SOCIO ECONOMIC SURVEY 2017-18

PLANNING DEPARTMENT
GOVERNMENT OF ANDHRA PRADESH

PREFACE

At the national level, the Ministry of Finance, Government of India presents the Economic Survey in both houses of the Parliament every year, just before the Union Budget. It is the ministry's view on the annual economic development of the country. Annual document of the Ministry of Finance, Government of India, Economic Survey, reviews the developments in the Indian economy over the previous 12 months, summarizes the performance on major development programs, and highlights the policy initiatives of the government and the prospects of the economy in the short to medium term. It contains certain prescriptions that may find a place in the Union Budget which is presented a day or two later.

The Government of Andhra Pradesh publishes 'Socio-Economic Survey' report every year and places it in both Houses of the State Legislature along with the budget documents. The report is a unique volume that captures the socio-economic changes took place in the state since the beginning of the financial year. The report essentially attempts to present the growth performance of the state economy by capturing the progress under key macro-economic aggregates and physical outcomes because of implementation of various programmes / schemes during the year 2017-18.

The Socio Economic Survey 2017-18 is an outcome of the collective effort of all the stakeholders including the government departments, consultations made with experts from research bodies and interested readers who have offered their valuable advice.

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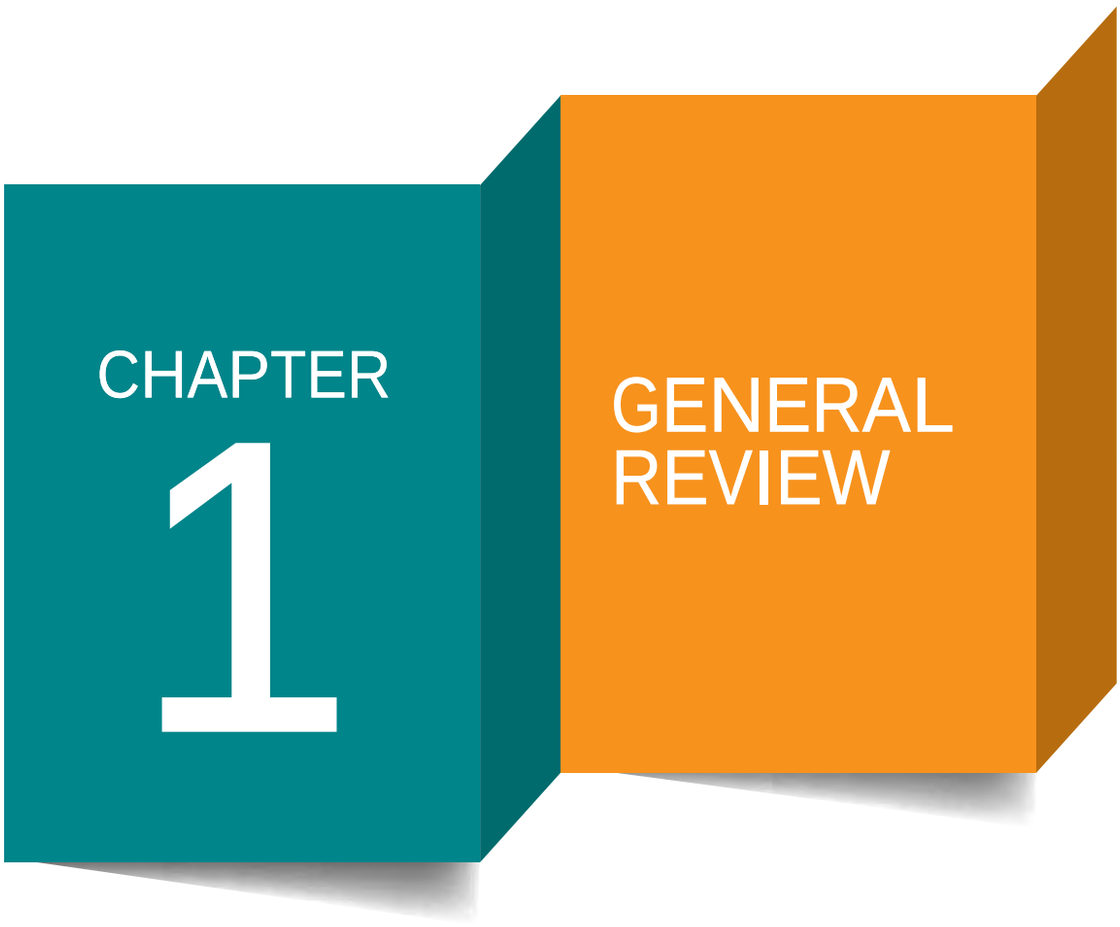

CHAPTER
1
GENERAL
REVIEW

Andhra Pradesh - Towards a Sustained Economic and Structural Transformation

During the last few years, the State has witnessed numerous challenges and it is worth noting that enormous efforts have been made to put the state back on the inclusive and higher growth trajectory. The overarching and ultimate objective of the government is to ensure inclusive growth, higher levels of human development and a happy society. Thus, the broad welfare agenda of the State is creation of wealth, ensuring better standards of living to people, reducing inequalities and disparities and enhancing the happiness index. The State as per its Vision agenda is targeting a compound annual growth rate of 12% till 2029 and a high level of Human Development Index of 0.90 by 2029 through structural & social transformation.

Economic growth imperative – making it more inclusive

The growth performance of the state in the recent past is most impressive with the average growth during the last three years as 11%. The Per capita incomes have also shown substantial jump from Rs. 107276 in 2015-16 to Rs.142054 in 2017-18.Thus, every year, on an average, nearly Rs. 12,000 are being added to the per capita, while the average annual increase of State Per Capita during three years before state re-organization was around Rs. 6500 only.

Despite impressive rise in the growth performance, the fruits of growth and development are not fully percolating down to the last mile. Recognizing this, the state government has initiated steps to resolve issues that are hindering the inclusiveness, setting right the inequalities.

Focus on multidimensional issues – higher human development

Keeping this in view, government decided to focus on access and quality to health and education besides income as criteria for observing the wellbeing of people and compile estimates on multidimensional poverty. Towards this endeavor, government is conscious to step up public expenditure and reduce out of pocket expenditure on these two important determinants of Human development. Noteworthy efforts have been done on this front. In order to improve school education and learning outcomes in government schools, government is keen to rollout the 'Municipal school model', which in the recent past has shown improvement in strength as well as standards. Similarly, conversion of Hostels to Residential Schools also yielded good results. Strengthening this set up further and to improve nutrition-intake, the government is committed to increase in diet charges.

The government is moving with saturation approach for primary education enrolment, infrastructure and learning outcomes as a foundation for lifelong learning. 2358 digital classrooms are proposed to be set up in 2017-18. Virtual classroom and internet connectivity is provided to 3500 schools. Physical literacy is encouraged in schools for all classes.

Happiness and Global benchmarking

Ensuring good Health, Wealth and providing civic amenities to the people of the state remain the key determinants of happiness. Andhra Pradesh moved in sync with the Nation for a total transformation towards "Prosperity with Happiness" of our society. The state is thereby benchmarking against the global best standards. AP state has arrived at benchmarks for the 17 SDG goals and related indicators for national/global comparison. To achieve these goals, the government has evolved a holistic monitoring strategy encompassing five themes: Gross Value Added (GVA), Sustainable Development Goals (SDG), Samaaja Vikaasam, Kutumba Vikaasam and Key Performance Indicators (KPI).

The Government of Andhra Pradesh envisions becoming a happy and globally competitive society placing people's happiness and well-being at the

forefront of the State's efforts. In Happiness Index, AP stood at 74th rank (equivalent) while India's rank is 122. The levels of happiness across 13 districts have been studied in a sample survey done.

Sectoral concerns

Government has achieved a significant success in the Primary sector. However, low base in the previous years to some extent have contributed to this growth. Productivity improvements and diversification have largely helped the state to show decent performance. At the core of the vision of the government is making agriculture sustainable and profitable and ensuring that the state is made drought-free. Promoting diversification into horticulture and livestock for sustained income and drought resilience and is proactively promoting agriculture produce processing and value addition for better returns to farmer are our focus. We are focusing on improvement in production of milk, meat and egg under livestock sector to ensure earnings of Rs.10,000 income per month to every household.

Growth in Fisheries sector has been very good in the recent past. The sector contributes 6.4% to GSDP, provides employment to about 14.5 lakh people, and contributed Rs.17000 Crores from sea food export during 2016-17. AP Ranks 1st in total fish and shrimp production by producing more than 70% of cultured shrimp in the country. AP State envisions to become 'Aquaculture hub' by investing in processing capacity and export. However, expansion is reaching saturation in fisheries sector and pollution issues need to be tacked effectively. Separate zone for saline lands, conversion of delta to hatcheries in WG dist., deep sea fishing to be encouraged by providing few deep sea fishing vessels in the Tamil Nadu model. Milk is another important growth engine in the primary sector. Silage to be used as a regular feed to cattle but not just as a drought mechanism. It is essential to conduct a detailed study on the issues and the problems in primary sector so that further growth can be explored and farming community is benefited.

Building on the success in Agriculture sector, government is keen to improve the industry sector. Near saturation in Primary sector to be compensated by manufacturing sector. Stagnant growth in industries sector is a concern. Manufacturing is the need of the hour and improving the growth and contribution, especially in the low skill labour intensive industries and MSMEs, is the focus. Government to focus on putting in necessary infrastructure in place and create an enabling environment.

Service sector as a major GVA contributor and employment provider in organized sector requires additional focus. Construction sector is expected to pick up and especially in the light of huge public investment to a tune of Rs. 2000 crore. Urban housing is yet another key area and with Economic cities – walk to work with plug and play being set up. The construction sector with increased demand for cement, steel is set to create more jobs. However, Real estate sector is yet to fully pickup with the adverse impact of GST and demonetization slowly fading away. IT is a promising sector with exports and job creation. Tourism has an abundant scope for adding more GVA and more jobs and identification of tourist places is to be done. Five star hotels in Tirupati and Visakhapatnam would boost the prospects. Government is willing to allot land at concessional rates to attract investors. Urbanization as a growth enabler has a positive impact on growth. Lack of big cities in the state resulting in lesser PCI as States with higher urban population and major cities have higher PCIs. Asset formation not promising and it is time, the credit plans to move from routine renewals to productive assets.

Welfare – focus on lowest decile

About Rs. 60,000 crore is spent on welfare. However, social and financial inclusion is yet to show marked improvements. Greater inclusiveness and lower GINI is the motto of the government. This requires nurturing social entrepreneurs. The issue is how to prepare people who drive social innovation and transformation in various fields including education, health, environment and enterprise development and who build strong and sustainable non-profit organizations. Lower decile population to have more opportunities and become true stakeholders of the development and growing economy. The commitment of the government in assuring Rs. 10,000 per family per month will substantially improve the living standards.

Geographic, Demographic and Socio-Economic profile of Andhra Pradesh

With a geographical area of 1,62,970 sq km, Andhra Pradesh ranks as the 8th largest State in the country. Situated in a tropical region, the state has the 2nd longest coastline in the country with a length of 974 km. As per the forest records, the state ranks 9th in India having forest cover area of 36909.38 Sq. Kms which accounts to 23.04% of the total geographical area.

Andhra Pradesh is the tenth largest state in the Country, in terms of population. As per 2011 Census, the State accounts for 4.10% of the total population of the country. The decadal growth of population rose from 18.88% during 1961-71 to 21.13% during 1981-91. Subsequently a significant decline was observed in the rate of growth of population and decline is even more prominent at 9.21% during 2001-11, lower than the All-India's growth rate of 17.70 percent.

The density of population for Andhra Pradesh is 304 persons per square kilometer, as against 382 persons per square kilometer at all India level in 2011. The sex ratio in the state was up from 983 in 2001 to 997 in 2011 and is higher than all India figure of 943 in 2011.

The literacy rate of the State is 67.35 percent in 2011 as compared to 62.07 percent in 2001. The literacy rate of the State is lower than the all India literacy rate at 72.98% percent. Literacy in Andhra Pradesh increased over 37 percentage points from 29.94 percent in 1981 to 67.35 percent in 2011. Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011.

Urbanisation has been regarded as an important component for growth realization. The percentage of urban population to the total population in the State is 29.47 percent in 2011 as compared to 24.13 percent in 2001.

Sand, silt, and clay are the basic types of soils and most of soils are made up of a combination of these three. The texture of the soil, how it looks and feels, depends upon the amount of each one in that particular soil. There are various types of soils and the formation of soil is primarily influenced by major factors such as climate, altitude and composition of bedrock etc. Disproportion in the distribution of rainfall in the country and excessive heat contribute special characters to the soils.

The land utilization classification reveals that 37.29% of the state geographical areas is under net area sown (60.77 lakh hectares), 22.63 % under forest (36.88 lakh hectares), 9.18% under current fallow lands (14.96 lakh hectares), 12.57% under land put non-agricultural uses (20.48 lakh hectares), 8.26 % under barren and uncultivable land (13.46 lakh hectares) and remaining 7.18% is under other fallow land, cultivable waste lands like permanent pastures and other grazing lands (12.74 lakh hectares) and land under miscellaneous tree crops and groves are not included in the net area sown which is around 2.26%(3.69 lakh hectares)

Macro-Economic Aggregates - Current Scenario

The GSDP at Current Prices for the year 2017-18 (Advance Estimates at current basic prices is estimated at Rs.8,03,873 crores as against Rs.6,95,491 crores for 2016-17 (First Revised Estimates).

As per the Advance Estimates, the GSDP at constant (2011-12) Prices for the year 2017-18 is estimated at Rs. 6,07,388 crores as against Rs.5,46,104 crores for 2016-17 (FRE) indicating a growth of 11.22 per cent. The corresponding growth rate of GDP of India is 6.6 per cent. The GVA at Constant (2011-12) Basic Prices for the year 2017-18 is estimated at Rs. 5,48,439 crores as against Rs. 4,92,374 crores of 2016-17(FRE), registered a growth rate of 11.39 percent. The sectoral growth rates of GVA of Andhra Pradesh for 2017-18 at constant (2011-12) prices are Agriculture: 17.76%, Industry: 8.49% and Services sector: 9.11%. The Per Capita Income (NSDP) of Andhra Pradesh at current prices increased to Rs.1,42,054 from Rs.1,22,664 in 2016-17 registering a growth of 14.87 percent.

Public Finance

The revenue for the state in FY 2016-17 stood at Rs.44,181 Crores from Own Tax sources, Rs.3,989 Crores from Own Non Tax sources and Rs.49,292 Crores of Central Transfer.

The total Own Tax Revenue was Rs.44,181 Crores in FY 2016-17 and Rs.52,717 Crores in FY 2017-18 (RE). The Sales Tax accounted for 62 percent of the State's Own Tax Revenue for FY 2017-18 RE. After introduction of GST by Government of India, a provision of Rs.4,426 crores under SGST and Rs.1,000 crores towards Compensation due to loss of Sales Tax for 2017-18 RE. State's Own Non Tax Revenue was Rs.3,989 Crores in the FY 2016-17 and was Rs.5,347 Crores in FY 2017-18 (RE). Resource flow from the Centre was Rs.49,292 Crores in the FY 2016-17 and was Rs.66,837 Crores in FY 2017-18 (RE).

The Total Expenditure by the State excluding ways and means advance was Rs.1,31,923 Crores in the FY 2016-17 and was Rs.1,51,297 Crores in FY 2017-18 (RE). The revenue expenditure was Rs.1,16,178 Crores in the

FY 2016-17 and was Rs.1,27,272 Crores in FY 2017-18 (RE). It is important to mention that in its strive to build a developed Andhra Pradesh, the state spent Rs.15,181 Crores on its Capital Outlay in FY 2016-17. This was mainly spent on capital works like irrigation, roads and infrastructure. Revenue expenditure through welfare schemes like subsidy rice, power subsidy, pavala vaddi, old age pensions, housing programs etc.

The Total Debt by the State was Rs. 2,01,314 Crores at the end of the FY 2016-17 and was Rs.2,25,234 Crores at the end of FY 2017-18 (RE). In the FY 2016-17, Andhra Pradesh faced a Revenue Deficit of Rs.17,193 Crores and a Fiscal Deficit of Rs.30,908 Crores. Due to focused and planned management of the state's finances, these deficit numbers could be brought down to Rs.4,018 crores and Rs.27,603 crores for the Revenue deficits and Fiscal deficits respectively for the year 2017-18 (RE).

Prices

Consumer Price Indices for Industrial Workers increased by 1.23% and 2.12% in the State and All India level respectively during the period from April, 2017 to Oct, 2017 over the corresponding period of previous year. Wholesale Price Index (WPI) serves as an important determinant in formulation of trade, fiscal and other economic policies by the government. WPI (Base Year 2004-05) for All Commodities increased from 113.2 in Apr 2017 to 115.7 in Dec 2017.

Public Distribution

29,462 Fair Price (FP) shops are functioning in the State as on 31.12.2017. There is one shop for every 1,376 persons in Andhra Pradesh vis- à-vis the Government of India's norm of one shop for every 2,000 persons. 28,689 F.P. Shops are functioning through ePoS Devices-cum-Electronic Weighing Machines.

To leverage of technology to the benefit of BPL cardholders, government has introduced F.P. shops portability system. Under this system, the ration cardholder can draw essential commodities from any ePoS enabled F.P. shop irrespective of having his / her ration card number in Dynamic Key Register of a particular ePoS enabled F.P. shop. AP has attained saturation in LPG connections and on 8th June, 2017, Government of Andhra Pradesh declared the State as "Smoke free State"

Seasonal conditions:

Rainfall received during the South West Monsoon period for 2017-18 was 567mm as against the normal rainfall of 556 mm, recording an excess of 2%. The rainfall received during the North East monsoon period for 2017-18 was 177.5 mm as against the normal rainfall of 296 mm, recording a deficit of 40%.

Agriculture & Allied sectors: Agriculture:

The area under food grains is estimated to be 40.72 lakh hectares in 2017- 18 as against 39.70 lakh hectares in 2016-17, showing an increase of 2.57%. The total production of food grains in 2017-18 is estimated at 157.59 lakh tonnes while it was 149.16 lakh tonnes in 2016-17 showing an increase of 5.65%. The cropping intensity for the year 2016-17 is 1.25. The number of holdings has increased from 72.16 lakh in 2005-06 to 76.21 lakh in 2010-11.

Andhra Pradesh stood first for the second consecutive year in the country by distributing Soil Health Cards the farmers with soil test based recommendations. State government has achieved saturation in soil testing. Through drone based cloud technology, soil test reports are made available in real time for farmers in the state. During 1st cycle of soil health card scheme 13.48 lakh soil samples were analyzed and 54.28 lakh soil health cards were distributed to the farmers. The 2nd cycle of soil health card scheme i.e from 2017-18 and 2018-19 is under progress.

The government is committed to develop Andhra Pradesh as Global seed hub and to ensure the availability of quality seed with low cost to every farm holder in the State, entered an MoU with renowned University in the USA. Government of Andhra Pradesh allotted an amount of Rs. 650 Cr. to develop the Mega Seed Park in 579 acres at Tangadancha Agriculture farm in Kurnool District.

D- Krishi is a unique, simple, sustainable, secure and standard and user friendly mobile based DBT solution offered to farmers. This Application has received CSI Nihilent Best e-Governance Award during the year 2017-18.

Horticulture:

Andhra Pradesh stands at 1st position in productivity for Chillies, Cocoa, Lime, Oil Palm, Papaya and Tomato, 2nd in Cashew, Mango and Sweet Orange in India. A.P. Ranks 1st in area and production of fruits and spices and 2nd in Micro Irrigation area coverage. 15.92 Lakh Ha. area is under Horticulture with production of 268.57 lakhs MTs.

So far 20.60 lakh acres has been covered under Micro irrigation in all the 13 Districts in the State since inception i.e., from 2003 to 2016. This is benefiting 6.25 lakh farmers. A.P ranks 2nd in Micro Irrigation in area coverage.

Andhra Pradesh stands second in the country in silk production. During the year 2017-18, 7500 acres of Mulberry is brought in to cultivation and 26952 MTs of CB Cocoons and 4676 MTs of BVH Cocoons are produced up to November, 2017.

Livestock and Fisheries

Andhra Pradesh is one of the advanced states for Animal Husbandry sector in the country. Under the most promising sector Livestock Milk, Meat and Egg are the key Growth Engines. Milk is the single largest commodity contributing highest economy to the State.

The State stands 2nd in Egg production (1582.74 Crores – next to TN 1668.82 Cr), 4th in Meat production (6.32 Lakh Metric Tons – next to UP:13.46, Maharashtra:8.45, WB:7.05 Lakh MTs) and 5th in Milk production (121.77 Lakh Metric Tons – next to UP:275.51, Rajasthan:193.57, MP:134.45, Gujarat:127.84 Lakh MTs) in the country during 2016-17.

Fodder is being provided to livestock at the doorsteps of the farmers below poverty line (BPL) with 50% subsidy ensuring fodder security under Kutumba Vikasam. The government endeavours to insulate the farmers from the vagaries of agriculture by focus on livestock sector to ensure that every household has a monthly income not less than Rs.10,000. Improved fodder seed will be supplied 75% subsidy to the farmers to take up largescale fodder production to meet the fodder requirement of high yielding animals.

AP ranks 1st in total fish and shrimp production and contributes more than 70% of cultured shrimp produced in the country. AP is the largest shrimp exporter in the country. Fisheries sector is supporting employment to 14.5 lakh persons and contributing significantly to the State's economy. The state government has initiated plans to make Andhra Pradesh the 'Aqua Hub' of the World. 27.49 lakh tonnes of fish and prawn were produced in the state in 2017-18 (upto December 2017) as against the target of 33.84 lakh tones. Chandranna Bima is being implementing by the Government to cover insurance facility for the people in unorganized sector including fishermen with nominal premium.

Forests

As per the forest records, the state ranks 9th in India having forest cover area of 36909.38 Sq. Kms which amounts to 23.04%. Out of 36909.38 Sq. Kms of forest area, the Very Dense Forest is 649.79 Sq. Kms the Moderate Dense Forest is 11792.18 Sq. Kms, Open Forest is 10931.01 Sq. Kms Scrub Forest is 9455.24. Kms Non-Forest is 3708.08 Sq. Kms and Water Bodies is 373.08 Sq. Kms. The State has 13 wildlife Sanctuaries and 3 National Parks covering an area on 8139.89 SqKms which is 22.53% of the State's Forest area and 4.448% of the State's Geographical area.

Industrial Development

In a bid to encourage the micro, small and medium enterprises (MSME) sector, government has established Andhra Pradesh MSME Development Corporation with a corpus of Rs.100 crore, would help the MSME entrepreneurs in marketing, branding, skill development and quality improvement of products.

The three Partnership summits held in Visakhapatnam consecutively for three have facilitated great investment friendly environment and the progress of investments is very encouraging. The Chennai-Bengaluru Industrial Corridor(CBIC) is one of the mega infrastructure projects of Government of India which passes through the State conceived with the main objective to increase the share of manufacturing sector in the GDP of the country. This also aims and to create smart sustainable cities which will have world-class infrastructure, convenient public transport, power management and an efficient water and waste management system.

The Vizag Chennai Industrial Corridor(VCIC) is a key part of the planned East Economic Corridor and India's first coastal corridor. Nearly 800-kilometer corridor links India with the Association of Southeast Asian Nations (ASEAN) and East Asian economies that form the bedrock of global manufacturing economy. The corridor traverses nine districts of the state of Andhra Pradesh. VCIC intends to complement the ongoing efforts of the Government of Andhra Pradesh (GoAP) to enhance industrial growth and create high quality jobs.

Industrial Infrastructure

The government is committed to use the long coastline and make the state as a logistic hub. New ports are developed through public private partnership (PPP) route and modernize existing minor ports and set up port-based industries along the coastal corridor. Out of 19 operational SEZs, 3 were IT/ITES SEZs, 5 Multi Product SEZs, 4 Pharmaceuticals SEZs, 2 Textile, 2 Leather Products, 1 Building Products, 1 Port based SEZ and 1 Food Processing SEZ.

Mines and Geology

Minerals & Agriculture are one of the main sources of revenue to Andhra Pradesh with minerals forming the major contributor for the economic growth of the State.

The State is focusing on inventory of mineral resources, key issues of legislation, objective and strategies in tune with the National Mineral Policy for accelerating growth leading to overall development of the mining sector. There are 381 mining leases for major minerals, 1806 quarry leases for cut and dressed blocks of granites and 1033 quarry leases for industrial minerals and 4067 Quarry leases for other Minor Minerals (Construction Minerals).

The State Mineral and Mining sector contributed Rs.1700.70 crore of Mineral Revenue to the state exchequer during 2016-17 and Mineral Revenue during 2017-18 (upto Oct, 2017) earned Rs.965.01 Crore. The percentage growth compared to last year during the same period was 12%.

Commerce and Exports

The Exports from the state for the year 2016-17 have recorded Rs. 80559.87Cr. During the year 2017-18 (upto November 2017), the state has recorded Rs.50404.75 crore. The Major exports from the state are Drugs & Pharmaceuticals, Marine, Agriculture and Agro based products, Handicrafts, Minerals and Mineral products and Software products

Irrigation

The Government has decided to complete 29 projects on priority and on track to providing early irrigation facilities in the drought prone Rayalaseema and Prakasam districts and backward districts of Srikakulam and Vizianagaram. 1) Polavaram Irrigation Project, 2) BRR Vamsadhara Project (Stage II- Phase II), 3) Sardar Gowthu Latchanna Thotapalli Project, 4) Poola subbaiah Veligonda Project, 5) Gundlakamma Project, 6) GNSS Phase-I & II and 7) HNSS Phase-I & II are some of the projects. Completion of 57 projects (28 Major +18 Medium + 4 Flood Banks + 7 Modernisation), will create 48.433 lakh acres of new ayacut Irrigation Potential under Major, Medium irrigation projects besides stabilization of 24.196 lakh acres

Modernization of Godavari, Krishna and Pennar deltas Nagarjuna Sagar Canal System and Yeleru canal system are under progress to improve the water use efficiency of the existing canal system.

Groundwater

The Government has set a goal to keep the ground water levels between 3 to 8 meters below ground level. Based on the ground water level data collected from piezometers, it is observed that about 52% of the area in the State is showing water levels more than 8 meters and about 34% of the area reflected the water levels between 3 to 8 meters and 14% of the area with 0-3 metres groundwater level as on 9.2.2018 in the State.

The Government has taken up an innovative work of Geo tagging of all 15.09 lakh bore wells in the state. All the agricultural bore wells have been geo tagged along with bore well photograph and certain information about the bore wells.

Power

From 22.5 million units of power deficit in June 2014, the state has become surplus power state and able to provide quality power supply to all domestic consumers on a 24X7 basis. The total agricultural services in the state as on 30-11-2017 is 16.97 lakhs. Out of 1181 new housing colonies, 1174 housing colonies have already been electrified and remaining are in progress. All the ordinary streetlights were replaced with LED Street lights in all 110 Municipalities of the state and out of a total target of 5.6 lakh street lights set initially, 6.10 lakh (109%) of street lights have been installed in the project. World Bank has ranked the Sunrise State of Andhra Pradesh as No. 1 in the area of "Energy Efficiency Implementation Readiness".

Roads

The total R&B Road network in the state as on 30.04.2017 was 47,002 Km of roads (excluding NH roads) comprising 15,406 Kms of State Highways, 25,620 Kms of Major district roads and 5,976 Kms of rural roads .

There are 32 National Highways in the state covering a length of 6401.39 Km (as on 25th January 2018). The density of National Highways is 12.96 Kms per lakh population (2011) in the State as against national average of 8.30 km and in terms of area coverage, a length of 39.90 Kms is available for every 1,000 Sq. Kms in the State as against national average of 30.50 km. Out of 6401.39 Kms National Highways in the state, a total length of 1897.22 Km is under the control of NHAI for development and 461.56 Kms with PIU, Machilipatnam 4042.61 km with State PWD-NH Wing.

Transport

The State had a registry of 103.58 lakh vehicles. About 78.62% of the vehicles on road are two wheelers, followed by cars, tractor trailers, three wheelers, buses and goods carriage trucks as on 31-9-2017.

The corporation has 4 zones, 12 regions and 128 depots

with a total fleet strength of 11,649 buses and 55049 employees on rolls as on October, 2017. The average vehicle productivity per day of its fleet is 369 kms and the Corporation achieved 99.20% fleet utilisation upto October, 2017. APSRTC stands top in physical performance in vehicle productivity and resource utilisation indicators like vehicle utilization, fleet utilisation, average number of passengers transported fuel efficiency, etc.

Airports

The Government has proposed to develop 3 new Greenfield International Airports at Bhogapuram Mandal of Vizianagaram District near Visakhapatnam, Dagadarthi in Nellore and Orvakal in Kurnool. Currently, Visakhapatnam serves flights to Far East and Middle East (one stop). 33% passenger traffic growth rate recorded during FY 2015 & 2016-17 in Visakhapatnam airport. Vijayawada Airport is the second largest Airport and Tirupathi Airport is the third largest Airport in Andhra Pradesh in terms of passenger traffic During FY 2016-17.

Sea Ports

Andhra Pradesh has 974 Kms long coast line with a major Port at Visakhapatnam under Government of India control and 14 notified ports under State Government. Of which, four(4) are captive ports. One port is proposed at Duggarajapatnam in SPSR Nellore district. The State Government declared Kakinada SEZ as a minor port and Meghavaram port in Srikakulam district as minor port for imports of coal, fly ash for the thermal plants

Tourism

Andhra Pradesh has the distinction of being a leading tourism destination in India and is presently, the third most visited State in terms of domestic tourism. In 2013, 152.1 million domestic tourists visited Andhra Pradesh, which was about 13.3% of the total domestic tourism market.

APTDC has designed a number of tourist packages to different destinations covering temples, hill resorts, beach resorts, heritage sites both in and outside the state. APTDC has taken new initiatives to develop tourism in Andhra Pradesh and steps are being taken.

Information Technology

The Government is committed for making the state as a suitable destination for IT Services, Electronic Manufacturing /Assembling. To achieve this, Government has formed three societies' viz., e-Government authority, Electronic & IT agency, and Innovation society. Andhra Pradesh government firmly believes that technology focus will carve a way forward for the newly formed State of Andhra Pradesh.

Andhra Pradesh has always been at the forefront of implementing e-Governance, having pioneered popular projects like CARD, eSeva, MeeSeva, e-Procurement. The e-Pragati Authority has made a rapid progress in turning Government of Andhra Pradesh as the first completely digitally transformed State in Government of India. Andhra Pradesh as a leader in adoption of disruptive technologies such as block chain, Internet of Things(IoT), Data analytics, machine learnings, cyber security.

School Education

Out of the total enrollment of 69.61lakhs, 35.49 lakhs are in I-V classes; 21.00 lakhs in VI-VIII classes, 13.12 lakhs in IX-X classes. Annual average dropout rate at I-V classes (Primary Level), I-VIII (Elementary Level) was 0% and 3.30% at IX-X (Secondary Level). Necessary measures have been taken to retain children into schools.

Under Mid meal scheme 34.57 lakh children were covered during 2017-18, out of which 17.42 lakh are in Primary including NCLP, 10.04 lakh in Upper Primary and 7.11 lakh children in High schools in the state.

Digital Class Room equipment is provided in 2358 schools including about 1500 High schools. e-Hazar project is being implemented in a phased manner in all schools. The Government has introduced a new scheme called 'Badikosta' to provide bicycles to IX Class girl students. 1.82 lakh bicycles were distributed to girl students.

Government introduced physical literacy in schools ensuring provision of 6 hours per week for classes 1st to 10th. Yoga, Music, Dance (Bharatanatyam, Kuchipudi) are introduced in Schools by Government of A.P as part of the Physical literacy.

For improving learning levels among low performing schools and students in partnership with Isha Foundation, J-PAL and Pratham is taken up in the schools. Isha Foundation is implementing Happy classroom, Magic English and remediation programme for improving learning outcomes among slow learners in 3000 schools in Chittoor district.

The State has received Swacha Vidyalaya Puraskar (SVP) Award for 2016-17. On All India, 172 schools are selected for National Award. Andhra Pradesh is at 2nd position by gaining 21 Awards.

Sarva Shiksha Abhiyan

500 Digital classrooms provided in all 352 KGBVs. In KGBVs the pass percentage for 10th class in March 2017 is 89%.Proposed to introduce Intermediate course in 26 KGBVs in MPC, BiPC, MEC and CEC streams for the year 2018-19.

Mana Vooru Mana Badi (Amma Vodi) (Enrollment Drive of 5+ Age Children) programme is introduced to identify school age 5+ age children and enroll them in the schools with the help of local Anganwadis and other volunteers. "Badipilustondi" programme is also implemented for enrolment of school age children in the schools.

Intermediate Education

There are 449 government junior colleges including 8 government vocational junior colleges besides 128 private Aided Junior Colleges in the state. 27 Vocational courses are also being offered in the field of Engineering & Technology, Agriculture, Home Science, Business & Commerce and Humanities.

Collegiate Education

Higher Education has been identified as a growth engine in the sunrise state of Andhra Pradesh and is pursued in a mission approach for sustaining and promoting quality of education and for providing purposeful education, particularly to students hailing from marginalized sections of the society.

There are 147 Government degree colleges (146 Degree +1 oriental college) and 141Private aided colleges (126 degree +15 oriental) are functioning in the state. The department entered into MoU with TISS-Higher Education to train 30,000 students from 100 GDCs in the modules viz., Communication skills, Financial literacy, Youth leadership, Digital literacy, Introduction to Entrepreneurship, Analytical skills, Legal Literacy. CCE introduced 25 marked oriented courses such as Office Management & Secretarial Practice, Journalism & Mass Communication and Web Enabled Technologies, Data Science, Multimedia, Cloud Computing, Internet of things etc. Andhra Pradesh is one of the few States in the entire country that implemented Choice Based Credit System (CBCS) for UG Courses in all Universities in the State.

The Government focuses on Swachha Andhra Pradesh Mission with particular stress on achieving complete Open Defecation Free by 31st Mar'2018. Disaster Management Trainings were given to students in degree colleges to enhance capacities of young people to take leadership, to help others and contribute towards nation building.

Technical Education

There are 314 polytechnic institutions in the State with a sanctioned strength of 82238 and 41 Skill Development Centers have been established in Polytechnics across the State. Technical courses that supplement regular Diploma Courses are offered.

Proposed to set up 4 Vocational Education & Training Institutions in Government Polytechnics at Anantapur, Tirupati, Guntur and Visakhapatnam respectively to draw students from in and around these Districts.

Health and Family Welfare

Maternal health care, child health care and family welfare services are provided through 7458 Sub-centers, 1147 Primary Health Centers, 193 Community Health Centers, 31 Area Hospitals, 8 District Hospitals, 3 Mother and Child Health Centres and 11 Teaching hospitals. Apart from these, 73 Urban Family Welfare Centers, 48 Post Partum Units and 222 (e)-UPHCs fall under the purview of the State. The estimated Crude Birth rate, Crude Death rate and Infant Mortality Rates for the year, 2016 in the state are 16.4, 6.8 and 34 respectively while it is 20.4, 6.4 and 34 for All India (as per Sample Registration System, bulletin September 2017).

26 Special New Born Care Units (SNCUs), 18 Nutrition Rehabilitation Centres, 95 Newborn Stabilization Units (NBSUs) and 789 New Born Care Corners (NBCCs) are established in the state to reduce Infant Mortality Rate (IMR) by strengthening neo-natal care services.

The Government has upgrading all the existing UHCs into e-UPHCs and named as Mukhyamantri Arogya Kendram. All 222 UHCs in the State have been upgraded to State of the Art electronic Urban Primary centres. Introduced NTR Baby Kits to reduce the Infant Mortality Rate (IMR) and reduce infection rate in mother and baby.

Under NTR Vidya Seva, 1.98 lakhs patients were treated as out- patients and 2.93 lakhs patients treated as in-patients in the Network Hospitals during the period from April 2017 to October 2017. 14.08 lakhs therapies were pre-authorized at the cost of Rs.3934.69 crores for the period from since June 2014 to end of October, .2017.

Under the AP Vasidya Vidhana Parishaad(APVVP), which deals exclusively with the middle level hospitals of bed strength ranging from 30 to 350, about 2064 doctors including specialists and staff, are working for Health care. There are 27 blood banks and 92 blood storage centres are functioning in APVVP Hospitals in the State. Currently, 7 Nutritional Rehabilitation Centres in the APVVP hospitals

are functioning and at present 6 Trauma Care Centres are functioning in APVVP Hospitals located in Andhra Pradesh.

Several schemes like National Leprosy Eradication Programme, Integrated Disease Surveillance Project, National Iodine Deficiency Disorders Control Program and National Programme for Prevention and Control of Diabetic, Cancer, Cardiovascular Diseases and Stroke are being implemented in the state. At present 8 Cardiac Care Units are functioning in the State. National Programme for Prevention and Control of Fluorosis is being implemented in Guntur, Prakasam and Nellore districts. Steps are taken for Fluoride levels in Ground Water in all the districts along with affected mandals, habitations and villages. Several schemes like Thalli Bidda express, NTR Vaidya Pariksha, Chandranna Sanchara Chikitsa, National free dialysis program, Health ATMs installed at remote places, Expanded Eye care services, Expanded Dental Care services, Mukhyamanthri Aarogya Kendramulu, Mukhyamantri Bala Swasthya Bharosa, Swasthya Vidya Vahini are introduced in the state.

Women Development and Child Welfare

The Department is running 46 Homes for Children and 21 Institutions for Women to cater to the needs of Children and Women in difficult circumstances. 46 Children homes are functioning in the State. About 5.15 Lakh children are attending pre-school education activities in Anganwadi Centres. 257 ICDS projects are functioning in the State. Supplementary Nutrition Programme is implemented in all ICDS Projects covering 48770 Main and 6837 mini AWCs. Balamrutham" is the weaning food introduced under ICDS to provide improved supplementary nutrition to children between 7 months to 3 years. The Government introduced Anna Amrutha Hastam, Gorumuddalu, Giri-Gorumuddalu schemes in the state.

Welfare of Disabled

There are four(4) Homes for the disabled are functioning in the State at East Godavari, Anantapur, Chittoor and Krishna Districts. Pensions are sanctioned every month to 5.22 lakh Differently Abled persons and 19.54 lakh Senior Citizens in the State. Study circle was established exclusively for Persons with Disabilities at Vijayawada. 3 Old age homes are established on PPP mode at Visakhapatnam, Guntur and Ananthapuramu.

Social Welfare

As per the 2011 Census, Scheduled Castes population forms 17.08 percent of the total population of Andhra Pradesh and 79.98% of the Scheduled Caste people live in rural areas. 758 hostels are functioning in the state, with an admitted strength of 78,851 in 2017-18. 36 Integrated hostel Welfare Complexes are functioning are in the State with an admitted strength of 8,149. At present 17 (8 boys and 9 girls) Ananda Nilayams are functioning in the State.

On the Occasion of 110th Birth Anniversary Celebrations of Dr. Babu Jagjeevan Ram, Government launched "Jagjeevan Jyothi" scheme extending the benefit of free power upto 75 units in respect of SC&ST Households, consuming power upto 100 Units per month by covering 14.24 Lakhs SC&ST Households from 01.06.2017 onwards.

To encourage skill development for SC youth by providing employability linked training programs under Chandranna Cheyutha around 31,815 SC Youth were benefited with a monetary benefit of Rs.233.31 crore.

Tribal Welfare

The tribal population of Andhra Pradesh according to 2011 Census is 27.39 lakh constituting about 5.53% of the total population of the State.

Government is keen on providing quality education to ST Students, safe drinking water to all ST habitations, providing connectivity to unconnected villages, electrification of un-electrified ST habitations and Capacity building and Skill up gradation of ST youth.

Four(4) tribal students scaled Mount Everest successfully during May 2017 and awarded Rs.10.00 lakhs per student and 3 are also participated to scale the Mount Everest and awarded Rs.5.00 lakhs per student by Government of Andhra Pradesh. "Araku Valley Instant Coffee" is launched into the market. 1105 persons were benefitted under Giriputrika Kalyana Padhakam scheme in 2017-18.

Backward Class Welfare

At present, there are 897 government B.C. hostels, (692 hostels for boys and 205 hostels for girls). A total strength of 90,611 boarders were admitted in the B.C. hostels during 2017-18. Government have sanctioned 3 new BC Residential Schools in Ananthapuramu District and 6 new Residential Schools for the children of Fishermen @ one in each District of Srikakulam, Vizianagaram Visakhapatnam, West Godavari, Guntur and Prakasam Districts. 2 Junior Colleges are sanctioned, one for Girls and one for Boys in Ananthapuramu District. Government is implementing the Post Matric Scholarships and Reimbursement of Tuition fee scheme to eligible BC students who pursue higher education. 7.33 lakh BC students were sanctioned Post

Matric Scholarships and 84 lakh students were benefited under reimbursement of tuition fee scheme.

96.11% of X class students in BC hostels were passed against the 91.92% of state average during the year 2016-17. Under NTR Videsi Vidyadharana scheme, 485 students were selected in 2016-17 and 168 students were selected in 2017-18 (April to Oct. 2017).

Minorities Welfare

There are 6 Pre-matric Minorities Hostels and 9 Post-matric Hostels functioning aiming the educational and social development of the poorest of the poor minority students and 6 Residential schools in the state aiming the educational and social development in Minority students with residential amenity. 7316 unemployed minority youth were trained. APSCMFC offers industry specific training across sectors including IT and ITES, Hotel Management, Retail, Engineering etc., at exclusive skills centres through multimedia content and 1210 candidates were benefitted.

"NTR Vidyonnathi" scheme is introduced in the year 2017-18 for Minorities for providing professional guidance for Civil Service Examinations for sponsoring the meritorious students to reputed private institutes to extend the benefit for 300 students yearly.

Housing

Under Weaker Section Housing Programme 59,00,175 houses have been completed up since inception of the scheme in 1993-94 till Dec, 2017 comprising 53,76,663 in rural areas and 5,23,512 in urban areas. APSHCL has taken up 2.00 lakh houses under NTR Rural housing programme dovetailing with MGNREGS. Out of which 1,16,477 Houses were completed by Dec, 2017.

APSHCL has taken up 72,885 lakhs with a unit cost of Rs.2,00,000/- houses under NTR Rural housing (Gramin) programme dovetailing with PMAY-G and MGNREGS with a project cost of Rs.1457.70 crore. Out of which 17,329 Houses were completed by Dec, 2017. 48,058 houses were sanctioned in 2017-18 with a project cost of 961.16 crores.

31,401 houses were sanctioned under NTR urban housing dovetailing with BLC component of PMAY, HFA (U) with a unit cost of Rs.3.50 Lakhs per house and with a project cost of Rs.2556.44 Crores. Of which 17,532 Houses were completed by Dec, 2017. 1,02,977 houses were sanctioned in 2017-18 with a project cost of 3604.19 crores.

The Government has decided to construct and handed over 5 lakh dwelling units by March 2019. So far 4.81 lakh houses sanctioned in 98 Municipalities out of 110 Municipalities under PMAY NTR Nagars Scheme with a project cost of Rs.38266 crores. Out of 4.81 lakh sanctioned houses 4742 houses were completed and upto February 2018.

Rural Water Supply and Sanitation

The main objective of the government is to ensure that by 2022, every rural person is supplied 70 LPCD safe water within their household premises or at a horizontal or vertical distance not more than 50 meters from their household.

There were 2,03,162 bore wells fitted with hand pumps, 33,985 PWS Schemes and 561 CPWS Schemes (including Sri Satya Sai Schemes) existing as on 01.04.2017. 1473 habitations were covered. 275 works were taken up at a cost of Rs.827 crore to cover 2,700 habitations, of which 1,047 habitations are targeted for coverage during 2017-18. 570 habitations are covered duly incurring an expenditure of Rs.260.00 crore under all programmes up to November, 2017. The Government has decided to cover all problematic habitations with safe drinking water through community treatment plants by Hub & Spoke model (clusters) under NTR Sujala Sravanthi scheme.

Municipal Administration

The Swachha Andhra Corporation is exclusively established to deal with sanitation and solid waste management matters. To improve the sanitation conditions and to arrest open defecation, the Swachha Andhra Corporation has sanctioned individual household toilets on saturation mode in 110 ULBs. All the 110 ULBs in the state have been declared as ODF. QCI had issued certificates for 109 out of 110 cities so far.

The Government of Andhra Pradesh, with a vision of transforming Cities and Towns in the State into the best Cities and Towns in terms of live ability, environment and health standards and Providing 100% service coverage to make these Cities & Towns clean and litter-free and issued Operational Guidelines for Maintenance of Sanitation and Solid Waste Management for uniform implementation in all the ULBs in the State.

The 14th FC has recommended grants to ULBs in two types i.e., 1) Basic Grant for Rs.2908.64 Crores and 2) Performance Grant for Rs.727.16 Crores (total for Rs.3635.80 Crores) on the ratio of 80:20 basis.

MEPMA

The main objective of MEPMA is to organize poor women into Self Help Groups by covering all families living in

slums and enable them to become self-reliant. A total of 1,96,591 Self Help Groups, 7,068 Slum Level Federations and 139 Town Level Federations were organized upto October, 2017.

30,520 Persons with Disabilities (PWDs) are also organized into 3,050 exclusive SHGs, 79 Town Vikalangula Samakyas (TVSs) and 111 Parents Associations of Persons with Mental Rehabilitation (PAPWMRs) were formed in the State. During 2017-18, 49 shelters are functioning under the scheme Shelter for Urban Homeless. 58 Generic Medical Stores and 30 Pradhanamantri Janaaushadi Kendras grounded in the ULBs. 47 City Livelihood centres were established in all ULBs and 35 City Livelihood Centres are functioning

Rural Development

NTR Bharosa has turned public service delivery into a reality- at the door step of the beneficiary with timely and hassle-free delivery of services month on month, at a huge scale of over 45.28 lakh pensioners with an annual outlay of Rs.5878.16 Crores. The CORE (Chief Minister Office Real-time Executive) Dashboard has been developed to monitor pensions closely. 99% of Pensions in the state are Aadhaar authenticated.

MGNREG act is a legal Guarantee of 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. MGNREGS is being implemented in 12,946 Gram Panchayats in 661 Mandals of 13 districts. 84.85 lakh job cards were issued covering 1.74 crore wage seekers since inception of the scheme. 5.47 lakh Srama Shakti Sanghams have been formed with 60 lakh households covering 116 lakh wage seekers.

Andhra Pradesh occupies 2nd place in the country in generating of person days (17. 17 cr.as against the target of 20 crores) with an average wage rate of Rs. 141.4 per day per person as on November 2017 and timely payment of wages. Total expenditure incurred is Rs. 3882.5 Cr. 59.8 lakh wage seekers belonging to 37.2 lakh households were provided wage employment with an average employment of 46.1 days per household. Total number of households which completed 100 days is 2,78,601. Out of these 386 Lakh. person days generated by SCs, 173 lakhs by STs and 845.9 lakhs by BCs. 59.8 lakh wage seekers from 37.24 Lakh Households were provided wage employment.

Poverty

The poverty ratios for rural and urban areas of united Andhra Pradesh were 10.96% and 5.81% respectively and combined ratio stands at 9.20%. The corresponding figures for All India during the same period were 25.70%, 13.70% for rural and urban areas and the combined was 21.92%. The poverty in the State is on a decline and currently stands at 9.2%.

Employment – Unemployment

As per the National Sample Survey Office (NSSO) of 68th Round (during 2011-12) the unemployment rate for Andhra Pradesh State for Rural and Urban sectors stood at 12 and 43 respectively. Similarly, for All India, the corresponding estimates are 17 and 34 in respect of Rural and Urban areas.

Employment & Training

There are 79 Govt. ITIs are functioning in the state. 19 ITIs are covered in the fold of Vocational Training Improvement Project. Government ITI Gajuwaka, Visakhapatnam has been selected for Upgradation of one existing ITI as model ITI.

Skill Development

Andhra Pradesh State Skill Development Corporation supported progressive institutions, colleges and universities with IT, & other infrastructure to strengthen training delivery and ensure its reach to remote areas 3.28 lakh were trained and 7,693 got placements.

Under DDUGKY programme SEEDAP is the State implementing agency targeted to train 57,966 of which 32033 were trained and 17665 got placements. Under PMKVY 2.0, APSSDC is fixed a target with a state mandate of 64,000 candidates to be trained in a period of 2016 –20.

Real Time Governance:

Government has recognized need to bring in innovative practices in governance and public administration that enhance transparency, accountability and efficiency in provisioning of government services. Transparency and information create more opportunities for citizens to participate in governance and thereby demand better services.

Real Time Governance of Govt. of Andhra Pradesh is an endeavour wherein government attempts to improve delivery of services in an agile and responsive manner through data analytics, beneficiary feedback, project monitoring and process re-engineering of welfare provisions such that atleast 80 % public satisfaction is achieved in all government programs.

CHAPTER 2

MACRO ECONOMIC AGGREGATES

HIGHLIGHTS

GSDP Growth Rate 2017-18 (AE)

11.22%

Encouraging Growth scenario – expanding growth horizons

- AP state economy is witnessing a structural and social transformation
- State Economy moving in tune with Vision aspiration of 12% CAGR.
- Near saturation achievement in Primary sector – to leverage the benefits
- All three sectors of the economy moving positively and in tandem
- GSDP at current prices to move up from Rs.695491 crores for 2016-17 (FRE) Rs.803873 crores in 2017-18(Advance estimates)
- GSDP to maintain double digit mark successively for third consecutive year – Economy Growth rate: 11.22% as per Advance estimates for 2017-18 (at constant prices) as against India's Growth rate of 6.6%.
- AP adds nearly Rs. 20,000 to its Per Capita income over last year PCI - AP to move from PCI of Rs. 1,23,664 in 2016-17 to Rs. 1,42,054 in 2017-18.
- India adds about Rs. 12,000 to its PCI over last year – from Rs. 1,03,870 to Rs. 1,12,764 in 2017-18(AE)

State Economy

Under Vision 2029, Andhra Pradesh state envisions achievement of 12% Compound Annual Growth Rate of 12% till 2029. Growth achievement of Andhra Pradesh in the recent past has been a success story. The state could accomplish a double-digit growth rate successively. Growth story of Andhra Pradesh revealed encouraging trends. Due to persistent efforts and innovative policies, the growth expectations indicate a sustained performance for the year 2017-18 and the government have recognized that maintaining impressive economic growth as an imperative for sustained development leading to a happy society. While continuing the focus on Agriculture and Industries sectors, the government is also committed to focus on the key sub-sectors of services sector and give it a big push.

Structural shifts – capturing the changes in economy:

Improvement in availability of basic data over the years has helped in reviewing the methodology from time to time for estimating the State Domestic Product. Periodic updation of data and shifting base year to a more recent year are being undertaken regularly so as to capture the structural and sectoral shifts taking place in a developing economy can be properly gauged and captured.

In 'Income originating approach', the State Domestic Product (SDP) is estimated wherein income generated by the factors of production physically located within the geographical boundaries of the state are aggregated. It represents the value of all goods and services produced within the state, counted without duplication during a specified period of time, usually a year. The estimates of SDP and related aggregates are generally prepared both at current and constant prices. The estimation of SDP and related aggregates including District Domestic Product is being done both at current and constant prices.

These estimates of economy over a period reveal the extent and direction of changes taking place in the level of economic development. Sectoral composition of SDP gives an idea of the relative position of different sectors in the economy over a period of time, which not only indicates the real structural changes taking place in the economy but also facilitates formulation of plans for overall economic development. These estimates when studied in relation to the total population of the state indicate the level of per capita net output of goods and services available or the standard of living of the people in the State. These are referred as estimates of Per Capita Income (PCI).

With a view to take into account the structural changes taking place and thereby project a realistic picture of the economy through macro aggregates viz., Gross State Domestic Product (GSDP), Per Capita Income, Government Final Consumption Expenditure (GFCE), Private Final Consumption Expenditure, shifted the Base year of the GDP Estimates from 2004-05 to 2011-12.

Improvements in the New Series with 2011-12 as Base Year

The Central Statistical Office (CSO), Government of India have shifted the Base year of the GDP Estimates from 2004-05 to 2011-12, duly incorporating recommendations of SNA 2008, adopting the results of latest surveys and studies and also espoused some critical methodological changes to bridge the data gaps and to improve the quality of data sets. In the new series, the industry-wise estimates being presented as "Gross Value Added (GVA) at Basic Prices" and GSDP at Market Prices shall be referred as "GSDP-Gross State Domestic Product" which is a practice at international level.

Thus, 'GSDP' is the sum of GVAs at basic prices net of product taxes and product subsidies

Compilation of Estimates of GSDP

The Gross State Domestic Product (GSDP) of Andhra Pradesh is arrived at as per the methodology given by the Central Statistical Organisation(CSO). The Advance Estimates for every financial year are being compiled in the month of February with the data available till that period and these estimates will be revised from time to time as Provisional Estimates, First Revised Estimates, and Second Revised Estimates and finally after reconciliation with CSO as Third Revised Estimates after a gap of 2 years. The data pertaining to inputs, Consumption of Fixed Capital (CFC), Supra Regional Sectors, Central Non Departmental Commercial Undertakings (CNDCUs), Autonomous Bodies, Central Government Administration & Private Corporate Sector etc., is provided by CSO.

Estimates of GSDP at Constant (2011-12) Prices

The **GSDP** of Andhra Pradesh at constant (2011-12) Prices for the year 2017-18 (Advance Estimates) is estimated at Rs. 6,07,388 crores as against Rs.5,46,104 crores for 2016-17 (First Revised Estimates) indicating **a growth of 11.22%** in comparison with the All **India** GDP growth rate of **6.6%** for 2017-18 as per Advance estimates.

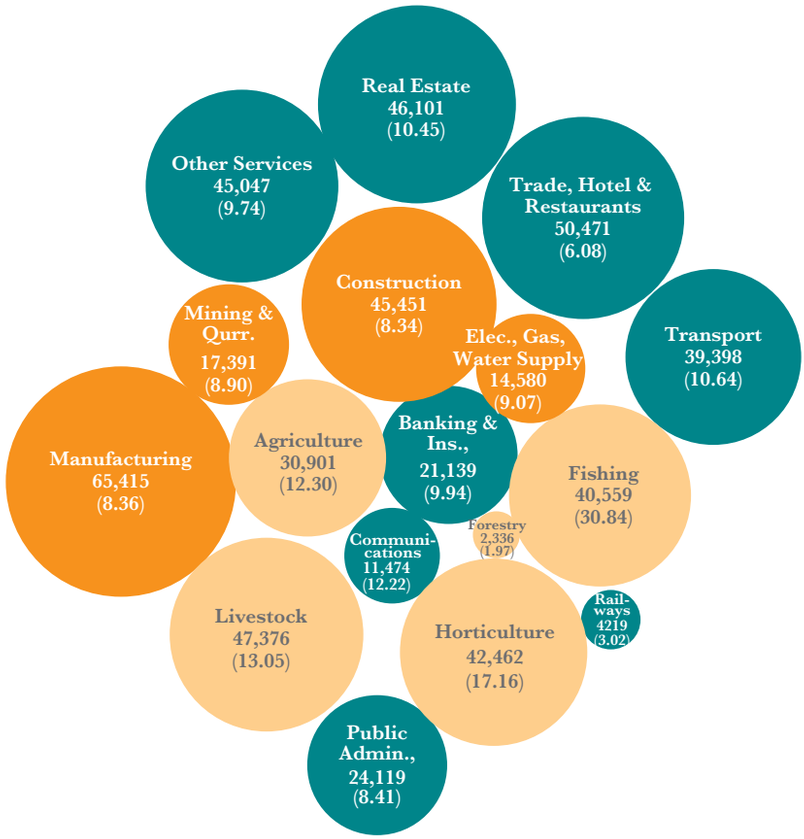
It is to be noted that the GSDP estimates may undergo revision until the stage of 3rd revision (TRE). Thus in the latest estimates now presented here, the GSDP growth for 2014-15 (TRE) has shown an upward revision to 9.20% from 8.51% previously mentioned (as SRE). However, for the years 2015-16 and 2016-17 the growth rates of GSDP underwent downward revision to 10.60% (from 10.95%) and 11.07% (from 11.61%) respectively.

Estimates of GVA at Constant (2011-12) Prices

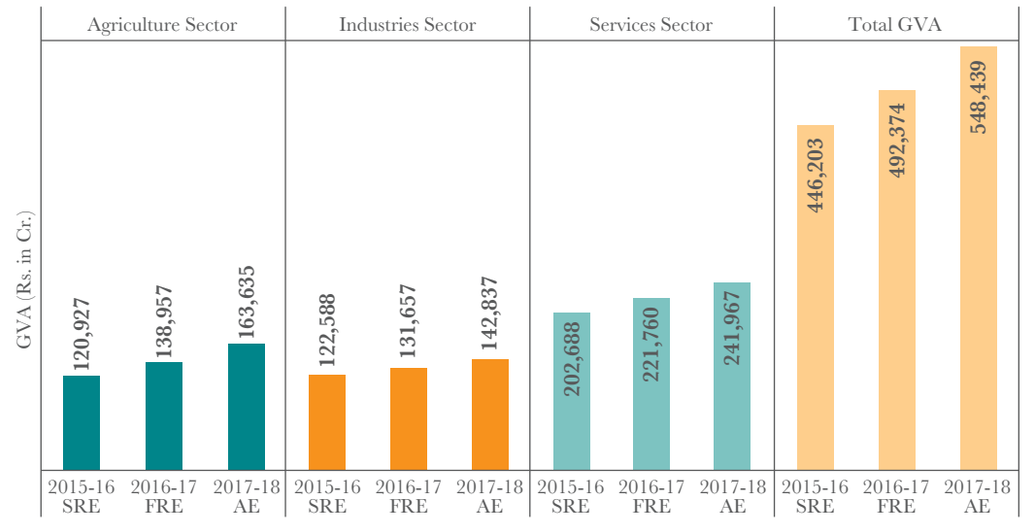
As per the Advance Estimates, the **GVA** at Constant (2011-12) Basic Prices for Andhra Pradesh for the year 2017-18 is estimated at Rs.548439 crore as against Rs.492374 crore for the year 2016-17 (FRE), a growth rate of 11.39 percent compared to the India growth rate of 6.4 percent.

Continuing the ascending trend, the sectors that registered an impressive double digit growth in the year 2017-18 are: Agriculture (12.30%), Horticulture (17.16%), Livestock (13.05%), Fishing and Aquaculture (30.84%), Electricity (12.53%), Transport (10.64%), Communications (12.22%), Real Estate and Ownership of Dwellings (10.45%).

GVA Estimates for 2017-18(AE)at Constant (2011-12)Prices



A year-wise snapshot of broad sector-wise GVA estimates at Constant (2011-12) Basic Prices:



Agriculture & Allied Sectors

The noteworthy feature of the growth pattern in **Agriculture & Allied Sectors** is that this key sector which is supporting about 60% of the population is consistently maintaining an ascending trend during the last three years, especially marked by an encouraging growth rate of **17.76%** in 2017-18 at Constant (2011-12) Prices with a GVA of Rs. 1,63,635 crores – up from Rs.1,38,957 crore during 2016-17.

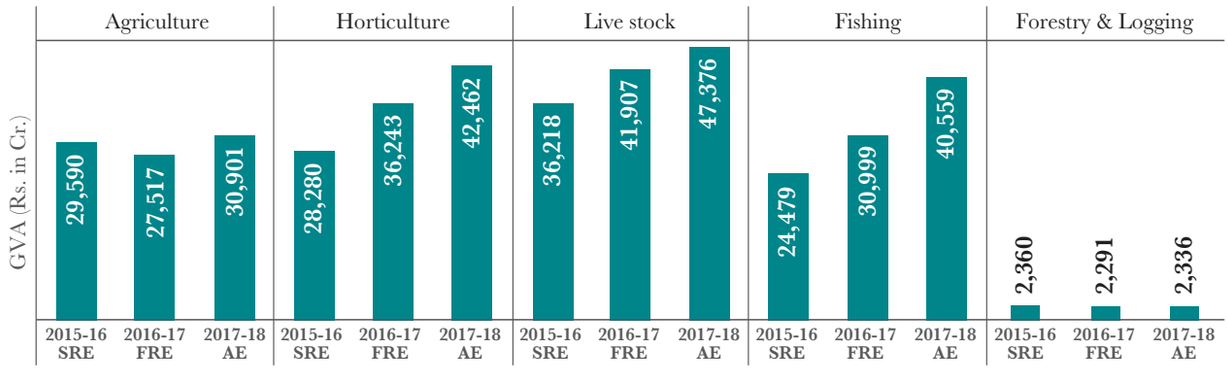
Agriculture sub sector despite a deficit rainfall of (-)13.4% during this year, remarkably bounced back from negative territory after three successive years to post a highly encouraging growth rate of **12.30%**. Adoption of technological, innovative and best practices reflects the impressive growth performance in agriculture.

The agrarian state of Andhra Pradesh is heading towards a value addition platform from the conventional production approach. '**Horticulture**' sub sector, recognized by the government as is an essential component for food and nutritional security in the State, continued its ascendency, showing an impressive growth of **17.16%**, a reflection of initiatives of the government such as Sprinkling / Drip Irrigation, Polynets/ Shadenets, Panta Sanjeevini, Panta Raksha. These initiatives augur well for the state to realize its goal of making Rayalaseema as a Horticulture hub. It is pertinent to note that horticulture, no longer a sub sector to agriculture sector, has crossed agriculture in terms of value addition.

The **livestock** sector has emerged as an alternative and dependable source of income generation even during the times of severe drought. Increase in the production of Milk (13.53%), Meat (13.68%) & Egg (12.32%) resulted in an encouraging growth rate of **13.05%** in the livestock sector. The fodder policy and timely interventions have helped the livestock sector, alone accounting for more than 28.96% per cent of the total Agriculture sector GVA, to bypass all the other sub sectors in the Agri. and Allied group.

Fisheries sector, which until recently was a non-descript sector, started showing phenomenal growth, with its contribution now matching with the agriculture sub-sector. Maintaining the uptrend, the increase in the production of Marine fish (0.49%), Inland fish (21.24%) and prawns/ Shrimps (40.24%) lead to register a significant growth rate of **30.84%** in Fishing Sector. Forestry & Logging Sector, after a series of weak and negative growth performances, registered growth rate of **1.97%** in 2017-18.

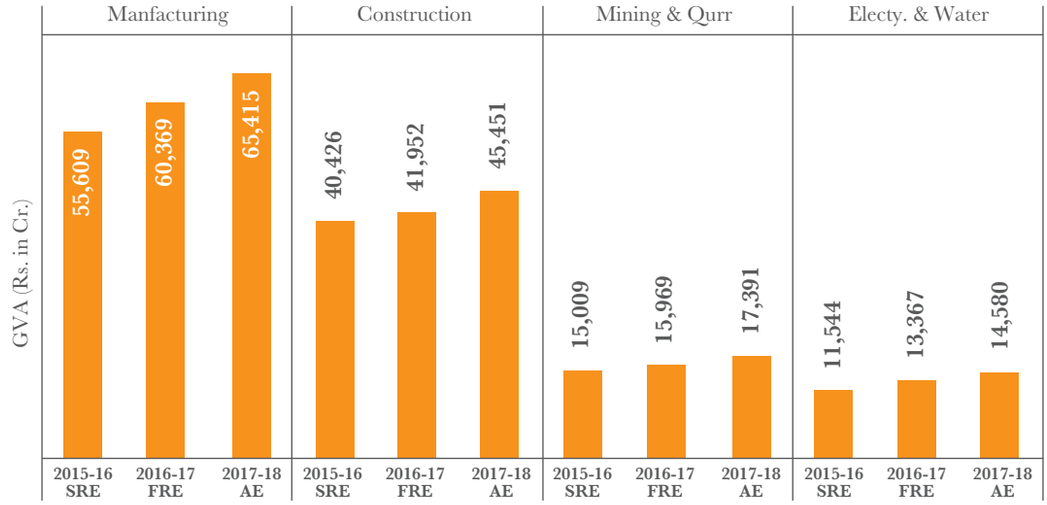
Year-wise subsector-wise GVA Estimates at Constant Prices (2011-12) - Agriculture & Allied Sector



Industry Sector:

Industry sector comprises of Mining & Quarrying, Manufacturing (Organised & Un-Organised), Electricity, Gas & Water Supply and Construction. As per the Advance Estimates for the year 2017-18 at Constant (2011-12) prices, the Industrial sector is estimated at Rs.142837 crore, registering a growth rate of **8.49%** over the previous year. All the sub sectors of Industry sector have posted encouraging growth performance of more than 8.3% over the previous year.

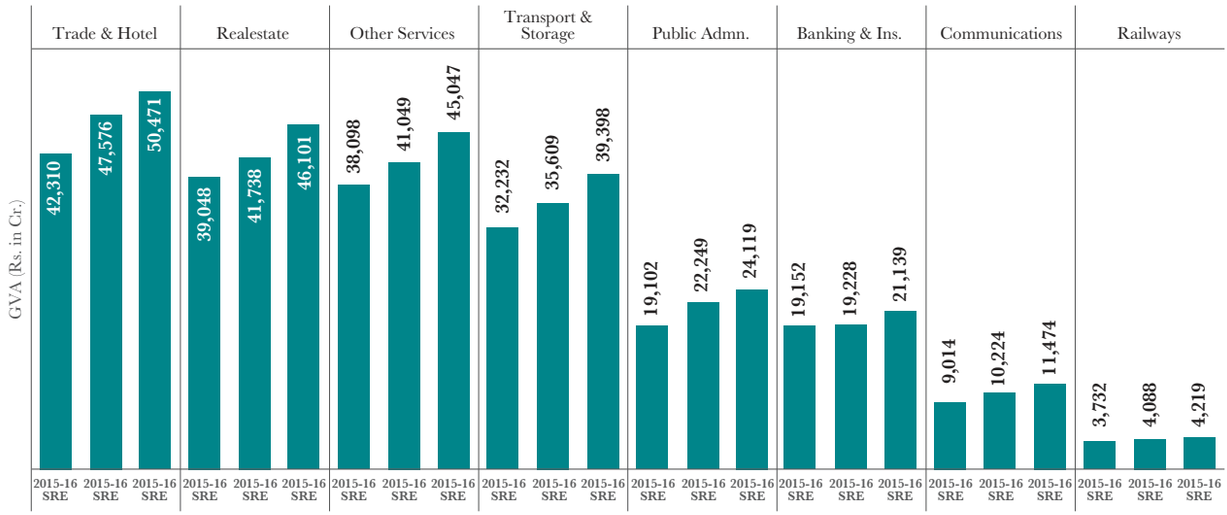
Year-wise subsector-wise GVA Estimates at Constant Prices (2011-12)- Industry Sector



Services Sector

Services sector, with its consistently surging share in the State GVA, continued to be the engine for pushing the overall growth. Services sector comprising of Trade, Hotels & Restaurants, Transport by other means & Storage, Communications, Banking & Insurance, Real Estate & Business Services and Community, Social & Personal services registered a growth rate of **9.11%** over previous year. The Advance Estimates for the year 2017-18 is estimated at Rs.241967 crore as against Rs.221760 crore in 2016-17.

Year-wise subsector-wise GVA Estimates at Constant Prices (2011-12)- Services Sector



Estimates of GVA at Current Basic Prices

The GVA of Advance Estimates at Current Basic Prices for the year 2017-18 are derived by using the IPD (Implicit Price Deflators) at sectoral level from the relevant price indices is estimated at Rs.735709 crore as against Rs.634742 crore of 2016-17(FRE).

Estimates of GSDP at Current Prices

The **GSDP** at Current Prices for the year **2017-18** (Advance Estimates) is compiled by adding Product taxes and deducting Product subsidies to the GVA at current basic prices and estimated at **Rs.803873** crore as against Rs.695491 crore for 2016-17 (FRE).

A snapshot of GVA Estimates at Current Prices–all sectors

	Sub-sector	2017-18 AE	2016-17 AE	2015-176AE
Agriculture & Allied	Live stock	76,974	66,418	53,472
	Horticulture	75,507	57,958	44,412
	Agriculture	39,610	37,611	39,056
	Fishing	56,929	42,190	32,085
	Forestry & Logging	3,826	3,704	3,506
Industry	Manufacturing	71,021	63,795	58,882
	Construction	56,074	50,093	46,221
	Mining $ Quarrying	19,451	16,635	15,473
	Electricity, Gas, Water Supply	15,936	14,627	12,745
Services	Other Services	70,230	60,289	51,698
	Real Est. O'ship of Dwellings	64,046	56,132	49,712
	Trade, Hotel & Restaurants	57,994	52,921	46,471
	Transport by Other means & Stores	50,899	44,535	38,767
	Public Admn.	32,689	28,999	23,625
	Banking & Ins.	24,150	20,929	20,665
	Communications	14,895	12,756	10,805
	Railways	5,476	5,150	4,386

GVA
3,606
20,000
40,000
60,000
76,974

HIGHLIGHTS

AP Per Capita Income Rs.

142054

(2017-18)

Per Capita Income:

The Per Capita Income is an indicator of the standard of living of the people. As per the CSO guidelines, the PCI is estimated by dividing Net State Domestic Product (NSDP) with midyear projected State population. As per the Advance estimates of 2017-18, the **Per Capita Income (NSDP) of Andhra Pradesh** at current prices increased in **2017-18** to **Rs.1,42,054** from Rs.1,23,664 in 2016-17 registering a **growth of 14.87 percent**. The Per Capita Income(NSDP) at constant (2011-12) prices, has also gone up from Rs.96374 in 2016-17 to Rs.106545 in 2017-18 registering a growth rate of 10.55 per cent.

The Sectoral Contribution in 2017-18 (AE) of AP& India at Current Basic Prices

The **contribution** from the **Agriculture** sector is Rs.252847 crore**(34.37%)**, from the **Industry** sector is Rs.162482 crore**(22.09%)** while it is Rs.320380 crore**(43.55%)** from the **Service** sector to the GSVA at current prices. All India level, the share of Agriculture in the GDP at Current prices stands at 17.9%, Industry 29.3% and Services sector 52.8%.

Estimates of GVA by the Economic Activity, GSDP, Per Capita Income and growth rates both at Current and Constant (2011-12) prices of Andhra Pradesh from 2011-12 to 2017-18 (Advance) are shown in **Annexures – 2.1 to 2.6**

The Estimates of GVA by Economic Activity of Andhra Pradesh from 2011-12 to 2017-18 (AE) at Current & Constant (2011-12) Prices are given in the following table

GVA by Economic Activity at CURRENT PRICES (Rs.in crores & growth rate in percent)

Sector	Item	2011-12	2012-13	2013-14	2014-15(TRE)	2015-16(SRE)	2016-17 (FRE)	2017-18 (ADV)
Agriculture	Value	94008	111864	128956	148196	172531	207881	252847
	Growth Rate		18.99	15.28	14.92	16.42	20.49	21.63
Industry	Value	112660	101687	107408	124282	133322	145150	162482
	Growth Rate		-9.74	5.63	15.71	7.27	8.87	11.94
Services	Value	143086	165925	190359	215230	246129	281711	320380
	Growth Rate		15.96	14.73	13.07	14.36	14.46	13.73
GSVA at Basic Prices	**Value**	**349753**	**379477**	**426722**	**487709**	**551982**	**634742**	**735709**
	Growth Rate		**8.50**	**12.45**	**14.29**	**13.18**	**14.99**	**15.91**

GVA by Economic Activity at CONSTANT PRICES (Rs.in crores & growth rate in percent)

Sector		2011-12	2012-13	2013-14	2014-15 (TRE)	2015-16 (SRE)	2016-17 (FRE)	2017-18 (ADV)
Agriculture	Value	94008	97831	108353	112200	120927	138957	163635
	Growth Rate		4.07	10.75	3.55	7.78	14.91	17.76
Industry	Value	112659	97387	99345	111842	122588	131657	142837
	Growth Rate		-13.56	2.01	12.58	9.61	7.40	8.49
Services	Value	143086	155796	167887	182970	202688	221760	241967
	Growth Rate		8.88	7.76	8.98	10.78	9.41	9.11
GSVA at Basic Prices	**Value**	**349753**	**351014**	**375585**	**407011**	**446203**	**492374**	**548439**
	Growth Rate		**0.36**	**7.00**	**8.37**	**9.63**	**10.35**	**11.39**

Estimates of GVA by the Economic Activity, GDP of **All India at Current & Constant (2011-12) Prices from 2011-12 to 2016-17 are shown in Annexure- 2.6 to 2.12**

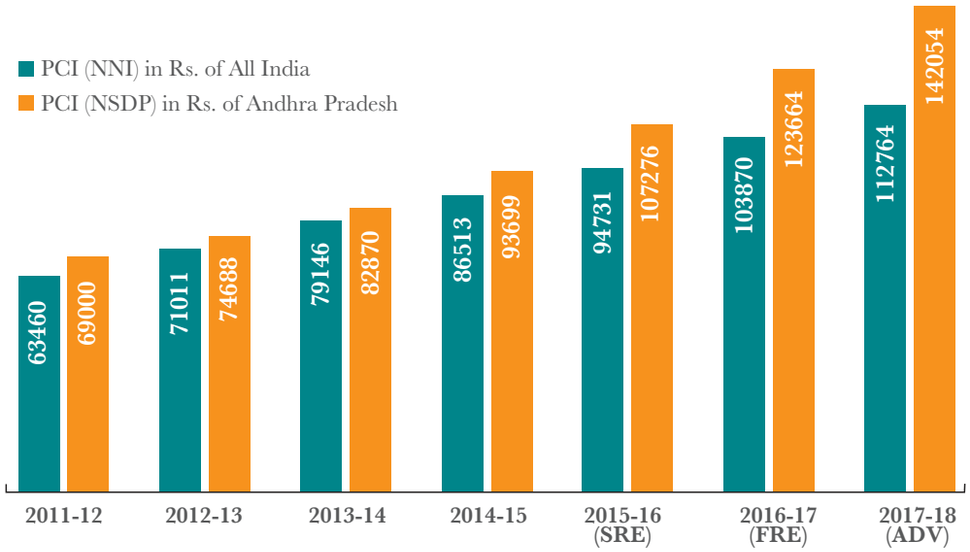
GSDP of Andhra Pradesh and GDP of All India – a Snapshot:

The GSDP of Andhra Pradesh and GDP of All India at Current & Constant (2011-12) prices are shown in Table

(Rs.In Crores)

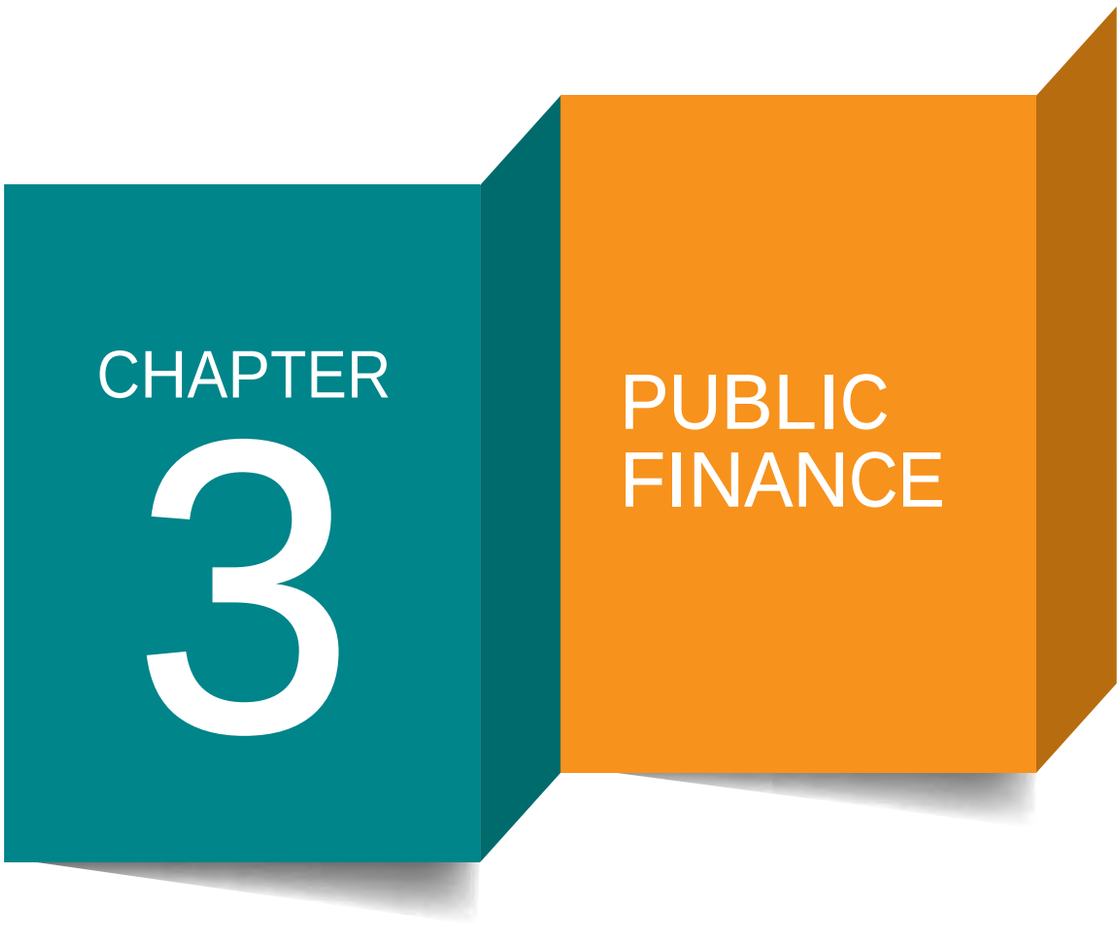
	Andhra Pradesh				All India			
	GSDP at Current Prices	Growth %	GSDP at Constant (2011-12) Prices	Growth %	GDP at Current Prices	Growth %	GDP at Constant (2011-12) Prices	Growth %
2011-12	379402		379402		8736329		8736039	
2012-13	411404	8.43	380629	0.32	9944013	13.82	9215125	5.48
2013-14	464272	12.85	407114	6.96	11233522	12.97	9817822	6.54
2014-15	524976	13.07	444564	9.20	12467959	10.99	10522686	7.18
2015-16 (FRE)	600298	14.35	491697	10.60	13764037	10.39	11386145	7.93
2016-17 (ADV)	695491	15.86	546104	11.07	15253714	10.83	12196006	7.11
2017-18	803873	15.58	607388	11.22	16751688	9.80	13003897	6.6

Comparaative trends of Per Capita Income at Current Prices from 2011-12 to 2017-18 (Advance):



Per Capita Income (PCI) at Current Prices of All India & Andhra Pradesh is tabulated below

Year	Per Capita Income (NNI) in Rs. OF All India	Per Capita Income (NSDP) in Rs. of Andhra Pradesh
2011-12	63460	69000
2012-13	71011	74688
2013-14	79146	82870
2014-15	86513	93699
2015-16 (SRE)	94731	107276
2016-17 (FRE)	103870	123664
2017-18(ADV)	112764	142054


CHAPTER
3
PUBLIC
FINANCE

Fiscal Consolidation

- The Revenues for the state in FY 2017-18 - Rs.52718 Crores from Own Tax sources, Rs.5347 Crores from Own Non Tax sources and Rs.66837 Crores of Central Transfer - Sales Tax accounted for 62 percent of the State's Own Tax Revenue
- The Total Expenditure by the State (excluding ways and means advance) is Rs.1,51,297 Crores in FY 2017-18 (RE).
- The Total Debt by the State was Rs. 2,01,314 Crores at the end of the FY 2016-17 and was Rs.2,25,234 Crores at the end of FY 2017-18 (RE).
- Revenue deficits and Fiscal deficits respectively for the year 2017-18 (RE) could be brought down to Rs.4,018 crores and Rs.27,603 crores.

Introduction

Undaunted by the numerous challenges post bifurcation, Government has converted every crisis into an opportunity, thanks to his astute leadership. The Vision of the state is to build a happy, inclusive and an innovative society and the people of the state aspire to be among the three best states in India by 2022, be the best state in the country by 2029 and a global destination by 2050. For India to grow at 8-9%, some states need to grow at more than the national average. Through structural & social transformation and through Macro Level Planning with Micro Level Execution, this vision becomes a reality.

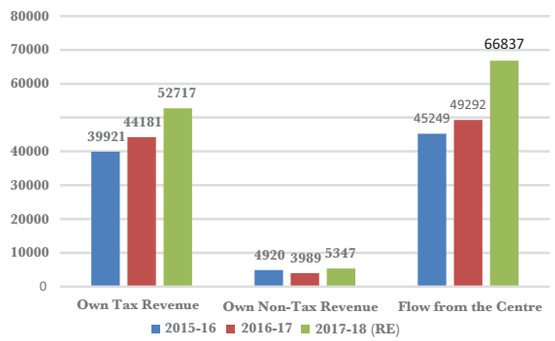
The State's Revenue

The revenue for the state in FY 2016-17 stood at Rs.44,181 Crores from Own Tax sources, Rs.3,989 Crores from Own Non Tax sources and Rs.49,292 Crores of Central Transfer. The details of the State's Own Tax Revenue, Own Non Tax Revenues and Resource flow from the Centre for the FY 2017-18 (RE) with the FY 2015-16 is given in Chart 3.1. The details of the same are given as Annexure 3.1, Annexure 3.2 and Annexure 3.3 respectively.

Chart 3.1 State's Revenues for FY 2015-16 to FY 2017-18 (RE)

Comparison of State's Revenue

(Rs.in Crores)



State's Own Tax Revenue

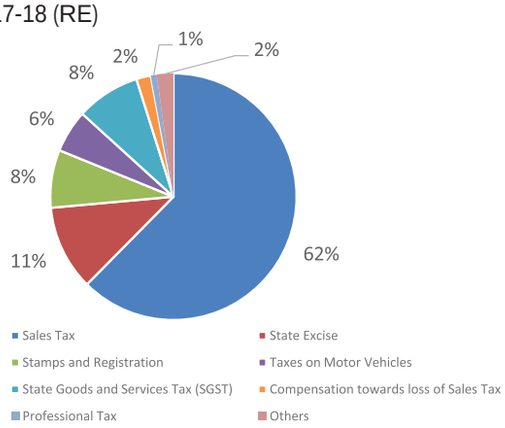
The total Own Tax Revenue was Rs.44,181 Crores in FY 2016-17 and Rs.52,717 Crores in FY 2017-18 (RE). The composition of individual components of Own Tax Revenue for FY 2017-18 (RE) is shown as Chart 3.2. It is to note that Sales Tax accounted for 62 percent of the State's Own Tax Revenue for FY 2017-18 RE. The State's own tax revenue for the FY 2015-16 to FY 2017-18 (RE) have been detailed in Annexure 3.1. After introduction of GST by Government of India, a provision of Rs.4,426 crores under SGST and Rs.1,000 crores towards Compensation due to loss of Sales Tax for 2017-18 RE.

HIGHLIGHTS

Own Tax Revenue in 2017-18 (RE)

Rs. 52717 Cr

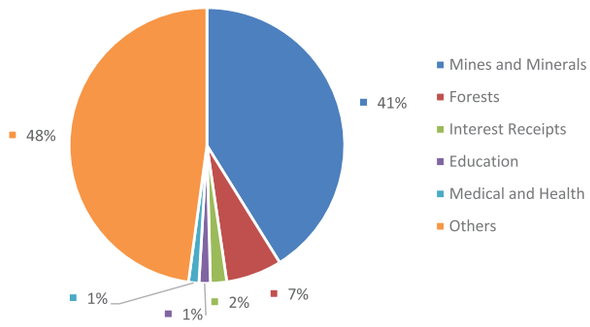
Chart 3.2 Composition of State's Own Tax Revenue – FY 2017-18 (RE)



State's Own Non Tax Revenue

State's Own Non Tax Revenue was Rs.3,989 Crores in the FY 2016-17 and was Rs.5,347 Crores in FY 2017-18 (RE). The main contribution towards the State's Own Non Tax Revenue included the Mines and Mineral, Forests, Education and Other revenue sources. The composition of these revenue sources are given in Chart 3.3. Mines and Minerals contributed 41% towards the State's Own Non Tax Revenue in the FY 2016-17. The other major receipts are Rural Development Cess, Forest, Education etc. The details of the own non tax revenue for the FY 2015-16 to FY 2017-18 (RE) are given in Annexure 3.2.

Chart 3.3 Composition of State's Own Non Tax Revenue – FY 2017-18 (RE)

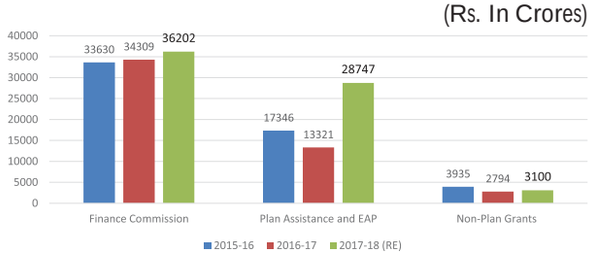


Central Transfers

Resource flow from the Centre was Rs.49,292 Crores in the FY 2016-17 and was Rs.66,837 Crores in FY 2017-18 (RE). Finance Commission allocation constituted a major portion of this Central Transfers, which was Rs.34,309 Crores in the FY 2016-17 and Rs.36,202 Crores in FY 2017-18 (RE). The central transfers for the FY 2016-17 and FY 2017-18 (RE) are elaborated in Chart 3.4. The details of the same for the FY 2015-16 to FY 2017-18 (RE) are given in Annexure 3.3.

Chart 3.4 Central Transfers for FY 2015-16 and FY 2016-17 (RE)

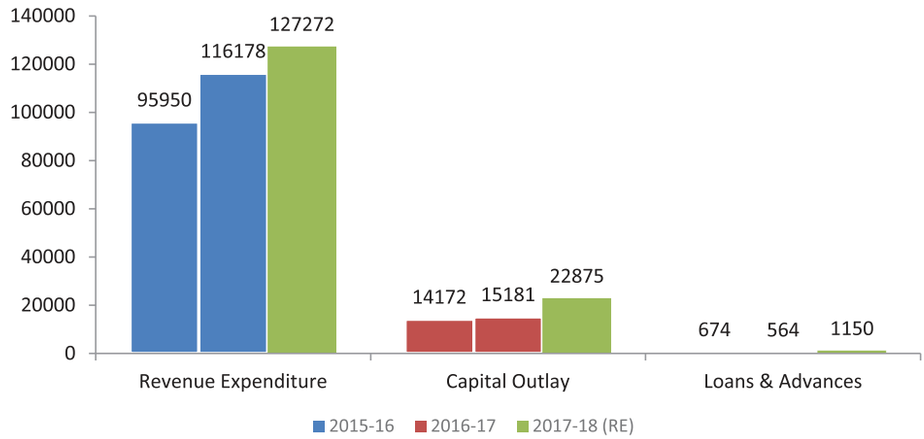
(Rs. In Crores)



The State's Expenditure

The Total Expenditure by the State excluding ways and means advance was Rs.1,31,923 Crores in the FY 2016-17 and was Rs.1,51,297 Crores in FY 2017-18 (RE). The revenue expenditure was Rs.1,16,178 Crores in the FY 2016-17 and was Rs.1,27,272 Crores in FY 2017-18 (RE). It is important to mention that in its strive to build a developed Andhra Pradesh, the state spent Rs.15,181 Crores on its Capital Outlay in FY 2016-17. This was mainly spent on capital works like irrigation, roads and infrastructure. Revenue expenditure through welfare schemes like subsidy rice, power subsidy, pavala vaddi, old age pensions, housing programs etc. The state expenditures for the years 2015-16 to 2017-18 RE are compared in Chart 3.5. The details of the same are given in Annexure 3.4.

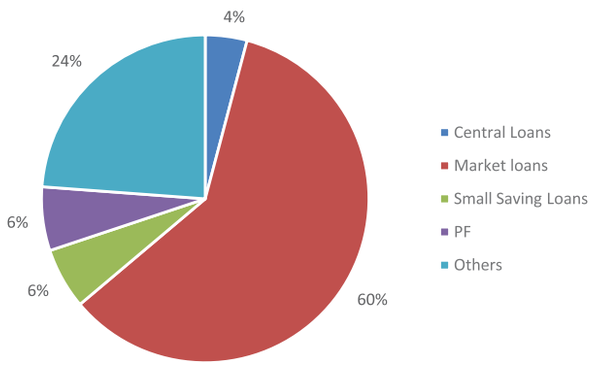
Chart 3.5 State Expenditure for FY 2015-16 and FY 2016-17 (RE)



Debts and Interest payments

The Total Debt by the State was Rs. 2,01,314 Crores at the end of the FY 2016-17 and was Rs.2,25,234 Crores at the end of FY 2017-18 (RE). The outstanding debt includes the un-apportioned amount of Rs.23,483 crores between two States of Andhra Pradesh and Telangana. The composition of debt sources like Market Loans, Central Loans, Small Saving Loans, PF and other sources. The Market borrowing outstood at Rs.1,12,630 Crores in the FY 2016-17 and at Rs.1,34,551 Crores in FY 2017-18 (RE). The state paid Rs.14,756 crores as interest towards its debts in the FY 2017-18 (RE) wherein it had paid Rs.11,697 Crores towards interest payments in the FY 2016-17. The Debt outstanding as percentage of GSDP was 28.79 percent in FY 2016-17 which came down to 28.40% in FY 2017-18 (RE). Chart 3.6 shows the composition of outstanding debt in the state for the FY 2017-18 (RE). The details of the outstanding debt for the years 2014-15 to 2017-18 RE are given in Annexure 3.5.

Chart 3.6 Composition of State's Debts – FY 2017-18 (RE)



Revenue and Fiscal Deficits

In the FY 2016-17, Andhra Pradesh faced a Revenue Deficit of Rs.17,193 Crores and a Fiscal Deficit of Rs.30,908 Crores. Due to focused and planned management of the state's finances, these deficit numbers could be brought down to Rs.4,018 crores and Rs.27,603 crores for the Revenue deficits and Fiscal deficits respectively for the year 2017-18 (RE). The details are given in Annexure 3.6.

CHAPTER 4

PRICES WAGES AND PUBLIC DISTRIBUTION

Ensuring food security – leveraging the technology

- Technology-enabled Public Distribution System to ensure food security to last person in the state - ePoS devises
- End to End Computerization of TPDS through 93% functioning
- Andhra Pradesh, first state in the country to automate Fair Price Shops - Estimated savings of Rs.1526 crore in expenditure.
- GPS based vehicle tracking system – monitoring the movement of essential commodities
- Market intervention scheme – review mechanism to check price hike, availability of essential commodities
- Ensuring festive celebration in every household – Government offers Christmas Gift, Sankranthi Kanuka and Ramjan Thofa.
- Saturation of LPG connections - Andhra Pradesh the first big State in the country. 12.46 lakh LPG connections in 2017-18 alone.
- Chandranna Village Malls-Branded products at affordable prices – Bringing urban touch to rural consumers. 6500 malls in the first phase across the State.

Prices

Prices do not remain constant over a period of time. They tend to change due to various economic, social or political factors. Changes in the price levels cause two types of economic conditions, inflation and deflation. When it comes to essential commodities, both demand as well as supply are responsible for change in prices. It is therefore imperative for the governments to have a periodic check on the movement of prices of essential commodities since a change in price level is likely to have an impact on the pattern of consumption.

Apart from rise in population, which itself is a major cause of rising demand, changing food habits also contribute to demand-pull inflation. Prices will also be impacted by various activities resulting in a spike in consumption of certain products. Similarly, there are supply side concerns resulting in the short supply of commodities consequently pushing the prices up. The Directorate of Economics & Statistics reports the prices of essential commodities periodically. Monitoring of prices of six essential commodities from selected centres across the state on daily basis is being done for tracking the changes. The state average daily retail prices of essential commodities are shown in Table 4.1.

Table 4.1: State average daily retail prices of essential commodities (Rs/Kg.)

Commodity	2016 -17 (Apr to Dec 2016)	2017 -18 (Apr to Dec 2017)	Variation (%) of Apr – Dec 2017 over Apr – Dec 2016
Rice (II sort)	27.83	28.91	(+) 3.89
Redgramdal (II sort)	119.68	67.34	(-) 43.74
Groundnut Oil	118.63	112.14	(-)5.47
Common Tamarind (Without seed)	89.20	107.64	(+)20.67
Red Chillies Dry (Gr II)	140.14	78.01	(-) 44.33
Onions(Gr II)	12.71	22.17	(+)74.38

Source: Directorate of Economics and Statistics

Recent price trends indicate that the average daily retail prices of essential commodities like Rice (Gr.II), Common Tamarind (Without Seed) and Onions (Gr.II) have shown an ascendency and the prices of Redgram dal (Gr.II), Groundnut Oil and Red Chillies (Gr.II) have shown decreasing trend during the period from April to Dec 17 when compared to that of corresponding period of last year. The year-wise average daily Retail prices of (6) Essential Commodities from 2004-05 to April to December 2017 are shown in Annexure – 4.1.

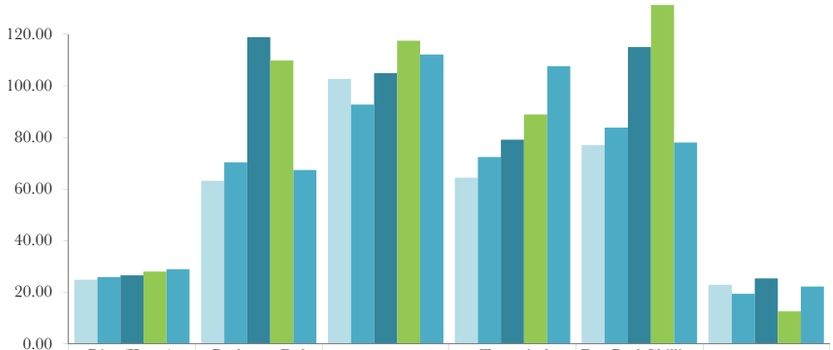
HIGHLIGHTS

CPI for Industrial Workers

A.P **1.23**%

India 2.12%

Chart 4.1. Average daily retail prices from 2013-14 (April to March) to Apr to Dec 2017



	Rice (II sort)	Redgram Dal (II sort)	Ground Nut Oil	Tamarind (Without Seed)	Dry Red Chillies (Gr. II)	Onions (Gr. II)
2013-14	24.78	63.22	102.69	64.34	77.01	22.87
2014-15	25.84	70.31	92.73	72.36	83.80	19.36
2015-16	26.50	118.86	104.85	79.08	115.01	25.28
2016-17	27.96	109.85	117.45	88.87	131.35	12.58
Aprilto Dec 2017	28.91	67.34	112.14	107.64	78.01	22.17

Price Index- an economic barometer

Price Index is a statistical tool for measuring the relative change in price level with reference to time, geographical location and other characteristics. It is also considered as a barometer of economic activity.

Consumer Price Index is of great relevance for this purpose and is used as a device for measuring changes in the level of retail prices of goods and services consumed by different population segments. Industrial workers and agricultural labour, rural labour from the main population groups are usually covered by these indices. These indices measure relative changes in prices of selected goods and services consumed by indexed population over a period of time.

Consumer Price Indices for Industrial Workers

The Consumer Price Indices for Industrial Workers (CPIIW) are being constructed and compiled at the new base 2001=100. The data is collected in all from seven centres selected from Andhra Pradesh under central and state series based on Industrial workforce. The Centres are: 1.Visakhapatnam 2.Guntur 3.Vijayawada 4.Vijayanagaram-Chittivalasa 5.Kakinada- Rajahmundry 6.Jaggaiahpet and 7.Tirupati – Renigunta. Of these, Labour Bureau, Simla compiles the index for the first three centres since they come under central series, while the State Directorate of Economics and Statistics compiles the indices covering the remaining four complexes in Andhra Pradesh.

Consumer Price Indices for Industrial Workers grew by 1.23% and 2.12% in the State and All India level respectively during the period from April, 2017 to October, 2017 over the corresponding period of previous year. Details about the CPIIW from 2011-12 to 2017-18 are shown in Table 4.2.

Table 4.2: Consumer Price Index Numbers for Industrial Workers (Base : 2001 =100)

Year	Andhra Pradesh	All India
2011-12	198	195
2012-13	219	215
2013-14	239	236
2014-15	257	251
2015-16	269	265
2016-17	278	276
2017-18 (Apr to Oct)	283	282
Growth rate (%) April to Oct '2017 over Apr-Oct , 2016	1.23	2.12

Source: Labour Bureau, Shimla

HIGHLIGHTS
CPI for Agriculture Workers
A.P 1.57%
India 1.49%

CPI Numbers for Agricultural Labour

The Consumer Price Index Numbers for Agricultural Labour (CPI- AL) with 1986-87 as base year are compiled by the Labour Bureau, Shimla, The Table 4.3 given below gives the indices during April, 2017 to December, 2017 and the data relates to the combined state of Andhra Pradesh. The Consumer Price Index Numbers for Agricultural Labour increased by 1.57% in the State (Combined AP) and 1.49% for All India compared to the corresponding period in the previous year.

Table 4.3 Consumer Price Index Numbers for Agricultural Labour (Base:1986-87 =100)

Year	Andhra Pradesh	All India
2009-10	534	513
2010-11	589	564
2011-12	654	611
2012-13	711	672
2013-14	805	750
2014-15	860	800
2015-16	914	835
2016-17	955	870
2017-18(Apr to Dec)	971	883
Growth rate (%) April to Dec'2017 over April to Dec'2016	1.57	1.49

Source: Labour Bureau, Simla.

CPI Numbers - Rural, Urban and Combined

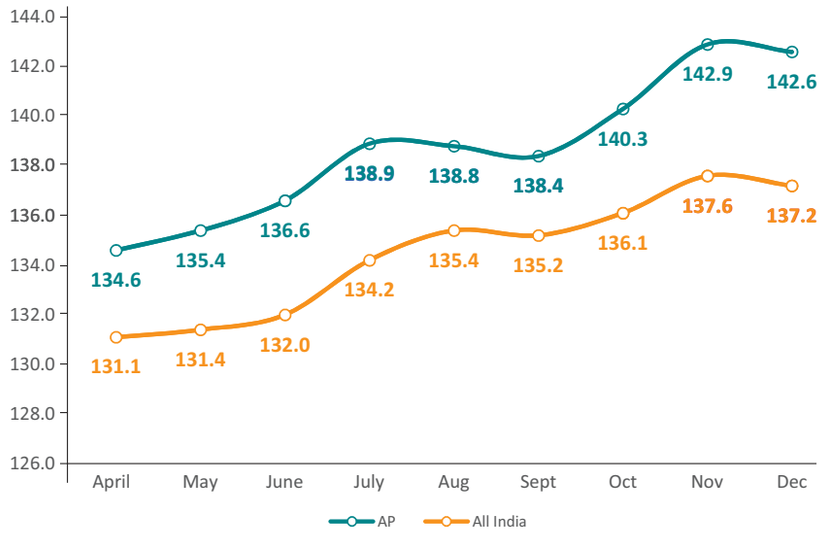
Since the Consumer Price Index (CPI) Numbers reflect the change in retail prices pertaining to specified segments such as industrial workers, agricultural labourers and rural labourers only and do not encompass all segments of the population, these numbers do not capture the holistic picture of price behavior in the country/state.

In order to reflect changes in price levels of various goods and services consumed by respective population groups in rural and urban areas, a new series of CPI is compiled separately for the entire urban population, viz. CPI (Urban), and CPI for the entire rural population, viz. CPI (Rural).

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has revised the base year of the Consumer Price Index (CPI) from 2010 to 2012 with effect from 2015 for release of indices and the new base is being followed by the States & UTs.

The average indices for the period April to December, 2017 in AP and All India are shown in Chart 4.2, Table 4.4 and month wise index given in Annexure 4.2.

Chart: 4.2 Consumer Price Indices



Source: Directorate of Economics and Statistics

Table 4.4: Average Consumer Price Index Numbers for Rural, Urban and Combined

(Base: 2012 =100) (Apr.-December .2017)

Year	Andhra Pradesh	All India
Rural	141	137
Urban	134	132
Combined	139	134

Source: CSO, New Delhi, Note: Index is for AP (13 districts)

Wholesale Price Index

Wholesale Price Index (WPI) serves as an important determinant in formulation of trade, fiscal and other economic policies by the government. It is also used by banks, industry and business circles. It is released on monthly basis by the office of the Economic Adviser, Ministry of Commerce & Industries, GOI. It covers 697 commodities, of which 117 are from 'Primary Articles' group, 564 from 'Manufactured Products' group and 16 from 'Fuel and Power' group. WPI for 'All Commodities' increased from 113.2 in Apr 2017 to 115.7 in Dec 2017. It increased from 127.4 to 131.7 for Primary Articles group and from 112.6 to 114 for Manufactured Products and from 91.7 to 96.5 for Fuel & Power group during the same period.

Wages

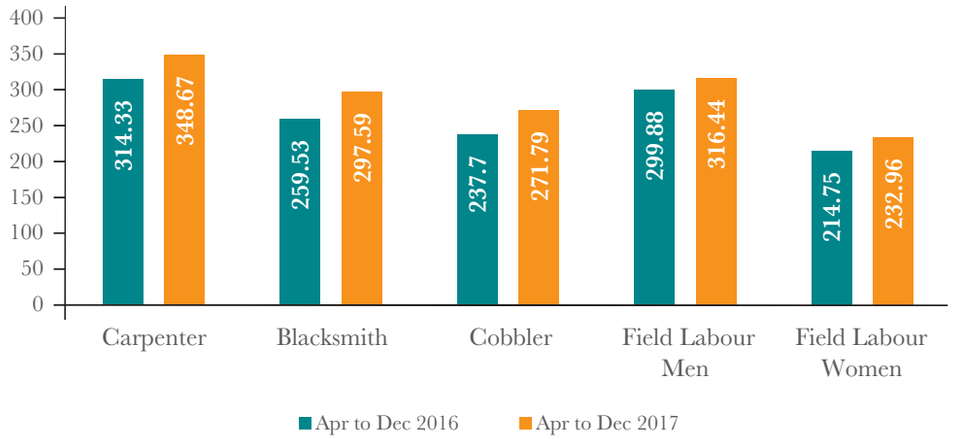
Agricultural labour and artisans constitute the weakest segment of rural labour force in the un-organized sector. 'Wage' data is collected from 44 centres spread over the State covering 42 divisions and 23 occupations. Average daily wages of artisans and field labour in the State are presented in Table 4.5 and depicted in the Chart 4.3 below.

Table 4.5: State average daily wages (Rs.) of artisans and field labour

Category	April to Dec 2016	April to Dec 2017
Carpenter	314.33	348.67
Blacksmith	259.53	297.59
Cobbler	237.70	271.79
Field Labour		
Men	299.88	316.44
Women	214.75	232.96

Source: Directorate of Economics and Statistics

Chart: 4.3 Average daily wages (Rs.) of artisans and field labour.



Source: Directorate of Economics and Statistics

HIGHLIGHTS

Savings through ePoS

Rs. 1525.87 Cr.

Public Distribution

Andhra Pradesh stands as a poineer in implementing the electronic modules in PDS, such as, linkage of Aadhaar with ration card data, allotment of commodities under e-PDS and distribution of commodities through e-PoS cum e-weighing devices throughout the state through supply chain management, enabling end-to-end computerization of the public distribution system (PDS). Portability was also provided to draw their commodities from any of the e-PoS enabled FP shops. SMS facility was also provided to the beneficiaries. Due to these reforms, the state has ensured better delivery of essential commodities to the entitled households as per the scales indicated under the National Food Security Act, 2013.

The AP State Civil Supplies Corporation Ltd., a State Government Undertaking, is incharge of lifting of food grains and procuring under the DCP. APSCSC ltd. is transporting commodities to the Mandal Level Stockiest points and from there through a route programme at the door steps of the Fair Price shops through GPS based vehicle tracking system.

Fair Price Shops

29,462 Fair Price (FP) shops are functioning in the State as on 31.12.2017. There is one shop for every 1,376 persons in Andhra Pradesh vis- à-vis the Government of India's norm of one shop for every 2,000 persons.

Every month, 2.23 lakh MTs of Rice (0.32 Lakh MTs for AAY families & 1.91 Lakh MTs to priority household families) is being allotted for distribution at subsidized rates @ Rs.1/- per Kg to cater to the needs of 1.42 crore BPL families. Government is attaching highest importance to provide food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a dignified life.

Government of India is allocating 31796.42 MTs of rice per month under AAY @ Rs.3,000/- per MT., 122351.62 MTs of rice under priority category @ Rs.3,000/- per MT and 1838.97 MTs of rice under Tide over category @ Rs.6,100/- per MT for distribution to all the eligible card holders under NFSA,2013.

118 MTs of rice is being supplied to beneficiaries under Annapurna scheme for distribution @ 10 kgs. per beneficiary per month free of cost. The following commodities are supplied to the BPL card holders, every month.

Sl. No	Name of the Scheduled Commodity	Scale of distribution	End Consumer Price per Kg (in Rs.)	Quantity allotted (in MTs)
1	Rice to Priority / White Cards	5 kgs per unit in the ration card	1.00	1.91 Lakh MTs
2	Rice to AAY Cards	35 kgs per card	1.00	32058
3	Rice to Annapurna Cards	10 kgs per card	Free of cost	118
4	Sugar	1 kg per AAY card only	13.50	916
5	Wheat Atta	1 kg per card	16.50	1800
6	Redgram dal	1 kg per card in ITDA areas	40.00	1076
7	Ragi (Millet) (In Ananthapur and Chittoor districts on pilot basis)	Upto 3 kgs per card (in lieu of Rice)	1.00	3252

Source: Civil Supplies Department

Ration Cards

Category-wise ration cards in existence in the State during the month of December, 2017 are given in the following Table 4.6 and district wise card position is given in Annexure 4.3.

Table 4.6: Ration Cards Position (Lakh No.)

1	White ration cards	133.02
2	Annapurna	0.12
3	Antyodaya Anna Yojana Cards	9.16
	Total	142.30

Source: Civil Supplies Dept.

Integrated Child Development Services (ICDS) Scheme

Integrated Child Development Services (ICDS) Scheme is a unique early childhood development programme aimed at addressing health, nutrition and development needs of young children, pregnant and nourishing mothers. Under Supplementary Nutrition Programme to Anganwadi Centers, essential commodities like Rice, Dal and Oil are being procured from various sources. Supply of Rice, Dal and Oil from F.P. Shop network to the Anganwadi Centers directly through ePoS.

End-to-end Computerisation of TPDS Operations

Andhra Pradesh is the first State in the country to implement FP Shops Automation under the Scheme "End-to- End Computerization of TPDS Operations". Out of the total, 29,462 F.P. Shops, 28,689 F.P. Shops are functioning through ePoS Devices-cum-Electronic Weighing Machines. 28,422 Iris readers were also integrated to ePoS devices for authentication whenever biometric authentication is not successful. With the implementation of FP Shops Automation, the savings in essential commodities noticed are shown in Table 4.7

Table 4.7 Savings after Implementation of e-PoS

Sl. No.	Commodity	Qty saved (in MTS)	Value of savings noticed (Rs. in crores)
1	Rice:	478963.939	1483.86
2	Sugar	20176.700	29.29
3	Wheat	8209.526	12.72
TOTAL:		507350.165	1525.87

Source: Civil Supplies Dept.

Installation of Global Positioning System

The State Government is implementing GPS/GPRS-based vehicle tracking system to monitor the movement of essential commodities from MLS Points to FP Shops (Stage II movement) to prevent diversion of essential commodities and for ensuring greater transparency in distribution of ECs under PDS.

F.P. shops portability within district

To leverage of technology to the benefit of BPL cardholders, government has introduced F.P. shops portability system. Under this system, the ration cardholder can draw essential commodities from any ePoS enabled F.P. shop irrespective of having his / her ration card number in Dynamic Key Register of a particular ePoS enabled F.P. shop.

Kaizala – A messaging and productivity application

Kaizala Application of Microsoft is being used in Civil Supplies department and A.P. State Civil Supplies Corporation Limited by forming different groups of officials including F.P. Shop Dealers for the monitoring of day-to-day activities.

Cash less Transactions

Cashless Aadhaar Enabled Payment System is being implemented in 28,689 FP shops. The shops/ cardholders who are not ready to implement cashless transaction, ECs are distributed on credit basis for the month of December and the credit to be recovered in ensuing month.

Market Intervention Scheme

Whenever there is abnormal hike in prices, review of prices of selected essential commodities, their availability and measures to be taken up to control prices and to ensure availability of commodities at affordable prices, is taken up through market intervention by government under the scheme.

Redgram dal and Onions

Government of India has allotted 11,421.844 MTs of Redgram (Tur) @ Rs.66/-per kg. Redgram dal distributed to the Tribal Families in agency areas @ (one) 1 kg per family at the rate of Rs.40/- per kg from November 2016 onwards. So far 462 MTs of Redgram dal was distributed. Onions were distributed through 95 Rythu Bazars in all 13 districts at the rate of Rs.22/- per kg. so far 964 MTs of onion were distributed on no loss and no profit basis.

Chandranna Christmas Kanuka 2017/ Sankranthi Kanuka 2018

Six commodities viz., Redgram Dal (½ Kg), Palmolive Oil (½ Litre), Chana Dal (½ Kg), Jaggery (½ Kg), Wheat Atta (1Kg), Ghee (100 ml) were allotted for distribution to the 1.39 crore BPL families in a carry bag at free of cost as festival special gift pack on the eve of Christmas / Sankranthi festivals. Christian BPL cardholders are allowed to draw their festival special gift pack entitlement well in advance on the eve of Christmas festival, the commodities under Chandranna Christmas / Sankranthi Kanuka are supplied through ePoS devices in a backed form in the presence of Janmabhoomi Committee members.

Deepam

In the year 1999, the State Government introduced "DEEPAM SCHEME" for providing LPG connections to poor women by bearing the cost of refundable deposit by the State Government on behalf of the beneficiary. AP has attained saturation in LPG connections and on 8th June, 2017, Government of Andhra Pradesh declared the State as "Smoke free State". Total 54.40 lakh Deepam LPG connections were released from July, 1999 to Dec. 2017.

CHAPTER 5

AGRICULTURE AND ALLIED ACTIVITIES

Sustained efforts – Stabilized Primary sector

- Technology in agriculture - bringing together global leaders in cutting edge technologies to aid small and marginal farmers
- Drought – a thing of the past – Sustained growth in Agriculture and Allied sectors - Growth despite deficit rainfall
- Soil Health Cards to farmers - distribution based on soil test recommendations.
- 1.43 lakh MTs reduction in consumption of Fertilizers during 2017 over 2016. Saving of Rs.220 Cr to farmers.
- Supply of seed - Subsidy using biometric system, e-crop booking and geo-tagging of water sources – key innovative initiatives.
- "Zero Budget Natural Farming'' a comprehensive and long term welfare initiative - to reach 5 lakh farmers and to cover 5 lakh hectares.
- Andhra Pradesh to become a horticulture hub.
- Micro Irrigation - A.P ranks 2nd in the country in the coverage with 20.60 lakh Ha. in 2017-18 benefitting 6.25 lakh farmers.
- Area coverage under Horticulture targeted to touch 40 lakh hectares by 2029 from 16.43 lakh hectares in 2017-18.
- Minimizing post-harvest losses which are about 5%-15% and enhancing food processing capacity of local crops
- Cold Chain Corporation is being set-up to reduce the post-harvest losses and add value to the produce
- To achieve self-sufficiency of fodder at village level - 'Oorura Pashugrasa Kshetralu' State bags 10th Global leadership award-2017.
- Spectacular growth in Fisheries. AP to become Aqua hub of the World.. AP envisions No.1 position in processing capacity, value and highest exports of sea food.
- Linking markets through e-NAM to improve farmers' income
- Haritha-Andhra Pradesh - Government targets 50% green cover by 2029.

Agriculture

"Everything else can wait but not Agriculture"
Pandit Jawaharlal Nehru.

Agriculture growth throughout global history has been the progenitor of broad-based economic growth and development. The strengths of fundamentals of the economy is evident from the remarkable transition to a high growth path, which was achieved in the recent past. Sustainable growth in Agriculture sector is the "need of the hour" not only for the State of Andhra Pradesh but also for the Country as a whole.

The role played by the agriculture sector in the economy of Andhra Pradesh, remains crucial, despite its volatility centeringaround unpredictable weather conditions, huge farm expenditure and non-profitability continues to be the mainstay for millions of population in the state. Making the agriculture sector more resilient and helping the farming community is the most important priority for the state of Andhra Pradesh.

Various strategic initiatives put in place by the State, by and large have improved the living standards of the people. Economy of Andhra Pradesh continues to be predominantly agrarian with three fourth of its work force engaged directly in Agriculture sector. The Government has charted clear vision to increase the farm productivity as part of achieving Sustainable Development Goals 2030.

HIGHLIGHTS

Area under Food Grains (2017-18)

40.72

Lakh. ha

Forward looking strategies – Use of Technology in agriculture:

Government is committed to support innovative technological interventions that adopt and develop sustainable, cost-effective solutions for agricultural production, post-harvest and storage processing, cooling, chilling and drying. Such of those technologies that result in saved costs, increased yields and local value capture for farmers, route-to-market strategies and on inputs to the agricultural value chain will be encouraged.

"We will make use of advanced technologies to turn agriculture profitable in the state. Through technology, we will conduct soil tests and rightly guide farmers on the crop"

Sri Nara Chandrababu Naidu, Chief Minister of Andhra Pradesh At the World Food Prize-2017 award ceremony event in Des Moines, Iowa, United States.

Government has recognized that the ideal solution for increasing agriculture productivity in the state is to use Information Technology (IT) in a big way. IT, as a tool directly contributes to enhanced productivity in agriculture, also empowers farmers to get latest information for making qualitative decisions.

Agricultural transformation – focused approach

Andhra Pradesh endeavors to provide agricultural extension services to farmers and to transfer the latest technical knowledge to the farming community, introduction of high yielding varieties, laying demonstrations, imparting training to farmers to improve skills & knowledge to boost up the agricultural Production and productivity. The State is committed to transform the Primary Sector with an aspirational goal of making Andhra Pradesh as one of the three top leading states in India through Sunrise Andhra Vision by 2029. The focused areas under the Primary Sector are:

(a) Increasing productivity

(b) Mitigating the impact of droughts through water conservation and micro-irrigation;

(c) Post-harvest management to reduce wastage; and

(d) Establishment of processing, value addition capacity and supply chain of the identified crops.

Making agriculture sector drought-proof, the state has come out with various strategies that not only mitigate the distress in agriculture but will substantially enhance the incomes of farmers. Deploying Rain guns during Rabi season and ensuing Kharif as a yield protection measure by placing their services based on the soil moisture assessment is one of the key strategies of the government. Ensuring food security and provision of gainful employment continues to be the essential premise of socio economic development.

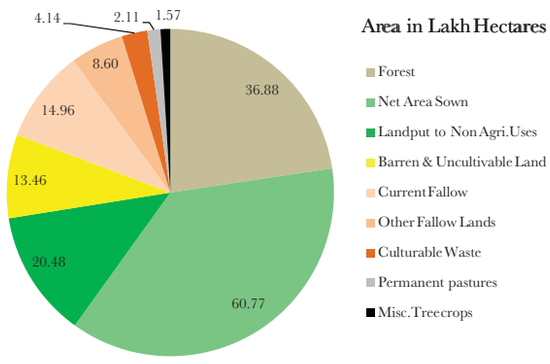
Land Utilization

The percent share of the different segments of land use of the total geographical area of the state: 162.97 lakh hectares is as follows:

Net area sown	37.29%
Forest	22.63 %
Current fallow lands	9.18%
Land put non-agricultural uses	12.57%
Barren and uncultivable land	8.26%
Other fallow, cultivable waste lands	7.81%
Remaining land	2.26%

The Land utilisation particulars from 2008-09 to 2016-17 are given in the Annexure 5.1 and district wise land utilisation particulars during 2016-17 are given in Annexure 5.2. The following Chart. 5.1 depicts Land utilisation details for 2016-17.

Chart 5.1 : Land Utilisation in Andhra Pradesh 2016-17



Source: Directorate of Economics & Statistics department

HIGHLIGHTS

Production of Food Grains (2017-18)

157.59

Lakh. Tons

Soil Types

There are various types of soils and the formation of a soil is primarily influenced by major factors - climate, altitude and composition of bedrock etc. Disproportion in the distribution of rainfall in the country and excessive heat contribute special characters to the soils. Most of soils in the State are made up of a combination of three basic types, namely, Sand, silt, and clay. Category wise soils are given in Annexure 5.3. Of the 22 categories of soils adding to the total geographical area of the state, six types are predominant and together account for over 88% of the area.

Agro Climatic Zones

The following are the Six Agro climatic zones in the State.

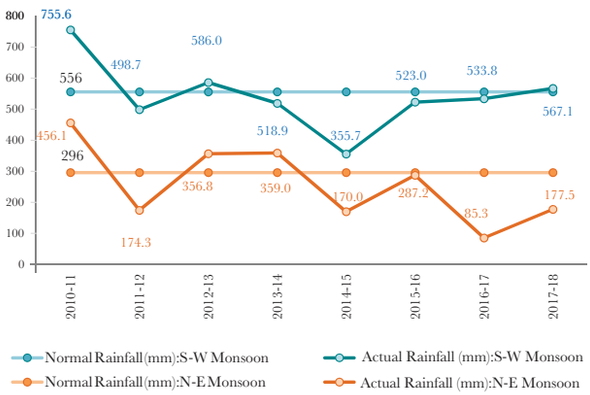
Sl. No.	Name of the zone	Districts
1	North coastal zone	Srikakulam, Vizianagaram, Visakhapatnam
2	Godavari zone	East Godavari, West Godavari
3	Krishna zone	Krishna, Guntur, Prakasam
4	Southern zone	Chittoor, YSR, SPS.Nellore
5	Scarce rainfall zone	Kurnool, Anantapuramu
6	High altitude & tribal areas zone	High Altitude & tribal areas of Srikakulam, Visakhapatnam, East Godavari districts

Land Holdings

The data on land holdings is being collected since 1970-71 through a quinquennial census of land holdings, the latest available data relates to 2010-11. The average size of land holdings in the state has marginally declined to 1.06 hectares during 2010-11 from 1.13 hectares in 2005-06. The number of holdings has increased from 72.16 lakh in 2005-06 to 76.21 lakh in 2010-11. Distribution of land holdings and area according to size classes are given in Annexure 5.4 and District- wise distribution of land holdings and area according to size classes are given in Annexure 5.5.

Rainfall scenario:

Chart 5.2: Rainfall during South-West Monsoon and North-East Monsoon



Year	Monsoon-wise Rainfall		
	South West Monsoon (Normal 556.0)	North East Monsoon (Normal 296.0)	Total (Normal 966.0)
2016-17	534.0 % of deviation to normal (-4)	85.0 % of deviation to normal (-71)	677.2 % of deviation to normal (-29.9)
2017-18	567.1: Deviation to normal (2%)	177.5: Deviation to normal (-40%)	-

Season wise and region wise rainfall details are given in the Annexure 5.6 and district wise rainfall is given in Annexure 5.7.

Source: Directorate of Economics &Statistics.

Comparative picture of Area and Production under food grains and paddy

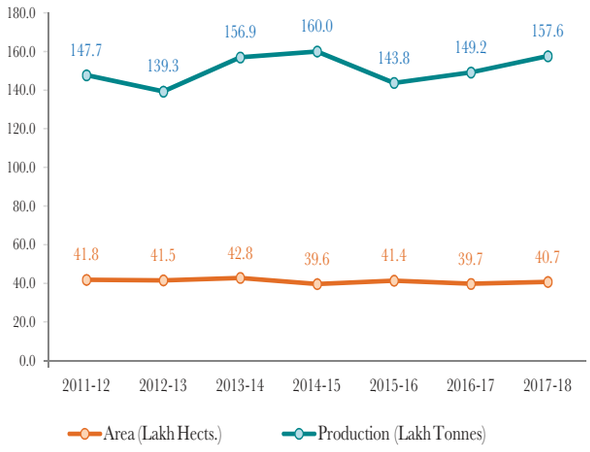
The area as well as production of food grains for the year 2017-18 are expected to show an increase in comparison with the previous year achievements viz, 2016-17. However, a marginal decline of 0.47 lk ha. in area took place in case of Paddy crop during 2017-18.

Year	Food grains						Paddy			
	Area (lakh ha.)			Production (lakh.tonnes)			Area (lakh ha.)			Production (lk.tonnes)
	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif
2016-17	21.53	18.17	39.70	85.35	63.81	149.16	15.20	5.85	21.05	78.50
2017-18	20.65	20.07	40.72	84.81	72.78	157.59	14.77	6.75	21.52	76.45
% Change	(-)4.08	10.45	2.57	(-) 0.63	14.05	5.65	(-)2.83	15.38	2.23	(-)2.61

(Second advance estimates 2017-18)

Expansion of Area under Paddy and Major millets during 2017-18 lead to an increase of 5.65% in the production of Food grains. The time series trends in area and production of food grains and the Season wise area, production and productivity of selected crops are presented in Annexures 5.8, 5.9, 5.10 and 5.11 respectively.

Chart 5.3: Area and Production under food grains



Source: Directorate of Economics & Statistics

Cropping Intensity

The cropping intensity, the ratio of gross cropped area to net cropped area, one of the indicators of assessing efficiency of agriculture sector has not undergone much change in the recent past. The cropping intensity for the year 2016-17 has marginally improved to 1.25 from 1.24 last year. This to be further stepped up to 1.50 by ensuring adequate irrigation and changing cropping pattern. Punjab and Haryana with cropping intensities respectively at 1.91 at 1.81 stand as National benchmarks.

Gross and Net Area Irrigated

The gross area irrigated in the State increased to 35.82 lakh hectares in 2016-17 from 35.47 lakh hectares in 2015-16. The net area irrigated in the state stands at 27.19 lakh hectares in 2016-17. The source-wise District wise Gross and Net area irrigated in the State from 2009-10 to 2016-17 are given in Annexure 5.12, 5.12A and 5.13, 5.13A respectively.

Agriculture Extension Programmes - Mission based approach

In line with the Government of India's commitment to double the farm income once in five years, the state government has started implementing double digit inclusive growth strategy with strategic interventions in agriculture sector contributing to higher Gross State Domestic Product (GSDP). The government is working in a mission mode to attain sustainable agricultural production duly competing with the best performing states in the country with minimum cultivation cost, targeting higher net returns to farmer.

The Government has got clear vision to increase the food grain productivity from 2641Kgs/Ha. to 4409 Kgs/Ha. marching towards achieving Sustainable Development Goals 2029. It is aimed to transform the Agriculture sector in the state into a dynamic, high growth sector. Strategies have been devised to double the contribution of Agriculture to the GSDP to Rs.60000 Cr. by 2021-22 from the current level of Rs.31961 Cr (constant prices 2015-16).

Key strategies to realize the vision:

- Modernization of market yards and Rythu Bazaar shall significantly improve the income of farmers.
- Linking to e-NAM to improve farmers' income

HIGHLIGHTS
2 Lakh Farmers practicing ZBNF

- Involvement of marginal and small farmers in crop diversification and food security are the important aspects to be addressed in accelerating crop diversification in the state.
- Promoting poly crop system in the rain fed areas of the state to ensure sustainable income to the farmer in the event of drought situations also which is a common phenomenon of Rayalaseema districts of the state.
- Increasing cropping intensity through seasonal discipline especially in Godavari Delta areas where the farmers can take three crops in a year (Paddy – Paddy - Pulse).
- Promotion of Integrated Crop Management through INM, IPM, efficient water management.
- Promotion of Green Manure crops on a Mission mode.
- Involvement of ANGRAU and other National and International Institutes.
- Periodical crop advisories to the farmers formed both at state and district level.
- Drought mitigation through Rain guns.
- Farm Mechanization –cost effective farming practices with special emphasis to promote CHCs.

Extension Activities:

The government is taking up extension activities in a big way and utilizing the campaign modes to educate farmers in all possible forms.

Polam Pilusthondi:

The main objective of the scheme is to strengthen the extension reach at farmers' doorstep for increasing productivity, profitability, sustainability and explore the possibilities of value addition to increase the income of the farmers. In order to foster rapid and sustainable agricultural growth and raise increased farm income key strategies such as providing effective extension services, promoting farmer led extension, scientific approach, improved use of technologies are being used.

Focused Areas:

During the Polam Pilusthondhi Programme, the main emphasis is being given on the following issues:

- Distribution of Soil health cards and soil test based fertilizer application.
- Correction of Micro nutrient deficiency
- Encouraging the Organic farming / Natural Farming/ Zero budget natural farming
- Soil & Water conservation measures (Dead furrows, Recharging of Bore wells, Recharge of Ground Water, Farm ponds, rainguns etc)
- Issue of Certificate of Cultivation to Tenant farmers for obtaining Institutional Credit and other benefits.
- Pest and Disease Attack and Remedial measures to be taken up.
- Drought Mitigation

Procedural guidelines, Approach, Action Plan and Workshops:

During 2017-18, the Polam Pilusthondi programme is proposed to be conducted for two days in a week by the Agricultural Department i.e, on Tuesday and Wednesday along with the officials of the allied departments and scientists of the Agricultural, Horticultural and Veterinary universities with the consent of the people representatives.

- Each day two villages will be covered and the programme will be organised for a period of eight months
- the programme was organized in 57,415 villages covering 16.03 lakh farmers (including 2.38 lakh women farmers) during 2017-18 (upto December 2017).
- The posters, pamphlets and village specific materials have been prepared on the schemes implemented by the Government and distributed to the farmers attending the programme.
- Training programmes are being imparted to the farmers/Farm women/RMGs on the latest production technologies on various crops with the main emphasis on the focus crop.
- The trainings are to be organized covering 30% trainings to the farm women, 10% trainings to RMGs and remaining to the farmers out of the total budget allocated. An amount of Rs. 78.00 lakhs allotted to conduct 1,300 trainings in the districts @ Rs.6,000/- per training covering 65,000 farmers.
- District specific topics for trainings shall be selected as per the location specific/crop specific situations. The trainings must cover all the aspects based on the critical interventions identified in the villages as per the Action Plans prepared.

- Monthly workshops are being held regularly at identified research stations of ANGRAU in all districts on first Saturday. The information obtained in the monthly workshops will be displayed as black board messages in every village.

Chandranna Rythu Kshetralu– Inculcating best management practices

Important crops like Paddy, Pulses, Coarse cereals, Oil seeds and Cotton are cultivated in considerable extent in the state. The production and productivity levels in case of majority of crops are below the possible potential. In order to enhance the productivity of these crops, special programme involving the gross root level functionaries and farmers, Chandranna Rythu Khsetralu-(CRKs) are being conducted on farm demonstrations with latest technological interventions.

Chandranna Rythu Kshetralu programme is implemented to promote best agronomic and farm management practices for achieving increase in productivity and reducing cost of cultivation. CRK is an on farm demonstrations of 10 Ha. each cluster at field level with a subsidy of Rs.5000/- per Ha. During 2017-18, 3307 CRKs were organized in all the 13 districts in the State in all the major crops i.e., Rice, Groundnut, Pulses, Maize, Cotton and Sunflower.

Multi-Purpose Extension System

The Government introduced Multi-Purpose Extension System in place of Adarsha Rythus for every 1000 Ha. of cultivable area. 4017 Multi-Purpose Extension Officers (MPEOs) are working in the State. The Performance of MPEOs is being assessed on monthly basis based on the Key Performance Indicators and MPEOs are graded based on the marks obtained on performance. Latest technical information on various schemes, objectives, guide lines, subsidy pattern and suggestions to the farmers related to the concerned season/ month are being published in the Telugu Monthly magazine 'Padi Pantalu'.

Soil samples analysis and soil health cards

Soil sampling and soil testing program is organized in a systematic manner to evaluate the fertility status and identify soil problems. The departmental Soil Testing Laboratories are equipped with advanced equipment (AAS, MPAES) to analyse 12 parameters i.e., PH, EC, OC, N, P, K, S, Zinc, Iron, Copper, Magnesium and Boron. The results of the soil analysis are being communicated to the respective farmers in the form of soil health cards. Fertilizer recommendations on the available nutrient contents on soil fertility status are to be given to the farmers in the soil health cards. During 1st cycle of soil health card scheme 13.48 lakh soil samples were analyzed and 54.28 lakh soil health cards were distributed to the farmers. The 2nd cycle of soil health card scheme i.e from 2017-18 and 2018-19 is under progress.

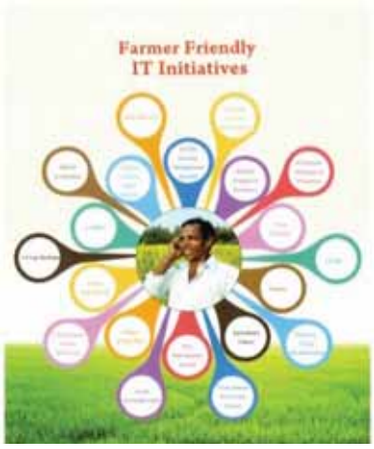
Enhancing Agricultural productivity - Soil Health Management

Soil Health Management in a sub mission under NMSA, which aims to increase soil nutrient status and thus enhance crop productivity for ensuring food security and sustaining rural development.

Analysis of soil samples has indicated that 42% of soils in Andhra Pradesh are potentially deficient in Zinc(Zn), 22% in Iron(Fe), 7% in Manganese (Mn),3% in Copper (Cu), 19% in Boron (B) and 11% in Molybdenum(Mo). Studies also revealed that 20-24% of soils in AP are deficient in Sulphur. These large scale deficiencies of multiple nutrients such as micro and secondary nutrients are reducing the response to the added N, P, K nutrients also. It is planned to take up a massive programme such as publicity on correction of micronutrient deficiency through local media, Polam Pilustondi, wall poster and pamphlets, Hoardings and moving media etc. in the districts where micronutrient deficiencies are high wide. All the micro nutrients are being positioned and distributed on saturation mode. Yield impact studies taken up under the project has shown 8-15% yield increase over the control plots. During 2017-18 the Govt. has increased the subsidy from 50% to 100% duly relaxing the 2Ha. limit per farmer and 87,250 M.tons of micronutrients distributed through Aadhar enabled biometric system based on soil test results on production of Soil Health Card..

Information and Communication Technology:

Coverage of crop booking on real-time through e-crop booking software has supported the tenant farmers through LEC, CoC (Certificate of Cultivation). Thus these actual cultivators have enjoyed the first low hanging subsidy fruits of the department through Digital Krishi Kalyan, Farm Machineries, Vaddi Leni Runalu. Concepts like FOSS (Farmer One Stop Shop) Farmer data base creations, Big data analysis, Internet of Things (IoT), Smart Home Technologies, cloud computing, mobile governance, Machine Learning, IVR, AR (Augmented Reality) &VR (Virtual Reality), Everything on Demand (Uberization), GPS fencing, Assets mapping, and Automation areas are going to further bolster the Information Technology pursuit by the AP Agriculture Department which is still peddling in new wider angles.



D-Krishi – a mobile based DBT solution for distribution of e-Seed& Micro Nutrients:

D- Krishi is a unique, simple, sustainable, secure and standard and user friendly mobile based DBT solution offered to farmers. Farmer or any one member of the farmer's family is the main beneficiary wherein land records, Aadhar and family database (Ration card) are integrated. Based on the landownership data of the farmer linked to his Aadhar ID, the area of land and associated eligible seed quantity shall be calculated by the system. Farmer-wise seed distribution as well as stock are also recorded. The Department has been distributing subsidized seed through biometric system using these Aadhar, webland and ration card databases with the technical support from NIC. Based on the experience gained in Anathapuramu and Guntur districts during 2016-17, the department is planning to use all subsidized seed distribution through the Android application www.eseed.ap.gov.in. This Application has received CSI Nihilent Best e-Governance Award during the year 2017-18.

e-Agriculture- Crop Booking- Android Application:

The Department has been doing crop booking using e-Agriculture tab based android application http://45.114.143.89/E-Agriculture since Rabi-2015. This software was integrated with CM Dash board to show the real time dynamic crop coverage area of the state. 100% farmer data base is created and validated with Aadhar number. Crop photos are captured as and when sowings are done on the field and geo tagged. The application facilitates real time estimation of crop coverage and dynamic report generation used for decision making and used as a prediction tool. Software applications are developed using e-crop data for procurement of Chillies, Cotton, Paddy.

Certificate of Cultivation:

The Software http://120.138.10.153/COC is being used for issue of Certificate of Cultivation(CoC) to tenant farmers / authenticating farmer who is raising the crop for availing department's subsidies. The banks have to extend the finance to "Certificate of Cultivator" (tenant farmers) up to Rs.1.00 lakh on hypothecation of crop & without insisting on collateral security as per the existing norms, basing on the certificate of cultivator details provided by the Agriculture Department.

Loan Eligibility Card Portal:

http://137.59.201.88:8080/LEC/?rvn=1

This software is used to monitor the status online of the LEC cards issued by Revenue Department to Tenant Farmers. These LEC cards are useful to obtain crop loans from banks.

Input distribution 2017-18:

The distribution status of various agriculture inputs is presented in the following paragraphs

Seeds

During Kharif 2017, 6.87 lakh Qtls. of seed of various crops distributed with a subsidy of Rs.26196.53 lakhs. 2.10 lakh Navodhaya kits were distributed in co-ordination with the seed supplying nodal agencies like APSSDC, OILFED, MARKFED and NGOs. Under contingency plan, 29,413 qtls of seed of different crops was distributed in four districts (Kadapa, Kurnool, Ananthapuramu and Chittoor) on 100% subsidy incurring Rs.2366.84 lakhs. During Rabi season, a quantity of 6.71 lakh Qtl. of various crop seed has been indented for distribution to farmers on subsidy and 3.10 lakh quintals of seed has been distributed with a subsidy value of 12037.72 lakhs in co-ordination with the seed supplying nodal agencies upto 14-12-2017.

To develop Andhra Pradesh as Global seed hub and to ensure the availability of quality seed with low cost to every farm holder in the State, identified IOWA State University, USA and entered an MoU with IOWA. Government of Andhra Pradesh allotted an amount of Rs. 650 Cr. to develop the Mega Seed Park in 579 acres at Tangadancha Agriculture farm in Kurnool District.

Fertilizers

Fertilizer consumption during the year 2016-17 in terms of product was 35.31 LMT (Kharif 16.41 LMT and Rabi 18.90 LMT) and in terms of nutrients (N, P, K), it was 16.86 LMTs (7.78 LMT during Kharif 2016 and 9.09 LMT during Rabi 2016-17). The consumption during Kharif 2017 in terms of product is 14.98 LMT and in term of Nutrient (NPK) is 5.00 LMT. Details of consumption of Fertilizers and in terms of nutrients are given in Annexures 5.14 and 5.15 respectively.

The government is implementing (Nutrient Based Subsidy (NBS) Policy for P&K fertilizers. Government has announced a fixed rate of subsidy on nutrients namely Nitrogen (N), Phosphate (P), Potash (K) and Sulphur (S). As per the Government of India's communiqué, the per kg subsidy fixed on nutrients for the year 2017-18 stand at Rs. 18,989 for Nitrogen, Rs. 11,997 for Phosphorous, Rs. 12,395 for Potash and Rs. 2,240 for Sulphur.

Pesticides

The consumption of chemical pesticides showed a reduction of 101.71MTs (Active Ingredient) as the consumption declined to 998.96 MTs of active ingredient in Kharif 2017 from 1100.67 MTs in Kharif-2016. The awareness created by the government on integrated pest management practices among the farming community through Chandranna Rythu Kshetralu, Polambadi, Polam pilusthondi, usage of bio-pesticides, change in cropping pattern, Zero Budget Natural Farming etc has contributed to the reduction. The pesticide consumption has been showing definite decline during the recent past with the consumption falling from 4050 MTs in 2014-15 to 2015 MTs in 2016-17.

Drought proofing measures

Two thirds of the area cultivated in the state is rain-fed. Keeping in view the climate change, government is giving emphasis on drought proofing. Technologies like automatic Weather Stations, Piezo meters, Soil Moisture meters etc are being used extensively. Water being a key factor in dry land farming, greater emphasis is given to ground water recharge through Farm Ponds (Panta Sanjeevini) and Neeru-Chettu, Geo mapping of all water resource bodies.

The Government is giving highest priority for welfare of farming community in the state. Rain guns are being used under prolonged drought conditions for enhancing productivity. During 2016-17, an extent of 6.37 lakh acres benefitting 1.47 lakh farmers has been covered in 8 districts with Rain guns and Sprinklers saving produce worth of Rs 560 Cr. Expenditure incurred for diesel and transport was Rs. 4.43 Cr. During 2017-18, protective irrigation was provided in 36 moistures stress mandals of Ananthapuramu district through Rainguns for Groundnut crop in 810 acres facilitated to achieve highest yield of 1600 kg/Ha. Government is committed to effectively utilize the water resources as a part of this strategy, plans to provide productive irrigation through rain guns in moisture stress areas during Rabi season.

Farm Mechanization and Custom Hiring Centres

Agronomically designed tools and equipment for reducing drudgery, enhancing safety and comfort and to suit the needs

of women workers have been recognized to help better adoption of technologies in agriculture. Mechanization includes introduction of better equipment for each farming operation to improve efficiency by saving on time and labour, improve productivity, minimize wastage and reduce labour costs for each operation. Another important aspect in our agriculture sector is the high proportion of female workforce in both the cultivation and processing stages of farming. Subsidy is increased from 50% to 70% to SC and ST farmers on farm mechanisation components except tractors and combined harvesters.

Mee-seva, online application system was introduced to help farmers to avail the equipment on time and also more transparent manner. The achievements under Farm mechanization scheme are shown in Table 5.1.

Table 5.1 : Farm mechanization

Year	Beneficiaries		Subsidy expenditure (Rs. in lakhs)	
	Target	Achievement	Target	Achievement
2014-15	122182	87990	16591.47	15784.00
2015-16	153401	124386	18688.25	18440.58
2016-17	139624	93566	28657.61	27022.22
2017-18 (upto Dec.2017)	153335	55548	42367.00	16757.68

Source: Agriculture Department

2258 Custom hiring centers are being established at village for the Paddy, Maize, Groundnut crops and harvesting package and marginal high cost machinery is made available to small and marginal farmers. Capacity building trainings were also being conducted to train rural unemployed youth on the machinery to mitigate shortage of skilled workers to work on the machines

Crop Insurance

Pradhan Mantri Fasal Bima Yojana (PMFBY)

Government of India announced a crop insurance policy namely "Pradhan Mantri Fasal Bima Yojana" in place of NAIS & MNAIS from Kharif 2016 season onwards. It incorporates the best features of all previous schemes and at the same time removing, all previous shortcomings/ weaknesses. The major improvements made are:

- Farmer's premium contribution in Kharif is 2% and in Rabi it is 1.5% for Food Crops and Oilseed Crops. Annual Commercial & Horticulture crops – farmer premium share will be maximum of 5%.
- Premium subsidy will be paid by the Central and State Governments on equal proportion (50:50).
- Cover for inundation apart from Hail storm and Post-harvest crop damage.
- Action plan to cover 50% of the area under Crop Insurance.

Under PMFBY scheme, in Kharif 2017, Paddy crop is covered under "Village Insurance Unit" in 12 districts, Red gram in Ananthapuramu district and other 18 crops covered under Mandal Insurance Unit.13 Districts have been grouped into two clusters with balanced risk profile and sum insured. The results of the CC Experiments are being compiled through online system for quick settlement insurance claims.

During Rabi 2017-18, Paddy crop is covered under "Village Insurance Unit" in 5 Districts (East Godavari, West Godavari, Krishna, Nellore & Chittoor, Bengalgram in 3 districts (Prakasam, Kurnool & Kadapa), Maize in Guntur District and 10 crops (Rice, Maize, Jowar, Greengram, Blackgram, Bengalgram, Groundnut, Sunflower, Red Chilly, Onion covered under Mandal Insurance Unit. All the districts have been grouped into two clusters with balanced risk profile and sum insured.

Restructured Weather Based Crop Insurance Scheme (RWBCIS)

Under Weather Based Crop Insurance Scheme, in Kharif 2017, Groundnut crop is covered in 4 Districts of Rayalaseema region. Cotton, Redchillies, Oil palm, Sweet lime, Tomato crops are having insurance coverage facility in selected districts. The structure of farmer's premium under RWBCIS will be at par with the proposed PMFBY i.e., 2 % for Kharif crops & 1.5 for Rabi Crops. (in case of Horticulture/Commercial crops, farmers share is upto 5% only). As the proposed crops under RWBCIS are limited in the selected districts, one cluster is formed under this scheme.

In Rabi-2017-18, Mango, Banana, Cashewnut, Acid lime and Tomato crops are covered in insurance coverage facility in selected districts. As the proposed crops under RWBCIS are limited in the selected districts, one cluster is formed under this scheme. Season wise, district wise crops notified under W.B.C.I.S. are shown in Table 5.2

Table 5.2 Notified crops under W.B.C.I.S

Season	Crops	Districts
Kharif, 2017	Groundnut	Kurnool, Anantapur, Kadapa and Chittoor
	Cotton	Guntur and Prakasam.
	Redchilly	Guntur
	Oil Palm	West Godavari , East Godavari
	Sweet Lime	Kadapa, Ananthapur
	Tomato	Chittoor , Kurnool, Prakasam
Rabi, 2017-18	Mango	Srikakulam, Vizianagaram, Vishakapatnam, East Godavari, West Godavari, Krishna, Prakasam, Kadapa, Kurnool, Chittoor, Ananthapuramu
	Banana	Srikakulam, Vizianagaram, East Godavari, West Godavari, Kadapa, Kurnool, Guntur, Ananthapuramu, Krishna
	Cashewnut	Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari
Rabi, 2016-17	Acid Lime	SPS.Nellore
	Tomato	YSR Kadapa, Kurnool, Chittoor, Ananthapuramu

Unified Package Insurance Scheme (UPIS) (Pilot scheme)

Apart from PMFBY & WBCIS, GOI has also announced "Unified Package Insurance Scheme (UPIS) on pilot basis during 2017-18.

- Srikakulam district is selected to implement UPIS during 2016-17 on pilot basis.
- The pilot scheme includes seven sections viz., 1. Crop Insurance (PMFBY/WBCIS), 2. Personal Accident Insurance (PMSBY), 3. Life Insurance (PMJJBY) 4.Building & Contents Insurance (fire and allied perils), 5.Agriculture Pump Sets Insurance, 6.Student Safety Insurance, 7. Agriculture Tractor Insurance
- Out of these seven sections Crop Insurance (PMFBY / WBCIS) is compulsory. However, farmer can choose at least two sections from remaining six to avail applicable premium subsidy under PMFBY/WBCIS.

Enrollment of farmers

- Around 18.65 lakh Loanee and 68,440 of Non-Loanee farmers were enrolled under PMFBY & WBCIS during Kharif, 2017 season. Certificates of cultivation are being issued by MAO to the Non-loanee farmers who are not having LEC cards for increasing the Non-Loanee enrollment.
- MPEO are visiting door to door of the farmers to sensitize them on the scheme benefits and also identify the Non-loanee/Tenant farmers.
- All the Insurance Companies are advising to coordinate the officials and provide the material required.

Crop insurance claim details under different schemes from 2010-11 to 2016-17 are given in Annexure – 5.16.

Agricultural Credit

The Annual Credit Plan for the year 2017-18 was Rs.87470.67 cr. towards Agriculture Credit. Rs.49054.81 cr. (56.08 %) was disbursed up to Sept. 2017 under Agriculture Credit. An amount of Rs.38893.59 crores (61.63%) was disbursed under crop loans (short term loans) against the target of Rs.63105.51 crores and an amount of Rs.10161.22 crores (41.70%) was disbursed against the target of Rs.24365.16 crores under Agriculture Term Loans including allied activities. Details about Agricultural Credit disbursement during 2017-18 (upto 30-09-2017) are given in Annexure 5.17.

The Annual Credit Plan 2016-17 for the State was Rs.83003.39 crore towards Agriculture Credit Rs.78113.97 crore (94.11%) was disbursed under Agricultural credit. An amount of Rs.58839.84 crore (98.07%) was disbursed under crop loans as against the target of Rs.59999.95 crore and an amount of Rs.19274.13 (83.79%) crore disbursed as against the target of Rs.23003.44 crore under Agriculture Term Loans including Allied activities.

Credit to Land Licensed Cultivators (Tenant farmers):

The State Government has taken up a major initiative to facilitate financing to the land licensed cultivators (tenant farmers) through passing an act named the "Andhra Pradesh land licensed cultivators Act No 18 of 2011'' to provide loan and other benefits eligibility cards to land licensed cultivators (tenant farmers).

During 2016-17, Loan Eligibility Cards (LECs) were issued to 6,00,717 (Fresh & Renewal) Land licensed cultivators by the Revenue department. An amount of Rs.218.88 crores was issued under crop loans to 82837 LEC holders. During 2017-18, Loan Eligibility Cards (LECs) issued to 5,11,324 (Fresh: 2,08,498 and Renewal: 3,02,286) Land Licensed cultivators (Tenant farmers) in the state. An amount of Rs.524.27 crores was given to 1,92,789 LEC holders. Details are given in Annexure 5.18.

Issue of "Certificate of cultivation'' to tenant farmers:

So far 3,38,470 Certificates were issued to the tenant farmers and loaning started. Till date, an amount of Rs 322.17 Crores was disbursed to 93494 no. of farmers. The Department has also initiated necessary steps to maintain the online data base of the Tenant farmers issued with Certificate of Cultivators on AP AGRISNET portal http://www.apagrisnet.gov.in/ for easy access to the bankers.

Vaddileni Runalu and Pavala Vaddi Scheme on Crop Loans

To mitigate the financial burden of the farmers, the Government has announced Rythu Sri (vaddileni panta runalu/pavala vaddi) scheme on crop loans disbursed. The Government has announced Interest free crop loans to all the farmers up to Rs.1.00 lakh and Pavala Vaddi for crop loans from Rs.1.00 lakh to Rs.3.00 lakhs if repaid in time (maximum period of one year).

During 2016-17, an amount of Rs.249.48 Crores was settled under Vaddileni Runalu and Rs.5.43 crores was settled under Pavala Vaddi. During 2017-18, till date, an amount of Rs. 128.41 crores was settled to 5,73,691 farmer's accounts under Vaddileni Runalu and Rs.3.45 cr have been settled to 34,848 farmers accounts under Pavala Vaddi (as on November 2017), and the settlement of claims is under progress.

Rythu Sadhikara Samstha

Agricultural Debt Redemption Scheme to farmers:

Government of AP is implementing the Agriculture Debt Redemption scheme with an outlay of Rs.24000 Crores. At present 3 installments of Debt Redemption is being released for the farmer families who are entitled for Debt Redemption of more than Rs.50000/-. Including the 3rd installment so far released, in to Rs.14,428 Crores has been released.

While releasing the II installment of Debt Redemption the farmers are given interest @10% for one year on 2nd installment and for 2 years @10% while releasing the 3rd installment.

In respect of Horticultural crop loan Debt Redemption it is considered upto maximum of Rs.50000/-@ Rs.10000 per Acre and for Horticulture Debt Redemption so far Rs.384.47 crores was released in favour of 2.23lakh Loan accounts of farmers.

Rythu Sadhikara Samstha has processed around 9 Lakh Grievances and released an amount of around Rs.566 Crores. Even now all the eligible cases represented through grievances are considered for Debt Redemption.

The Tenant farmers are given priority. The individual tenant farmers as well as the members of Rythu Mithra Group and Joint Liability groups are also considered for Debt Redemption. Installment wise releases are shown in Table 5.3

Table 5.3 Installment wise Debt Redemption Scheme

Installment No.	No of Accounts (in lakhs)	Amount (Rs.in crores)
First	54.98	7564.69
Second	36.39	3302.81
Third	26.23	3069.83
Horticulture	2.23	384.47
Under grievance redressed (2016-17)		58.83
Under grievance redressed (2017-18)		45.83
Girijan Corporation Society	0.03	1.88
Total amount so far released under Agriculture Debt Redemption		14428.34

The following accounts and amounts are included in the total amount so far released mentioned above.

	Amount (Rs. in Crores)	Accounts redeemed (in lakhs)
Redemption provided to deceased farmer accounts	51.54	0.10
Tenants Benefited (81508)	123.57	0.82
Individual members under Rythu Mithra group and Joint Liability group benefited (1.43 lakh)	224.14	1.43

Details of debt redemption data is given in Annexure 5.19.

Rashtriya Krishi Vikasa Yojana – A GoI Initiative

Rashtriya Krishi Vikas Yojana (RKVY) is one of the flagship programme of Government of India with Central and State sharing 60:40. The State Level Sanction Committee (SLSC) has sanctioned projects worth of Rs. 782.85 crores during 2017-18. Out of which, Rs.120.89 crores has been sanctioned to Agriculture Sector.

State Initiatives:

Organic Farming / Natural Farming

During 2016-17, 39,856 farmers were covered in 704 program villages across the state comprising 131 clusters. In 2017-18, the programme is being implemented in 972 villages in 399 Clusters. In Kharif 2017, 1,39,230 farmers are practicing ZBNF in both old and new clusters in an area of 61023 ha. The enrolment is expected to reach 2,00,000 farmers by this financial year end. An amount of Rs. 38.39 Crores has been earmarked during 2017-18.

National Food Security Mission

The National Food Security Mission (NFSM) is under implementation in the State. Maize and Commercial Crops (Cotton, Jute and Sugarcane) is part of NFSM from 2014-15. Five districts are identified for implementation of NFSM Rice, 7 districts for Coarse cereals, 6 districts for cotton, 2 for Mesta and 11 for sugarcane during 2017-18.

Extension Reforms - Agriculture Technology Management Agency

"Support to State Extension Programmes for Extension Reforms'' (ATMA), is a support scheme covering the entire state of Andhra Pradesh with 60:40 central and state share. The Extension Reforms (ATMA) component has been included in the National Mission on Agricultural & Extension Technology (NMAET) as Sub Mission on Agricultural Extension (SMAE). The Objectives of the programme is to develop an efficient, effective, demand driven, research integrated and financially sustainable public extension system.

ATMA is a district level autonomous institution, supported by a Governing Board (GB) and a Management Committee (MC) and having membership of all key stakeholders involved in agricultural activities and having linkages with all the line departments, research organizations, non-governmental organizations and agencies associated with agricultural development in the district and farmer organizations. In order to provide needed HRD support in innovative areas of extension delivery, a State Agricultural Management and Extension Training Institute (SAMETI) has also been established in the project states.

Strategic Research and Extension Plan (SREP):

One of the first tasks of ATMA is facilitation of the preparation of Strategic Research and Extension Plan (SREP) of the district through participatory methodologies

involving all the stakeholders and farmers. It also prioritizes the research – extension strategies within the district. It becomes the basis for development of work plans at blocks/ district level. All the ATMA districts have developed their respective of Strategic Research and Extension Plans. The State has already initiated the revisiting of the SREPs.

State Extension Work Plan (SEWP):

The District Action Plans developed under the scheme should be processed consistent with Article 243 ZD of the Constitution. The consolidated State Extension Work Plan for the year 2017-18 was developed at state level with an outlay of Rs.4520.80 Lakhs. The districts organize the need-based activities like farmer trainings, demos, exposure visits, Kisan melas, field days, farmer scientist interaction etc. The following are the major activities undertaken during the year.

- Conduct of fortnightly Agricultural Market Committee Level workshops.
- Organization of Demos on promotion of Minor millets, introduction of new varieties in paddy, soil test based fertilizer recommendations and Poly culture under innovative activities.
- Different methods of planting in Paddy in an extent of 100 acres under innovative activity.
- IPM in Cotton for pink bollworm management.
- Promotion of:
  - Single node/ Budchip method of Sugarcane Cultivation,
  - IPM in Rose, Okra,
  - Cultivation of Coccinea on Pendals,
  - Fish rearing in NREGS Tanks, Water parameters in prawns like, salinity, Ammonia, dissolved oxygen in Aquaponds,
  - Transplantation of Redgram,
  - Drip irrigation in Redgram and inter cropping in Redgram with Cotton etc.
  - Cultivation of Korra before bengalgram in fallow fields.
  - Crop diversification from Paddy to Rajmah.
  - Trainings organized on Ground nut cultivation using Micro Irrigation methods,
  - Increasing millet production, Sugarcane under Drip Irrigation,
  - Fish seed Culture management, Cocoa crop management, Mulbary cultivation & cacoons production

Component wise targets and achievements are given in Annexure 5.20.

Externally Aided Projects:

1. Andhra Pradesh Integrated Irrigation And Agriculture Transformation Project (APII & ATP)

Integrated Irrigation and Agriculture Transformation Project (APII & ATP) funded by World Bank implemented over a period of 6 years is providing benefits to 2 lakh farming families covering 1.47 lakh Ha. of Agriculture land in 1,211 tank command areas. The total estimated project cost is Rs. 1,600 Cr.

2. Japan International Cooperation Agency (JICA)

Under this comprehensive convergence livelihood improvement project rural youth and farmers are being trained on overall maintenance and operation of all types of farm machinery. The project will also promote 20 Farmers Producer Organizations and 921 Village Farmer Federations in the project area.

3. AP Drought Mitigation Project

This is a drought mitigation project initiated with Rs.1048 Cr. in 2017-18 and targets mitigation of drought in Rayalaseema & Prakasam Districts of AP.

4. Bill & Melinda Gates Foundation:

Proposed for working with Bill & Melinda Gates Foundation for sharing new and innovative technology in soil analysis and soil health management.

Cooperation

In a democratic structural frame work like India, Cooperatives have traditionally been promoted and organized for achieving social and economic uplift of the people. Different types of cooperatives are organized essentially to provide agricultural credit to member-farmers so as to enhance employment to its members and for alleviating rural poverty. Co-operative movement has completed over 100 years of service to farmers and other weaker sections of the society.

Computerization of PACS:

Out of 2051 PACS under 13 DCCBs, 63 PACSs are ceded Societies and remaining 1988 PACS to be considered for computerization as they are directly affiliated to DCCBs. A three tier governance structure - National Level Implementation & Monitoring Committee, Technical Sub-Committee, State & District Level Implementation & Monitoring Committees is proposed for smooth implementation of project. The Government has monitoring proper implementation of project.

Rural credit co-operatives

The Rural credit co-operative structure is a three-tier structure currently with the Andhra Pradesh State Co-operative Bank at the APEX level with 13 District Co-operative Central banks (DCCBs) at the district level and with 406 branches located in district headquarters and small towns and semi urban areas and 2051 Primary Agricultural Credit Co-operatives at the village level. Kisan Credit Cards have been issued to 15.57 lakh farmer members of the PACS. The PACS are also actively participating in distribution of Agricultural inputs and also doing other non-credit business.

Loaning Programme 2017-18

A.P. State Co-operative Bank provided Rs.5567.33 crore (Kharif–Rs.4950.77 crore and Rabi-Rs.616.56 crore) as production credit to farmers through the Primaries and the District Co-operative Central Banks during the year 2017-18 (upto December,2017). Of this total amount, loans were distributed under Seasonal Agricultural Operations.

Long Term Loans

APCOB has refinanced an amount of Rs.1140.00 crore to the DCC Banks under Long Term Agricultural Credit as against the loaning programme of Rs.571.14 crore allotted to all the 13 DCCBs during the year 2017-18 (upto December,2017).

Integrated Cooperative Development Projects

Integrated Cooperative Development Project (ICDP) is a centrally assisted scheme implemented with the financial assistance of National Cooperative Development Corporation (NCDC. Under this scheme, assistance is provided for development of Agricultural production, supply of Agriculture inputs, Marketing, Storage and processing activity. ICDP Scheme under Phase-I was implemented in all districts in the State and approval is given for 3 Districts i.e. Chittoor, Kurnool and East Godavari under phase-II.

Marketing Co-operative Societies

The 13 District Co-operative Marketing Societies (DCMSs) in the state undertake procurement of agricultural produce to enable farmers get minimum administered prices for their produce. The DCMSs procure seed on behalf of AP Seeds Development Corporation and also undertake procurement activities on behalf of MARKFED in addition to carrying on local business activities like sale of Fertilisers, Seeds, Consumable articles, Stationary items etc., performance of District Cooperative Marketing Societies are shown in Table 5.4

Table 5.4 : Performance of District Cooperative Marketing Societies

(Rs.in Lakh)

	2016-17	2017-18 (upto Nov,2017)
Share Capital Contribution	287.11	274.15
Business Turn over	40776.67	21689
Profit	566.65	74.29
Loss	60.87	63.18
Accumulated losses	2117.46	3109.25
Assets	20468.77	12494.40
Liabilities	17752.54	9394.40

Source: Cooperative Department

A.P. MARKFED

MARKFED is an apex organization for the Co-operative Marketing Societies (CMS) in the state for supplying agricultural inputs, cattle feed, fertilizers, gypsum, provisions and other requirements to private run institutions and government hostels. MARKFED offers its services through PACS at the primary level and DCMS in the district level. It undertakes procurement of other commodities under commercial account every year depending upon the market situation.

HIGHLIGHTS
Area under Horticulture Crops
16.43
Lak. ha

AP State Co-operative Union

APSCU is an Apex Cooperative institution in the field of Cooperative Education and Training through four Co-operative training centres located at Vijayawada, Rajahmundry, Ananthapuramu district and Y.S.R. Kadapa district on awareness building and propagation of Cooperative Principles and Cooperative Movement.

Andhra Pradesh State Cooperative Rural Irrigation Corporation Ltd.

The Andhra Pradesh State Cooperative Rural Irrigation Corporation Ltd., undertakes drilling of in-well bores, surface bores, lift Irrigation schemes and construction of check dams etc. in Agricultural sector. Besides being the "Nodal Agency" for construction of Farm ponds in Horticulture fields.

Rural electricity supply cooperative societies

Rural electric supply cooperative societies purchase electricity in bulk from the nearest DISCOM and distribute it to domestic, industrial and agricultural consumers in their area of operation. Three RESCOs are working at Kuppam (Chittoor), Kasimkota (Visakhapatnam) and Cheepurupalli (Vizianagaram).

Cooperative Joint Farming Societies

Joint Farming Cooperatives work in a three-tier structure ie., Primary Level- 1,452 CJFS and membership of 1,35,334; District Level-13 District Federations of Cooperative Joint Farming Societies and State Level- Andhra Pradesh State Cooperative Joint Farming Societies Federation Ltd.

Horticulture

The agrarian state of Andhra Pradesh is heading towards a value addition platform from the conventional production approach. 'Horticulture' sector has been recognized as an essential component for food and nutritional security in the State. Efforts are being made to make Andhra Pradesh maintain its supremacy in the production of Oilpalm, Papaya, Citrus and Chillies, Mango and Tomato. Micro irrigation through drip and sprinkler mechanisms have proved effective both in terms of cost and output. The government is implementing strategies to make Rayalaseema as a Horticulture hub.

Under extension programme undertaken in a big way, it is targeted to cover one million farmers in next three years under Farmer Producer Organisations for Agriculture & Allied sectors in order to establish forward and backward linkages and to promote the products of Andhra Pradesh to global standards. It contributes about 8.18% of the State GVA and is moving towards value enhancement in addition to focus on production. The Government is committed to encourage horticulture and it is expected that value addition from this sub-sector will soon cross the agriculture share

Wide range of agro-climatic conditions of Andhra Pradesh are conducive for growing a large variety of Horticultural crops, including, root and tuber crops, ornamental crops, plantation crops like coconut, cashew and cocoa etc. During the year 2016-17, the Government has set a target of 20% growth in output and to achieve this, there is need for new initiatives, new interventions and implementations with the support and coordination of farmers and entrepreneurs.

Horticulture – the key growth driver in primary sector

The State Government has developed a comprehensive strategy for achieving sustainable and inclusive double digit economic growth to make the state of Andhra Pradesh amongst the three best states in India by 2022 and a developed state by 2029 on key social and economic indicators.

The Government is committed to the farmer centric programmes and identified horticulture sector as one of the top priority sectors. This vision is sought to be realized through seven inter-related Missions and Primary Sector Mission is one among them consisting of agriculture and allied sectors. GVA from Horticulture Sector during 2016-17 was Rs.34013 crores (constant price) with a growth rate of 17.00% over 2015-16. The returns from Horticulture per unit of land are higher as compared to Agriculture. Horticulture, as a climate resilient alternative involving less risk, assures higher income to farmers.

In the context of global warming & climate change and increasing per capita income of middle class, this sector has

more potential as food habits are changing and people are becoming more health conscious. During the year 2016-17 the area under Horticulture crops is 15.92 lakhs acres with a production of 268.57 lakh MTs. Andhra Pradesh stands at 1st position in productivity for Chillies, Cocoa, Lime, Oil Palm, Papaya and Tomato, 2nd in Cashew, Mango and Sweet Orange in India. A.P. Ranks 1st in area and production of fruits and spices and 2nd in Micro Irrigation area coverage. Area and Production of Horticultural crops during 2016-17 and 2017-18 (A) are shown in Table 5.5 and crop wise details are shown in Annexure 5.21.

Table 5.5: Horticultural Crops – Area and Production during 2016-17 and 2017-18 (A)

Crop Category	Area and Production during 2016-17		Area and Production during 2017-18(A)	
	Area (lakh ha.)	Production (lakh MTs)	Area (lakh ha.)	Production (lakh MTs)
Fruits	6.09	139.88	6.49	141.81
Vegetables	2.35	80.93	2.74	87.76
Flowers	0.19	2.66	0.22	3.94
Plantation Crops	4.58	31.27	4.65	32.16
Spices	2.69	13.81	2.25	15.80
Medicinal & Aromatic Plants	0.02	0.01	0.08	0.16
Total	15.92	268.57	16.43	281.62

Source: Horticulture Department.

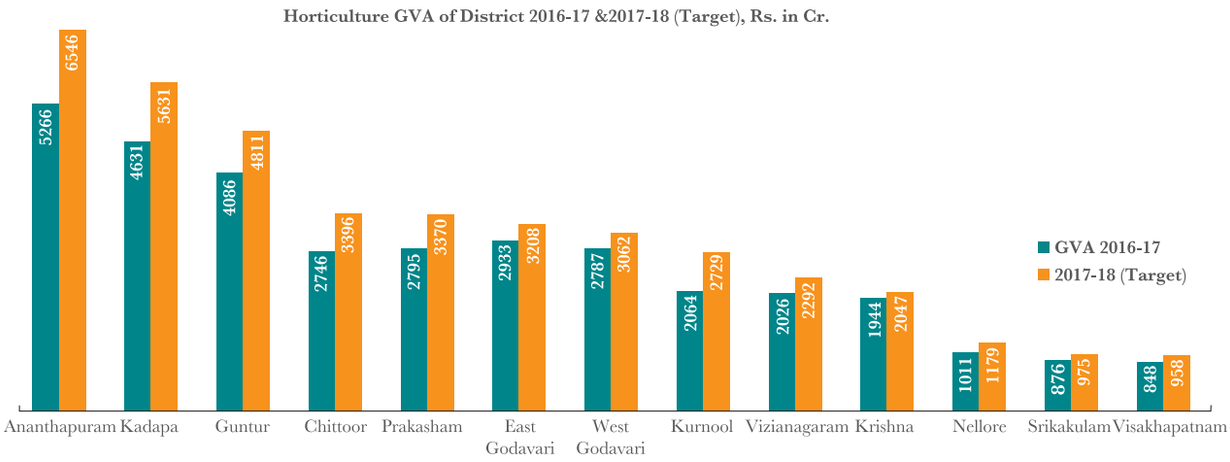
Productivity of Horticulture Crops

Andhra Pradesh stands at 1st position in productivity for Chillies (5 MTs/Ha), Oil Palm (19 MTs/Ha), Papaya (100 MTs/Ha) and Tomato(44MTs/Ha), 2nd in Cashew (0.9 MT/Ha), Mango (12 MTs/Ha) and Sweet Orange(20Mts/Ha) in India.

District wise Productivity of Growth Engine Crops are shown in Annexure 5.22

Chart 5.4

Horticulture GVA of Districts 2016-17 & 2017-18 (Target)



Programmes

Several farmer oriented activities are being taken up to encourage adoption of modern technologies, evolving sustainable farming practices, provision of post-harvest infrastructure facilities and building knowledge base of the farming community.

Action Plan 2017-18

(Rs.in Crores)

Sl. No	Name of the Scheme	Allocation	Funding Pattern	Central Share	State Share	RIDF / NABARD	Total
1	MIDH	96.03	60:40	57.90	38.13	---	96.03
2	NMOOP (Oil Palm)	54.98	60:40	32.99	21.99	---	54.98
3	PMKSY(Micro-irrigation)	717.00	Differential subsidy	310.00	207.00	200.00	717.00
4	Promotion of Horticulture Activities	102.00	0:100	---	102.00	---	102.00
Total		970.02		400.89	369.13	200.00	970.02

Pradhana Mantri Krishi Sinchai Yojana (PMKSY)- Micro Irrigation Project (APMIP)

For the 1st time in India a special purpose vehicle (APMIP) was launched during 2003 by the Govt. of Andhra Pradesh with institutional framework from State level to the District level for planning, Implementation and monitoring of Micro Irrigation. It is an ongoing project and so far 20.60 lakh acres has been covered under Micro irrigation in all the 13 Districts in the State since inception i.e., from 2003 to 2016, benefiting 6.25 lakh farmers, A.P ranks 2nd in Micro Irrigation in area coverage. To encourage farmers for adopting Micro Irrigation the State, government is giving top up subsidy.

Impact of Micro Irrigation

Sl. No	Name of the crop	Crop yield Tons per Ha.			Net Income per Ha in Rupees		
		Before MI	After MI	% of increase	Before MI	After MI	% of increase
1	Mango	10	12	26	48735	73135	50
2	Sweet Orange	13	16	27	187500	237375	27
3	Acid lime	10	13	25	180000	225000	25
4	Guava	10	13	25	200000	250000	25
5	Banana	45	55	22	281250	400000	42
6	Papaya	72	87	21	700000	887500	27
7	Vegetables	22	27	22	101838	142230	40
8	Tomato	28	36	28	141403	196813	39
9	Sugar cane	64	82	29	56785	93095	64
10	Maize	9	11	22	133125	162375	22
11	Mulberry	30	37	23	62500	87500	40

HIGHLIGHTS

Area under Micro Irrigation

20.60

Lakh Acres

Crop wise Water saved and energy saved per hectare with MI

S. No	Crop	Water saved in (mm) per ha per season				Energy Saved (kwh) per ha			
		Flood Irrigation	Drip Irrigation	Net saving	% of saving	Flood Irrigation	Drip Irrigation	Net saving	% of saving
1	2	3	4	5	6	7	8	9	10
1	Sweet Orange	1136	530	606	53	1307	610	697	53
2	Sugarcane	1634	748	886	54	1881	861	1020	54
3	Pomegranate	1363	663	700	51	1569	763	806	51
4	Brinjal	891	408	483	54	1026	470	557	54
5	Papaya	2196	1060	1136	52	2528	1220	1307	52
6	Mango	1114	520	594	53	1283	599	684	53
7	Tomato	994	504	490	49	1145	580	564	49
8	Chilli	994	480	514	52	1145	553	592	52
9	Banana	2196	1087	1109	51	3033	1501	1532	51

Major Activities under Micro Irrigation:

- Bringing an area of 5 lakh acres under Micro Irrigation during 2017-18.
- Bringing all Horticulture Mulberry plantation and high water intensity agriculture crops under Micro-Irrigation.
- Revival of defunct micro irrigation systems to reduce financial burden on farmers.
- Integration of agronomic services and fertigation (water soluble fertilizers).

Water Security to orchards

- All plantations & orchard crops shall have farm ponds.
- Protective Irrigation during dry spells.

Major initiatives 2017-18:

- Promotion of FPO-PPP business models for value chain development and higher income to farmers.
- One million farmers will be organised into 1000 FPOs in the primary sector for Value chain development and better market linkage. Developing globally competitive value chain is our mission.
- 2nd Round table meet for identification of new partners has been organized on 30-06-2017 and 27 New Companies have participated. As a result of this 5 New Projects are under processing to take up during 2017-18 besides the following ongoing projects.

FPO – PPP projects under implementation:

ITC	Value chain development of Chilli, Millets and Shrimp
INI Farms Future Group	Value Chain development of Banana and Pomegranate
Jain	Value Chain development of Mango and Tomato
CII Face	Value Chain development of Banana and Mango
Lawrencedale	Value Chain development of colour Capsicum & English Cucumber
Mondalez	Cocoa area expansion and procurement
Bayer Crop Science	Quality improvement in chilli.

AP Coconut trees record highest productivity.

Andhra Pradesh stands at 4th position in coconut cultivation with an area of 261430 acres and production of 209144 no. of nuts in lakhs. The average productivity of coconut in the country is 4247 nuts/acre, where as the State stands at First position in productivity with 5482 nuts/acre. Best quality ball copra is produced in Andhra Pradesh. State Govt. supports for strength of PH infrastructure & value chain

development of coconut by rejuvenating existing orchards planting high yielding varieties promotion scientific method of cultivation, promotion of Pack houses and processing units. Coconut farmer have made a beginning by forming Farmer Producer Organization (FPO) consisting of a three-tier structure including Coconut Producers Societies (CPSs), Coconut Producers Federation (CPF) and Coconut Producers Companies. Farmer Producers Organization (FPOs) are now venturing into diversification of Coconut by products like nutritious and healthy drink, organic foods industrial and cosmetic products.

Oil Palm - only tree species with highest edible oil recovery

Andhra Pradesh ranks 1st in area and production of Oil Palm in India. This is the only tree species that is 100% under contract farming with tie up of processing plants for extraction of oil and income from the tree is all round the year. In A.P. this crop is presently under cultivation in 3,91,562 acres with 14.82 lakh MTs production.

A.P. Emerging as land of cocoa

Cocoa beans are mainly used in chocolate industry and

this crop is grown in 32,000 acres under contract farming and the company is providing free technical guidance on crop development and also buy back dry beans directly at the doorstep of farmers at market rate in the state.

Horticulture infrastructure in the State

Pack House / Farm Collection Unit	1573
Fruit Ripening Chamber	240
Cold Storages (single chambered)	325
Multi chambered cold storage	2 (Tirupathi, Chittoor)
Cashew / Minimal Processing Units	248
Onion ventilated storage	25
Coconut Pack House	170
Refrigerated Transport Vehicles	1
Vapour heat treatment	2 (Chittoor, Krishna)
Integrated Pack Houses	2 (Vizianagaram and Vijayawada in Krishna)
Hot Water treatment plant	1 (Rajamahendravaram in East Godavari

Ripening Chambers

Animal Husbandry

Animals provide nutrient rich food products, draught power, dung as organic manure and domestic fuel Hides and skin and are a regular source of cash income for rural households. Livestock are a natural capital, which can be easily reproduced to act as a living bank with offspring as interest and the best insurance against the vagaries of nature due to drought, famine and other natural calamities. This is the sector where the poor contribute to growth directly instead of getting benefit from growth generated elsewhere.

Livestock have been an integral component of India's agricultural and rural economy since times immemorial, supplying energy for crop production in terms of draught power and organic manure, and in turn deriving their own energy requirements from crop by products and residues. The progress in the sector is inclusive in nature as it results in balanced development of the rural economy particularly in reducing poverty amongst the weaker sections. Livestock provides stability to family income especially in the arid and semi-arid regions of the State

Growth in livestock - inclusive and pro-poor

Most of the animal farming activities such as fodder collection, feeding, watering, healthcare, management, milking and household-level processing, value addition and marketing are performed by women. The growth in livestock sector is demand-driven, inclusive and pro-poor. The rate of return on investment from Livestock sector is comparatively very high. Livestock sector apart from contributing to the state economy in general and to agricultural economy in particular, also provides employment generation opportunities, asset creation, coping mechanism against crop failure and social and financial security. Livestock is the main source of animal protein for the population. Demand for animal food products is responsive to income changes, and is expected to increase in future.

Milk, Meat and Egg – the key growth drivers

The Animal Husbandry, from a humble beginning of backyard poultry, has grown into a dynamic industry. Milk and Meat production has also made a quantum leap with the production increasing substantially. Andhra Pradesh has some of the richest livestock resources in the country and is one of the most advanced states in Livestock sector. The State attained a prominent position in the country in Livestock Sector over the years because of its increasing livestock resources, gradual enlightenment of farmers and dedicated and sustained efforts of the Government. The State Government identified Livestock Sector as the most promising sector and Milk, Meat and Egg are the key Growth Engines. Milk is the single largest commodity contributing highest economy to the State.

Effective veterinary and animal husbandry services are critical in achieving the significant production levels. Welfare schemes implemented by the Government for dairy, sheep and poultry units helped the rural masses enormously in bridging income gaps. This, besides conserving domestic

biodiversity has become a means of producing food in dry lands without depleting ground water resources. A sizable number of families owning sheep and goat have already been covered with livestock insurance.

The key objectives of the government include building the health of the Nation by increasing the availability & quality of animal origin foods like Milk, Meat and Eggs to the human population through scientific breeding, feeding and health management of livestock & poultry. Efforts are being made to improve the wealth of the nation by providing necessary technical support to Livestock bearers thereby improve livelihoods of farm families. Andhra Pradesh is one of the advanced states in Animal Husbandry sector in the country.

Status of Livestock Sector

The State stands 2nd in Egg production (1582.74 Crores – next to TN 1668.82 Cr), 4th in Meat production (6.32 Lakh Metric Tons – next to UP:13.46, Maharashtra:8.45, WB:7.05 Lakh MTs) and 5th in Milk production (121.77 Lakh Metric Tons – next to UP:275.51, Rajasthan:193.57, MP:134.45, Gujarat:127.84 Lakh MTs) in the country during 2016-17.

Popular breeds – pride of the state

Andhra Pradesh takes pride in the country in having famous and world renowned Livestock breeds like Ongole and Punganur in cattle, Godavari Buffaloes, Nellore in sheep and Aseel in poultry. As per Livestock Census 2012, 62.54 lakh out of 126.65 lakh (49.38%) households in the state are engaged in Livestock / Livestock related rearing activities. The Livestock resources in the state include 47.42 lakh Cattle, 64.65 lakh Buffaloes, 135.67 lakh Sheep (1st in country), 45.06 lakh Goats, 1.57 lakh pigs, 0.13 lakh other Livestock, 294.37 lakh total Livestock & 817.85 lakh poultry (3rd in country).

Support to the livestock sector

Animal Husbandry schemes have been formulated to attain well-laid National policies aimed at improving livestock production, fifighting protein hunger, improving nutritional standards of human population and provision of technical support for the maintenance and improvement of livestock.

With sustained efforts, the state government is providing fodder to livestock at the doorsteps of the farmers below poverty line (BPL) with 50% subsidy ensuring fodder security under Kutumba Vikasam. The government endeavours to insulate the farmers from the vagaries of agriculture by focus on livestock sector to ensure that every household has a monthly income not less than Rs.10,000.

Growing contribution to GSDP

The contribution of livestock sector to the Gross State Domestic Product (GSDP) of the State is Rs. 76974 Crores at Current Prices, which is 10.46% of the GSDP as per Advanced Estimates of 2017-18. The sector grew at 13.05% at Constant Prices and 15.89% at Current Prices during 2017-18. The GVA from Livestock Sector surpassed that of Agriculture for the first time during 2015-16.

Livestock population as per 2012 Census is shown in Table 5.6. District wise Livestock population as per 2012 Census is given in Annexure 5.23.

Table 5.6 Livestock population in A.P

(No. in lakh)

Category	As per 2007 census	As per 2012 census
Cattle	54.73	47.42
Buffaloes	82.30	64.65
Sheep	121.20	135.67
Goat	48.24	45.06
Pigs	2.06	1.57
Poultry	745.37	817.85

Source: Directorate of Animal Husbandry

Though there is reduction in the total Cattle and Buffalo Population, the production and availability of nutritious food and supplemental income to farmers has increased due to perceptible increase in Crossbred Cattle and Graded Murrah Buffaloe population especially female / Milch animals as per the Livestock Census, 2012.

HIGHLIGHTS

AP Stands 5th in Milk Production

121.77 LMT.

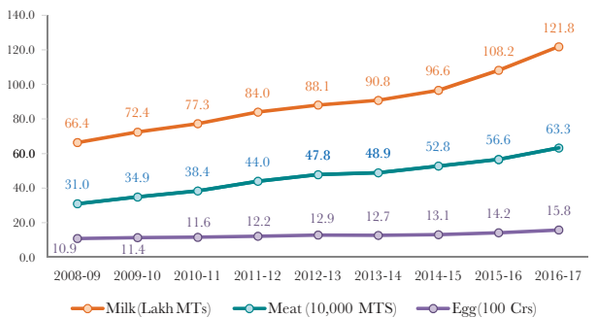
The production of Milk, Eggs and Meat is shown in the following Table 5.7 and chart 5.4.

Table 5.7: Production of Milk, Meat & Eggs

Growth Engine	Unit	2015-16	2016-17	2017-18 (upto Dec.2017)
Milk	L.MTs	108.17	121.78	106.51
Growth	%	12.02	12.58	--
Meat	L.MTs	5.66	6.33	5.45
Growth	%	7.33	11.84	--
Eggs	cr.Nos	1417.67	1582.75	1342.26
Growth	%	8.25	11.64	--

Source: Animal Husbandry Department.

Chart 5.5: Milk, Meat and Egg Production



Source: Animal Husbandry Department

Production estimates of milk, meat and eggs from 2008-09 to 2017-18 (upto December 2017) are shown in Annexure 5.24 and district wise production are given in Annexure 5.25. Details of district wise Veterinary institutes are given in Annexure 5.26.

State Schemes 2017-18 – Broad objectives

1. Cattle & Buffaloe Breed Development

a) New Artificial Insemination Centres (Coverage of Additional breeding stock through NGO):

This scheme is meant for expansion of breeding operations involving NGOs with experience in implementation of livestock projects.

b) Promotion of Indigenous Breeds:

Under the scheme, breed improvement activity will be taken up for conservation of Desi /Indigenous cows and promotion of sustainable Organic farming.

c) Interest Subsidy for Dairy farms:

This scheme is designed to promote entrepreneurs in dairy farming for establishment of new Dairy farms / expansion of existing Dairy farms in the State. Interest subsidy will be provided over and above 3% interest charged by the banks. The animals will be procured from other states

d) Sexed Semen/Sexed semen Lab/ ET lab:

This scheme will be implemented in selected pockets of the State involving AP livestock Development Agency (APLDA). .

e) Performance based incentives to Gopal Mithras:

Under this scheme, grants will be utilized to extend performance-based incentives to the Gopal Mithras towards calf births.

2. Feed and fodder Development Programme:

The fodder security policy, which is first of its kind in the country, having various components to provide quality feed and fodder to the Livestock will be implemented.

a) Promotion of Silage

This is an ongoing scheme with the objective of making nutritious green fodder available to the livestock throughout the year. Through this activity, the department will promote silage production activity in the form of bales/pit silage/tower silo /Bunkers etc., The activity will be implemented through involvement of farmers / entrepreneurs / NGO / SERP / PPP partners/any other agency. It will be promoted in PPP mode wherever possible. The existing subsidy pattern will be followed and the beneficiary contribution @ Rs.2/- per kg silage will be borne by the beneficiary.

b) Hydroponics & Azolla

Hydroponics technology will be promoted to enable the farmers to produce green fodder where there is constraint for land to grow fodder. Azolla, an algae will be promoted as an alternative to replace oiled cakes in the concentrate feed to some extent to reduce cost of production in the Livestock Production.

c) Total Mixed Ration

The scheme enables farmers to get access to the balanced / complete ration to the animals, particularly to those farmers who do not own land (for fodder production) and to enable them confidently take up dairying activity.

d) Convergence with MGNREGS to match for material cost

The scheme is meant to promote largescale fodder production in convergence with Rural Development Department by promoting Ooroora Pasugrasa Kshetralu. The AH department will provide matching funds of material component over and above the 40% material cost involved under MGNREGS..

e) Ration Balancing Programme(RBP)

Under this component, promotional activities to create awareness amongst the farmers for optimization of milk production will be taken up with the objective to reduce the production costs.

f) Fodder Seed Supply

Improved fodder seed will be supplied 75% subsidy to the farmers to take up largescale fodder production to meet the fodder requirement of high yielding animals.

g) Fodder Banks

Storage facilities for fodder will be created in strategic locations to supply fodder to livestock farmers during critical situations. Infrastructure facilities will be provided by the Department through RIDF / MGNREGS in convergence with Rural Development Department)/ State fund.

h) Feed and fodder supply

Under this program, feed and fodder of different categories to the farmers / Goshalas will be provided on subsidy basis. Apart from this, to promote usage of technology, funds will also be utilised for supply of chaff cutters, milking machines, harvesters & other farm equipment to conserve fodder on 75% subsidy.

i) Oorura Pasugraasa Kshetralu (OPGK)

This is a new scheme aimed to promote the availability of green fodder in villages throughout the year and to make livestock rearing a sustainable activity and also to increase the livestock holding capacity among landless labour.

j) Under Kutumba Vikasam (Fifteen Point) Programme fodder & feed & other inputs will be supplied to farmers at village level on subsidy through VLRPs i.e Gopala Mithras / Pasumithra / Jeevamithra etc.

3. Implementation of Livestock Development Programmes Management / Health Care

a) Pregnant and Lactating Animal Care (Ksheera saagar)

This is an ongoing scheme, designed to reduce inter calving period in milch animals and to increase the life time milk production.

b) Animal Hostel

This scheme aims to create basic infrastructure facilities needed for integrated dairy activity with biogas production, vermi compost, value addition to milk etc., Common infrastructure facilities required for animal management, dung & urine management will be provided free of cost, working capital in the form of revolving fund will also be provided. This scheme is implemented in convergence mode with RD department involving SHGs/ unemployed youth/ Dairies/ NGOs, etc.

c) Suphalam

The objective of the program is to get one calf once in 15-18 months from milch animals /heifers through fertility Management of infertile animals.

d) Organization of Janmabhoomi – Mavooru programme

Under the scheme, Animal Health Camps are conducted in all the GPs / Wards of the State.

e) Mobile Veterinary Services (NTR Sanchara Pashu Vydya Sevalu)

The Mobile Veterinary Services (NTR SPS) will provide service to the farmers in the state, at the rate of one each per Animal Husbandry division for 45 divisions in the first phase.

4. Infrastructure support to Dairy/Sheep/ Poultry Sector:

The government is extending infrastructure support through implementation of various schemes. The key schemes include: BMCU in potential villages, milk processing units/equipment, Farmer Producer Organisation(FPO), milk market outlets breeding rams production/replacement and exchange, Jeevamithra, sheep shelters, interest subsidy for setting up of new sheep / goat farms, feeding support to pregnant ewes, meat market outlets/ meat processing unit/ mobile sheep health care units, cold storage facilities/ support to small vendors and hatchery (Rural Backyard Poultry), disease diagnosis, relief to EMU farmers, Subsidized Power Tariff to Dairy, Sheep and Goat and Poultry farmers etc.

Scheduled Caste Sub-Plan (SCSP)

Integrated Livestock Management –

Towards feeding support to animals owned by SCs and for the fertility management of animals, various schemes like calf rearing programme (Sunandini), Ongole male calf rearing programme, pregnant and lactating animal care (Ksheerasagar), heifer induction and rearing programme are being implemented.

Tribal Sub-Plan (TSP)

Integrated Livestock Management –

Various components of schemes such as strengthening of backyard poultry for livelihood & nutritional security, establishment of integrated livestock development centre, integrated mini dairy complexes, fertility management of animals owned by STs and for their feeding support, are being implemented.

Best Practices implemented to achieve Double Digit Growth in Livestock Sector

- Fodder Security Policy, Poultry development Policy and Small Ruminant (Sheep and Goat) development Policy (first time in the country),
- Fodder conservation through fortified silage, production & distribution,
- TMR (Total Mixed Ratio) production and distribution,
- OPGK (Oorura Pashu Grasa Kshethralu) to achieve self-reliance in fodder development
- Distribution of feeding inputs @ Rs. 1/-Kg of Green Fodder, @ Rs. 2/- per Kg Silage, @ Rs.3/- per Kg of Dry fodder, @ Rs. 3.50/- per Kg Total Mixed Ration and @ Rs. 4/- per Kg concentrate feed to reduce the cost of production
- Sex Sorted semen
- IVF / Embryo Transfer Technolgy
- Pasumithra / Gopalamithra services at Farmers doorstep
- RIDS (Revamped Input Delivery System) implementation
- Convergence with SERP, MGNREGS (RD), JK Trust and WASSAN
- Infra-structure development through RIDF
- Use of IT for real-time data capture and analysis

Livestock Health Care

Mass vaccinations in campaign mode for Livestock is done by implementing Livestock Health Calendar covering various diseases like Foot and Mouth Disease, HS, BQ, Anthrax in Cattle, PPR, ET in Sheep and Goat and RD and Fowl Pox in Poultry to protect the health of animals and poultry birds.

The details on outbreaks of various diseases during 2017-18 (upto December 2017) are shown in Table 5.8.

Table 5.8 outbreaks of various diseases

Sl. No.	Name of the disease	No. of OBRs	No. of Villages	No. of Attacks	No. of Deaths	No of VOB
1	HS	2	5	13	10	587
2	Black Quarter	1	1	12	12	373
3	Anthrax	1	1	5	5	1655
4	PRR	2	2	19	5	3300
	Grand total	6	9	49	32	5915

Source: Animal Husbandry Department.

A Dossier has been submitted to OIE for recognizing Andhra Pradesh as FMD FREE ZONE with vaccination in India under Article 8.8.3 and as per the questionnaire on FMD in Article 1.6.6 of Terrestrial Animal Health Code, 2016. It is proposed to keep the vigilance assistants on animal movement at all the proposed places of check posts and Shandies with immediate effect by erecting temporary shelters.

Physical surveillance through village, stock route & institutional searches are being carried out to maintain the freedom status of CBPP and to undertake surveillance of other animal diseases in the State.

All precautions and preparations for Control of Avian Influenza are being taken up to prevent the entry of disease in Andhra Pradesh, though it is prevailing in neighboring States. 31,000 cattle doses and 5.68 lakh sheep doses of Anthrax Vaccine is supplied to endemic districts in the state in the year 2017-18 (up to October 2017). Anthrax Vaccinations are conducted in endemic areas for every 9 months.

Table 5.9 Vaccine production during the year 2017 – 18 at VBRI, Samalkot, East Godavari District (in Lakh doses)

S.No	Name of the Vaccine	Target	Achievement up to November 2017
1	Ranikhet disease 'K'	96.34	93.80
2	Ranikhet disease 'F'	41.98	40.32
3	Fowl pox	41.33	31.62
4	Duck Plague	1.26	1.70

Zoonosis day is celebrated in a big way to bring awareness on the spread of diseases from animals to humans and vice-versa and a total of 47,300 doses of Anti Rabies vaccinations conducted. Apart from this, various wings of VBRI, Vijayawada are attending Disease Diagnostic and Preventive Health Care measures through the laboratories of Quality Analysis Lab for export oriented livestock products, Disease Monitoring & Surveillance and Zoonotic lab, Microbiology Lab, Pathology Lab, Parasitology Lab, Toxicology & Feed Analysis Lab (TFAL), Sero Epidemiology Lab, FMD lab, Virology.

Livestock Breeding Activities:

Artificial Insemination Centers

The Artificial Inseminations (AI) facility is made available to more than 80% Breedable Cattle and Buffaloes in the state through 6377 Artificial Insemination centers which include – 3021 Animal Husbandry Departmental Institutions; 2875 Gopal Mitra/ MAITRIs; and 481 other AI Centres (Dairy Union, BAIF, RASS, JK Trust & Veterinary College) Centres.

40.49 Lakh Artificial Inseminations were conducted and 15.86 Lakh improved progeny calves were born during 2016-17. During this year upto November 2017, (26.67 Lakh) Artificial Inseminations were conducted and (10.72 Lakh) improved progeny calves were born.

To provide Artificial Insemination services to cattle and Buffaloes in remote areas, 156 Integrated Livestock development centres (NSP) in Srikakulam, Vijayanagaram, Visakhapatnam, East Godavari and West Godavari, Krishna, Kurnool and Anantapuram districts in 2017-18 are established through NGO named JK Trust. These centres provide breed improvement services to those areas for 6 years.

Organization of Fertility Camps

Every year, 2400 fertility camps are being organized at Gopalamitra Centers for treating infertility animals and bringing them to conception under supervision of Technical guidance of local Veterinarian. During this year, 2867 fertility camps are organized upto December, 2017.

National Kamadhenu Breeding Centre

Govt. of India has sanctioned National Kamadhenu Breeding Centre to the State of Andhra Pradesh for Southern Region with the financial outlay of 36.12 crore with the objective to conserve and preserve Indigenous Bovine breeds to enhance production and productivity; to upgrade genetic merit; to supply certified elite germplasm and to protect threatened breeds from extinction. 194 indigenous animals were procured belonging to (17) indigenous cattle breeds.

Progeny Testing Programme

APLDA has been identified as End Implementing Agency (EIA) for implementing the Sub Project Plan on "Production of High Genetic Merit Crossbred Jersey bulls through Progeny Testing" under National Dairy Plan-I during the years 2013-14 to 2017-18.

Status of implementation of the Sub Project

The sub project is being implemented in Chittoor district. There are 107 PT centers in Chittoor district covered by 107Gopalamitras, 08 Exclusive Milk Recorders and 13 Supervisors. The fourth set of test bulls have been introduced from the month of Nov'16 and so far 105 bulls are put to test and 181978 test AI have been done upto December 2017. In 2017-18 (upto Dec.2017), 17894 female have born and are registered.

Bull calf procurement is the ultimate aim of the project and so far, 96 HGM CBJY bull calves have been procured from the field after parentage testing and disease screening and 63 bulls have already been distributed / allotted to different agencies. 28 bulls are under rearing and 4 bulls were culled and one (1) died.

National Mission on Bovine Productivity

In order to improve productivity and enhance milk production, thereby making dairying more remunerative to the farmers, a new scheme "National Mission on Bovine Productivity" has been initiated by Government of India.

Components of the Scheme

- Pashu Sanjivni: an Animal Wellness Programme encompassing provision of Animal Health cards ('Nakul Swasthya Patra') along with UID identification and uploading data on National Data Base;
- Advanced breeding Technology: including Assisted Reproductive Technique- IVF/MOET and sex sorted semen technique to improve availability of disease free high genetic merit female bovines;
- Creation of "E- Pashudhan Haat"-Nakul Prajnan Bajar: an e-market portal for bovine germplasm for connecting breeders and farmers and
- National Bovine Genomic Centre for Indigenous Breeds (NBGC-IB).

Progress in implementation of Pashu Sanjivini

Under this scheme, 1276 Veterinarians, 1603 Para Veterinarians and 2375 MAITRIs were trained.

Fodder Management and Fodder Security to Livestock

The State Government has approved Fodder Security Policy to ensure fodder security to the animals. The Government has targeted massive fodder production in 30000 acres under "OoruraPashu Grasa Kshetralu" (OPGK) in the needy villages engaging the services of entrepreneurs interested to produce green fodder for the consumers who are willing to buy green fodder @ Rs.1/- per Kg from the entrepreneur and this initiative of fodder security to the animals has bagged "10th Global Leadership Award – 2017".

The State Government is implementing the policy of distribution of feeding inputs @ Rs. 1/-Kg of Green Fodder, @ Rs. 2/- per Kg Silage, @ Rs.3/- per Kg of Dry fodder, @ Rs. 3.50/- per Kg Total Mixed Ration and @ Rs. 4/- per Kg concentrate feed to reduce the cost of production in order to make livestock enterprise viable to the farmers.

The Fodder Security Policy supports for propagation of world best practices such as Silage & TMR feeding to

the cattle in addition to the utilisation of crop residues otherwise wasted in coastal districts for fodder management in summer season especially in Rayalaseema districts of Andhra Pradesh.

- 4065 MTs of fodder seed is distributed on 75% subsidy to individual farmers and promoted fodder cultivation in 81,300 Ha. with an expected fodder yield of 8.13 LMTs.
- Distributed 13620.00 MTs of TMR, 29894.00 MTs of Silage and 27634 MTs of Cattle feed on concessional prices.
- 23400 acres of land under fodder cultivation under Oorura Pasu Grasa Ksthetralu (OPGKs) with an expected green fodder yield of 9.36 LMT.
- Supplied 1184 No of 2 HP, 152 No of 3 HP and 48 No of 5 HP chaff cutters under farm Mechanization to minimize fodder wastage.
- 6260 Azolla and 270 Hydroponics units distributed. Targeted two lakh animals under Ration Balancing Programme to optimize production from animals to reduce the cost of production.

Oorura Pasu Graasa Kshetralu (OPGK)

The objectives of OPGK are

a) to promote community fodder production to address the fodder shortage problems in livestock sector

b) to achieve the double-digit growth under primary sector it is essential to address fodder problem in the State to further increase milk production in the State

c) to provide employment to rural unemployed youth / SHG members.

Progress under various components of OPGK is as follows:

Sl. No.	Work Name	Sanctioned works		In Progress		Completed	
		No. of Works	Est. Amount (in Lakhs)	No. of Works	Total Exp (in Lakhs)	No. of Works	Total Exp (in Lakhs)
1	Azolla production unit	54	3.02	1	0	0	0
2	Construction of silopits of 3 MTs capacity	55	10.06	0	0	0	0
3	Fodder trough for cattle/cattle drinking water trough	6441	1501.32	919	147.68	301	58.97
4	Oorura Pashu Graasa Kshetralu of annuals	10353	2295.23	5401	146.44	0	0
5	Oorura Pashu Graasa Kshetralu of perennials	17794	16710.78	8734	776.36	1	0.26
6	Raising of Fodder Maize/Fodder Jowar/Nutrifeed/Sugargraze	13813	2354.91	1779	49.65	0	0
7	Raising of perinnial fodder	9461	5389.01	626	56.78	0	0
8	Raising of Silvipasture clubbed with subabul plantation	44	11.21	0	0	0	0
Total		58015	28275.54	17460	1176.91	302	59.22

Source: Animal Husbandry Department.

Dairy Development

Key achievements of Andhra Pradesh Dairy Development Cooperative Federation (APDDCF):

- APDDCF is supplying Vijaya Vajra+ UHT Milk (enriched with vitamin A & D) of 38 lakh liters per month to more than 25000 AWCs across 257 Projects covering 13 districts of Andhra Pradesh. The preliminary studies and feedback have shown that the acceptance of "Anna Amrutha Hastham" by the target group is overwhelming and had good impact on improving maternal nutrition and improved birth weights.
- A Dairy Plant of 50,000 LPD capacity at an outlay of Rs. 6.50 Cr. is being established under RKVY at G.Kothapalli in West Godavari.
- An Ultra High Treated (UHT) Milk packaging plant of 80,000 LPD capacity is being established through IDMC on turnkey basis at an outlay of Rs. 26.42 Cr. under RKVY at Madanaplle in Chittoor District.
- Rs. 2.50 Cr. was sanctioned for implementation of Ratio Balancing Programme (RBP) covering 50 villages in each of the four(4) districts of East Godavari , West Godavari, Ananathapuramu and Kadapa.

- Revived Milk Procurement operations in 10 BMCUs through Public Private Participation; 5 BMCUs in Kadapa procuring 6000 LPD and 5 in East Godavari procuring 6000 LPD.

Sheep and Goat Development Activities

The State has brought out a Small Ruminant Development Policy (2015-2020) with an allocation of Rs. 575 Crores to tackle inbreeding problems in Sheep flocks and to check migration of flocks during summer season through supply of Silage & TMR to the shepherds at affordable prices. The policy is also aimed to encourage stall feeding and housing to the Sheep flocks. The Government has also decided to promote Meat sector in the State through establishment of Meat Development Corporation of Andhra Pradesh.

Sheep and Goat Deworming

Every year, government is taking up 2 times free mass sheep & goat deworming covering 180 lakhs Sheep & Goat population. The main objective is to reduce internal parasite burden, improved immunity, improved nutrient absorption leading to about 1 Kg improvement in body weight.

Implementation of NCDC Scheme

The National Co-operative Development Corporation has sanctioned Financial Assistance of Rs.35.74 crores under Integrated Small Ruminants Development (ISRD) to be implemented by the Federation in Prakasam and Chittoor districts through the District Unions. 146 shepherd families of Prakasam district and 120 of Chittoor district were benefited with the 1st installment of NCDC amount of Rs.265.20 lakhs. In the 2nd phase an amount of Rs.750.54 lakhs has been released to Prakasam & Chittoor districts by for grounding of units.

Strengthening of sheep breeding farms under Integrated Development of Small Ruminants & Rabbits (IDSRR)

An amount of Rs.25.46 lakh has been released to Government Sheep Farm, Penugonda of Ananthapuramu district towards construction of new sheds, purchase of Breeding Rams, fodder production, purchase of feed.

The A.P Sheep & Goat Development Cooperative Federation Ltd has organized exposure visit to (13) districts to the Presidents, DSBCUS of Andhra Pradesh with the objective to create awareness on technical aspects of sheep farming i.e., latest technologies & scientific management practices, innovations, new breeds of Sheep & Goat etc., to improve the small ruminant sector in the state.

Poultry Development

The Poultry Development Policy (2015-2020) will support poultry farmers through sanction of interest subsidy on working capital and also offer incentives to the entrepreneurs who wish to establish processing plants for eggs and chicken and to reduce the cost of production in poultry farming through concessional power tariff.

Under TSP, each district with 2400 units of Rural Back Yard Poultry units (Manakodi), targets were fixed to the Srikakulam, Vizianagaram, Visakhapatnam, East Godavari & West Godavari districts. Under SCSP, nearly 15000 units of MANAKODI targets were given to the all the districts in the state.

Rural Poultry Development through WASSAN:

Government of Andhra Pradesh entered into an MoU with the voluntary organization 'Watershed Support Services and Activities Network (WASSAN) for "strengthening of Back Yard Poultry & Nutritional Security to Tribal Areas". This organization will cover the 5 Tribal Districts viz. Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari districts in AP.

Poultry Interest Subvention

Poultry Development Policy 2016-20 has a provision of Interest Subvention to the newly establishing Poultry Farms in the state. For the year 2016-17, Interest Subvention is 4.5% & for the year 2017-18 is 3.3% is permitted based on MCLR.

Livelihood activities:

8390 Heifer units (cow and buffaloes) were distributed to SC families. Animal Husbandry Department is working

in convergence with SC/ST/BC/Kapu Corporations to ground more number of units. Established 129 clusters for 'Strengthening of Desi Backyard Poultry for Livelihood and Nutritional Security for Women in Tribal Areas (ITDA)' in collaboration with WASSAN – benefitted 12900 Tribal farmers.

Farmer Producer Organisations (FPOs)

The collectivization of producers, specifically marginal and small farm holders into producer's organizations is emerging as the effective possible pathway to address improved access to investments, technologies, knowledge support, inputs and markets to the farming community in Livestock sector.

The areas identified are: Indigenous Breed Development, Crop residue Procurement, Fortification & TMR manufacturing, Dairy Sector, Procurement, Marketing of Desi Eggs & Meat, Livestock Breeding and Health Services, (Gopalmitra / Paravet / Village level Worker), Integrated Small Ruminant Production and Marketing; Management of Community Pastures Establishment of Community Fodder Banks linked with Complete Feed Production; Custom Hiring Services/Centers. Livestock Satellite Units-SEZs. Rural slaughter Houses. Meat processing Units, Marketing, Sales Counters etc.

Infrastructure Development

Most of the Veterinary Institutions in the State are in dilapidated condition, so far 1357 buildings have been constructed replacing dilapidated buildings in the state by the assistance of NABARD under various phases of RIDF.

Animal Welfare Activities:

Establishment of SPCAs in 13 Districts.

The basic activities include:

a) Allotment of 3 to 5 acres of land for each district with shelter for animals with feed and water facilities along with veterinary aid.
b) Allotment of required staff for functioning of SPCA's.
c) Taking up Animal welfare activities with coordination of Transport and Police Department, NGO's involved with Animal welfare activities (Recognized by AWBI Chennai).
d) Conducting awareness activities to enlighten public about Animal Protection Laws/Acts through print electronic media and seminars etc.

Animal Husbandry Day

First Saturday of every month is being observed as Animal Husbandry day as part of Publicity & Extension designed to bring all the departmental activities to the door step of the farmer and create awareness among the livestock owners.

IT initiatives:

IT initiatives are used in a big way to capture real-time data on various welfare schemes and programs implemented by the Department with 8300 Tablet Phones and 670 Desktop computers. The State Government received prestigious international "MANTHAN Award – 2016" for the ICT initiatives taken up under Government – Citizen engagement category for implementing the real time capture of Foot and Mouth Vaccinations using Android Application. (30) Android/Web applications are developed capturing the data of about 15 lakh Dairy/Sheep farmers duly integrating with Aadhar and Mobile Numbers of the farmers.

AP Centre for Advanced Research on Livestock PVT LTD (APCARL)

The existing name of the company changed from "Indira Gandhi Centre for Advanced Research on Livestock Private Limited" to "Andhra Pradesh Centre for Advanced Research on Livestock Limited" was approved by the Ministry of Corporate Affairs. Partners Joined with AH Dept and APCARL during 1st partnership summit held on Jan 2016 were Genomix Molecular Diagnostics Pvt ltd for vaccines, Diagnostic kits, Animal Nutrition, Therauptics, Green cell incubator pvt ltd - Animal Nutrition, Therauptics, Ahara Technology group-Swine Genetics and Meat processing and ICAR – National research center on meat Hyderabad. During 2nd partnership summit Tropical Animal Genetics Pvt Ltd. – Bovine & Poultry ART.

HIGHLIGHTS

Fish & Prawn Production

27.66

Lakh. Tons

Fisheries

'Fisheries' sector is becoming a subsector of Primary sector with consistently increasing contribution to the state economy. The state government envisages development in fisheries sector with a multi pronged strategy with essential focus on increasing fish production and thereby ensure sustainable development. Development of fisheries through effective value chain and boosting exports, government is committed to invest to create infrastructure, promote welfare of fishermen and set up institutions to build skills.

Growth enabler and employment generator

Fisheries, occupies an important place in the Socio-economic development of sunrise Andhra Pradesh State. As one of the vibrant sub-sectors of the Primary Sector, Fisheries is identified as one of the growth engines for achieving Double Digit Growth. It is a significant employment generator and a source of proteinous food and foreign exchange earner for the State. AP ranks 1st in total fish and shrimp production and contributes more than 70% of cultured shrimp produced in the country. AP is the largest shrimp exporter in the country. AP is contributing 1.18% of global and about 21% of national fish production (2014-15).

Fisheries sector is supporting employment to 14.5 lakh persons and contributing significantly to the State's economy. The state government has initiated plans to make Andhra Pradesh the 'Aqua Hub' of the World. The A.P. Fisheries Policy, 2015 envisages 42 lakh tonnes of fish production with GVA of Rs.80,000 crore by 2019-20 Sustainable development of Fisheries can only be achieved through improvement of the quality inputs, technical skills and management of human resource in the Sector.

The broad development Vision envisages to:

- Promote "Blue Revolution" through a multipronged approach and introduction of alternate species.
- Develop a policy framework for allotment of marine areas and large reservoirs for cage culture through fishermen cooperatives/private participation or by consortium.
- Establish SPF Brood Stock Multiplication centres and aquatic quarantine centres for L.vannamei for production and supply of SPF brood stock to hatcheries to supply quality seed.
- Examine opportunities for reduction of cost of production of fish/shrimp in areas of power, feed and others.
- To establish and manage more fishing harbours and fish landing centres at all feasible coastal villages.
- Build better skills for women for more productive role in fisheries sector through Matsya Mithra Groups/ Fisherwomen Cooperative Societies in fish marketing and fish processing.
- Create and enabling policy environment brining about necessary legislations and policy guidelines.

Fish Production

27.49 lakh tonnes of fish and prawn are produced in the state in 2017-18 (upto December 2017) as against the target of 33.84 lakh tonnes. The Fisheries sector contributes 7.74% to the GVA as per advance estimates of 2017-18. 27.66 lakh tonnes Fish and Prawn production was achieved in the year 2016-17. Details of Fish and Prawn production are shown in Table 5.10.

Table5.10: Fish and Prawn Production (Lakh Tonnes)

Year	Marine (including marine shrimp)	Inland fish &Fresh Water prawn	Brackish Water Shrimp	Total Production	Growth Rate %
2013-14	4.38	12.43	0.88	17.69	11.35
2014-15	4.75	13.98	1.05	19.78	11.86
2015-16	5.20	16.01	2.31	23.52	18.91
2016-17	5.80	18.69	3.17	27.66	17.60
2017-18 (upto Dec. 2017)	4.28	19.74	3.47	27.49	

Source: Commissioner of Fisheries

Production of fish /prawn in the state has increased from 17.69 lakh tonnes in 2013-14 to 27.66 lakh tonnes in 2016-17 and by upto Dec, 2017 to 27.49 lakh tonnes registering double digit growth rate on year to year basis from 2012-13 to 2016-17. This became possible because of the entrepreneurship skills of farmers, implementation of better management practices, proactive role of government and timely interventions of the Department. Details of District wise Fish and prawn Production for the year 2016-17& 2017-18 (upto December, 2017) is given in Annexure 5.27.

Registration of Aquaculture

As per the Government of India Coastal Aquaculture Authority Act and rules 2005, land within a distance of two kilometers from high tide line (HTL) of seas, rivers, creeks, and back waters comes under the purview of Coastal Aquaculture Authority (CAA). The District Level Committee (DLC) has recommended applications for farms above 2 ha. water spread area, to State Level Committee for further recommendation to CAA for consideration of registrations. As of now, CAA has issued registrations of certificates to 25288 ha of 19,300 farmers in 9 coastal districts.

Interested farmers duly obtaining permission from the department of Fisheries can take up fresh water aquaculture. Registration certificates were issued to 39,543 farmers covering an area of 1,04,633 ha area of Fresh water aquaculture in the state up to December, 2017.

Important schemes and programmes

Relief to Marine fishermen during ban period

Every year, fishing in the marine waters is banned from April 15th to June 14th (61 days) under MFR Act as a conservation of fishery wealth in the sea and also for promoting responsible fisheries. During ban period, the crew members of the mechanized and motorized fishing boats are provided relief @Rs.4000/- to each crew member by Direct Cash Transfer. About 77500 fishermen are covered during 2017-18.

All the Fishing Crafts of Mechanized (upto 20Mts OAL), Motorized and Traditional are being registered under MS Act 1958/APMFR Act 1994 and license on annual basis. So far 1569 Mechanized, 17307 Motorized and 13521 traditional are registered through online (Real Craft) by 31-12-2017. The Department has also supplied Biometric ID cards to all coastal fishers of above 18 years age group under CSS Programme with the technical support of ECIL, Hyderabad for ensuring coastal security.

Dissemination of cyclone warning and PFZ information to coastal fishers:

The Department has developed strong communication network and disseminating the cyclone warnings through voice message with the support of M/s Reliance Foundation to all coastal fishers. The Department with the support of INCOIS is also communicating Potential Fishery Zone Information through voice messages and Digital Display Boards in the coastal Districts.

Subsidy (Exemption of Sales Tax) on HSD Oil

This scheme meets the State commitment on exemption of Sales Tax on HSD oil used by mechanized and motorized fishing crafts. The ceiling limit of HSD oil is 3000 litres per month in case of mechanized boats and 300 litres per month in case of motorized boats. The subsidy on sales tax is Rs.6.03 per litre. On World Fisheries Day i.e, on 21-11-2017, Hon'ble Chief Minister has announced for enhancement of existing boats which are registered upto 9th Five Year Plan.

Supply of OBM/IBM engines

Out Board Motor Engines / In Board Motor Engines are supplied to traditional fishing craft under the scheme of Motorization of Traditional Crafts as a CSS programme. Unit cost is Rs.1.20 lakhs and subsidy is 50% of unit cost or Rs.60,000/- whichever is less.

Promotion of Deep Sea Fishing

The objective of the scheme is to promote deep sea fishing particularly Tuna fishery, which is under-exploited and scope for potential catches through mechanized and

motorized boats. Tuna long lines and gill nets are providing on 50% subsidy on the unit cost of Rs.4.00 lakhs and Rs.1.00 lakh respectively

Supply of Sea Safety and Navigational Equipment

Sea Safety and Navigational equipment like Life Jackets, Life buoys, G.P.S., Echo sounder, VHF Sets and DATs are provided on 75% Subsidy for all categories of sea going fishing vessels so as to promote safety at sea for fishers and facilitate to catch more fish with the aid of navigational equipment.

Establishment of Infrastructure facilities to Marine Fishermen

Marine infrastructure facilities like fishing harbours, fish landing centers, dry platforms, additional shore based facilities, markets, are provided to Marine Fishermen community for promoting hygienic handling of fish and shrimp and to reduce postharvest fishery losses.

Training and Capacity Building to fishers:

Various training programmes, awareness camps, exhibitions are being conducted regularly with technical support of State Institute of Fisheries Technology (SIFT).

Scheduled Castes and Scheduled Tribe Component

- An amount of Rs.5931 lakhs and Rs.2041.00 lakhs are allocated for SCs and STs respectively for the year 2017-18. The important activities implemented under this scheme are:
- Supply of cycles with iceboxes and nets for reservoir fishers for fishing and vending,
- Supply of two / three / four wheelers equipped with ice boxes, freezers etc., for fish vending / marketing, seed transport, assistance for establishment of fish retail kiosks,
- Assisting in raising fish fingerlings for stocking in tanks under lease to SCs and STs,
- Assistance for construction of fish ponds and supply of inputs.

Fisheries Development schemes

The important sub schemes under this scheme are: establishment of BMCs, AQFs Hatcheries for Sea-bass and Mud crab undertaking survey and preparation of DPRs for establishment of new Fishing Harbours, Fish landing centers all along the coast, mechanization of aquaculture, supply of boats, nets, motors / engines to marine and inland fishers etc.,

Blue Revolution:

Integrated Development and Management of Fisheries" is a scheme in which all the sectors of fisheries – inland, marine, welfare, postharvest fisheries etc., are covered. GOI assistance is 24% to general and 36% to SC/ ST beneficiaries of the unit / project cost. GoI sanctioned Rs.18.00 crores during 2017-18 to the State.

Schemes under RKVY

Under RKVY 2017-18, Rs.19.66 crores was sanctioned for fisheries sector in the state. The schemes implemented under RKVY are establishment of AQF, BMC for P.vannamei prawn, Mudcrab and Seabass hatcheries fish brood banks at Kovvali, (West Godavari district) and Sunkesula, (Kurnool district).

Infrastructure projects under RIDF

Government has sanctioned 67.29 crores under RIDF XX Tranche for taking 47 works in the state. The works of fish seed farms, shore based facilities; fish landing centers, labs, approach roads etc. are taken up by the engineering wings of the PR dept, APEWIDC. Some of the works are completed and the remaining projects are under various stages of execution.

MGNREGS

Under this scheme 176 fish ponds, 125 fish drying platforms were constructed during the year 2017-18 upto October 2017. Fish ponds are utilized for raising fish fingerlings and fish culture.

Initiatives taken by department for development of fisheries:

- Disease surveillance was taken up in the identified 181 Aqua clusters in 9 coastal districts covering 1248 villages to identify various shrimp/fish diseases to mitigate the situation by initiating timely remedial measures.
- Constituted Apex Committee & Task Force Committee to conduct studies on the usage of various antibiotics, unwanted chemicals/drugs feed additives and other aqua inputs in the Aqua farming sector for recommending a comprehensive action plan to be taken in view of the alerts issued by the EU on detection of banned antibiotics residues in the shrimp exports from the state.
- Desilting and de-weeding of the 56 identified drains and creeks through Water Resources Department for free flow of fresh water to the aquaculture ponds.
- DPRs are prepared for new fishing harbours at Juvaladinne, (Nellore district), Vodarevu, (Prakasam district) Uppada, (East Godavari district) and Phase-II Development at Nizampatnam, (Guntur district), and Machilipatnam, (Krishna district) with an estimated cost of Rs.1533.62 crores.

Chandranna Bima:

Chandranna Bima is being implemented by the Government to cover insurance facility for the people in unorganized sector including fishermen, with a nominal premium. The coverage includes missing fishermen also. The sum assured is Rs.5.00 Lakhs. 1.58 lakh fishers are covered under this scheme.

Organization of Fishermen Cooperative Societies

The Government has given great importance to cooperative societies in fisheries sector to empower fishermen to manage water resources. As a policy, tanks are given on nominal lease to these cooperative societies for exploitation of fishery wealth and also provided assistance for inputs like fish seed stocking, feed, boats and nets on subsidy. While so far 2.61 lakh fishermen have been organized into societies, a large number of fishermen still remain to be brought under the fold. This is a continuous process and wherever fishermen are coming forward to form cooperative societies, they are being registered. Details are shown in Table 5.11:

Table 5.11 Fishermen Co-operative Societies

Type of Societies	Nos	Members
Inland Fishermen Coop. Societies	1402	134117
Marine Fishermen Coop. Societies	430	85776
Brackish water Fishermen Coop. Societies	9	1058
Fisherwomen Coop. Societies	501	39442
TOTAL	2342	260393

Source: Commissioner of Fisheries

Forest

Andhra Pradesh State is bestowed with two mighty river systems of Krishna and Godavari. The State has wide and varied vegetation types enriched by a variety of flora and fauna. Andhra Pradesh located strategically in the central region of the Indian sub-continent, has representatives of the magnificent Indian plant and animal life. Its varied topography ranging from the hills of Eastern Ghats and Nallamallas to the shores of Bay of Bengal supports varied ecotypes, which in turn support a rich diversity of flora & fauna.

Packed with abundance of rich flora and fauna life, the forests in Andhra Pradesh make for highly rejuvenating getaways. Tourists often head to the forests near Andhra Pradesh to experience jungle safaris. The famed wildlife in Andhra Pradesh is mainly scattered across these forests. While the benefits from dense forests are numerous, the tangible benefits like Timber, Bamboo, Fuel wood, Fodder, Non-Timber Forest Products etc., are quantifiable. Intangible benefits like maintenance of ecological balance, conservation of soil and moisture, regulating the water flow, sequestering carbon-dioxide from the atmosphere etc., are not quantified but are of great significance.

Forest cover has been recognized as critical for a living environment as it influences the quality and quantity of air and water. The role of forests as carbon sinks endows them added recognition as an important environmental factor. With the responsibility of management of forests vested with the State Forest administration, the Central interventions are directed essentially towards reinforcing the capacity of States to undertake the National Policy mandates towards conservation and sustainable use of

resources. The core objective of forest sector development strategy is to enhance green cover by integrating it with livelihood opportunities.

As per the forest records, the state ranks 9th in India having forest cover area of 36909.38 Sq. Kms which amounts to 23.04%. Of this forest area, the Very Dense Forest is 649.79 Sq. Kms the Moderate Dense Forest is 11792.18 Sq. Kms, Open Forest is 10931.01 Sq. Kms Scrub Forest is 9455.24. Kms Non-Forest is 3708.08 Sq. Kms and Water Bodies is 373.08 Sq. Kms. District wise forest area is shown in Annexure 5.28.

As per goals and directives set in the National Forest Policy 1988, the 1993 and the revised 2002 State Forest Policy, Vision 2020 of Andhra Pradesh, the forest department implements various development schemes to protect and develop existing forests, to improve its productivity and economic value. The main objectives of programmes like Community Forest Management (CFM), Centrally Sponsored National Afforestation Programme (NAP) through Forest Development Agencies, RIDF Projects, Soil & Moisture Conservation, Social Forestry, Wildlife Development and Human Resource Development are enriching existing low density forests and alleviating rural poverty.

Under RIDF projects and other schemes the department has set a programme having provision for soil and moisture conservation with the financial assistance of NABARD for construction of various types of water harvesting structures such as Check dams, Contour Trenches Rocks fall dams, percolation tanks etc. in forest areas. These structures help recharge ground water, and improve forest vegetation besides stabilizing the status of agriculture in adjoining fields.

The Silvi-cultured research for improvement of natural forests has assumed great significance. Keeping in view recent trends in forest research, the department has laid special emphasis on Forest research to conduct experiments, improve nursery and plantation techniques, vegetative propagation, seed development and natural forest management etc.

Monitoring of vegetation (Forest) Canopy Cover Density, Forest Fire Risk Zonation Mapping, mapping all forest areas with site suitability, Kolleru lake restoration, re-locating & demarcating forest boundaries and Inventory of forest resources are some of the major and important activities taken up by the department using latest information technology.

Forest Produce

The Departmental Extraction of Timber, Fuel and Pulp Wood, Faggot Wood, Long Bamboo and Bamboo Industrial Cuts (BIC) from natural forests as well as plantations was introduced from the year 1976-77, after disbanding the previously existing contractor system.

At present there is a moratorium on extraction of timber from natural forests except for bamboo from overlapping bamboo forests. The major activity comprises harvesting timber and poles from matured plantations of Teak, Eucalyptus, Casuarinas etc. and long bamboos and BIC from bamboo coupes as per prescriptions of the working plan of respective divisions. The physical targets and achievements of Departmental Extraction of Forest Produce of Timber, Fuel, Poles and Bamboos details are given in Table-5.12.

Table 5.12 Forest Produce extraction

Species	2016-17		2017-18 (upto Nov 2017)	
	Target	Achievement	Target	Achievement
Timber (Cmt)	3998.33	4427.88	2888.13	541.51
Fuel (Cmt)	43652.66	1820.97	38701.00	30.00
Poles (Nos)	85744.00	13763.00	48133.00	--
Bamboo (lakh Nos)	77.11	30.01	70.67	33.10

Source: Forests Department

Forest Revenue

Forest products in the state include Red sander, Timber, Bamboo, Firewood & Charcoal etc. The income accrued from forestry sector in the State was Rs.18.92 crore in 2017-18 (upto Nov, 2017). Details of the value of forest produce in the State are given in Annexure-5.29.

Production

There is no supply of raw material from the Forest department to all the three major wood based industries

in the state. Forests are looked as "Green Capital" and are no more valued as raw material resources for the industries. Industrial requirements are met from other sources like imported pulp, agricultural wastage and plantations raised by farmer with buy-back arrangements.

Forest Development Authority

22 Forest Development Agencies (FDA) have been sanctioned by Government of India for implementing Centrally Sponsored schemes with a funding pattern of 60:40 between Centre and state. Various plantations activities, SMC works, awareness camps for capacity building are being done by FDAs through the Vana Samrakshna Samithies.

Centrally Sponsored Schemes like National Afforestation Programme (NAP), National Mission for a Green India (GIM) & National Medicinal Plantation Board (NMPB) schemes are being implemented through FDAs.

A P Disaster Recovery Project (APDRP)

This is the world bank externally aided project with the objective to restore and improve rural connectivity, public services and livelihood opportunities in targeted communities of Andhra Pradesh specifically the four heavily impacted Districts i.e., Srikakulam, Vizaianagaram, Visakhapatnam & East Godavari Districts. The project is having the 7 components viz., Underground cabling, Roads and Cyclone shelters, Restoration of Beach front, Eco-restoration and support to livelihoods, Tech. Assistance and capacity building for Disaster Rescue Management, Incremental operating cost; and Contingency emergency response.

Out of the above said 7 components, component of "Eco-restoration and support to livelihoods" is for restoration of environmental services & facilities and livelihood support which is being implemented by Andhra Pradesh Forest Dept (APFD) with an Out lay of Rs.120 crore

The scheme "Restoration of environmental services and facilities and livelihood support" has two sub components - 1) Redevelopment of Indira Gandhi Zoological Park: and Restoration and redevelopment of Kambalakonda Eco-Tourism Par and 2) Livelihood support

The Targets for 5 years and achievements (4 Districts viz., Srikakulam, Vizianagaram, Visakhapatnam and Kakinada having 10 implementing Divisions) are as follows:

Raising nurseries	573.00 lakh plants
Raising shelterbelt plantations	823.00 ha.
Raising Palmyrah brakes	415.00 km
Restoration of Mangroves	70.00 ha
Infrastructure development	4 central nurseries, 33 field nurseries

Social Forestry

The State Government has launched a massive people's movement involving public and farmers in a big way to increase tree cover outside reserve forests to improve environment and to provide gainful employment to thousands of unemployed youth. Public distribution of seedlings, raising community land plantations/ avenue/ shelterbelt plantations; and raising of institutional plantations have been done under Social Forestry programme.

Vanamahostavam-Vanam-Manam

The Government has launched "Vanam-Manam" on 01.07.2017 witVana-mahostavam in Kondaveedu Forest Block at Obulanaidu Palem village of Guntur District. The tentative target of planting for 2017-18 under Vanam-Manam is 25 crore by all stakeholders.

The Vanam-Manam programme has two components viz. "Vanamahotsava", a tree plantation programme and "Prakruthi Pilusthondi", a programme for creating awareness and ensuring participation of various stakeholders. The Vanam–Manam Campaign has started on the 1st Saturday of July, 2017 and it is continued for 127 days. Every Saturday afternoon and 4th Saturday of each month were earmarked to reinforce environmental conservation efforts and to increase awareness on forest protection. The campaign ended with "Karthika Vana Samaaradhana" on 04-11-2017 at Nagaravanam Perecherla, Guntur.

As per the reports received till date, 23.43 crore seedlings are planted as against the target of 25.00 crore seedlings under "Vanam-Manam" during 2017 monsoon.

Prakruti Pilustondi

"Prakruti Pilustondi" awareness programme was held from 01.07.2017 to 04.11.2017 in 19 Saturdays with 13,717 events (like green runs, cycle rallies, trekking, visits to natural forest areas, debates, group discussions, elocutions, seminars, essay writing, quiz competitions on nature and environment etc.) were organised and 10.29 lakh students / public participated and 107.88 lakh seedlings were planted.

Karthika Vanamahostavam

The Government have organized a week-long celebration of "Karathika Vanasamahotsavam". This auspicious programme started as State function "Karthika Vanasamaraadhana" on Karthika Purnima day i.e., 04-11-2017 and it is continued up to 11-11-2017. As part of "Karathika Vanasamahotsavam" 954 events were organized, 1.29 lakh students / public participated and 1.66 lakh no.of saplings planted.

Afforestation:

The department has raised 4850 ha of block plantation and 479 km of Avenue plantation as against the target of 4,739 ha. of block plantation and 650 km of Avenue plantation respectively for the year 2017-18. 158.99 lakh saplings have been utilised for planting in the forest areas and 418.49 lakh saplings have been utilised for distribution. Presently 54.11 lakh tall seedlings and 36.37 lakh fruit bearing species like Jama, Usiri, Neredu etc., are available in the year 2017-18 (upto December, 2017).

Soil and Moisture Conservation works:

Soil and Moisture Conservation works are being taken up under Neeru Pragathi Udyamam ie., Staggered Contour Trenches --- (10mx0.5mx0.5m), Mini Percolation Tanks ---(10mx10mx1m), Check Dams , Rock Fill Dams, De-silting Percolation Tanks and Check Dams, Water Absorption Trenches --- (3mx2mx3m) and Peripheral Trenches ----(1.5mX1mX1m)

Achievements:-

The department achievements upto 30.11.2017, are shown in Table 5.13

Table 5.13 Achievements of the department

Sl. No	Item of work	Up to 2016-17		2017-18 upto Nov, 2017	
		No.	Volume (cum)	No.	Volume (cum)
1	Staggered Contour Trenches(10mx0.5mx0.5m),	636198	1590495	273121	682803
2	Mini Percolation Tanks(10mx10mx1m),	2113	211300	2245	224500
3	Check Dams	187		159	
4	Rock Fill Dams			762	
5	Di-silting of Percolation tanks and Check Dams	-	--	-	54084
6	Elephant Proof Trench/Water Absorption Trench (in km) (3mx2mx3m)	1267	9502500	103.26	774450
7	Peripheral Trench (Km.) (1.5mx1mx1m)			159.71	199638

Source: Forest department

Seed dibbling:

Forest Department has collected 660.75 Mts. of seeds of native species as against the target of 646.10 Mts. The same is being utilized (of all the soil and moisture conservation works e.g. on the bunds of mini percolation tanks, staggered contour trenches etc.,) and in other blank areas for bringing more area under greenery. The main species raised for public distribution and planting in public lands are Teak, Red Sanders, Bamboo, Amla, Seethaphal, Casuarina, Eucalyptus seedlings for planting.

Mahathma Gandhi National Rural Employment Guarantee Scheme Neeru-Chettu Performance

Activity wise performance is given in Table 5.14.

Table 5.14 Performance of Neeru-Chettu (2017-18)

Sl. No.	Activity	Target	Achievement up to 30.11.2017
1	Planting and other interventions to increase green cover in the recorded forest area (ha.)	10000	9958
2	Planting outside recorded forest area (Notional) (ha)	369230	348923
3	Number of plants planted during 2017 season (No. in lakhs)	2502	2338
4	Soil and Moisture Conservation works (lakh cum.)	41.91	18.74
5	Nagaravanams (No.)	5	2
6	Footfall in zoo parks, Eco parks and protected areas (No. in lakh)	30	21.76

Source: Forest Department

Wildlife Conservation

As of now the State has 13 wildlife Sanctuaries and 3 National Parks covering an area on 8139.89 SqKms which is 22.53% of the State's Forest area and 4.448% of the State's Geographical area.

There are 1 Tiger Reserve, I Elephant Reserve (Koundinya Sanctuary and Rayala Elephant Reserve), 1 Biosphere Reserve (Seshachalam) 3 National Parks and 13 Wildlife Sanctuaries in the State. The State has 2 Zoological Parks, 2 Deer Parks under Government control, 2 Deer Parks under private control and 2 Animal Rescue Centers for Ex-Situ conservation. One in SVZP, Tirupati and one in IGZP, Visakhapatnam with the assistance of Zoo Authority of India.

In the state of Andhra Pradesh the important Wildlife Habitats are declared as Sanctuaries and National Parks to ensure higher degree of protection and management of the flora and fauna in the wildlife habitats. Special management status is afforded to important protected areas like Tiger Reserve, Elephant Reserve. Critically endangered wildlife habitats of species like Jerdon's Courser, Great Indian Bustard and wet lands,

In-Situ Conservation:

This involves conserving the wildlife in their natural habitat by giving proper protection and managing the habitat to meet the requirements of the wild animal species found naturally in the area. Areas which are potentially suitable for this type of conservation were identified and notified as Wildlife Sanctuaries and National Parks.

Ex-Situ Conservation:

Wildlife management involves conservation of wildlife outside its natural habitat in places like in Zoo Park, Deer Park and Rescue Centers. The purpose of this type of conservation is to breed the wild animals in such areas to build up their population. The population so built-up is trans-located back to the natural habitat and released for improving densities in the areas. Apart from conservation breeding, ex-situ conservation is also helpful in education, research and recreation.

Zoological Parks in Andhra Pradesh

The 2 zoological parks in the state Indira Gandhi Zoological Park, Visakhapatnam and Sri Venkateswara Zoological Park, Tirupati are rated among the best zoos of the country with excellent facility for display of animals, conservation breeding, visitor amenities, and conservation education etc.,

Deer Parks

There are 2 deer parks in the state ie., Kandaleru Deer Park at Kandaleru Dam, Nellore district with an area of 25 ha. and Chittoor RF Deer Park at Chittoor district with an area of 3.25 ha. Kottapakonda Deer Park in Guntur district is under development.

Another 2 deer parks are functioning under the control of private organisations ie., Deer Park, Nagarjuna Fertilizers and Chemicals Limited Green Belt, Kakinada, East Godavari Dist. and Deer Park, GVK Power Plant, Jegurupadu, East Godavari Dist.

Management of Protected Areas

It has been experienced that lack of sufficient water holes and fodder within the Protected Areas and Reserve Forests along the fringe areas that are subjected to over use by the local people result in straying of wild animals outside the forests.

Protection of Wildlife outside Protected Areas:

It is contemplated to revive the anti-poaching squads, one for each region of north coastal Andhra, South coastal Andhra and Rayalaseema kept under the control of independent divisions. These squads need to be provided with vehicles, weapons, wireless sets and other necessary equipment. Protected areas of the forest department in the State is given in Annexure 5.30

Conservation of Endangered Marine fauna

Hunting of endangered marine fauna like Sea turtles, Dolphins, Whale sharks and ray & shark fish which are listed in Schedule I of Wildlife (Protection) Act, 1972 is increasing in recent times along the Andhra Pradesh coast. A special scheme for conserving endangered marine fauna and to conduct studies for declaring Marine protected areas is an urgent need.

Protection of Migratory birds

Though the important and prioritized wetlands like Kolleru Lake, Pulicat Lake, Nelapattu tank are notified as Wildlife Sanctuaries, there are still many which are identified by the Bird Watchers Society of Andhra Pradesh and SACON, are being declared as Wet lands of Ecological significance.

Wildlife education and awareness

The National Wildlife Action Plan has identified 'Conservation Awareness and Education' as one among the thirteen important strategies to be adopted for implementation of wildlife conservation programme. To inform and involve media on issues surrounding wildlife conservation and to highlight the connections between destabilized ecosystems and the failing quality of human life.

East Godavari Riverine Estuarine Ecosystem (EGREE) Foundation

An initiative of the GoI-UNDP-GEF-GoAP Godavari Project a cross sectoral institutional mechanism established to achieve the goal of "Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors" operations in "East Godavari Riverine Estuarine Ecosystem", Andhra Pradesh, India Main aims of the EGREE Foundation are to mainstream biodiversity conservation into the production sectors of EGREE through: (1) Cross-sectoral planning in the EGREE that mainstreams biodiversity conservation considerations, (2) Enhanced capacity of sector institutions for implementing biodiversity-friendly sector plans, (3) Improved community livelihoods and sustainable natural resource use.

Conservation measures for Sea Turtle along cost line of Andhra Pradesh

To protect Sea Turtles from predators all along the coast line of Andhra Pradesh. A rapid survey was conducted along the coast of A.P. to identify potential nesting sites and NGOs & local communities are involved in protection of nests by In-situ and Ex-situ methods. Efforts have been made to protect Sea Turtles from predators all along the coast line of Andhra Pradesh and nearly 10032 nests and 13,13,452 Hatchlings were released successfully in to the Sea between 2011-16. During 2016-17, 4,32,490 hatchlings released into the sea. During 2016-17 (142) artificial hatcheries established and maintained by engaging (94) turtle protection and conservation workers in all the 9 coastal districts.

Man-Animal Conflict

To reduce the Man-Animal Conflict, steps are taken to ensure prompt compensation for crop loss, cattle kills and for human deaths. Apart from that measures like creating more water sources in the fringe areas, developing animal

rescue teams with full-fledged equipment, and creation of awareness in the public. To mitigate the migratory Elephant problems in Chittoor district immediate special compensation packages are given for crop loss, human injury and death. Elephant proof trench is excavated and solar pulsating current fence are also being put in place to prevent elephants to enter into the agricultural fields and habitations. Elephant Proof Trench has been excavated over 222 Kms. so far by incurring expenditure of Rs.431.92Lakhs.

Eco Tourism

Ecotourism Planning should be ecologically acceptable, economically viable, socially desirable and aesthetically satisfactory. 50% revenue for maintenance and development of the facility. 30% for VSS / EDC members. 20% for CBET members as incentive.

Community Based Eco-Tourism (CBET)

"Responsible travel to natural areas that conserves the environment and improves the well-being of local people.'' Minimize impact. Build environmental and cultural awareness and respect. Provide positive experiences for both visitors and hosts provide direct financial benefits for conservation provide financial benefits and empowerment of local people by ensuring their direct stake in conservation of local culture, ecology and environment.

The existing CBET circles in the state are: Maredumilli CBET (Rajaumundry Circle), Kambalakonda CBET (Visakhapatnam Circle), Coringa EDC (Rajaumundry Circle), Talakona CBET (WLM Tirupathi Circle), Mamanduru CBET (WLM Tirupathi Circle), Ubbalamadugu CBET (WLM Tirupathi Circle)

Eco-Tourism Centres Developed by Forest Department

Bairluty EDC (Jungle Camp & Safari) (NagarjunaSagarSrisailam Tiger Reserve), Tummalabyalu EDC (Jungle Safari) (NagarjunaSagarSrisailam Tiger Reserve), Paccherla EDC (GundlaBrahmeswaram Wildlife Sanctuary) (Kurnool Circle), Maredumilli Jungle Star (Rajaumundry Circle).

Forest Protection Schemes Intensification of Forest Management Scheme

The objectives of forest protection scheme include prevention and control of fire, survey and maintenance of boundaries, preparation of working plans, development of infrastructure and protection of forests and wildlife.

Under this scheme 1.74 lakh claims with an extent of 10.26 lakh acres are received. Of which 1.63 lakh claims with an extent of 9.81 lakh acres are surveyed. Remaining are under progress.

Information Technology (Geomatics)

The list of IT projects completed under GIS and MIS are as follows:

GIS

- Vegetation cover analysis for 2015 is completed.
- Fire monitoring & alert system for current year.

MIS

- Integration of plantation, Nursery and Red sanders offence cases details with CM Core Dash board.
- Implementation of online tree felling permission (EODB).
- Geo tagging of all plantations (Since 2010)
- Digitization of forest protection offence cases and Nursery raising and utilization.
- Decision support system for working plan inventory
- Development of financial module- CAMPA
- Decision support system to estimate the growing stock in TOF and for Red Sanders.
- Development of Vanam-Manam web application
- Development of disciplinary case web application

Forest Research & Development

There are 6 centres in Andhra Pradesh State under the control of 2 Research Divisions located at Tirupathi and Rajahmundry. The main objectives of these Divisions are to attend to forestry problems in their respective jurisdiction and take up activities mainly to establish experimental plots, improved Nursery Technology, Seed collection,

Vermi Compost/Organic Compost production and Tree breeding programs etc. An amount of Rs.73.90 lakhs incurred expenditure towards Research schemes during the year 2017-18 upto Nov.2017.

Forest Conservation Act: 1980 Compensatory Afforestation

Forests are a vital component to sustain the life support system on Earth. Forests whether Government, village or private sub-serve the entire community and represent a community resource that meets the need of millions of rural people especially the Tribals. Article 48A of the Constitution of India requires that the State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country. Under Article 51A, it is the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

Forest Conservation Act, 1980 deals with such diversion of forest lands for non-forest purposes so that only minimum and only essential projects are taken up on forest lands. Details of progress on Compensatory Afforestation under Forest (Conservation) Act 1980 in the state for the years 2017-18 (1.04.2017 to 30.09.2017) are shown in Annexure 5.31.

Andhra Pradesh State Bio-Diversity Board

- Biodiversity is an important asset for humankind. It also provides valuable ecosystem services that are necessary to sustain our land forms and water bodies. Our economic progress is thus closely linked to environmental and biodiversity status.
- The state of Andhra Pradesh is blessed with rich biodiversity. Over 2,800 species of plants and over 5,757 species of animals.
- Loss of biodiversity will in-turn affect the health of our forests, grasslands, water bodies, coasts, etc., and will ultimately impact human well-being.
- Regulating the mechanism for access to/collection of biological resources, constitution of biodiversity management committees at local body level and establishment and management of biodiversity heritage sites.

Activities:

The Andhra Pradesh State Biodiversity Board has formed Expert Committees to give suggestions on various issues where in decisions are to be taken by the committee. Regulate commercial utilization, bio-survey and bio-utilization of any biological resource. Commission studies and sponsor investigations and research and organize training/awareness programmes. Build up database and documentation of biological resources and associated traditional knowledge etc.

Biodiversity Management Committees (BMCs):

Promoting conservation of biological diversity, Sustainable use of biological diversity, Conservation of land races, folk varieties and cultivation, domesticated stocks & breeds of animals & microorganisms and Facilitating preparation of people's biodiversity registers (PBRs).

Achievements

So for 4000 BMC's have been constituted at various levels. So far, 75 PBRs have been prepared and 39 PBRs under preparation. 189 Local Biodiversity Funds (LBF's) have been established within the support of NBA / State / UNEP- GEF- MoEF & CC – ABS Grants. 115 Awareness Programmes/ Workshops conducted various stakeholders. Proposals for notification of Veerapuram & Timmamma Marrimanu as Biological Heritage Sites were submitted to Government. The Andhra Pradesh Biodiversity Board celebrated the International day for Biological Diversity (IDB) - 2017 on 22nd May, 2017 at Tummalapalli Kalakshetram, Vijayawada. The theme for this year IDB is "Biodiversity and Sustainable Tourism".

Andhra Pradesh Forest Development Corporation, Guntur

Objectives of the Corporation:

To raise large scale plantations to meet the demands of forest-based industries with species such as Eucalyptus, Bamboo, Tropical pines, Coffee, Cashew, Casuarina etc. To generate gainful employment to the landless poor, particularly in remote and agency areas. To undertake consultancy services to the industries to raise and maintain

plantations in their vicinity. Details about plantations raised by APFDC 2017-18 (upto Oct, 2017) are shown in Table 5.15.

Table 5.15 Plantations raised by APFDC 2017-18

Sl. No	Species	Area (in Ha.) (upto Oct. 2017)
1	Eucalyptus (Seed origin)	3985.05
2	Eucalyptus (Clonal)	31962.82
3	Bamboo	2416.28
4	Cashew	5794.91
5	Coffee	4010.00
6	Teak	824.70
7	Medicinal plants	581.52
8	Casuarina, Pines and other Misc. species	209.79
	Eco-Tourism Projects	201.32
	Total	49986.39

Source: Forest Department

Achievements, Projections upto Oct, 2017 are given in Table 5.16

Table 5.16 Achievements under APFDC

Sl. No.	Activity	Achieve-ment 2016-17	2017-18	
			Target	Achieve-ment upto 31-10-17
1	Raising of Clonal Eucalyptus plantations-Ha	795.00	623.40	545.75 #
2	Raising of Bamboo plantations -Ha	37.00	9	9
3	Raising of Teak plantations -Ha	32.85	0	0
4	Harvesting of Eucalyptus pulpwood – MTs-	24226	240855	211860 #
5	Harvesting of Long Bamboo – Nos.	356171	514253	467693 #
6	Harvesting of Bamboo Industrial Cuts – MTs.	155	350	209 #
7	Harvesting of Raw Cof-fee – MTs.	544.65	570	Not started
8	Harvesting of Pepper-MTs.	6.419	40	61

In Progress

Source: Forest Department

Plantation Activities:

Eucalyptus Plantations:

The APFDC has been raising Eucalyptus Clonal plantations and with 31963 Ha. it is the single largest grower among PSUs in India. There are proposals to raise another 1000-2000 Ha. in the next 3 to 4 years. Due to improved site preparation, use of quality planting material and management practices, optimum yields are obtained from the plantations.

Bamboo Plantations:

Bamboo plantations are raised over an area of 2416 ha. The Corporation is intending to expand the Bamboo plantations over an area of 100 Ha in the next 3 to 4 years to ensure more supply of raw material per annum to the Paper Industries besides raw material to the artisans.

Coffee Plantations:

The Corporation is maintaining about 4,010 ha. of existing coffee plantations in the agency areas of Visakhapatnam and East Godavari Districts with intensive cultivation practices, by following scientific methods. These plantations are generating about 5.00 lakh mandays of employment to the tribals all-round the year

Pepper Cultivation

APFDC has 1.80 lakh Pepper standards in its Coffee Estates in the agency areas of Visakhapatnam and East Godavari Districts comprising of high yielding varieties like Panniyur-I, Purnima, Sreekara, Subhakara, Panchami, Panniyur-5. It is proposed to plant another 1.15 lakh standards with pepper in the next 5 years.

Cashew Plantations:

The Corporation has got cashew plantations over an area of 5795 ha. along the coastal belt in Prakasam and Nellore districts and in the inlands of West Godavari and Chittoor districts. Presently, the older plantations are being replanted with high yielding Cashew varieties using scion banks.

Eco-Tourism:

A.P. Forest Development Corporation Ltd. has developed Rajeev Eco Park at Idupulapaya of YSR Kadapa district. It is proposed to promote Eco Tourism in Muthayapalem, Ananthagiri , Minimuluru and Maredumilli areas by establishing nature Education camps and other amenities.

Other Activities:

- The Corporation has diversified its activities with several schemes such as providing consultancy services in afforestation to the industries such as NTPC, HPCL etc., and supplying high quality Eucalyptus clones to the public and institutions.
- It is also acting as agent to the Govt. in carrying out the export of Red Sanders wood.
- Establishment of Seed Banks at Chinthapalli, Rajamahendravaram, Bapatla and Satyavedu.
- Tree translocation and tree ambulance services in urban areas
- Support to wood based crafts (Toys) of Kondapalli and Etikoppaka

Employment Generation:

The Corporation is providing employment to the tribals and Srilanka repatriates almost round the year. In the other areas the employment is provided to the land less and poor during regeneration and harvesting activities.

About 9 lakh man-days of employment (3.00 Lakh mandays in raising and maintainace of plantations 3.50 Lakh mandays in Coffee plantations and 2.50 lakh mandays on harvesting of plantations) per annum are provided to the poor, tribals and Sri Lanka repatriates.

Sericulture

Sericulture in Andhra Pradesh is a sustainable farm- based economic enterprise positively favouring the rural poor in the unorganized sector because of its relatively low requirement of fixed capital, and higher returns at frequent intervals on the investment. It yields regular returns in 4 to 5 splits from one acre of mulberry.

Andhra Pradesh stands second in the country in silk production next only to Karnataka. Unlike coastal districts sericulture is predominant in the Rayalaseema districts. The State has also got strong industrial base besides traditional Silk handloom pockets like Dharmavaram, Peddapuram, Uppada, Venkatagiri etc., which are nationally renowned silk handloom weaving centers, encouraging the growth of Sericulture industry in the State.

The goal of the department is to produce International 2A and above grade Bivoltine Silk production duly sanctioning of ARMs in the State under private sector. The Dept. is also concentrating on strengthening of marketing system duly providing incentives on production of Bivoltine and CB cocoons to the farmers.

Vision

To place Andhra Pradesh as one of the leading states in silk production, by first meeting domestic requirements and catering to exports of silk and silk garments later. To promote sericulture as an alternative and viable option to meet the challenges of agrarian crisis. To promote rural livelihoods for employment creation and poverty alleviation through sericulture sector in the state.

Objectives

Prioritize production of Bivoltine Silk, improve quality and quantity of Mulberry silk, focus on production of Bivoltine Silk through Cluster approach and integrate both on Farm and Non-Farm activities within the cluster/ district. Leaf to cloth approach for development of Bivoltine Silk production in East Godavari, Ananthapuramu and Chittoor districts are showing good results. The department adopts life cycle approach for balanced growth of farmers, reelers and silk weavers. Eco-friendly production process in Mulberry cultivation to help to reduce the climate change. The Government is striving to achieve higher productivity through focus on Bivoltine cocoon production, area expansion of Mulberry cultivation, strengthening extension efforts through training and publicity and Convergence approach for maximizing results. Linking with NABARD, RKVY, ATMA, MG-NREGS, APMIP and other schemes.

Centrally Sponsored Schemes

Centrally Sponsored Schemes (CSS) during XII Plan up to 2017-18 for development of sericulture by supporting

infrastructure, Technical up gradation and improvement of financial status of Sericulture farmers. Under Restructured Central Schemes, the financial assistance is being provided to strengthen seed sector, post Cocoon sector, Vanya sector, Capacity building and R&D schemes. In Andhra Pradesh during 2017-18, much emphasis is given for promotion of components under SCP/TSP sector by providing 90% assistance. Out of total release of Rs.742.02 lakhs of Central share as on date, an amount of Rs.226.30 lakhs were released to SCSP (Rs.177.85 lakhs)and TSP(Rs.48.55 lakhs) sectors to improve financial status of SC/ST sericulture farmers.

The financial support is extended to the reelers/ weavers for establishment of Multi-end/ Automatic Reeling Machines and Twisting units so as to increase marketing for Bivoltine cocoons and produce International 2A and above grade Raw Silk in the State.

Cluster Promotion Programme (CPP):

In Andhra Pradesh, much emphasis is being given for the promotion of Bivoltine hybrid programme through cluster approach. 13 Clusters have been established in 8 potential districts of the State and the programme is being implemented with the coordination of CSB and State dept. officials/ staff for technical guidance to the farmers. The financial assistance is being provided from CS schemes.

Supply of 100% chawkie worms:

Special attention is paid on strengthening of (47) Government Seed Farms and also by encouraging the farmers for establishment of Chawkie Rearing Centres under private Sector for better productivity of Bivoltine Cocoons. 5 fully equipped Chawkie rearing centers with incubator were newly sanctioned in the year 2017-18. (2) for Ananthapuramu and (3) for Chittoor in addition to the existing CRCs. The Chawkie rearing equipment is also sanctioned to the existing Pvt. CRCs. All CRCs shall meet the requirement of Chawkie worms to the farmers during 2017-18 and ensure 100% Chawkie worms supply.

Rastriya Krishi Vikas Yojana

Funds are sanctioned to the Govt. Farms for Farm mechanization under RKVY. 50% (Rs.750/- for 100 DFLs) subsidy to BVH Chawkie charges is also being released under the said scheme to the farmers to encourage Chawkie concept. During 2017-18, an amount of Rs 8.27 crores has been allocated to Sericulture Department towards release of subsidy to the farmers for construction of verandas to their existing rearing sheds. Solar Lighting Units, Supply of additional neetrika to bivoltine farmers are also sanctioned with 50% RKVY subsidy.

MGNREGS:

The department is providing financial assistance to the farmers under MGNREGS towards plantation of Mulberry for the first year and maintenance of the garden for second and third years also. The unit cost per acre is Rs.1.54 lakh for (3) years. Assistance is also being extended for construction of silk worm rearing sheds.

Development of Non-Farm Sector Providing incentives on silk production

- Rs.130/- per kg for bivoltine silk produced on multi-end silk reeling units and Rs.150/- per kg for the silk produced on Automatic Reeling Machines.
- Rs.80/- per kg for Multi-voltine silk produced on multi-end silk reeling units
- Rs.35/- per kg for motorized charka, backend Italian model charka & cottage basin silk in the state.
- An amount of Rs142.73 lakhs was released under Raw Silk incentive to the reelers against the production of 152.014 M.Ts Raw Silk during 2017-18 (upto November 2017) under State Plan.
- Introduction of e-Marketing process is under progress in Government Cocoon markets
- Digital display boards are established in the Government cocoon markets for market rates awareness to the farmers with updated information of A.P Markets and Karnataka Markets.
- Establishment of silk exchange in Proddutur of YSR District and Hindupur of Anantapuramu district for dupion and raw silk trading.
- Establishment of Automatic Reeling Machines (ARM) in the State during this year for enhancement of the International Grade Bivoltine Raw silk production and to meet the indigenous demand of Silk in the State.

Impact of Initiatives

An amount of Rs 1617.79 Lakhs has been provided towards cocoon incentive to the farmers for transacted of 2909.44 Mts of Cocoons in Government Cocoon Markets in A.P. Most of the cocoons produced in the state were purchased by Karnataka State. Due to implementation of cocoon incentive scheme, a quantity of 1743.826 MTs of cocoons were purchased and consumed by the local reeling units in the state up to November 2017.

Status of Sericulture industry

An extent of 82889 acres of Mulberry was cultivated in the year 2016-17 and a quantity of 35625.17 M.Ts of CB Cocoons and 6602.86 M.Ts of BVH Cocoons were produced. During the year 2017-18, 7500 acres of Mulberry brought in to cultivation and 26952 M.Ts of CB Cocoons and 4676 M.Ts of BVH Cocoons are produced up to November, 2017. The productivity for 100 DFLs (Cocoon Production) is increased to 72 Kgs.

State schemes

- Supply of HYV Mulberry Saplings.
- Supply of quality disinfectants to increase the productivity.
- Providing Rs.1000/- Assistance per 100DFLs towards chawkie Charges.
- Providing 50% subsidy to the farmers for farm mechanisation like secateurs, brush cutters, sprayers etc.,
- Incentive to reelers against production of raw silk on improved multi end and improved cottage basin silk reeling units.
- Production incentive for the reeling cocoons produced by farmers including Tasar cocoon Production.
- Providing assistance to charka reelers for conversion in to 6/10 basin reeling units.
- Integration of charka reeling units to small twisting units.
- Supply of quality disinfectants to increase the productivity.
- Yarn support price to silk weavers who are outside Co-operative fold.
- Implementation of e-governance projects.
- Share capital assistance to SERIFED.

Subsidies to weavers:

On purchase of 4 Kgs of Silk yarn by an individual weaver outside the co-operative society @ Rs.250/Kg with a subsidy of Rs. 1000/- in a month. 4167 weavers in the state are being paid yarn subsidy during 2017-18. The Government has released Rs 4208.28 lakhs during 2017-18 to implement the scheme.

Research and Development

Six new Silk worm hybrid races were developed by the institute and submitted for National Silk Worm Race Authorisation. Bivoltine hybrids with disease resistance races are under field trials. In addition, certain eco-friendly disinfectants such as Seri-Gold, Seri-Clean, Seri-Plus, Shakthi and Abhya etc., are released in the field for increase in Cocoon production from 5 Kgs to 10 Kgs for 100 DFLs. Achievements and status during 2016-17 (upto Nov, 2017) are shown in the Table 5.17 details of district wise achievements made under Sericulture sector is given in Annexure 5.32.

Table 5.17: Sericulture - Achievement during 2017-18 (up to Nov, 2017)

Sericulture	
Area under Mulberry- (Acres)	7500
Cocoon Production (MTs)	31628
Raw silk production MTs	4467
Tasar Cocoon production (lakh No.)	22.71
On-Farm Sector:	
Mulberry Acreage as on 31.11.2017 (Ac.)	90389
No. of farmers covered (by the end of 31.11.2017) (Nos)	66942
Ave. Cocoon Production per year (MTs)	31,628
Ave. Raw Silk Production per year (MTs)	4467
Ave. Productivity per 100 DFLs (Kgs.)	72
Ave. Net income per acre/ year (Rs.)	1,25,000/-
Employment generation in both On Farm & Non-Farm activities (lakh Nos.)	4.14
Non-Farm :	
Total existing reeling Basins (No.)	2,389
Existing Twisting Spindles (No.)	99038
Potential available for additional Spindles (No.)	75000

Source: Sericulture department

HIGHLIGHTS
Implementing e-Nam in 22 AMCs

E-governance initiatives:

- Benefits to farmers / silk reelers / weavers are transferred through online banking system.
- Cocoon rates are made available through SMS by sending message to Seri_CB/Seri_BV to 9704742555.
- Key Performance Indicators were uploaded and reviewed every month (www.kpimsap.cgg.gov.in)
- Up loading the farmers / reelers data in the CSB web site is under progress.
- Implementation of e-marketing for Cocoon transactions in the Government Cocoon Markets is under progress.

Agricultural Marketing

Marketing is a key link in the supply chain. Markets functioning effectively are essential for driving up the growth in the agriculture sector and for generating employment and economic prosperity in rural areas. Agricultural marketing infrastructure plays a pivotal role in the fostering and sustaining the tempo of rural economic development and is critical for better performance of the agriculture sector as a whole. Effective marketing infrastructure is essential for cost effective marketing, to minimize post-harvest losses.

It is envisaged that large investments are required for development of postharvest and cold chain infrastructure nearer to the farmers' field. With rapidly changing production-consumption trends, the requirement of cold storages in markets has increased manifold more so in case of perishable commodities. Successful marketing requires learning new skills, new techniques and new ways for obtaining market price information. With a view to provide dynamism and efficiency into the marketing system, the government has undertaken several measures in the recent past.

The State has 191 Agricultural Market Committees managing 324 market yards including sub-yards, of which 98 are functioning, The Market Committees levy and collect market fee at the rate of 1% Ad-Valorem on sale and purchase of notified agricultural produce payable by purchasers of produce. Market fee is the only source of income for Market Committee. The Agricultural Marketing department under takes various activities such as, facilitation for procurement operations under Minimum Support Price (MSP), providing loans to the farmers under Rythu Bandhu Pathakam, Market Intervention, Management of Rythu Bazars etc., The Market Committees collected Rs.476.84 crore in 2016-17 and Rs.223.57 crore during 2017-18 (up to October 2017) towards market fee. The details of district wise collection of market fee are given in Annexure 5.33.

Rythubandhupathakam

Under this scheme, an amount of Rs.43.73 crore loans were distributed to 3890 farmers during year 2016-17 and an amount Rs.32.67 cr. is distributed to 2607 farmers during 2017-18 (upto Oct-2017).

Rythubazars

There are 96 Rythu Bazars are functioning in the state. 56 New Rythu Bazars are sanctioned during the year 2017-18. At present, 13 Rythu Bazars construction is under progress. The constructed Rythu Bazars shall start commencing from 15th January 2018 onwards. The Marketing Department has taken commitment to start the remaining 43 Rythu Bazars start functioning before March 2018. The study on possibility of collection of service charges / utilization charges from the farmers for improving the maintenance of Rythu Bazars and meeting other incidental charges is under progress. 5 Cold Rooms are constructed at Visakhapatnam, Vijayawada and Tirupathi Rythu Bazars. Farm 2 Home program introduced at Vijayawada, Guntur, Visakhapatnam and Rajahmundry where farmer groups are selling vegetables directly to consumers through Retail outlets and Mobile Rythu Bazars. e-Kuragayalu scheme is implemented in Krishna District.

Market Reforms

The Government has adopted A.P. Agricultural Marketing Policy 2015 to improve the transparency and efficiency of the Markets and create competitive, credible and hassle free primary marketing system in the State and elimination of barriers to participation in markets. As part of this policy, the A.P (Agricultural Produce and Live Stock) Markets Act, 1966 has been amended vide Act No.14 of 2015.

Newly Regulated Market Yards, Model Market Yards and Ruythu bazars

There are 12 newly regulated Market Yards are functioning in the state except YSR district. There are 12 market yards from each district except Srikakulam were taken-up for development as Model Market Yards including e-NAM markets in the state for the year 2017-18.

e-NAM

Purchase transactions are being conducted through Electronic Platforms (Unified Market Platform) in 22 Agricultural Market Committees (e-Trading). Government of India have sanctioned National Agricultural Market (NAM) project in 22 markets with an amount of Rs. 6.60 Crores under assistance from ISAM Funds from Ministry of Agriculture & Farmers Welfare.

Present Progress on e-NAM

Major traded commodities in e-NAM markets are Groundnut, Maize, Sunflower, Red Chillies, Turmeric, Cotton, Jaggery, tomatoes, Lemon, Fruits & Vegetables etc., e-NAM was fully implemented in Duggirala Market Yard with online payments to farmers through e-NAM payment Gateway. In 12, e-NAM Markets arrivals are recorded and e-Bidding is done. Payments are made partly through RTGS/NEFT and partly in cash. In 7, e-NAM Market Yards only arrivals are recorded under e-NAM. Total Quantity traded under e-NAM is 34.13 lakh MTs and Trade value is Rs.730.04 Crores, so far.

Market Intervention

Market Intervention activities are taken up by way of direct procurement of Agricultural Produce from the farmers during sudden fall of prices and arranging sales in Rythu Bazars and other outlets as it is done currently for Onions, Tomatoes, Coconuts and Red Chillies with procurement of cotton from CCI.

MIS / Price Support Scheme for Red Chillies, Onion, Tomato:

An amount of Rs. 120.449 Crores was paid to 52,120 Red Chilli farmers during the period 20.04.2017 to 30.06.2017 from the Marketing Department. An amount of Rs.1.00 Crores was provided under MIS operations for procurement and distribution for Onions and Tomato during price escalated is implemented on no profit and no loss basis.

MSP operations for Cotton

The MSP for cotton variety during (2017-18) season is Rs.4020 for Medium Staple (Staple length (mm) 24.5- 25.5 and Micronaire value of 4.3-5.1) and Rs.4320 for Long Staple (Staple length (mm) 29.5- 30.5 and Micronaire value of 3.5- 4.3). Software was developed for procurement of cotton in all 43 No's of CCI centers. Farmers Ration Card Data with bio metric authentication, data on crop area particulars from Agricultural Department (COC), online payment directly to the farmers account is integrated with CCI software. Dash Board on Cotton procurement will be linked to CM Dash Board.

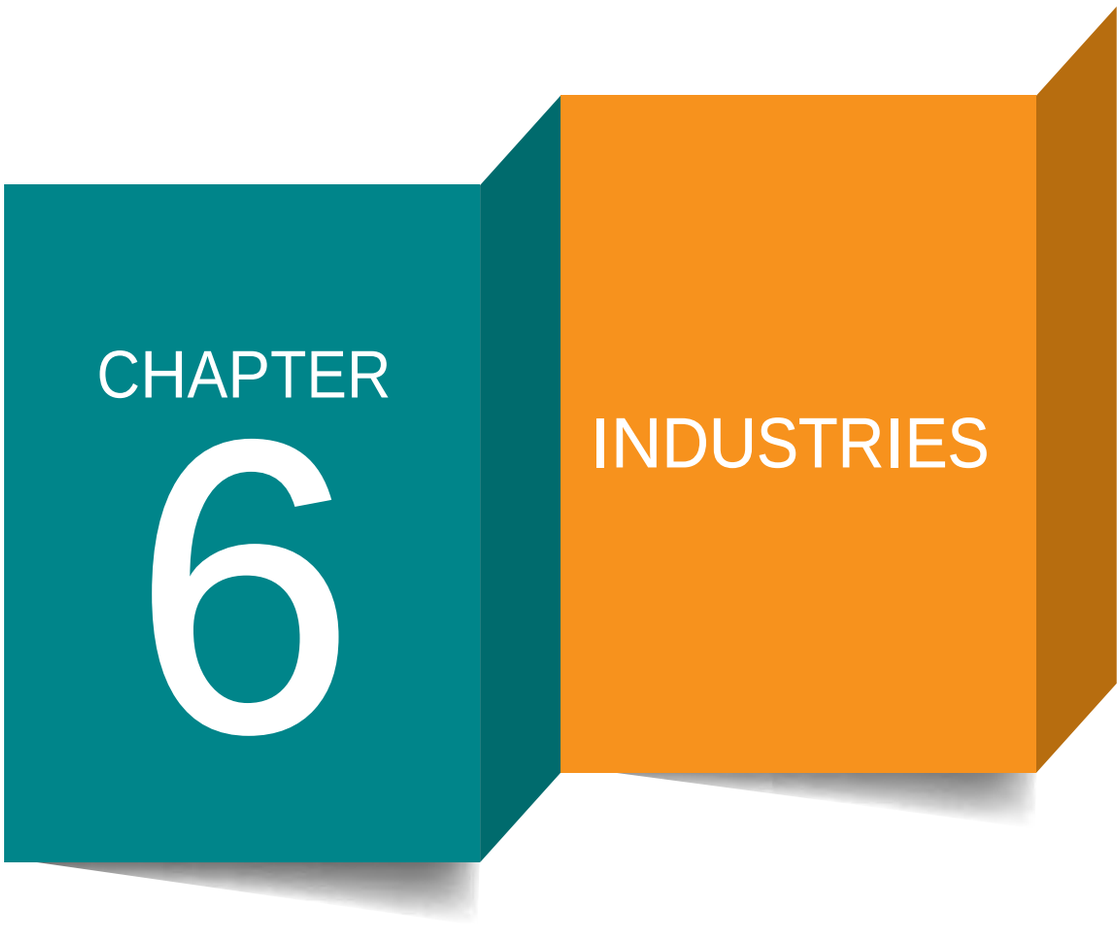
10 New godowns with a capacity of 13,000 MTs. and 13 cold storage godowns are sanctioned during the year 2017-18. There are 36 Ripening chambers with a capacity of 675 MTs are constructed for an estimated ripening quantity of fruits to a tune of 49350 MTs. in market yards. Details of godowns are given in Annexure 5.34

Vanam-Manam Programme

The Agrl. Market Committees. has taken-up massive tree plantation under Vanam-Manam Programme during the year 2017-18.68276 saplings planted at Agrl. Market Yards with a target of 89,442 saplings during the year-2017-18.

Maintenance of Storage Facilities

Presently 991 Godowns with 8.45 lakh MTs. storage capacity are available in AMCs in the state. From 2011 onwards godowns are being constructed with upgraded technology. Due to this, roof panels of godowns are mechanically seamed (Inter-locked) and they are free from holes, nuts, bolts, overlaps, ensures zero maintenance and also resistant to extreme weather conditions and 100% leak proof roofs. 47 godowns are sanctioned in 13 Districts with 90,800 MTs capacity. All the godowns are at different stages of execution.


CHAPTER
6
INDUSTRIES

Accelerating Industries and Investments for Job creation

- AP ranked No.1 in 2016 in Ease of Doing Business by DIPP and World Bank
- AP - First State in India to take up initiative in bringing A.P. Single Window Clearance System under e-Biz project of National e-Governance plan
- Industrial Development Policy(2015-20) to change the infrastructure landscape of the State
- Increase the contribution of manufacturing to GSDP from 9.95% (2013-14) to 15% by 2020
- To create employment opportunities for an additional 10 lakh people by the end of 2020.
- To track investments in 1946 large & mega projects across 18 departments and the new projects signed in the 3rd Summit
- 3rd Partnership summit 2018; 734 MoUs with investment potential of Rs. 4.39 lakh crore and employment potential of 11 lakh
- GIS – based large industrial land bank
- Focus on Node-Centric Industrial corridors for development
  - CBIC – each node as a township
  - VCIC - enhance industrial growth and create high quality jobs
- Ananthapuramu district to emerge as strong Automobile Hub - South Korean Kia Motors a game changer
- MSME corporation to be set up - MSME Parks with plug-and-play facilities planned in 175 assembly constituencies in a phased manner.

Industries

The efforts of the state to undertake structural reforms and thereby give impetus to accelerate industrialization, continued since last three years. The Industrial policy (2015-20) put in place to create a good ecosystem for investments is paying dividends. Adequate attention is being given to different segments like food processing, textiles, electronics hardware, automobiles; aerospace, defence and tourism which are creating opportunities for entrepreneurs and generating employment.

During the last two decades, Indian manufacturing has expanded steadily and grown almost at the same pace as India's overall economy. Despite this encouraging growth, the relative share of manufacturing in the Indian economy has remained unchanged. Meanwhile, several economies have increased their share of manufacturing to above 20 percent of their GDP. This shift of manufacturing capacities from developed nations to rapidly developing economies is likely to continue.

As part of the low skill and labour intensive focus, the state government is devising strategies to develop opportunities in agro-processing, garments, leather, furniture, induce private investment in target sectors, develop cost-effective infrastructure and logistics, Regulatory and policy support to anchor large units. Post bifurcation, the MSME profile of the state has changed significantly towards capital intensive industry. The government has identified competitive MSMEs as a central theme for developing the MSME sector and to make MSMEs a central part in the global value chain and becoming the flag bearer of Brand Andhra Pradesh.

The Govt. undertook Business Process Reengineering (BPR) exercise of incentive administration process to improve the quality of services provided to investors. The BPR focused on improvement of parameters in incentive application and sanction process viz. Process simplification, Plugging of information loop, Document rationalization, Standardized templates, Technological interventions, Administrative restructuring. The major impact of BPR of incentive application time is reduced from to 120 to 40 days for the claim processing and submission of documents reduced from 26 to 7 days.

District Industries Centres

These centres provide all required approvals/ clearances for setting up Industries under a Single Window. The District Industries Centres are implementing agencies of MSMED Act besides maintaining effective liaison with various financial

institutions in arranging required credit facilities. The information pertaining to Industrial development of districts is maintained in these centres. All the MSME claims are now sanctioned at district level as compared to claims of Micro enterprises only earlier.

Industrial Investment Promotion Policy 2015-20

The State Government of Andhra Pradesh has come up with an Industrial Investment Promotion Policy 2015-20 with various Incentives/Concessions to new industries set up in the State. The Government is striving towards creation of quality infrastructure coupled with congenial industrial environment in the State to make Andhra Pradesh an attractive destination for both foreign and domestic investors.

As a part of facilitation through e-Governance, sanction of industrial incentives pertaining to industries department are processed through online submission of applications.

Special emphasis is given for establishment and enhancing production capacities of Micro, Small & Medium Enterprises with huge employment potential. In order to create hassle-free environment for the investors, Government is effectively implementing Single Window Act and arranging various industrial clearances within the set time frame period through online submission of applications.

Andhra Pradesh is the first State in India to take up the initiative in bringing A.P. Single Window Clearances system under e-Biz project of National e-Governance plan of Government of India. This provides efficient, convenient, transparent and integrated electronic services to investors and industrialists covering 40 services, of which 13 are Central Services, 21 are State Common Services and 6 State specific services, covering 18 Departments.

Single Window Act

The Single Desk Policy aims to create a conducive ecosystem to provide all clearances required to setup industry within 21 working days. The main focus for attracting investments is the strategy of "Ease of doing Business".

A. State Level Nodal Agency

During the period from April to December 2017, 270 Large and Mega Industries have filed their proposals with the Nodal Agency for 618 clearances/approvals from various departments. 580 cases were given clearances/ approvals by different competent authorities, 35 proposals were rejected/ returned and 3 cases are in process with an investment of Rs.62471.96 Crore providing employment of 71,783 persons.

B. District Level Nodal Agency

During the period from April 2017 to September 2017, 3921 Micro & Small Enterprises have filed their proposals with the District Level Nodal Agency for 8855 clearances / approvals from various Departments. 8496 cases were given clearances / approvals by various competent authorities and 327 proposals were rejected / returned and 32 cases are in process with an investment of Rs.8834.3 Crores, providing employment to 1,33,304 persons.

Large & Mega Projects

During 2016-17, 54 Large and Mega industrial projects are established with an investment of Rs.4881.13 Crore and employment generation of 22696 persons. During 2017-18 (upto Dec 2017), 40 Large and Mega industrial projects are established with an investment of Rs.4296.91 Crore and employment generation of 11762 persons. The details of district wise Large & Mega industrial proposals, investment and employment are given in Annexure 6.1. So far, 1979 Large and Mega industrial projects are established in the state with an investment of Rs.1,01,532.00 crore providing employment to 5,08,878 persons.

Micro, Small & Medium Enterprises

Investment limits were enhanced with the enactment of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006. MSMEs contribute to approximately 8% of the Country's GDP, 45% of the manufacturing output and 40% of exports. MSMEs provide the largest share of employment after agriculture and hence, the development of MSME sector can contribute enormously to the socio-economic development of the country.

HIGHLIGHTS

3rd Partnership Summit 2018
MoUs.. 737
Invst. Rs.4.39 Lakh Cr.
Employment 11 Lakhs

The MSME sector in Andhra Pradesh manufactures a variety of products with a high concentration of Micro and Small units belonging in the Sectors of food, mineral and building materials, drugs and pharmaceuticals, fabricated materials, trading and service sector. Andhra Pradesh has identified development of MSMEs as a catalyst for job creation and balanced regional development.

Government of Andhra Pradesh has introduced the MSME policy 2015-20 to provide a holistic frame work for sustainable development of MSMEs in the State and to make them globally competitive. The policy offers incentives, infrastructure development, technology up-gradation, skill development and marketing support, simplification, administrative reforms and rehabilitation of sick industries in the State. Udyog Aadhaar Memorandum (UAM) registration is on-line and user friendly and is filed on self-declaration basis and no supporting documents are required.

During 2017-18 (upto Dec 2017) 5920 Micro, Small and Medium Enterprises were established, providing employment to 59,103 with an investment of Rs.2382.65 Crores. District wise details are given in Annexure 6.2. So far in total 80,252 Micro, Small and Medium Enterprises established with an investment of Rs. 24,489 crore thereby creating employment to 8,23,900 persons.

AP Micro, Small Medium Enterprises Facilitation Council

The Micro, Small and Medium Enterprises Development Act 2006, provides for constitution of Micro and Small Enterprises Facilitation Council by State Governments in their State for redressal and recovery of amount due to delayed payments. APMSE Facilitation Council, a quasi-judicial body, provides impetus towards facilitating the payments to MSEs from their buyers.

Prime Minister's Employment Generation Programme

The PMEGP is a Central Sector Scheme funded by the Ministry of Micro, Small and Medium Enterprises. The scheme is implemented by KVIC in association with KVIBs and State Governments through District Industries Centres.

The subsidy component under the scheme is placed at the disposal of participating banks by the KVIC with regard to targets that will be allocated to DICs. The scheme envisages 16.2% reservation for SCs, 6.6% for STs, 27% for OBCs, 5% for Minorities 1% for Ex- Servicemen, 3% for physically handicapped and 30% for Women (overall).

Objectives

The objective of the Prime Minister's Employment Generation Programme is to generate employment opportunities through self-employment ventures and to increase wage earning capacity of artisans and contribute to increased growth rate of Rural and Urban employment. Self Help Groups (including those belonging to BPL provided that they have not availed benefit under any other scheme) are also eligible for assistance under PMEG. Beneficiary's contribution is 10% of project cost for general categories and 5% for Special Categories (including SC/ ST/OBC/Minorities /Women, Ex-servicemen, Physically handicapped, NER Hill and Border area etc.). Margin money (rate of subsidy) for general categories is 15% in urban, 25 % in rural areas. For special categories, it is 25% in urban and 35% in rural areas and is 'one-time assistance' and normal rate of interest shall be charged. Re-payment schedule ranges between 3 to 7 years.

The persons should possess at least VIII standard pass educational qualification for setting up projects costing above Rs.10.00 lakh in manufacturing (Industry) sector and above Rs.5.00 lakh in Business/ Service sector. The maximum cost of the project/unit admissible under manufacturing (industry) is Rs.25.00/ Rs.10.00 lakh under Business/ Service sector.

During the year 2016-17, 283 units were established with a margin money assistance of Rs.802.16 lakhs and provided employment to 3208 persons. During the year 2017-18 (upto December, 2017), 339 units were established with a margin money assistance of Rs.878.97 lakh and provided employment to 3516 persons District wise details of PMEGP is given in Annexure 6.3.

New MSME Policy 2015-20

New Micro, Small and Medium Enterprises (MSME) Policy 2015-20 had been introduced in July 2015, with

HIGHLIGHTS
MSME Parks Planned in 175 Constituencies

fiscal benefits covering the categories of (a) Micro and Small Enterprises (b) Medium Enterprises (c) Service Sector Enterprises (d) Swachh Andhra Initiatives (e) MSME Parks (f) Marketing assistance (g) Awards & Recognitions (h) Sick Units Revival.

Industrial Incentives

Policy of State Incentives/ facilities announced by the State Government will be in operation from 01.04.2015 to 31.03.2020.The Policies are

a) Industrial Development Policy (IDP) 2015-2020
b) Automobile & Automobile Components Policy 2015-2020
c) Textile & Apparel Policy 2015-2020.
d) Biotechnology Policy 2015-2020
e) MSME Policy 2015-2020.
f) Aerospace & Defence Manufacturing Policy 2015-2020
g) AP Electronics Policy 2015-2020
h) AP Retail Trade Policy
i) AP Information Technology Policy

Eligible Industrial Enterprise

Any industrial undertaking and servicing enterprise/ industry, other than those run departmentally by Government of India / State Government or having equity of State Government / GoI.

New Industrial Enterprise

An Industrial Enterprise which has been established in the State with new machinery and commenced commercial production on or after 01.04.2015 and before 31.03.2020 holding valid approvals from the concerned authorities. Micro Industries, Small Industries, Medium Industries and Large Industries/Enterprises means in which investments on plant and machinery is up to the limit as defined by the Government of India from time to time.

Mega Projects:

Mega Project means the Industrial Enterprise, which is set up with a capital investment of Rs.500 crore and above or the Industrial Enterprise which creates direct employment to more than 2000 persons.

Biotechnology Industries

Projects with capital investment of Rs.50 crore and above or creating local employment for 200 people will be accorded mega project status.

Textile Industries: Projects with capital investment of Rs.125 crore and above or providing employment to 2000 people or more, will be accorded mega industry status.

Mega Integrated Automobile Project

Automobile projects that will have engine plant, press shop, body shop, transmission line, assembly line, paint shop etc. either on its own or as consortium or joint venture mode in the same location with investments over and above Rs.1500 crore and which will bring ancillary units of a minimum of Rs.500 crore investment within 3 years, will be accorded mega Integrated Automobile Project. District wise incentives sanctioned in MSME and Large and Mega projects are given in Annexure 6.4

SC Sub Plan and Tribal Sub Plan.

516 claims with Rs.37.01 crores under SC sub Plan and 86 units with Rs.5.13 crore under Tribal Sub plan were sanctioned during 2017-18 upto November, 2017.

Cluster Development Programme- MSME Cluster Development Programme

Government of India has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country. Clustering of units also enables providers of various services to them, including banks and credit agencies, to provide their services more economically, thus reduce the costs and improve the availability of services for these enterprises.

Objectives .

To support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, access to capital, etc, to build capacity of MSEs for common supportive action through formation of self-help groups, consortia,

up gradation of associations, etc., to create/upgrade infrastructural facilities in the new/existing industrial areas / clusters of MSEs and to set up common facility centres (for testing, training centre, raw material depot, effluent treatment, complementing production processes, etc).

20 Cluster proposals are under active consideration. Of which, 4 Infrastructure Development (ID) Projects are under active consideration by DC-MSME, 3rd instalment was released to ID-Project i.e. JRD Tata Industrial Estate in Vijayawada, Krishna District. 4 Common Facility Centres are under active consideration by DC-MSME. 12 Diagnostic Study Reports (DSRs) / Soft Interventions (SIs) are under consideration by the State Level Project Steering Committee (SLPSC).

Industrial Infrastructure Scheme

Clusters/ Industrial locations were identified for development based on the diagnostic study on providing physical infrastructures as identified in the cluster. Priority was given to develop clusters having small industry concentration. The Scheme is implemented on a public-private-partnership initiative i.e. user driven with the support of the Government.

The salient features of the Scheme are

a) Physical Infrastructure.
b) Common facilities for fuel/gas supply system, ETP & Solid waste disposal.
c) Information and Communication Technology Infrastructure.
d) R & D Infrastructure.
e) Quality Certification and Benchmarking Center.
f) Common Facilities Center.
g) Information dispersal /International Marketing infrastructure
h) Small Industry Cluster Development Programme.

Partnership Summit

During the Partnership Summit held in Visakhapatnam in January 2017, 665 Memorandum of Understandings (MoUs) were signed with an investment of Rs. 1,054,594 crore and an employment potential of 2,234,096. Of these almost 109 MoUs were worth more than Rs.1000 crore investment in total. Some marquee investments were signed by various department of Government of AP, some of the major focus sectors were Aerospace and Defence, Electronics, Pharmaceuticals & Biotechnology, Food Processing, Automobiles and Tourism. In the recently concluded Partnership Summit 2018, the Government signed another 734 MoUs with investment potential of Rs 4.39 lakh crores and employment potential of 11 lakhs.

Chennai Bangalore Industrial Corridor (CBIC)

CBIC is one of the mega infrastructure projects of Government of India which passes through the State with the main objective to increase the share of manufacturing sector in the GDP of the country and to create smart sustainable cities which will have world-class infrastructure, convenient public transport, power management and an efficient water and waste management system.

Sectors of focus include general manufacturing; automobiles & auto ancillary, agro and food processing, metals and metallurgical products; biotech and services sector.

The Japan International Cooperation Agency (JICA) has agreed in principle to support the Chennai- Bangalore Industrial Corridor (CBIC).

The Department of Industrial Policy and Promotion (DIPP) and the Japan International Cooperation Agency (JICA) through their consultants M/s. Nippon Koei Limited and PWC have prepared a Comprehensive integrated Master Plan (CMP). The study team has completed the Part-A of CMP for CBIC region and selected 3 potential Industrial nodes – (1) Krishnapatnam in Nellore District, (2) Kalikiri in Chittoor District and (3) Hindupur in Ananthapuramu District.

Under CBIC project, three Nodes have been identified in Phase-I: One node each in Andhra Pradesh, Tamilnadu and Karnataka. Each node is to be developed as an industrial township. In Andhra Pradesh, Krishna Patnam Node has been selected for development in Phase–I. Draft Final Report (DFR) covering the critical gap assessment along with concept master plan and development plan is prepared for Krishna Patnam node.

Krishna Patnam Industrial Node (KPTIN) is a planned area located in south of Krishnapatnam port as industrial development of around 12,000 ha. The estimated project

cost for the development of Infrastructure in KPTIN is around Rs. 13,716 Crores in 3 phases spanning around 25 years. Proposals for considering Krishna Patnam Node as NIMZ and to form the Special Purpose Vehicle (SPV) are under process. The Conceptual Master Plan for CBIC has been completed and presented to DIPP along with all state stakeholders workshop in New Delhi on 21st August 2015.

DMICDC has also been engaged as Nodal agency for expediting environmental impact assessment study and also for carrying out detailed engineering plan for the identified 3 Nodes in CBIC. CBIC project has reached implementation stage. The formation of SPV has been started in the CBIC project. Government of Japan has been asked to indicate their financing support for this project.

A total of 26 priority projects across various sectors have been identified for debottlenecking in the CBIC region, out of which 2 following projects pertain to AP state (Roads sector) and sanction is awaited from Ministry of Road Transport & Highways (MoRTH).

- 4 Laning of NH-18A from Chittoor to Renigunta and SH-61 (now NH-71) from Renigunta to Naidupeta (Estimated cost Rs.600 Crs).
- 4 Laning of NH-4 from Km 133/360 to 216/916 in the State of A.P. (from Karnataka/ AP border to AP/Tamilnadu border via Chittoor - Estimated cost Rs.1214 Crs).

Out of (11) Additional Projects -A under CBIC, two projects are concerned to A.P State i.e (1) Chittoor Drinking Water Supply (Implementing Agency is INCAP) and (2) 6 Lane access road to Krishnapatnam (Implementing Agency is GoAP/Private). Project is under process.

Out of (08) Additional Projects-B under CBIC, two projects are concerned to A.P State i.e (1) Sewage Recycle and Industrial Wastewater Recycle in Andhra Pradesh (Implementing Agency is APIIC) and (2) Power Plant/ Transmission project in Andhra Pradesh (Implementing Agency is GoAP/Private). Project is under process.

Each node is envisaged to be implemented by a Special Purpose Vehicle (SPV) set up as a joint venture between the GoI (to be represented through the Fund/Trust) and the concerned State Government. It is to state that about 60-65% of the infrastructure projects are proposed to be implemented on PPP basis and rest relating to trunk infrastructure on assistance from Government.

The Government of India has appointed DM, ICDC as a Technical Advisor for the CBIC project. APIIC and DMICDC have jointly prepared and finalized the State Support Agreement (SSA) and Stake Holders Agreement (SHA) for the project which is under process of approvals and signing. As per the broad terms of the SHA, GoI shall be contributing Rs.5,000 crores as its equity contribution and soft loan funding for the development of the requisite project infrastructure. GoAP shall contribute the land required for the project as its equity.

Vizag Chennai Industrial Corridor (VCIC)

The VCIC is a key part of the planned East Economic Corridor and India's first coastal corridor. VCIC is aligned with the Golden Quadrilateral and is poised to play a critical role in driving India's Act East Policy and Make in India campaign. Nearly 800-kilometer corridor links India with the Association of Southeast Asian Nations (ASEAN) and East Asian economies that form the bedrock of global manufacturing economy. The corridor traverses nine districts of the state of Andhra Pradesh. VCIC intends to complement the ongoing efforts of the Government of Andhra Pradesh (GoAP) to enhance industrial growth and create high quality jobs.

VCIC Development Program supports Government of India (GOI)'s strategy to develop industrial corridors of international standards for expanding its manufacturing and services sectors, and creating modern urban centers connected by state-of-the-art infrastructure. GOI has selected the Asian Development Bank (ADB) as the lead partner for developing the ECEC, which will run from Kolkata (in West Bengal) to Kanyakumari (in Tamil Nadu). The conceptualization and development of VCIC has received major support from ADB, which carried out analytical work determining the kind of infrastructure and institutional investments necessary to drive manufacturing-led growth in consultation with the Department of Industrial Policy and Promotion, GOI.

VCIC's long coastline and strategically located ports allow development of multiple international gateways to

connect India with global value chains (GVCs) in Southeast and East Asia. VCIC aligns with the national objectives of expanding the domestic market and supports India's port-led industrialization strategy (Sagar Mala initiative). It has Influential area of about 1,10,000 sq. km, (3.5% of India's area). It is estimated that the VCIC attracts about Rs.1,00,000 Crores additional investments and generates additional employment to the tune of 110 Lakh persons. The corridor contributes to 5% of national GDP and has potential to increase GDP in the Corridor by 6 times. Regional industry agglomeration could be achieved by attracting companies in the value chain of other companies already based in the corridor, attracting particular industries that the corridor provides with geographical advantages, or building and maintaining advanced infrastructure to support industries.

The objective of VCIC Development Program is to increase the manufacturing sectors, improve labor productivity, and enhance international competitiveness. Metallic and non-Metallic Minerals, Chemicals and Petrochemicals, Pharmaceuticals, Agro-Processing, Food-Processing, Automobile & Auto components, Renewable Energy, Textile, Electrical and Electronics have been identified as key industrial sectors in the Corridor.

The key objectives of VCIC are:

- Increase the manufacturing sector's contribution to state and national output
- Increase employment opportunities in formal sector
- Increase labour productivity & wages
- Promoting dynamic SMEs
- Integrating India and the VCIC region in global production networks, particularly East and Southeast Asia

The VCIC is proposed as a node-centric development platform with four nodes: (i) Vishakhapatnam Node, (ii) Kakinada Node, (iii) Gannavaram –Kankipadu Node (Amaravathi Region Node) and (iv) Yerpedu – Srikalahasti Node. Two Nodes, i.e., Visakhapatnam Node and Yerpedu - Srikalahasthi Node were prioritized for making initial investments.

ADB has approved on 20th September 2016 the Visakhapatnam–Chennai Industrial Corridor Development Program (VCICDP) comprising of Multi tranche Financing Facility (MFF 0093-IND) of $500 million, Policy Based Loan (PBL Loan 3424-IND) of $125 million, and Capacity Building Technical Assistance (TA 9173-IND) of $1.0 million. Subsequently, ADB approved on 26th September 2016 Project 1 of the MFF comprising a loan (Loan 3430-IND) of $245 million, and a Grant from the Urban Climate Change Resilience Trust Fund (UCCRTF) (Grant 0495-IND) of $5 million. Project-1 Loan and Grant Agreements were signed on 23rd February 2017 and declared effective on 5th May 2017. The TA agreement was signed on 3rd March 2017 and was effective from the signing date.

Source	Amount ($ million) and share		
	Policy loan	Project loan	Total
Asian Development Bank	125.0(100%)	500(70%)	625(74.4%)
Government of Andhra Pradesh	0	215(30%)	215(25.6%)
Total	125(100%)	715(100%)	840 (100%)

Policy Based Loan: Supports the Government in policy, institutional and governance reforms to promote accelerated industrial development

Investment climate- 'Ease of doing Business'.

Strengthening of institutional structures for corridor management

Capacity building and skill development

Policy reforms & investment promotion

Project Loan: Supports investments in physical infrastructure in the selected nodes.

Improvement of road connectivity projects

Upgradation of energy transmission and distribution infrastructure

Augmentation of urban water supply infrastructure in corridor nodes

Internal and common infrastructure for industrial parks

As stipulated by Department of Industrial Policy and Promotion (DIPP), Government of India, GoAP is mandated to prepare three documents with regards to VCIC – i) Conceptual Development Plan, ii) Regional Perspective Plan and iii) Master Plan. Pricewaterhouse

Coopers Private Ltd. was appointed by ADB to prepare the Conceptual Development Plan (CDP) and Regional Perspective Plan for VCIC. The draft Regional Perspective Plan was submitted to Govt. of Andhra Pradesh and Asian Development Bank by PwC in March, 2016. In January 2016, a consortium of Jurong Consultants and KPMG was appointed for preparation of Master Plan of the 4 nodes of VCIC.

Through the Conceptual Development Plan (CDP), ADB has identified several infrastructure projects. The identified infrastructure projects by CDP include debottlenecking and capacity augmentation of existing assets and also some green field infrastructure projects for future economic growth in the state. Of the identified ones, selected high impact projects have been planned to be developed with financial assistance from ADB.

List of Projects identified for financial assistance under ADB

PIU	Project	Current Status
APIIC	Construction of 1 MLD Common Effluent Treatment (CETP) plant at Naidupet Industrial cluster (35.60Crs.)	PBER was submitted to ADB on 04.01.2018 ADB has issued NOC on 11.01.2018
	Augmenting utility services for Naidupet Industrial cluster. [SWD, power, internal road and one stop centre (179.51Crs.)	Work is awarded. Mobilization advance of Rs.7.20Crs. is released to the contractor.
	Bulk water supply to Naidupet cluster (116.10Crs.)	PBER was submitted to ADB on 02.01.2018. ADB has issued NOC on 11.01.2018
NOTE : Rs.111.97Crs. was allocated to the APIIC		
APRDC	Widening and strengthening of Samarlakota – Rajanagaram Road(SH148) to divided four lane from Km 26.4 to Km 56.4 in E. Godavari District. (319.00Crs.)	Bids were opened on 10.01.2018 and Technical Evaluation is in progress.
	Greenfield approach road and providing external water supply to Nakapalli (85.00Crs.)	DPRs are under preparation.
	Widening of road (single to 2 lane) from Neleballi to Routhusuramala and formation of new two lane road from SrikalahastiYerpedu (south block) to Pallamala on Kalahasti Tada Road (40.00Crs.)	
	Widening of road (single to 2 lane) from ThimmajiKandriga to NH-5 (AH-45) near Pandlur Railway gate for 6.1 KM length (without RoB) (87.00Crs.)	
Note : Rs.31.90Crs. was allocated to the APRDC		
AP TRANSCO	Augmenting power distribution capacity for meeting Industry demand at Kapuluppada, Nakkapalle / Chandanada and Achutapuram (327.00Crs.) (APTRANSCo. 01)	Financial Proposals are opened on 23.01.2018 and Evaluation of Financial Proposals is under process.
	Augmenting power distribution capacity for meeting Industry demand at Rachagunneri, Naidupeta and Yerpedu (325.00Crs.) (APTRANSCo. 03)	LOA was issued on 18.01.2018
Note : Rs.144.26Crs. was allocated to the APTRANSCo.		
GVMC	Distribution Network improvements for NRW reduction and 24x7 supply in GVMC area. (348.48Crs.)	Responses to the comments on Financial Evaluation Report were submitted to ADB on 22.01.2018
	Watershed Development and Rejuvenation of Mudasarlova lake (Rs 9.50 Cr)	DPR is under preparation
	Developing a 3 MW Solar Energy Park at Mudasarlova / Meghadri Gedda (Rs 14.50 Cr)	Last date for Bid submission is extended from 10.01.2018 to 24.01.2018
	Converting 3 streets into non-vehicular zone (Rs 7.00Cr)	DPR is under preparation
Note : Rs.77.11Crs. was allocated to the GVMC		

PIU	Project	Current Status
Policy Areas/ Objectives	Actions Prior to First Tranche Release (March 2017)	Current Status forFirst Tranche Release
Corridor Management	A dedicated investor promotion agency in Directorate of Industries	Complied. Economic Development Board was established.
	One global investment promotion event to be held in the State.	Complied. Invest AP held in January, 2017
	Road Safety Policy framework or action plan approved, and published	Complied.
	A state level roadmap to provide electricity	Complied.
	Roadmap for project development mechanism and its management.	Complied.
	Notification of State Industrial Corridor Management Authority (APICDA)	Complied. Act was enacted on 04.01.2018.
	Notification of Node-specific SPVs	Complied. Approval for SPVs issued by GoAP
Ease of Doing Business	Notification of new Industrial and Sector level Policies	Complied.
	Notification of State-wide single-desk policy	Complied.
	E-portal for online applications	Complied.
	Reform plan approved for DICs	Complied.
	A roadmap or a policy document approved for skill development	Complied.
	Lands for industrial use identified in at least two nodes	Complied.

Industrial Infrastructure

The state government is readying an ambitious plan for extensive infrastructure creation including integrated development of port-based infrastructure, using the state's 974-km-long coastline, part of East Coast which faces progressive south eastern nations, and industries that help the state emerge as a logistics and cargo hub.

The AP government developing the new ports—through the public private partnership (PPP) route —modernize existing minor ports and set up port-based industries along the coastal corridor. The state is also working on building a strong inland waterway system that is linked to ports through national highways.

The Special Economic Zones (SEZs) Policy was announced in April 2000 under Export & Import Policy to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. It is designated as duty free enclave and to be treated as foreign territory for trade operations and duties and tariffs.

Objectives of the SEZ Act

- Generation of additional economic activity
- Promotion of exports of goods and services;
- Promotion of investment from domestic and foreign sources;
- Creation of employment opportunities;
- Development of infrastructure facilities;

Initiatives

Government intends to exploit the SEZ concept for impacting the State's socio-economic fabric through enhanced job opportunities and industrial development. APIIC has already taken the lead in developing SEZs across various districts in Andhra Pradesh. . Details of the SEZs are shown in Table 6.1.

Table 6.1: Status of Operational Special Economic Zones (excluding de-notified SEZs) as on 30.06.2017:

Description	No. of SEZs	Investment made (including FDIs) (Rs. in Cr.)	Employment generated (No.)	Exports from SEZs during 2016-17 as on 30.06.2017, including deemed exports (Rs. in Cr.)
APIIC	5	3,532.54	9,501	882.10
APIIC JVs	3	4,311.79	4,967	341.03
APIIC Assisted	5	4,600.60	40,228	623.10
Private Developers	5	3,892.41	14,485	1,575.53
VSEZ	1	1,239.96	4,647	314.87
Total	**19**	**17,577.30**	**73,828**	**3,736.63**

Source: VSEZ, GoI, Visakhapatnam.

Out of 19 operational SEZs, 3 were IT/ITES SEZs, 5 Multi Product SEZs, 4 Pharmaceuticals SEZs, 2 Textile, 2 Leather Products, 1 Building Products, 1 Port based SEZ and 1 Food Processing SEZ.. District wise status of SEZs and area are given in Annexure 6.5.

New Initiatives

Mega Food Park:

Ministry of Food Processing Industries, Govt. of India sanctioned for establishing a Mega Food Park at Mallavalli Bapulapadu Mandal Krishna District with an estimated cost of Rs. 125.25 Cr. and projected Investment is Rs.400 Cr. Govt of India has released its 1st Instalment of Grant of Rs.15.00 Crores during July, 2017. The infrastructure works and Central Processing Centre (CPC) etc are under construction.

Electronic Manufacturing Cluster (EMC):

Ministry of Electronics & Information Technology, Govt. of India sanctioned for establishing Electronic Manufacturing Cluster (EMC) at Vikruthamala, Erpedu Mandal, Chittoor District on 02.08.2017 with an estimated cost of Rs. 339.80 Crores and release of 1st instalment grant amount of Rs.68.25 Crores i.e 30% of total grant is under progress. The infrastructure works under progress and already constructed 4 factory sheds and 3 more sheds are under construction.

AP Gas Infrastructure Corporation

Andhra Pradesh Gas Infrastructure Corporation (P) Ltd (APGIC) is a joint venture of APIIC and APGENCO with equity participation at 51:49 respectively. APGIC was incorporated on 2nd September, 2009 under the provisions of Companies Act. The authorized share capital is Rs.100 crore and paid up capital is Rs.55.44 crore upto January 2018.

Objectives

The two key objectives of the Corporation are 1. Exploration and Production activities particularly in KG Basin and 2. Make Andhra Pradesh a gas based economy. In the light of these objectives, in the New Exploration Licensing Policy (NELP) VIII. APGIC has won four blocks in KG Basin along with other consortium partners in NELP VIII round bidding conducted by Directorate General of Hydrocarbons. APGIC has 10% equity in all these four blocks. Out of these four blocks, three are Shallow Water Blocks and one is Deep Water Block. ONGC is the operating partner for the three Shallow Water Blocks, and British Gas is the Operating Partner for the Deep Water Block.

A.P. Gas Distribution Corporation Ltd.:

Andhra Pradesh Gas Distribution Corporation Limited (APGDC) is a joint Venture of APGIC and GAIL Gas Limited, (wholly owned subsidiary of GAIL (India) Limited, a Central Government Public Sector Enterprise) with 50:50 equity partnership has been incorporated. With an objective of designing/ developing Natural Gas supply/ distribution net work, Gas processing through liquefaction Re-gasification plants and to import, store, transport & distribute Natural Gas in the entire state. The authorized share capital of APGDC is Rs.100 crore.

APGDC is entrusted with establishing FSRU based LNG Terminal at Kakinada to narrow the gap between demand and supply position. Estimated Capital investment in the project is to the tune of Rs.1200 crore. APGDC has been authorized by PNGRB to lay, build operate and expand Kakinada- Srikakulam Natural Gas Pipeline. APGDC is taking up the project at an estimated cost investment of Rs.780 crore. Construction works of the pipeline are expected to start 2nd week of February 2018 and the pipeline is targeted to be completed by December 2019.

Godavari Gas Pvt. Ltd., a Joint Venture Company of APGDC and Hindustan Petroleum Corporation Ltd. (HPCL), a Central Government Public Sector Enterprise, with 74:26 equity partnership has been incorporated on 27th September 2016 to establish City Gas Distribution Network in East and West Godavari Districts of Andhra Pradesh. The authorized Share Capital of GGPL is Rs. 100 Crore estimated investment in the Project during the first 5 years for developing (a) Pipeline network, (b) providing over 1.15 Lac domestic PNG Connectivity and (c) setting up CNG Stations at various locations is Rs.475 Crore. The construction works have already commenced.

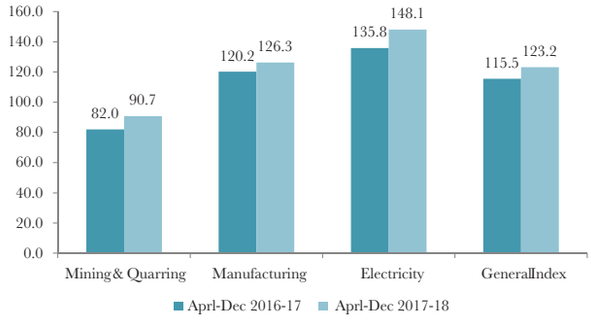
Index of Industrial Production

The Index of Industrial Production (IIP) is a yardstick for measuring industrial growth. It includes the relative change of physical production in the field of Industry during specific period as compared to the previous period. The IIP is estimated monthly by collecting data from selected units of Manufacturing, Mining, Quarrying and Electricity. The main objective is to estimate the contribution of Industrial sector to the Gross State Domestic Product. IIP in the State is being compiled with base year 2011-12 for 23 industrial classifications at 2-digit level under manufacturing sector.

As per Quick estimates of IIP, the Mining and Quarrying, Manufacturing and Electricity sectors (at NIC 2 digit level) registered growth rate of 10.7%, 5.1% & 9.1% respectively during the period April to Dec 2017 over April to Dec. 2016. The indices of IIP of State are given in Annexure – 6.6.

Growth in Industrial Production in terms of IIP is shown in chart 6.1. The General Index for the period from April to December 2017 in Andhra Pradesh stands at 123.2 against 115.5 observed in the same period of April to December 2016.

Chart 6.1 Index of Industrial Production



Source: Directorate of Economics & Statistics.

Annual Survey of Industries

The Annual Survey of Industries is the principal source of Industrial Statistics in the State. It provides Industrial statistical information to assess and evaluate the changes in the growth, composition and structure of organized manufacturing sector comprising activities related to manufacturing processes, repair services, gas and water supply and cold storage. The ASI conducted once in a year to collect the data from the Organized Manufacturing units registered under the section 2 m(i) [10 or more workers with power] & 2m(ii) [20 or more workers without power] of the Factories Act, 1948 and units registered under Beedi and Cigar (condition of employment) Act, 1966.

The main objectives of Annual Survey of Industries are:

1. Estimation of the contribution of manufacturing Industries as a whole and of each type of Industry to the State Income.
2. Systematic study of the structure of the Industry as a whole and each type of Industry.
3. Analysis of various factors influencing Industries in the State.
4. Provision of comprehensive, factual and systematic basis for formulation of Policy.

The data for 16 principal characteristics based on Annual Survey of Industries from 2009-10 to 2014-15 is given in Annexure-6.7.

Highlights of ASI 2014-15

The number of factories registered in the year 2014-15 is 12,905 and in 2013-14 it was 12,941, registering a negative growth rate of about 0.28%. The factories in the state generated employment to 5.28 lakh persons by the end of 2014-15 registering a growth of 1.22%. The Gross value added is increased by 29.24% in the year 2014-15 over the previous year 2013-14 and Net value increased by 50.75% at the end of the year 2014-15.

State Level Public Enterprises

There are 39 State Level Public Enterprises (SLPEs) functioning in the state. As per the working results of these SLPEs, the performance during the year 2014-15 can broadly be summarized as:

Capital Employed

The capital employed by all the state level public enterprises was Rs.31936.38 crore. The top five State Level Public Enterprises with the highest 'Capital employed' are A.P.GENCO, APSHCL, APSPDCL, APSFC and APMDC. The capital employed by the top five SLPEs constitute 85.8 % of the capital employed by all the SLPEs in the state.

Turnover

The total turnover (including other income) made by all the 39 public enterprises was Rs.51786.34 crore. The top five state level public enterprises whose turnover is highest are - APSPDCL, APSCSCL, A.P.GENCO, APEPDCL and APIIC. The turnover achieved by the top five state level public enterprises to total turnover works out to 85.4%.

Profit

24 SLPEs, out of the total 39, made a profit of Rs.1322.61 crore during 2014-15. Out of these following top five SLPEs made a profit of Rs.1132.17 crore, accounting for 85.6% of the total profit made by all the 24 profit making SLPEs.

- APEPDCL : Rs.722.24 crore
- APGENCO : Rs.205.56 crore
- APMDC : Rs.111.84 crore
- APTRANSCO : RS.50.19 crore
- APSFC : Rs.42.33 crore

Mines and Geology

Minerals & Agriculture are one of the main sources of revenue to Andhra Pradesh with minerals forming the major contributor for the economic growth of the State. Andhra Pradesh is well known globally for variety of rocks & minerals and called Ratna Garbha. Minerals form a major contributor to the economic growth of the State. Andhra Pradesh is a mineral rich state containing a vast variety of mineral wealth particularly industrial minerals. The State is a house for various minerals specifically Crude Oil & Natural Gas, Barytes, Bauxite, Heavy Mineral Beach Sand, Manganese, Limestone, Dolomite, Quartz, Feldspar, Silica Sand, Semi-precious Stones, Ball Clay, Laterite, Iron Ore, Gold & Diamonds, Mica, Asbestos, Calcite, Uranium, Lead, Zinc, Shale, Pyrophyllite, Steatite, Serpentine, Graphite, Kyanite, Vermiculite, Clays, Ochre, Black & Colour Granites, Limestone Slabs, Fullers Earth, Marble, Road Metal/Building Stone/Ballast, Gravel/Earth, Mosaic Chips and Ordinary Sand.

The State is focusing on inventory of mineral resources, key issues of legislation, objective and strategies in tune with the National Mineral Policy for accelerating growth leading to

overall development of the mining sector. The main aim of State Mineral Policy is to serve as a guiding force to translate the State's mineral potential into reality with eco-friendly and sustainable mining.

Mineral Resources

- The areas of Agnigundala, Bondalamottu in Guntur district are famous for mining of Copper, Zinc, Silver and other base metals.
- The alkaline and ultra-basic rock formations in Guntur and Prakasam districts are enriched in Nepheline Syenite.
- The State contains huge Uranium deposits in Thummalapalli, YSR district. The Department of Atomic Energy, GoI already started exploitation of the resources through M/s. Uranium Corporation India Ltd, a Public Sector Undertaking.
- The Dharwar Super Group Meta sediments contain rich deposits of Iron Ore confining to Bellary Reserve Forest and surrounding areas in Anantapuramu District.
- Number of scattered low grade iron ore deposits are in Prakasam, Krishna, Kurnool and YSR districts.
- The State is known for exclusive Granite varieties - Chimakurthy Black Galaxy, Steel Grey, Ocean Blue, Black Pearl in Prakasam, Srikakulam Blue in Srikakulam, Vizianagaram Green in Vizianagaram, River White, Kashmir White & Moon White in Visakhapatnam, Yellow Granite in East Godavari, Silver Pearl, Indian Labrador, Blur Paradise, Copper Green, Platinum Blur in Guntur, Viscon White, Tiger Black, Kuppam Green English Teak in Chittoor, Pista Green in YSR Dist, Chilli Red in Anantapur and Chocolate Brown in Kurnool.

Departmental Functions/Activities

The Department of Mines and Geology looks after overall development of mineral sector and also collection of mineral revenue for the state exchequer. The department is responsible for processing of mineral concession applications, grant of leases for minor minerals, approval of mine plans, inspection of mines, curbing of illicit mining and transportation, vigilance, and other activities.

Leases and Mining

There are 381 mining leases for major minerals, 1806 quarry leases for cut and dressed blocks of granites and 1033 quarry leases for industrial minerals and 4067 Quarry leases for other Minor Minerals (Construction Minerals). Mining for Limestone, Barytes and Natural Gas falls under large scale mechanized sector, while Granite, Dolomite, Quartz, Feldspar, Clays etc. all under semi mechanized medium sector and the other minerals fall under semi mechanized small sector. Nearly 90% of the mines fall under small sector and remaining 10% under medium and large sectors.

Mineral Based Industries

Both Public & Private Sectors established large and medium scale mineral based industries for manufacture of Cement, Steel, Sponge Iron, Ferroalloys, Glass, Ceramics, Refractories, Chemicals, Granite, Marble & Limestone cutting & polishing units, Slate cutting units, Gem Cutting & faceting units, Granite monuments manufacturing units, Pulve rizing units, stone crushers, Mosaic & Ceramic tile units, Lime Kilns, and Manufactured Rock sand units in the State.

The Mining Sector is identified as one of the growth engines and certain minerals have been identified as focus minerals viz. Bauxite, Heavy minerals, Beach Sand, Limestone, Gold, Diamond, Dolomite, Oil & Natural gas, Uranium, Garnet, Granite, Titanium, etc. for establishment of Cement, Gas based Thermal Plants, Oil Refinery, Cutting & Faceting, Mining & Refinery, Steel & Sponge, Alumina Smelter and Aluminium Refinery etc., as focus industry for overall development of the Mining Sector in the State.

Mineral Production and Value

Mineral consumption is increasing due to promotion of various industries and manufacture of Mineral based products. The State produced industrial minerals, dimensional stones, building materials with a value of Rs.12601 crores during 2016-17. Production of Crude Oil, Natural Gas and Limestone is given in Annexure 6.8.

Revenue

The State Mineral and Mining sector contributed Rs.1700.70 crore of Mineral Revenue to the state exchequer during 2016-17 and Mineral Revenue during 2017-18 (upto Oct, 2017) earned Rs.965.01 Crore. The percentage growth compared to last year during the same period was

12%. Details of Mineral revenue achievements are shown in Table 6.2. District wise mineral revenue from 2014-15 to 2017-18 (upto Oct, 2017) is given in Annexure 6.9.

Table 6.2 Mineral Revenue Achievement (Rs. in Crore)

Year	Achievement	Growth over Previous Year (%)
2014-15	966.11	9.20
2015-16	1396.05	55
2016-17	1700.70	13.68
2017-18 (up to Oct 2017)	965.01	

Source: Director of Mines & Geology

Vigilance

There are 9 Vigilance offices in the districts and 5 Regional Mobile Squads stationed at 5 Regional Dy. Directors of Mines & Geology, two integrated check posts and observation check posts at Krishna, Prakasam and Kurnool Dist for effective vigilance to curb illegal mining & transportation of minerals. The department has booked 4063 cases and collected Rs.14.55 crore as penalty upto October 2017.

Mineral Projects

The Department took up initiative for grounding of Bauxite mining project and establishment of Alumina/ Aluminum project with an investment of Rs.40,000 crore. Established Alumina Smelter at Makavarapalem, Visakhapatnam and acquired lands at Batwada Village, Vizianagaram for establishment of Alumina Smelter and Aluminium Refinery. Besides this, National Aluminium Company (NALCO) also proposes a similar project for exploitation of Bauxite in East Godavari district in the State. Uranium exploitation project is already commenced at Thummalapalli, YSR District by the Department of Atomic Energy through Uranium Corporation of India Ltd. The extraction of heavy minerals from Beach Sand deposits along the coastal line is presently under private sector and obtaining Mining Lease for Beach Sand Minerals and Planning setup value additional units through Joint Venture (JV). Basing on the availability of huge deposits of Cement Grade Limestone a number of green field projects are proposed in the area in addition to the expansion by the existing Cement plants with Rs.3,000 crore.

Policy Initiatives:

- Enhanced the application fee and security deposits to avoid blocking of huge extents by the applicant, besides providing opportunities to serious entrepreneurs.
- Government issued orders to promote and incentivize M-sand production.
- Government issued orders to make the prospecting licenses and quarry leases (granted for the purpose of non-captive consumption) as non-transferable.
- To avoid monopoly, government has imposed area restriction for leases such that any lease holder is not allowed to hold more than 50 Ha of lease area for a mineral whereas Industries are allowed to hold up to 100 Ha of lease area for captive purpose.
- Proposed to repeal cess on Mineral Bearing Lands (MBL) as DMF is being levied on all minerals enacted DMF Trust Rules, 2016 establishing District Minerals Foundation in all 13 districts of the State, as per the said Rules. All Mining and Quarry lease holders shall pay 30% on Royalty/Seig.fee in addition to the Royalty/Seig.fee. The Manner of working and receipt of contributions thereto, in mineral bearing districts, for the interest and benefit of persons and areas of affected by the mining related operations and for purposes connected therewith.
- Punitive measures have been taken to control illegal Mining and transportation of Minor Minerals by issuing amendments to Rule 26 & 34 of APMMC Rules, 1966.
- Government of India has established "The National Mineral Exploration Trust (NMET)" as per MMD&R Amendment Act, 2015. The objective of the Trust is to use the funds accrued to the trust for the purpose of Regional and detail explanation of major minerals. As per said act, all the Mining lease holders shall pay to the trust, a sum equivalent to 2% of the royalty as per the II-Schedule of the Act. Accordingly, the department is collecting 2% amount on royalty from the mining lease holders and transferring the same to the Central Account of the NMET by every month.
- Re-Christened the DMRTUF trust as MERIT (Mineral Exploration, Research and Innovation Trust) and framed Rules for collection of 2% of amount on Seig. fee as contribution fund to merit from minor mineral lease holders on par with NMET for research and exploration of new reserves.
- The Government announced "New Sand Policy-2016" in January, 2016. As per new Sand Policy, the sand shall

be made available to the public without charging any fee from 2nd March from 2016.

- The Government announced Manufactured Sand Policy-2016 in March, 2016 for promotion of manufacture of sand in place of river sand as alternative to the river sand in construction activity in view of the increase in demand of sand of domestic consumption as well as the scarcity of river sand. According to the said policy priority shall be given to the entrepreneurs who are interested to establish manufactured sand units.
- The collection of royalty/Seig.fee, NMET, MERIT, DMF and all other payments is integrated with the mineral e-permit system and collecting through online only.
- Other Initiatives Automated e-permit has been implemented for Iron Ore, Cement Grade Limestone and Manganese mining leases which has resulted in additional time for ADMGs to be spent on Field Inspections.
- Implemented E-filling of mineral concession applications through Mee Seva
- Mines Surveillance System has been developed for geo-referencing of major minerals leases for satellite based monitoring.
- Implement drone / laser surveys for 3D Mine Mapping to monitor mines production and mineral stock in the mine
- SMS and email based updates to lease holders & applicants for faster and more efficient communication with the lease holders
- New departmental website developed to increase transparency and dissemination of data to the public
- Mobile application for Randomized Selection of mines for inspection has been developed to introduce transparent mechanism for selection of mines
- State pursued with Central Geological Agencies for exploration of Diamond, Gold, Base Metals, Rare Earths, Beach Sand minerals, Volcanic Ash, Granites.
- Identification of exclusive quarry zones around Vijayawada, Visakhapatnam, Guntur & Chittoor districts.
- The Department encouraged the Andhra Pradesh Mineral Development Corporation & other Private Sector entrepreneurs for mining & establishment of Beach Sand Mineral Separation Units, Titanium Slag& downstream industry at Vizianagaram & Srikakulam districts.
- The Department encouraged APMDC for establishment of Low Grade Iron Ore beneficiation Plant at Ongole (Prakasam District) and large scale mining of Galaxy Granite (Prakasam District).
- The Department has taken initiative in establishment of cement plants at Krishna, Guntur, Kurnool, and Anantapur & YSR Districts.
- The Government through APMDC intends to enter into Oil and Natural Gas exploration. The Department requested the Government of India to allocate on-shore Oil and Natural Gas blocks to APMDC for exploration on nomination basis so as to cater the needs of the State.

Future Activities

- Satellite based monitoring system will be implemented for minor minerals to identify illegal mining in the State
- Department is in process to develop Single desk system for all regulatory approvals for grant of leases
- User portal for lessee is in process for tracking of lease status, payments due and other details
- Department has proposed to link of e-permit system to the portal
- Departmental Dashboard is being developed for tracking of the mining activities and status online
- Details of the leases to be made available to public for increasing transparency
- To curb illegal transportation of minerals and prevent loss of revenue to the state government, it is proposed to introduce a comprehensive system for installation of GPS-based Vehicle Monitoring & Tracking System
- Department is formulating Auction Rules for Minor Minerals for introduction of fair and transparent mode of allocation of minerals
- Proposal for levy of Green fee
- For private buildings and apartments a Green fee of Rs 3/ Sq. ft will be collected by local bodies while approving the building plan and will be remitted to Mining Department account.
- Henceforth, no Vigilance & Enforcement and Mines Dept. action will be allowed in cases where Building Plan has been obtained from local bodies by paying Green Fee

Strategies to achieve Double Digit Growth for the Mining Sector

- To utilize information technology for improving Revenue administration. Increase in Penalty and introduction of punishment for the illegal excavation and transportation Faster grant Disposal of Application
- No objection certificate (NoC) for land and Environment Clearance (EC) are two key approvals for lease grant
- Regional mines office (Assistant Director office) will coordinate with Tehsildar for faster issuance of NoC
- Regional Mines office will coordinate with the District Collector Office for conducting EC hearings with the local population
- IT implementation for online processing of lease application and its tracking resulting in faster disposal of application

Grant of new leases:

- Successfully conducted e-auction of 2 limestone blocks with a combined mineral resource of about 11 million tonnes. Overall, the bid-revenue-receipt of the state from the auction of these 2 limestone blocks shall be about Rs. 53 Crores.

Identification of new mineral blocks for auction:

- Chigurugunta Gold block and Bisanatham Gold Block, Chittoor, is proposed for auction in 2017-18. MECON has completed DGPS survey & submitted report to GSI for preparation of Geological report. Proposal for auction of 1 Limestone block for composite license sent to GoI for approval
- NoCs received will be processed further for grant of lease.

Multiple Exploration Activities

- Limestone: 9 blocks have been identified to be put up for auction in the next phase
- Tenders for G2 level exploration invited for 3 blocks, of which, work orders have been issued for 2 blocks, through MERIT funds
- For balance 6 blocks, proposals prepared for submission to NMET for funds
- Manganese ore: GSI has been requested to take up G2 level exploration in 9 Manganese blocks
- GSI has already taken up exploration for 1 block (Devada).
- Balance 8 blocks are also expected to be taken up gradually
- Iron Ore: Identification of prospective free hold areas for exploration being taken up in association with GSI

Technology Implementation:

- E-permit system for royalty collection and online lease application system developed and implemented
- Collection of contribution fund to NMET , DMF and MERIT is integrated with the Mineral e-permit system
- Geo-fencing of leases for Satellite based monitoring of Major Mineral leases
- Installation of CC cameras at check-posts for live monitoring of Mineral Transportation resulting in increase in checking of vehicles by 40% and mineral revenue for the State Govt.
- Mobile application for Randomized Selection of mines for inspection has been developed to introduce transparent mechanism for selection of mines

Operationalization or cancellation of non-working Mines:

- Andhra Pradesh has 2000 non-working leases out of 7200 leases
- Coordinate with lease holders to operationalize non-working leases
- Cancel remaining non-working leases to make them available for grant to potential miners

Vigilance activities:

- Keep constant vigil on illicit prone areas to prevent revenue leakage.

Value addition:

- Department will coordinate with investors & other departments for expediting the process of the grounding of the MoUs
- Allocation of leases on priority basis for value addition in the State
- Promotion of ceramic industry in the State
- Players with firm investment plans in ceramic industry: Jet Granito (Morbi), Sokri Tiles, Spartex Ceramics, Lotus and Balaji Agro Products
- Policy development under pipeline for allocation of mining leases with priority to value addition industry

Important Mineral-wise Targets Barytes

- Increase in the Production from 0.78 Million tons in FY 2016-17 (up to October, 16) to 1 Million tons in FY 2017-18 (up to October,17).
- Better price realization in this year.
- Commencement of beneficiation (2 lakh ton per annum)
- Commercial exploitation of Dolomite.
- Promotion of Barium based chemical industry.

Granite

- Increase in production from 605028 CBM in FY2016-17,(up to October,16) to 639744 CBM in FY 2016-17(up to October,17).
- Exploitation new reserves of Black Galaxy Granite in Ongole (State High Way)

Heavy Mineral Beach Sands

- GoI issued for integrated HMBS development in (3) reaches.
- Separate policy is under pipe line giving priority to grant mineral concessions to those giving value addition.

Commerce and Export Promotion

The Exports from the state for the year 2016-17 have recorded Rs. 80559.87Cr. During the year 2017-18 (upto November 2017), the state has recorded Rs.50404.75 crore. The Major exports from the state are Drugs & Pharmaceuticals, Marine, Agriculture and Agro based products, Handicrafts, Minerals and Mineral products and Software products are shown in Table 6.3.

Table 6.3 Value of Exports (Amount Rs.in crores)

Sl. No.	Product Group	2016-17	2017-18 (Up to Nov,2017)
1	Agriculture & Agro based and Forest Products	13255.85	8488.20
2	Leather, Animal and Marine Products	14627.56	10110.54
3	Mineral & Mineral Products	5194.07	2433.13
4	Handloom & Textiles	4967.65	1680.97
5	Handicrafts & Carpets	11023.78	7652.34
6	Drugs & Pharmaceuticals and allied Chemical Plastics.	14637.68	9836.39
8	Electrical & Electronics parts	1016.77	507.66
9	Misc. (Mfg Goods)	533.51	452.10
10	Software (IT & ITES)	526.69	366.50
Total		80559.87	50404.75

Source: Commerce and Export Promotion Department

Exports of manufacturing goods data was obtained from DGCIS, Kolkata & Software exports from (STPI)

India International Trade Fair (IITF)

National and international trade promoted by participating in fairs conducted by India Trade Promotion Organization (ITPO) and other agencies every year in New Delhi. The products particularly of MSME sector, Self Help Group (SHG) manufactured in the state are exposed to domestic and international market at New Delhi during this event. Commerce and Export Promotion Department has participated in IITF-2017 during Nov.2017.

Trade Infrastructure for Export Scheme (TIES)

The objective of the scheme is to enhance export competitiveness by bridging gaps in export infrastructure, creating focused export infrastructure, first mile and last mile connectivity for export oriented projects and addressing quality and certification measures including SPS/TBT compliance. The Export Commissioner of the state is the Nodal officer for the projects proposed by a State Govt. Agencies. This fiscal 2017-18 projects of Fisheries Dept. worth Rs.62.00 cr. are taken up for financial assistance under the TIES.

Industrial Relations

Industrial peace is a prerequisite for the growth and development of Industries. Work stoppages due to industrial disputes between employers and workmen and consequential loss of man-days in a given period are an important indicator of labour management relations in industries. Government through its conciliation machinery has been making efforts to settle disputes amicably and promote industrial peace for congenial work environment. Efforts are being made by the department to promote productivity- linked settlement in order to make industries more competitive. There are no strikes and lockouts registered in 2017 (upto Dec.2017).

CHAPTER

7

ECONOMIC INFRASTRUCTURE

Physical infrastructure, the key growth enabler

- Highest priority to Water conservation and its management - creating smart water grid – Inter linking of rivers – Maha Sangamam
- Inspiration from Pattiseema project – Polavaram on speed track
- Completion of 29 priority projects.
- Power sector reforms – phenomenal success
- From 22.5 million units of power deficit in June 2014, to surplus power state with 24x7 quality reliable power supply
- Installed capacity increased from 8307 MW in 2014 to 18380 MW in 2017
- T&D losses from 13.91% in 2014 to 9.8% in 2017 - lowest in the country
- Renewable energy capacity in the State reaching new heights - To add 10,000 MW of Solar and 8,000 MW of wind energy by 2022.
- No.1 State in energy efficient activities by World Bank for the last 3 years
- Airports - AP recorded passenger traffic growth of 135% between 2014 -2017
- State handled 130.6 Million Metric Ton cargo in FY2016-17- about 12% of total cargo handled at Indian Ports.
- Port-led development for industrial growth corridors and logistic hubs, improved road connectivity and ease of doing business
- IT revolution – AP emerging as leader in adoption of disruptive technologies such as block chain, Internet of Things(IoT), Data analytics, machine learnings, cyber security.
- E-governance - Implemented projects lie CORE dash board, e-Seva and e-procurement for transparency in governance.

Andhra Pradesh state is aspiring to grow into a competitive economy that creates opportunities for everyone, to foster the growth of productive firms, farms and people through putting necessary infrastructure – both physical and social in place. Proper infrastructure facilitates growth and the multiplier effect of the physical infrastructure such as irrigation projects, dams, roads, bridges, ports, airports and communications enhance growth opportunities and ultimately help for reducing poverty. The government takes cognizance of the changing patterns of government regulation worldwide and is transforming into a strategic, value-enhancing force which besides striving to fulfill basic needs of people also directing them into a lane of fast-paced growth. The government is focused upon facilitating the conversion of more ideas into enterprises, promoting the growth of small businesses and also linking them to larger ones.

The Sunrise state of Andhra Pradesh is moving forward with coast/port led growth strategy and is keen to improve the infrastructure and logistics.

Irrigation

Andhra Pradesh is a land of many rivers and lakes and it is popularly referred as the “Riverine State”. There are 40 major, medium and minor rivers in the state, of which Godavari, Krishna, Pennar, Vamsadhara and Nagavali are prominent rivers in peninsular India. Andhra Pradesh is experiencing frequent water crisis despite of sufficient availability of the resource. The availability and utilization of surface and groundwater is highly uneven and shows considerable variation from place to place. To provide water security, the state government is going forward with a strategy for scientific management of water resource by adopting combination of supply side and demand side measures depending on the local conditions by utilizing advanced technological tools. **The objective is to make the State drought proof and to provide water security to all by establishing smart water grid.**

Apart from the interlinking of rivers and completion of priority projects, restoration of water bodies, tank cascades

HIGHLIGHTS

Irrigation Potential

103.91

Lakh Acres

development, micro irrigation works are being taken up on priority and mission mode for sustainable development and optimum utilization of water resource. Automatic weather stations, rainguages, reservoir water level sensors, soil moisture sensors, automatic groundwater level recorders with telemetry system were installed and the data generated is disseminated on real time basis through web based digital system.

Irrigation Potential created

Creation of Irrigation Potential continued to be the most prioritized area. So far 103.91 lakh acres of irrigation potential has been created up to October 2017 under major anicuts on Krishna, Godavari and Pennar rivers, Projects like NagarjunaSagar, Telugu Ganga, Somasila, SRBC, Vamsadhara, Medium Irrigation projects and Minor Irrigation schemes. The details of sector wise irrigation potential created up to October 2017 are shown in Table 7.1 and district-wise irrigation potential created in the state are given in Annexure 7.1.

Table 7.1: Sector Wise Irrigation Potential created up to October 2017

Sector	Ayacut (lakh acres)
Major Irrigation	65.22
Medium Irrigation	5.52
Minor Irrigation	25.60
APSIDC	7.56
Total	103.91

Source: Water Resources Department

Out of 40 rivers 15 rivers are interstate rivers viz., 1.Bahuda River (AP & Orissa), 2.Mahendra Tanaya River (AP & Orissa), 3.Poondi Minor Drainages(AP & Orissa), 4. Vamsadhara River (AP & Orissa), 5.Nagavali River (AP & Orissa), 6.Godavari (AP, Maharashtra, Orissa, Karnataka, Chattisgarh & Madhya Pradesh), 7. Krishna (AP,Maharashtra & Karnataka), 8. Pennar River (AP & Karnataka), 9.Araniar River (AP & Tamilnadu), 10.Kortaliar River (AP& Tamilnadu), 11. Palar River (AP, Karnataka & Tamilnadu), 12.Ponniar River (AP, Karnataka & Tamilnadu), 13.Budameru (AP, Telangana), 4.Errakalava (AP, Telangana), 15.Tammileru (AP ,Telangana).

Out of these utilization of Krishna and Godavari river waters are covered by the Tribunal Awards. The Bahudha, Vamsadhara, Nagavali, Pennar, Palar, Ponniar river waters are covered by the agreements among basin states.

The entire share of 512 TMC of dependable water out of 811 TMC in the State of A.P in Krishna basin is fully harnessed. In the A.P Reorganization Act, 2014 under Section 89, KWDT-II is mandated to make project specific allocation in Krishna basin for both successor states of A.P and Telangana and determine operation protocol for project wise releases in the event of deficit flows.

The apportionment of waters of river Godavari between two successor states is yet to be finalized. The State of A.P is utilizing 308.703 TMC under existing projects and 468.688 TMC planned utilization under ongoing projects.

Utilization of water for irrigation under existing projects, ongoing projects and contemplated projects in the river basins is shown in Table 7.2.

Table 7.2 Utilisation for Irrigation

Sl. No	River Basin	Utilization for Irrigation (in TMC)		
		Existing Projects	Ongoing Projects	Contemplated Projects
1	Krishna River	512.040	150.500	---
2.	Godavari River	308.703	468.688	119.756
3.	Pennar River	128.94	58.120	6.750
4.	Vamsadhara	28.605	12.142	6.935
5.	Other Rivers	322.839	32.082	----
	Total	1301.127	721.532	133.441

Source: Water Resources Department

Contemplated Irrigation Potential

Completion of present 57 projects (28 Major +18 Medium + 4 Flood Banks + 7 Modernisation), will create 48.433 lakh acres of new ayacut Irrigation Potential under Major, Medium irrigation projects besides stabilization of 24.196 lakh acres.

Priority projects:

The Government has decided to complete 7 ongoing projects on priority basis providing early irrigation facilities in the drought prone Rayalaseema and Prakasam districts and backward districts of Srikakulam and Vizianagaram are:

1) BRR Vamsadhara Project (Stage II- Phase II):

- Stage I and Phase-I of Stage-II are completed creating an irrigation potential of 2,10,510 Acres.
- Phase-II of Stage-II works were taken up in three packages to create 45,000 Ac. ayacut and is expected to be completed by 31-3-2018.
- Government revised the cost of LA and R&R from Rs.273.00 Crores to Rs.930.00 Crores (3.50 times raised) for the benefit of Project Affected families.

2) Sardar Gowthu Latchanna Thotapalli Project:

The Project is completed and new ayacut of 1 lakh Ac. is created and 64,000 Ac. ayacut is stabilized.

3) a. Polavaram Irrigation Project:

- Virtual reviews and physical inspection of Dam site is being conducted.
- M/s Bauer – L&T JV company is entrusted with the work of execution of Diaphragm wall work. Jet grouting for downstream coffer dam has been started by M/s. Keller Ground Engineering Pvt., Ltd.,
- On average, 2.0 Lakh Cum of excavation is being carried out per day.
- The project is scheduled to deliver water in to canals by gravity with the completion of Cofferdam by June 2018 and total completion of the project is scheduled by June 2019.
- The work on Right main canal is almost completed and Godavari water could be diverted to Krishna through Pattiseema lift.
- 65% of work on left main canal is completed. It is programmed to complete the works of left main canal upto Km 50,000 by July 2017 and the entire length by June 2018.

Expenditure incurred & reimbursement by GOI:

Total cost of the Project (2010–-11 price level)	Rs. 16,010.45 Cr.
Total expenditure till date	Rs. 12,564.49 Cr.
Exp. incurred after declaration as National Project	Rs. 7,428.62 Cr.
Reimbursement by Govt of India.	Rs. 4,329.06 Cr.
Balance to be reimbursed.	Rs. 3,099.56 Cr.

b. Pattiseema Lift Scheme:

- The long cherished dream of interlinking of rivers Godavari and Krishna became reality with the commissioning of this Scheme in a record time of one year by March, 2016. The Limca Book of Records acknowledged that this is the fastest completed Project in the country.
- In 2015-16, 4.21TMC water was diverted saving Kharif crop in 8 lakh Ac. in Krishna Delta, which yielded crop worth Rs. 2500 Cr. During 2016-17, 55.62 TMC of water is diverted and Kharif crop in 13.08 lakh acres in Krishna Delta could be supplemented with this water which yielded crop worth Rs.5500 Cr.
- This year, 95.24 TMC water is diverted so far facilitating the farmers of Krishna Delta to go for transplantation in June itself. The total yield in Krishna Delta is expected to be about Rs.6000 Cr.

4) Poola subbaiah Veligonda Project:

The Reservoir work is completed. The work on canals is also nearing completion. Overall, 81% work is completed. It is programmed to complete the work of one tunnel by kharif 2018 and the entire project by December, 2018.

5) Gundlakamma Project:

The project is partially completed and an ayacut of 60,000 Ac. is already created. The remaining work of distributory network is programmed to be completed by Kharif 2018. An additional ayacut of 20,000 acres will be created.

6) GNSS Phase-I & II

- GNSS Phase-I is substantially completed now. For the first time, 6.00 TMC of water is stored in Gorakallu reservoir this year and water is being supplied to Gandikota Reservoir through Owk Tunnel.
- In the year 2017-18, it is planned to increase the impounding capacity of Gandikota Reservoir to 18 TMC.

7) a. HNSS Phase-I & II:

- All the pumps and motors are commissioned, and work is completed in main canal in HNSS Phase-1.

- During 2016-17, record quantity of 37.32 TMC of water is lifted. This is made possible only because of completion of Pattisam Lift Scheme, which catered to the needs of Krishna Delta and the water thus saved could be used in HNSS and other Rayalaseema Projects.
- During 2017-18, water is supplied to Dharmavaram and Bukkapatnam tanks also.

b. Muchumarri lift scheme

- During 2016-17, 1.336 TMC of water is lifted and supplied to KC canal ayacut.
- The Hon'ble Chief Minister Inaugurated 4 Pumps out of 12 on 08-09-2017.

With a view to reap early Benefits, Government has proposed to inaugurate the following 29 Projects in a span of one year

Sl. No	Name of the Project / component of work	Cost of the Project/ work Rs. Crores	IP Contemplated in acres		Details of the work and Benefits that will be obtained
			New	Stab	
1	Purushottapatnam Lift Scheme	1638.00	147386	67614	This Scheme is contemplated for lifting of Godavari Water into Polavaram Left Main Canal through stage-1 lift to an extent of 30 TMC and to Yeleru Reservoir from left main canal at Km 50.000 through stage-II lift to an extent of 10 TMC on similar lines of Pattiseema Lift Irrigation Scheme to reap early benefits of supplying water to 2.15 Lakh Ac. under Polavaram Left Canal, Yeleru Reservoir and Pithapuram branch canal and also meeting the irrigation, drinking water and industrial needs of Visakhapatnam district. This scheme facilitates inter linking of Godavari river to Yeleru river.
2	Construction of anicut across Sarada River	17.1	3480	0	The scheme provides irrigation facility to 3480 Ac. Ayacut in 4 villages of Kasimkota (M) and 8 villages in Yelamanchili (M)
3	Muchumarri lift scheme	549.45		0	This scheme is conceived to lift water to supplement to K.C Canal system and to HNSS scheme duly drawing water from an elevation of (+) 240.00 Meters (+ 787 Feet) level from the foreshore of Srisailam Reservoir in drought conditions.
4	Formation of Pogonda Reservoir near Chintalagudem, West Godavari	85.51	4000	3650	Reservoir provides water to new ayacut of 4000 Ac.
5	Modernization of yerracalava from Anathapalli Bridge to Nandamuru Auqueduct	143.15	0	0	Yerracalava is widened to increase its carrying capacity from 5000 cusecs to 20250 cusecs
6	Kandaleru Left Canal - Lift Scheme	60.96		20700	Ayacut of 20,700 acres will be created in the upland areas of Podalakur, Chejarla and Venkatachalam Mandals in SPSR Nellore Dt.
7	Marala Reservoir	39.22	18000	0	This Online Reservoir at Km. 371.40 of HNSS Main Canal has storage capacity of 0.464 TMC. This will provide water to 18,000 acres of ayacut and meet drinking needs enroute. This will also help in raising of ground water table and indirect ayacut will be developed.

HIGHLIGHTS
29 Irrigation Projects planned for completion by 2019.

Sl. No	Name of the Project / component of work	Cost of the Project/ work Rs. Crores	IP Contemplated in acres		Details of the work and Benefits that will be obtained
			New	Stab	
8	Cherlopally Reservoir	69.778	5500	0	This offline Reservoir has a storage capacity of 1.608 TMC and supplies water to an ayacut of 5,500 acres and meet drinking needs enroute. This will also help in rising of ground water table and indirect ayacut will be developed.
9	Siddapuram Lift Irrigation Scheme	116.5	20300	1000	The Scheme contemplates lifting of 2 TMC of water from Velugodu Balancing Reservoir to provide Irrigation facilities to 21,300 acres which includes stabilised ayacut of 1,000 acres under Siddapuram tank covering 12 villages under Atmakur and Pamulapadu Mandals of Kurnool District.
10	Gorukallu Balancing Reservoir (Sri Narasimharaya Sagar)	517.96	0	190000	Narasimharayasagar (Gorakallu Balancing reservoir) is constructed with a live storage capacity of 12.44 TMC. This reservoir is a Balancing reservoir and intended to derive benefits under GNSS and SRBC systems. It is proposed to store 9.00 TMC of water during this kharif season.
11	Owk Tunnel	451.81	0	0	Owk Tunnel is a part of GNSS Phase-I. It is proposed to draw 5,000 cusecs of water through Owk Bypass Tunnel during this kharif season and to deliver water to Gandikota Reservoir in Kadapa District.
12	Pedapalem LI Scheme on Krishna River	25.55	1830	0	The Scheme provides irrigation facility to an ayacut of 1830 acres Khariff ID. The Scheme will benefit 3 villages viz., Chigurupadu (418 acres), Chamarru (147 acres) and Pedapalem (1265 acres)
13	Chinasana LI Scheme on VLMC	23.70	2200	0	The scheme provides irrigation facility to an ayacut of 2200 acres Kharif wet in 9 villages viz., Parasurampuram, Pedadasana, Chinasanna, Pulibonda, Ramurtipeta, Gudivada, Subhadrapuram, Rameswaram, Kottapalli, and Sariyapalli.
14	B.R.R.Vamsadhara Project Phase-II of Stage-II (To dedicate Hiramandalam Reservoir to the Nation)	2038.03	45000	0	Project consists of construction of side weir at Katragada to divert the flood waters of Vamsadhara river for filling Hiramandalam reservoir (19.05 TMC capacity) connected through a flood flow canal of 33.70 Km with two balancing reservoirs at Singidi and Parapuram enroute the flood flow canal. The scheme intends to create new ayacut of 45,000 Acres and assured water supply to 62,280 acres of Right Main Canal and also supplement 5.00 TMC of water to the Left Main Canal ayacut of 1,48,230 acres in times of deficit.
15	Interlinking of Rivers Vamsadhara and Nagavali Rivers (To Release water to High Level Canal from Hiramandalam Reservoir)	84.90	5000	17500	High Level Canal taking off from Hiramandalam Reservoir proposed to join on upstream of Narayanapuram Anicut. Due to this diversion of water to supply water for stabilization of 37,000 acres under Narayanapuram Anicut in addition to 5,000 Ac. of New ayacut in 4 Mandals in Srikakulam District and sufficient drinking water can be supplied to the Srikakualm Municipal Corporation through infiltration wells located on downstream of Narayanapuram Anicuts.

Sl. No	Name of the Project / component of work	Cost of the Project/ work Rs. Crores	IP Contemplated in acres		Details of the work and Benefits that will be obtained
			New	Stab	
16	Pulichintala Project	2026.20	0	1308000	Proposed to keep the full Capacity of the dam for the coming Kharf-2017 at +53.34 m with a Capacity of 45.77 TMC. The storage facilitates early transplantation of Paddy Crop in Krishna Delta for an ayacut of 13,08,000 acres
17	Kondaveeti Vagu Pumping Scheme	237.00	0	0	To save the capital city from inundation by lifting of 5000 Cusecs of flood water of Kondaveeti vagu and letting into River Krishna at Undavalli Village on U/s of Prakasam Barrage
18	Kandula Obula Reddy Gundlakamma Reservoir Project	753.83	80060	0	Gundlakamma Reservoir Project create Irrigation Potential of 80,060 acres in 9 Mandals of Prakasam District and also provide drinking water supply to Ongole Municipality and villages enroute the canals. Now, Irrigation Potential of 60,000 Ac. ayacut is created.
19	Yerram Chinnapoli Reddy Korisapadu Lift Irrigation Scheme	177.00	20000	0	Korisapadu Lift Irrigation Scheme is contemplated to create an Irrigation Potential of 20,000 Acres under Micro Irrigation in Korisapadu and Naguluppalapadu Mandals of Prakasam District drawing water from foreshore of Gundlakamma Reservoir Project.Pump house, Pipe line and Korisapadu reservoir works are completed which create an irrigatation potential of 12,000 acres Ayacut.
20	Adavipalli Reservoir under HNSS Phase-II	29.22	80100	0	Irrigation Potential of 80,000 acres will be created in Vayalpadu, Pileru & Punganur Constituencies of Chittoor District as a Component of HNSS Phase-II.
21	Nellore Barrage	149.39		100000	To stabilise 1.00 lakh acres of Delta ayacut under Pennar River Canal System in SPSR Nellore District and to facilitate to control the flood discharges in the river.
22	Sangam Barrage	147.5		259387	To stabilise an Ayacut to an extent of 2.59 lakh acres Pennar River Canal System in SPSR Nellore District and to facilitate to control the flood discharges in the River.
23	Kuppam Branch Canal under HNSS Phase-II	430.26	0	6300	Supply of drinking water for 4.02 Lakh population in 8 mandals of Kuppam and Palamaner Constituencies in Chittoor Dt. and stabilization of an ayacut of 6300 acres under 110 existing tanks and 20 Kuntas in 8 Mandals in Chittoor.
24	Gandikota – CBR Lifts	1744.00	12000	0	Gandikota – CBR Lifts, located in Kadapa and Ananthapuramu Districts are divided into five stages to lift 8.3 TMC of water from the level of +204.00 m to +298.00 m from Gandikota Reservoir to Chitravathi Balancing Reservoir in 45 days.
25	SH-31 Road Work	103.42			Gandikota Dam is constructed with a capacity of 26.85 TMC. By construction of Gandikota Dam, the existing Kadapa-Tadipatri Road is under submergence. Therefore, alternate route is proposed at higher elevation from from Settivaripalli (V) to K.SugumanchiPalli (V) . By construction of SH-31 Road and High Level Bridge on Chitravathi River, 26.85 TMC of water can be stored in Gandikota Reservoir

Sl. No	Name of the Project / component of work	Cost of the Project/ work Rs. Crores	IP Contemplated in acres		Details of the work and Benefits that will be obtained
			New	Stab	
26	Gandikota Reservoir	755.35			To meet the Irrigation & Drinking water needs of Kadapa & Chittoor Districts, Gandikota Dam was constructed across river Penna near Gandikota to store 26.85 TMC of Water by drawing the flood water from Srisailam Dam. Government planned to store water in Gandikota reservoir during December-2016 and announced the R&R package for the PDF's and sanctioned Rs.479.36 Crores.
27	Madakasira Branch canal beyond Gollapalli Reservoir	728.542	42772	0	The Madakasira Branch Canal beyond Gollapalli Reservoir will feed 264 Tanks supplementing water to the ayacut under these Tanks and meet drinking needs. This will also help in raising of ground water table and indirect ayacut will be developed
28	Pulikanuma Lift Irrigation Scheme	263.09	0	26400	The ayacut proposed for stabilisation under Pulikanuma LI Scheme is 26,400 acres and Pulakurthy LI Scheme is 9,830 acres in Kurnool dt.
29	Pulakurthy Lift Irrigation Scheme	113.26	0	9830	
	TOTAL	13519.68	635014	2010381	

Modernization of Deltas and Nagarjuna Sagar, Yeleru Canal systems:

Modernization of Godavari, Krishna and Pennar deltas Nagarjuna Sagar Canal System and Yeleru canal system are under progress to improve the water use efficiency of the existing canal system. Scheme wise details are shown in Table 7.3

Table 7.3: Ayacut area under modernization of delta system

Name of the Scheme	Ayacut (in lakh acres)	Amount sanctioned (Rs.in Cr.)
Godavari Delta	10.38	3361
Krishna Delta	13.08	4573
Pennar Delta	2.47	1001.73
Nagarjuna Sagar project	14.71	2832.69
TBP HLC & LLC	4.64	766.91
Yeleru Reservoir Scheme	0.68	295.83
Nagavali System	0.40	139.59
Total	46.36	12970.75

Source: Water Resources Department

Purushottapatnam Lift Irrigation Scheme:

The works are in brisk progress and two pumps are commissioned on 15th August and water is released. This scheme is contemplated for lifting Godavari water into polavaram left main canal. This scheme facilitates inter linking of Godavari river to yeleru river.

Chintalapudi Lift Irrigation Scheme Phase –I & II

This Scheme is intended to supply irrigation facilities to an extent of 2.00 lakh acres new ayacut in Phase–I. Stabilization of 70,000 acres in West Godavari and 2.10 lakh acres in Krishna district is planned under Phase–II, besides supply of drinking water to the enroute villages with a total estimated project cost of Rs. 4909.80 crores. The work is in progress.

Uttarandhra Sujala sravanthi Project:

Babu Jagjeevan Ram Uttarandhra Sujala Sravanthi Project is contemplated for diversion of 63.33 TMC of surplus water from Godavari to the drought prone areas of Visakhapatnam, Vijayanagaram and Srikakulam districts to provide irrigation facilities to 8 lakh Ac. at an estimated cost of Rs.16,400 Cr.

An amount of Rs.2022.20 Crs sanctioned for Phase-I for diversion of 10 TMC of water from Polavaram Left Main Canal to Pedapudi Reservoir for an ayacut of 1.30 lakh acres. It is programmed to complete Phase-I partially by August 2018 and will be fully completed by August 2019.

Widening of HNSS main canal:

Widening of HNSS main canal upto Jeedipalli reservoir is taken up to carry full discharge of 3800 Cusecs with an estimated cost of Rs.832.91 Cr. It is programmed to complete the works by March 2018.

Community Lift cum Drip Irrigation Systems:

With a view to increase the irrigated area in rain – fed areas in Ananthapur district, Govt. has sanctioned on 05-09-2017 Drip Irrigation schemes on Mid Penner, PABR and Jeedipalli Reservoirs for an amount of Rs. 890.60 Cr.

Inter-State Water Resources:

Hydrology Project Phase-I (HP-I)

Hydrology Project Phase-I was taken up with World Bank financial assistance for measurement, validation, storage and dissemination of Hydrological, Hydro Meteorological and water quality data and to establish computerized data base network. Under this project 50 Gauge discharge sites on various minor streams and 22 digital water level recorders at various reservoirs have been established. Further 124 standard Rain gauge stations, 56 Autographic Rain Gauge stations, 3 Full Climatic stations, 9 Water Quality Level I and 2 Water quality Level II labs were also established.

Hydrology Project Phase-II (HP-II)

The World Bank has approved the Hydrology Project Phase – II under IBRD loan as one of the implementing agencies among 13 states and 8 central departments in the country. The project development objective will be to extend and promote the sustained and effective use of the HIS by all potential users concerned with the water resources planning and management, both public and private, thereby contributing to improved productivity and cost effectiveness of water related investment.

Hydrological Design Aids (HDA)

The Central Water Commission has appointed M/s Consulting Engineering Services (India) Private Limited (CES) as the consultants for Development of Hydrological Design Aids (Surface Water). The terms of reference of the consultancy assignment include, following areas for developing HDA tools.

HDA 1: Assessment of Water Resources Potential – Availability / Yield / Assessment

HDA 2: Estimation of Design Flood, and

HDA 3: Sediment Rate Estimation.

The training modules under HDA1 and HDA2 were completed. The development of software by CES is under progress.

Hydrology Project – III (National Hydrology Project)

NHP is a Central sector scheme with 100% grant to the state/Central implementing agencies for a period of 8 years from 2016-17. The objective is to improve the extent, quality and accessibility of water resources information, and to strengthen the capacity of water resources management institutions/ Departments in India. The project implementation plan, for a total amount of Rs 80.00 Crores is approved by MoWR. The components and respective cost proposed are shown in Table 7. 4

Table 7. 4 :Component wise Projects

Sl No	Project component	Amount (cr)
1	Water Resources Data Acquisition System	48.00
2	National Water Resources Information System	4.00
3	Water Resources Operation and Planning	12.00
4	Institutions and Capacity Enhancement	16.00
	Total	80.00

Source: Water Resources Department

The Annual work plan for the year 2016-17 & 2017-18 was approved by Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR),

with an amount of Rs.83.05 lakhs and Rs.9.12 Crores respectively. The Government has constituted State Level Steering Committee (SLSC) to provide policy direction to implementing agencies of project, to exercise overall administrative, management and financial control of the project, and State Level Procurement Committee (SLPC) for effective implementation of NHP in both SW & GW sector to advise on the Procurement of different items included in NHP. The Procurement process of NHP is under Progress.

CADA Projects

APILIP-II

Andhra Pradesh Irrigation Livelihood Improvement Project (Phase-II) for Rs. 2000 crores is under examination with Government of India. The project proposal consists of modernization of 2 Major Irrigation and 18 Medium Irrigation projects, restoration of 445 Minor Irrigation tanks and Agri business component. It is estimated that about 4,00,000 Acres of aycut will be stabilized under this project. The project duration is from 2017-18 to 2023-24. Exchange of notes on Japanese ODA loan was signed on 31-03-2017. Loan agreement is under process.

RRR-II

345 Minor irrigation tanks were covered under Repairs, Renovation and Restoration (RRR-II) of minor tanks with an estimated cost of Rs.112.36 crore apart from 3 works taken up in other programmes. Of these, 324 works were completed, and remaining 18 works have been terminated. The expenditure incurred under this project to bridge gap ayacut of 40,807 hectares during 2012-16 and expenditure incurred up to 31-3-2016 is Rs.57.09 crore.

RRR-III

Under this scheme the proposals are submitted to MOWR for sanction.

SL. No	Name of the Dist.	No. of Tanks	Ayacut in Ha.	Estimated Cost in Cr.
1	Prakasam	122	19321	80.24
2	Nellore	81	11724	48.21
3	Ananthapuramu	35	2220	11.45
	Total	238	33265	139.9

Source: Water Resources Department

APIIATP (World Bank Phase-II)

Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project (Phase-II) funded by World Bank for Rs.1600 crores. The proposal consists of modernization of 1200 Minor Irrigation Tanks to stabilize an ayacut of around 3 lakh acres. The project duration is from 2017-18 to 2022-23. World Bank Preparatory Mission visited the state from 2nd to 11th August, 2017. Project appraisal is expected to take place during February, 2018.

Accelerated Irrigation Benefit Programme (AIBP):

Status of 8 projects under AIBP covered under 99 Prioritized projects

No of Prioritized PMKSY Projects (No.)	8
Total Irrigation Potential targeted (Ha)	296577
Total Irrigation Potential created (Ha)	228423
Balance Irrigation Potential to be created (Ha)	68154
Cost of estimates as per DPRs (Rs.in Cr.)	3600.65
Project Cost Considered for Central Assistance Release (Rs.in Cr.)	1858.67
Eligible Central Assistance amount (Rs.in Cr.)	498.915
Actual Central Assistance Released (Rs.in Cr.)	452.85
Expenditure up to 9/2017 (Rs.in Cr.)	3040.28
Balance Central Assistance to be released (Rs.in Cr.)	46.06

Present status of Projects:

Out of 8 projects Maddigadda project is completed. Gundlakamma, Thotapally, Musurumilli, Pushkara, Yerrakaluva, and Tadipudi are programmed to be completed by March 2018. Tarakarama Thirtha Sagaram is programmed to be completed by July – 2019.Central Assistance proposals for Tarakarama Thirtha Sagaram project are under submission.

Fast Track Proposals of Gundlakamma and Pushkara Project and Thotapalli and Tarakarama Theertha Sagaram are under submission to CWC, New Delhi. Proposals of Yerracalva are under submission to CWC, Hyderabad.

CADWM

Objectives of CAD programme

Bridge the gap between the Irrigation Potential Created and Utilized through increase in irrigated areas. To increase efficient utilization of irrigation water. To improve Agriculture Productivity in the irrigation commands.

Status of Inclusion of New Projects.

Gundlakamma project is cleared by MoWR, New Delhi. DPR proposals for 5 projects (Thadipudi, Thotapalli, Musurumilli, Pushkara and Yerracalva) submitted to MoWR, New Delhi for inclusion under CADWM. DPR for Tarakarama Thirtha Sagaram submitted to CWC, Hyderabad.

Minor Irrigation

Minor Irrigation deals with investigation and execution of Minor Irrigation Sources of ayacut up to 5000 Ac.

Minor Irrigation plays an important role in the development of agriculture and livelihoods particularly in drought prone areas and areas outside command of Major and Medium projects. Minor Irrigation is providing irrigation facilities to increase the agriculture production in the existing ayacut of 25.60 lakh acres under 40817 tanks. The total registered ayacut 25.60 Lakh Acres is not being irrigated every year and hence the gap ayacut is being increased year by year and the average gap ayacut is approximately 57% of total registered ayacut.

Minor Irrigation Census

As per the 5th Minor Irrigation Census 2013-14, there were 10.54 lakh minor irrigation sources in Andhra Pradesh against 9.72 lakh sources as per 4th Minor Irrigation Census 2006-07, registering an increase of 8.42%. The statement showing data on Minor Irrigation sources is given in Annexure-7.2

RRR PHASE-II PROGRAMME

345 works were sanctioned under RRR Phase-II with cost of Rs 11236.52 Lakhs in 5 Districts viz., Ananthapuram, Kadapa, Chittoor, Kurnool and Srikakulam. Out of which 342 works were taken up with a cost of Rs. 1164.10 Lakhs and 3 are deleted. Out of 342 works 316 works were completed by 31-3-2016 with an expenditure of Rs.5750.27 Lakhs and remaining 26 works were terminated / cancelled due closing the programme.

RRR PHASE-III (PMKSY (HKKP))

The DPRs for 238 water bodies with an estimate value of Rs.13990.00 Lakhs were processed through State level TAC and were submitted to CWC, Hyderabad.

NABARD - RIDF

- XX Tranche: The Government issued orders for 49 Minor irrigation Projects to stabilize an ayacut of 23406 acres with cost of Rs. 10755.59 lakhs. Total Expenditure is Rs 2215 lakhs.
- XXI Tranche: The Government has issued orders for 41 Minor irrigation Projects to stabilize an ayacut of 17470 Acres with a cost of Rs.5673.13 lakhs. Total Expenditure is Rs. 166 lakhs.
- Expenditure incurred upto Nov, 2017 is Rs.2192.44 lakhs as against the sanctioned budjet of Rs.4000 lakhs.

JICA PHASE-II

- Government has sent APILIP-II proposal with JICA assistance to Government of India with an outlay of Rs. 2000 Crores out of which JICA share is Rs. 1700 Crores and Govt. of A.P share is Rs. 300 Crores. The Project proposal mainly consists of renovation of Irrigation Systems (Rs. 900 Cr) and Agriculture, Horticulture, Animal Husbandry, fisheries, Agribusiness component (Rs. 550 Crores).
- The Government of A.P has proposed restoration of 485 MI schemes and modernization of 21 Medium Irrigation Projects under JICA Phase-II.
- 232 DPR s of MI Tanks are prepared and approved by Technical Advisory Committee and 44 DPR s are ready to put forth before Technical Advisory Committee.

APCBTMP

- Renovation of 975 MI tanks with a cost of Rs.45667 lakhs were taken up to stabilize an ayacut of 3.01 lakh Acres in 12 Districts.
- 954 Minor Irrigation tanks covering an ayacut of 2.93 lakh acres were completed with an expenditure of Rs.41179 lakhs:
- The project was completed in all respects by 31-7-2016

AP Integrated Irrigation Agriculture Transformation Project

It is proposed to take up 1211 of Minor Irrigation sources with a cost of Rs.700 Crores to stabilize an ayacut of 3.00 Lakh acres during next five years. Preparations of DPRS are in progress.

Ground Water

The government is targeting water security – drinking water, irrigation and industrial use. With an objective to conserve every drop of water the government is working towards sustainable ground and surface water management through programmes like Neeru Chettu, Neeru–Pragathi, Panta Sanjeevini (farm pond), Panta Raksha (Rainguns), borewells under the NTR Jala Siri Programme. In addition to these programmes, several schemes are also put in place to provide access to quality drinking water by conservation and sustainable management of water resources.

It is also targeted to drought-proof the state and provide safe drinking water for all the people. Ground water is one of the major sources of drinking water in both urban and rural areas. In addition, it is also an important source of water for agricultural and industrial sector. Being a critical and integral part of the hydrological cycle, its availability depends on rainfall and recharge of water.

The demand for water has increased over the years led to water scarcity in many parts of the world. During the past two decades, the water levels in several parts have been falling rapidly due to an increase in ground water extraction. The number of wells drilled for providing irrigation to both food and cash crops has rapidly and indiscriminately increased. Intense competition among users viz., agriculture, industry and domestic sectors is driving groundwater table lower.

The National Water Policy calls for controls on exploitation of groundwater through regulation and an integrated and coordinated development of surface and groundwater through conjunctive use.

Key Functions

- Periodic estimation of groundwater resources of the state on a watershed approach and according clearances to minor irrigation schemes.
- Detailed investigations for delineation of potential zones and selection of well sites, to be implemented by developmental agencies and individuals.
- Investigations for identification of feasible areas and suitable sites for artificial recharge and rainwater harvesting structures.
- Drilling of exploratory – cum production bore / tube wells to study sub surface configuration of aquifers and assess aquifer parameters
- Monitoring of groundwater levels and quality through a network of observation wells, stream flow check points and improvednetwork of piezometers with Automatic/ Digital Water Level Recorders with Telemetry for Real Time Ground water levels.
- Conjunctive use studies in selected major command areas
- Identification of feasible sites for construction of bore wells under NTR Jala Siri II programme for small and marginal farmers in Command areas and also in Non-Command areas of 3 high rainfall north coastal districts.
- Special studies for evaluating groundwater regime through modern tools like, aerial photographs, satellite imagery, Geographical Information System etc,
- Aquifer Mapping and Management studies.

In recent years, the department shifted its focus to management by adopting Community Based Ground Water Management (CBGWM).

Estimation of Ground water Resources

The state has been divided into 748 watersheds (Groundwater Basins or Assessment Units) for estimation of groundwater resources. The last estimation was done for the base year 2012-13. Categorization of basins/ mandals/ villages is made based on stage of ground water development and long term groundwater levels trends. Details of the availability, utilization and stage of Ground water resources as per GEC -2012-13 are shown in Table 7.5 and Table 7.6.

Table 7.5: Ground Water Development

Ground water Resources	Command Area	Non Command Area	Total
Annual Ground water availability (MCM)	9163	9317	18480
Annual Ground water utilization (MCM)	2754	5350	8104
Balance Ground water availability (MCM)	6409	3967	10376
% of utilization stage of Ground water development)	30	57	44
Category	Safe	Safe	Safe

MCM = Million Cubic Metres. Source: Ground Water Department.

Category of basins and Mandals:

Table 7.6: Stage of Ground Water Development

Category	Watersheds (No.)	Mandals (No.)
Over Exploited	79	61
Critical	22	17
Semi-critical	62	54
Safe	585	538
Total	748	670
Over exploited villages to be notified under APWALTA-1227 villages.		

Source: Ground Water Department.

In terms of quantity, the total groundwater availability in the state is 18,480 Million Cubic Meters (MCM) out of which 8,104 MCM is utilized for various purposes leaving a balance of 10,376 MCM. The overall stage of ground water development is about 44%. The stage of ground water development in command areas is 30% and the stage of groundwater development in non-command areas is 57%.

Ground water Development

A study of the composite hydrographs of the past and present indicates that groundwater development is taking place in the state. It is generally observed that more the recharge more will be the utilization. At present, on an average, about 1.3 hectares of gross area is irrigated per well and on an average a total of 40,000 to 50,000 new wells are commissioned per year due to which the average unit area irrigated per well may decrease.

The net area irrigated under groundwater during 2016-17, is 11.62 lakh hectares and gross area irrigated under groundwater was 16.42 lakh hectares with 15.09 lakh bore wells. If micro irrigation practices are adopted on saturation mode, net irrigation potential through groundwater can reach to a level of 16 lakh hectares with additional recharge to ground water by taking up water conservation works in large scales.

Investigations

The Department is conducting investigation for selection of sites for bore wells, artificial recharge structures, implementation of APWALTA and hydrological clearances etc. During the year 2017-18 (April, 2017 to January, 2018) the Ground Water Department investigated 28,527 sites under various programmes for construction of different types of wells under SCSP, TSP., WALTA, Lift Irrigation, Artificial Recharge Structures, Industries, Sand Mining, Drinking water and NTR Jalasiri Phase.II etc., Out of which, under Special Component Plan, the department has conducted ground water surveys in 1864 sites and recommended 1073 sites through which 1594 hectares of the area is likely to be irrigated and 1803 beneficiaries benefited. Under, Tribal Sub Plan the department has conducted ground water surveys in 1116 sites and recommended 773 sites through which 1203 hectares of the area is likely to be irrigated for benefit of 1141 beneficiaries.

Drilling

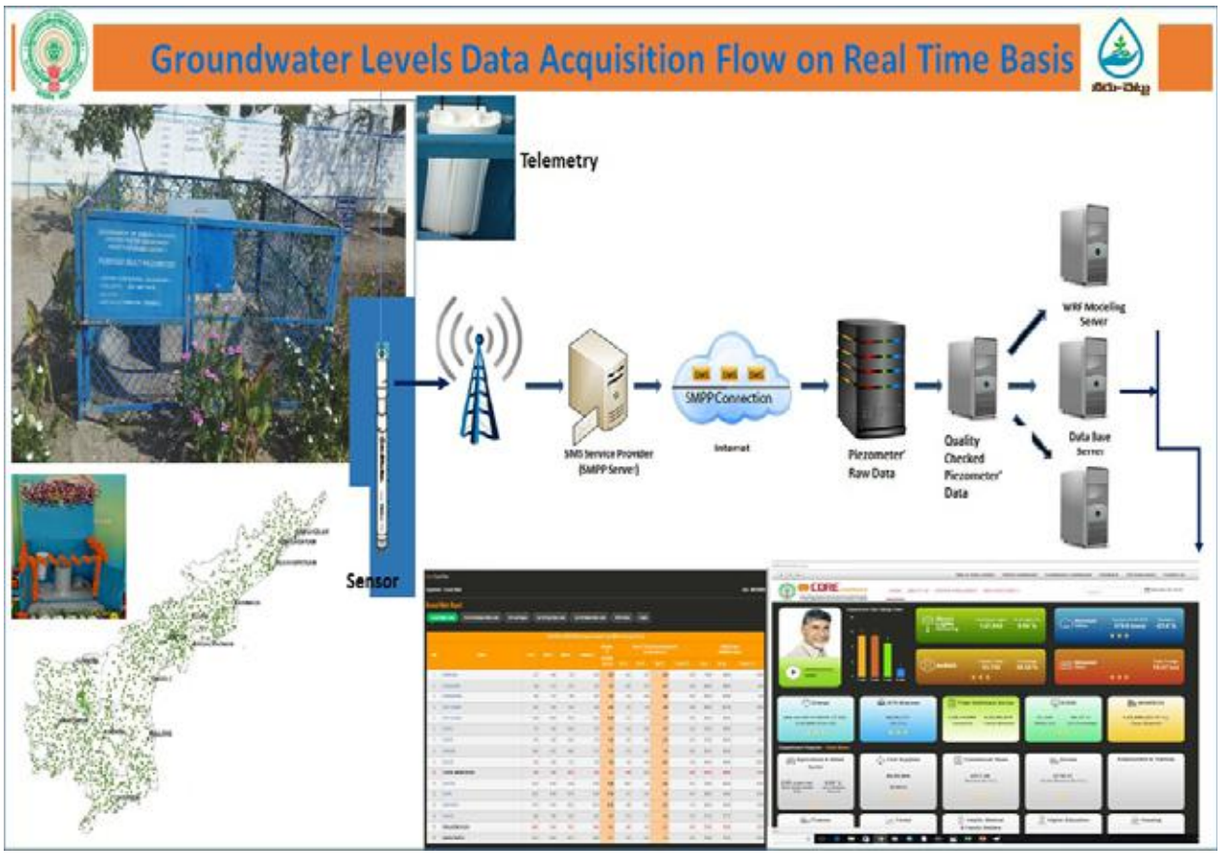
During 2017-18, 140 bore/tubewells wells have been drilled under Special Component Sub-plan as against the target of 200 bore wells and 63 borewells/tubewells drilled under Tribal Sub-plan as against the target of 100 bore wells upto January 2018.

Monitoring of Ground Water Levels

Department is monitoring ground water levels and water quality from a network of 2986 observation wells which includes 1260 piezometers installed with Automatic Water Level Recorders with telemetry under Real Time Water Level Monitoring System and 188 piezometers without DWLRs in all 748 basins covering all geological formations in the State.

Real Time Monitoring of Groundwater levels

Digital Water Level Recorders in 1260 Piezometers are functioning for real time monitoring of the ground water levels interval. The real time data is being analyzed with rainfall and reports are being disseminated through CM Coredash board.



Monitoring of Water Quality

The department collects water samples during pre-monsoon [May] and post-monsoon [November] from all monitoring wells and also during investigations. These water samples are being analyzed in the 4 Chemical Laboratories of the department. During 2017-18 (upto January, 2018), 6484 water samples were collected/analyzed as against the annual target of 4900.

Ground water Levels Scenario

In the water year 2017-18, (up to Jan.2018) the State has received 14% deficit rainfall as against the normal rainfall. Recharge to groundwater from the rainfall is about 3376 TMC. After utilization of groundwater for agriculture and other needs, the net rise in ground water level from May-2017 water level is 4.45 meters. And also observed a net rise of 1.19 m. from December-2017 water level and rise of 1.59 m. from January -2018 water levels.

During this water year 2017-18 up to January, 5 districts viz Nellore, Prakasam, East Godavari, West Godavari, Krishna received deficit rainfall and the other 8 districts received normal rainfall. Coastal Andhra region received 18% deficit rainfall against the normal rainfall upto January-2018 where as it was 24% less during the same period in the previous water year resulted in a net rise of 2.13 m from May-2017 and 1.18 m. fall from December-17 also a net rise of 0.46 m from January 17 to January-18 water levels.

Rayalaseema region received 6% excess against the normal rainfall upto January-18 whereas it was 33% deficit during the same period in the previous water year and as a result a net rise of 9.67 m from May-2017, 4.13 m. rise from January-17 and 1.22 m. fall from December-17 water levels.

The average groundwater level for the state in January 2018 is 10.34 m., where as it was 11.93 m. during the same period in the previous year and observed a net rise of 1.59 m. from the previous year water level. Net rise of 1.19 m is observed from December-17 average water level and 4.45 m. rise from May-17 water level is observed.

During January-2018, in 3 districts net fall is observed (0.03 to 1.14 m.) and net rise in 10 districts (0.01 to 6.57m) and maximum rise in Ananthapuramu district (6.57m) in comparison with average water level from January-2017 water levels is observed. Net rise in water level from May-17 to January 2018 is observed in all 13 districts. About 39% of the area is under water levels falling category from January 17 to January-18 and 62% of the area was more than 8 m. water level in May-17 where as it is 44% during January-17.

The analysis of January-18 groundwater levels data recorded through the Piezometer well network indicates deep water levels of more than 20m. in 163 wells (13%) and Piezometers with water levels less than 20m. and fall of more than 4m. is observed in 37 Piezometers. The areas represented by these 200.

Piezometers are showing the falling trend and there is a need to take appropriate steps to improve the groundwater conditions in the groundwater stress areas by way of giving high priority for conservation, augmentation and management of groundwater resources.

Command Area Development

The department takes up studies under four major project commands viz., Nagarjunasagar Right Canal Command, Nagarjunasagar Left Canal Command, Srisailam Right Branch Canal Command, Tungabhadra Project Complex Command area to study the impact of excessive irrigation, delineate areas already water logged and prone to water logging, recommend conjunctive use of both surface and ground water and to suggest other suitable remedial measures to improve productivity.

Monitoring of Groundwater levels is being carried out six times a year through 759 Command area observation wells to know the impact of canal releases on groundwater regime. The changes in chemical quality of groundwater are being monitored twice a year and detailed hydro geological and geophysical surveys are being carried out to recommend sites for construction of irrigation wells. Groundwater augment in these command areas are underutilized. The present stage of ground water development in various commands are NagarjunaSagar Right Canal Command Area(7%), NagarjunaSagar Left Canal (26%), Tungabhadra Project Complex Command Area(40%) and Srisailam Right Branch Canal Command Area (32%). The department is also working out different conjunctive use strategies in the four major commands and preparing conjunctive use plans for each district falling under the above commands.

Conjunctive use management

The conjunctive use of surface water and groundwater in the command area necessitated for the reasons are Irrigation system is not able to supply required quantity of canal water at required time to service the designed command are and maintain the irrigation schedule, when the storage in the reservoir is depleted due to low rainfall, when supply of canal water for irrigation use is reduced due to increase in the demand by other competitive uses and to increase the efficiency of irrigation system.

NTR Jala Siri-II Project (implementation of Conjunctive use)

Implementing conjunctive use of ground water and surface water in a true spirit in a big way. The objective of the scheme is to utilize the dynamically rechargeable groundwater resources in command areas, where the groundwater development is under "SAFE" category and create an additional ayacut of about 6.0 lakh acres in the state. Under this scheme the department has identified the scope for about 1.24 lakh bore wells in Command areas in the state and high rainfall areas of North Coastal districts. This programme is intended for small and marginal farmers in the state and the total outlay of the project is Rs.1498 crores.

During 2017-18 upto January 2018, the department conducted feasibility surveys for the selection of bore well sites in 13,377 sites and recommended 9,361 sites for construction of bore wells. The Rural Development Department is executing the drilling of bore wells and energisation etc.

Geo tagging of all Agriculture Bore Wells

The Government has taken up an innovative work of Geo tagging of all 15.09 lakh bore wells in the state. All the agricultural borewells have been geo tagged along with bore well photograph and certain information about the bore wells.

World Bank Assisted Projects

a. Andhra Pradesh Water Sector Improvement Project [APWSIP]:

It is proposed to study and articulate the success of conjunctive use of surface and ground water through community participation, and evolve a more systematic and scientific model to meet the demand of irrigation water and service the command area. Two Pilot areas were identified one each in Nagarjunsagar Right Canal and Nagarjunasagar Left Canal Command area presently falling in both reorganized States. Andhra Pradesh State is dealing with one pilot area falling in Guntur District with an area of about 4,100 Hectares. Five numbers of WUAs namely 194A, 202A, 215, 216 and 217 are falling in the Pilot area. Project outlay is Rs.3.078 Crores and the project period is March, 2010 to June, 2018.

b. National Hydrology Project [Phase.III]

The project developmental objective would be to improve the scope and accessibility of water resources data and information and to strengthen water resources planning and management in selected institutes across India. The project cost is Rs.80.00 crores and project period is 8 years purely under Central Government Grant.

c. Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project [APIIATP]

In sequel to Andhra Pradesh Community Based Tank Management Project World Bank proposed integrated irrigation and agriculture transformation project in Andhra Pradesh. The estimated project cost is Rs.36.00 Crores with duration of 7 years (2017-18 to 2023-24) with the development objective of the project is to enhance agricultural productivity and to improve efficiency of around 1200 MI tanks through catchment treatment approach with a total ayacut of about of about 1.2 lakh hectares benefitting about 2.0 lakh small and marginal farmers.

Ground Water Sustainability

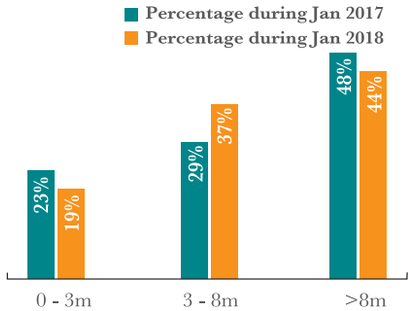
Day by day ground water utilization is getting increased for various needs resulting in the depletion of groundwater levels particularly in Non-command areas in the state. For sustainable development of this valuable resource, the Government is taking up various water conservation and water management measures. The objective is to make the state drought proof and increase the State GSDP in one hand and enhance the groundwater recharge through water conservation works, inter-linking of rivers and transfer of water from surplus basins to deficit basins. The Government has set a goal to keep the ground water levels between 3 to 8 meters below ground level. If the water levels are above 3 meters, the crop yields/Productivity/ Production can decrease and soil characteristics will also deteriorate. If the water levels are below 8 meters the power consumption will be more, well yields decrease and environmental issues will be more.

Based on the groundwater level data collected from piezometers, it is observed that during May, 2017 [pre-monsoon] 62% of the State area is having groundwater level more than 8 metres; 30% of the State area is having groundwater levels between 3-8 metres and 8% of the area is having groundwater levels less than 3 metres.

Based on the ground water level data collected from piezometers, it is observed that about 52% of the area in the State is showing water levels more than 8 meters and about 34% of the area reflected the water levels between 3 to 8 meters and 14% of the area with 0-3 metres groundwater level as on 9.2.2018 in the State.

Details of depth of water level ranges are shown in chart 7.1 and district wise depth of water levels are given in Annexure 7.3

Chart 7.3 Variation in depth of water levels



Source: Ground water Department.

Power

Power sector is a critical infrastructure element required for the smooth functioning of the state economy. An efficient, resilient and financially robust power sector is essential for growth and poverty reduction. The availability of reliable, quality and affordable power helps in the rapid Agriculture and Industrial development and the overall economy of the state. Power sector is one sector that has recorded significant performance in terms of generation, transmission and distribution. Andhra Pradesh is the leading state in the country in promotion of Energy Efficiency and Energy Conservation (EE&EC) for the long-term sustainability of power sector. Various EE&EC programs are under successful implementation in the state which are expected to impact the end consumers and facilitate industrial growth and development for the overall benefit of the State's economy.

In co-ordination with BEE (Bureau of Energy Efficiency),GoI& EESL (Energy Efficiency Services Limited),GoI, many EE&EC activities are being implemented in the state to ensure optimal utilization of available resources and realize the huge scope of energy saving potential in all sectors to the tune of around 15,000MU per annum.

Solar and Wind power will be the focus areas. As a critical infrastructure pushing the state economy upwards, its impact on the agriculture sector has also showed great promise. Various challenges have been faced by the power sector since bifurcation of state and major turnaround has been brought about by the government with apt policy reforms, considerably reducing the AT&C and T&D losses and providing quality power.

From 22.5 million units of power deficit in June 2014, the state was becoming surplus power state and able to provide Quality power supply to all domestic consumers on a 24X7 basis.

The recent performance of the State Power sector received acclaim from various quarters. The sector has won five national awards for remarkable energy conservation and efficiency parameters. The best practices followed by the state in the power sector are being emulated by other states.

HIGHLIGHTS

Installed Capacity

18379.64

MW

The Vision of the APTRANSCO is "To Plan, Construct and Maintain the Transmission Network in the State of Andhra Pradesh in line with Demand Growth and Generation Expansion in an efficient manner to ensure highest availability and lowest operational costs."

Details about APTRANSCO are shown in the below.

Table 7.7 APTRANSCO - 2017-18

Parameter	Performance as on 30-11-2017
Installed Capacity (MW) (Provisional)	18379.64
Maximum peak demand met (MW)	8166 (20-11-2017)
Minimum demand met(MW)	4604 (24-06-2017)
Maximum Grid consumption in MU	176 (16-05-2017)
Minimum Grid consumption in MU	130.66 (18-07-2017)
Consumers served (Lakh Nos)	176.097
Grid consumption (MU) during 2017-18 (upto Nov,2017)	38,184.71
Agricultural services (Lakh Nos)	16.97
Per capita consumption(kwh) 2016-17	1085

Source: AP TRANSCO

Support of Power sector to agriculture

- Government is particularly committed to the welfare of farmers and supplying free power to all agriculture consumers including all the services released. The Budgetary subsidy (electricity) provided for agriculture given by the Government during the year 201/-18 is Rs.3300 Crores.
- During the year 2017-18, it is programmed to release 50,000 new agricultural connections. So far i.e. up to 30-11-2017, 40,154 agricultural services have been released. The total agricultural services in the state as on 30-11-2017 is 16.97 lakhs.
- Government has waived the power consumption arrears relating to agricultural consumers of DISCOMs and RESCOs. As per modified policy, farmers having up to 3 connections in dry land, up to 2.5 Acres land holding in wet land are eligible for free power. The modified policy proposes incentives to promote energy saving measures.

R-APDRP

Restructured-Accelerated Power Development and Reforms Programme (R-APDRP) is a flagship programme of Government of India which aims at achieving actual demonstrable performance in sustained loss reduction. It has two parts – Part-A and part-B.

Part-A -I– IT Implementation

This includes projects for establishing of baseline data and IT applications for energy accounting/auditing & IT based consumer service centers. An amount of Rs.188.26 Crores was sanctioned to cover 75 towns in the state with more than 30,000 populations (as per 2001 census) (APSPDCL covers 46 towns + APEPDCL covers 29 towns). 75 towns (46 in APSPDCL and 29in APEPDCL) IT project works have completed and declared Gone-Live. An amount of Rs.150.37 Crores (Rs.83.50 Crores in APSPDCL & Rs.66.87Crores in APEPDCL). Out of total sanctioned amount Rs.188.26 Crores has been spent so far.

Part-A -II– (SCADA/DMS)

The Supervisory Control and Data Acquisition/ Distribution Management System (SCADA/DMS) System will provide real time monitoring & control, loss minimization/load balancing and considerable improvement in voltage/VAR profiles. It would also facilitate proper handling of loads while load shedding & restoration, efficient planning of network for future growth by using proven power system planning tools. Scheme consists of installation of Remote Terminal Units (RTU) at each 33/11 KV Sub- stations and integrating these RTUs with centralised control centre to manage distribution system of the town.

The eligibility criteria of SCADA/DMS system cover urban areas – towns and cities with population of more than 4,00,000 & 350 MUs annual input energy. Under SCADA / DMS Visakhapatnam town covered in APEPDCL-1, and 3 towns viz., Vijayawada, Guntur and Nellore towns are covered in APSPDCL. Rs.52.35 crores was sanctioned by PFC for SCADA/DMS in the above 4 towns (Rs 39.19 crs in APSPDCL and Rs 13.16 crores APEPDCL).

- In APSPDCL the scheme was sanctioned in March'2011 and is scheduled to be completed by December 2017.
- In APEPDCL the Visakhapatnam Scheme was sanctioned by Steering Committee on 27.9.13 and is scheduled to be completed by March 2018.
- An amount of Rs.12.33 Crores (Rs.4.14 Crores in APSPDCL and Rs.8.19 Crores in APEPDCL) out of total sanctioned amount Rs.52.35 Crores has been spent.

Part–B: Distribution System Strengthening:

This includes regular distribution strengthening projects such as renovation, modernization and strengthening of 11KV level substations, transformers/ transformer centers, reconductoring of lines at 11KV level and below, load bifurcation, feeder separation, load balancing, HVDS (11KV), Aerial Bunched Conductoring in dense areas, replacement of electromagnetic energy meters with tamper proof electronic meters, etc. In addition, in certain high-load density rural areas with significant loads, works of separation of agricultural feeders from domestic and industrial ones, and of High Voltage Distribution System (11KV) are also taken up. SCADA enabling components are sanctioned under Part-B scheme.

Rs.216.14 Crores was sanctioned for 42 towns with more than 30,000 population (as per 2001 census) and Aggregate Technical &Commercial (AT&C) losses of more than 15% for distribution System Strengthening in the two DISCOMs. DISCOM wise sanctions are APEPDCL: Rs.61.82 Crores. (10 towns) APSPDCL: Rs.154.32 Crores. (32 towns).

In addition to the system strengthening works, an amount of Rs 100.93Crs has also been sanctioned under part-B for providing the SCADA enabling components in the 4 towns where the SCADA project is sanctioned. These towns are not including in the 42 towns covered under system strengthening.

An amount of Rs.81.01Crores (Rs.62.81Crs in APSPDCL and Rs.18.20Crores in APEPDCL) out of total sanctioned amount Rs.100.93Crores has been spent so far. A total project expenditure of Rs.420.80Crores has been incurred by the DISCOMs under R-APDRP so far.

Integrated Power Development Scheme (IPDS)

The Government of India have launched the new "Integrated Power Development Scheme" (IPDS) with the components as 1. Strengthening of sub-transmission and distribution networks in the urban area, 2. Metering of distribution/ feeders/consumers in the urban area and 3.IT enablement of distribution sector and strengthening of distribution network for completion of the targets laid down under R- APDRP for 12th and 13th Plans by carrying forward the approved outlay for R-APDRP to IPDS. The existing R-APDRP scheme is subsumed in the IPDS scheme as a separate component.

The scope of work under IPDS scheme would be eligible for funding provided it is not covered under any GoIprogrammes like R-APDRP/RGGVY/ NEF etc., The projects for which any other grant/subsidy from Government of India has already been received/proposed to be received shall not be eligible under this scheme. Distribution Reforms Committee (DRC) should ensure that there is no duplication of works while recommending the projects to the Nodal Agency. An amount of Rs.653.95 Crores (Rs.301.51 Crores to APEPDCL (29 towns) and Rs.352.44 Crores to APSPDCL (54 towns) has been sanctioned under IPDS scheme.

The IT applications pertaining to ERP and customer care services can be included in the scope of works under IPDS scheme provided, they are not covered under R-APDRP. An amount of Rs 3.80 Crores sanctioned to APEPDCL against DPR cost of Rs 6.95 Crores for expansion of ERP in 8 Towns (Rajam, Palakonda, Nellimarla, Yelamanchili, Gollaprolu, Yeleswaram, Mummidivaram, Jangareddigudem) which were converted as Nagar panchayath from Gram panchayath and not covered in R-APDRP. Similarly an amount of Rs.16.79 Crores sanctioned against DPR for Rs.97.83 Crores submitted by APSPDCL for IT enablement in 11 new towns (Mangalagiri, Tadepalli, Piduguralla, Rajampeta, Pulivendula, Badvel, Dhone, Puttur, Nagari, Palamaner, Pedana).

In addition to the above the smart city project proposals (Visakahapatnam, Kakinada, Tirupathi) with an estimated project cost of Rs.470.05 Crores, have been submitted to Power Finance Corporation (PFC) are yet to be sanctioned under IPDS.

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

Govt. of India has launched DDUGJY for the rural areas. The approval for components of with a total cost of Rs.43033 Crores including a budgetary support of Rs.33453 Crores from Government of India during the entire implementation period.

(i) separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural & non-agricultural consumers in the rural areas;

(ii) strengthening and augmentation of sub-transmission & distribution (ST&D) infrastructure in rural areas, including metering at distribution transformers, feeders and consumers end.

The existing programme of Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) as approved by CCEA for continuation in 12th and 13th Plans are subsumed in this scheme as a separate rural electrification component [rural electrification, as per CCEA approval for completion of the targets laid down under RGGVY for 12th and 13th Plans by subsuming RGGVY in DDUGJY and carrying forward the approved outlay for RGGVY to DDUGJY)] for which CCEA has already approved the scheme cost of Rs.39275 Crores including a budgetary support of Rs.35447 Crores. This outlay will be carried forward to the new scheme of DDUGJY.

The projects under the scheme shall be formulated for rural areas only and will cover works relating to feeder separation, strengthening of sub-transmission & distribution systems including metering of distribution transformers, feeders &consumers and rural electrification component. Out of the total Project Cost, 60% is grant from GoI and 10% from APDISCOMs contribution & 30% loan from financial institutions/banks. In addition to that the maximum grant by GoI including additional grant on achievement of prescribed milestones is 75%. Rural Electrification Corporation Limited (REC) shall be the Nodal Agency for operationalization and implementation of the scheme under the overall guidance of MoP.

Implementation of DDUGJY

An amount of Rs.922.10 Crores is sanctioned under DDUGJY. Under rural electrification component of Rs.372.95 Crores, under intensive electrification, out of 10,997 villages 5,500 villages are covered, 15704 habitations are electrified and covering 7,08,171 rural households and works are under progress in the remaining habitations.

AP Rural HVDS Project

The High Voltage Distribution System (HVDS) aims at reduction of losses through replacement of the low voltage network with high voltage network and installation of large number of smaller capacity distribution transformers viz., 25 KVA/ 16 KVA DTRs in place of higher capacity distribution transformers viz., 100 KVA/ 63 KVA for supply to agricultural consumers. This system is best suited to meet the scattered low-density loads observed in rural areas in India. Based on the sample studies carried out in Andhra Pradesh, the system loss reduction due to adoption of HVDS system is expected to be around 10%.

HVDS was implemented to 8,61,371 agriculture services at a cost of Rs.3522.63 Crores up to 31.03.2017. In addition, during the year 2017-18, HVDS has been implemented to 1,05,690 agricultural services at the cost of Rs.488.57 Crores upto Nov, 2017, bringing the total number of agricultural services converted under HVDS to 9,67,061 at a cost of Rs.4011.50 Crores in the state.

The cost of the APRHVDS(ID-P216) project is Rs.294.75 Crores. JICA sanctioned loan assistance to an extent of 85% of the Project Cost, i.e., Rs.252.80 Crores on ODA package at concessional rate of interest of 0.65%. The repayment period would be 40 years (including grace period of 10 years). Power Sector is one of the priority sectors for Japanese ODA Loans.

Project preparatory activities

HVDS Project is taken up with an aim to implement HVDS scheme in a big way in the state where large number of agricultural pump-sets exist. HVDS has already been implemented to 9.67 lakh agricultural pump-sets by

availing loans from REC/PFC etc. APRHVDS Project is to implement HVDS scheme to cover 46,727 agricultural services in 7 districts of the State at an estimated cost of Rs.294.75 Crores. Due to implementation of the HVDS Project would result in saving of Rs.76.72 Crores per annum.

The project to be implemented by APSPDCL (Tirupati), It was decided that APSPDCL will repay the loan amount through the benefits accured by implementation of this project. APSPDCL shall bear the balance portion of the project cost i.e., 15% from their internal sources or through other domestic lending for the successful implementation of the project. An expenditure of Rs. 297.69 Crs incurred covering 49,319 agricultural services at APSPDCL.

Electrification of Indiramma New Housing Colonies

Electrification of new housing colonies under Indiramma housing programme, is being carried-out based on the requirement furnished by the Housing Corporation for development of infrastructure as a part of layouts development. 2095 new housing colonies were identified and to be electrified during the years 2011-12 to 2017-18. Of which, detailed estimates were prepared for 1995 colonies with an estimated charges of Rs.7928.37 lakhs towards electrification, So far, Housing department have paid an amount of Rs.4308.23 lakhs as development charges in respect of 1181 new housing colonies.

Out of the 1181 new colonies, 1174 housing colonies have already been electrified, 1 (one) is under progress and 6 layouts not formed by Housing Depts. Estimates are under preparation in respect of 98 new housing colonies. New housing colonies are being electrified on priority on payment of development charges.

Energy Efficiency Activities

The Details of various Energy efficiency programs which are already implemented with savings accrued and new initiatives taken up are stated below.

Unnat Jyothi by Affordable LEDs for All (Ujala)

Two LED bulbs of 9W capacity are distributed at nominal price of Rs.10/- each to the households as a replacement of 60W capacity incandescent lamps (ICLs). Around 2.17Crs LED bulbs have been distributed so far out of target of distribution of 2.32 Crs bulbs to ensure 100% coverage of all households. As per 3rd party survey by prestigious Andhra University & ESCI (Engineering Staff College of India) , the energy savings through each LED bulb is 73.7 units per annum. Monetary saving is Rs.887.3 crore.

As a special encouragement towards energy conservation & economic savings in SC& ST households, the GoAP has distributed 2 additional LED Bulbs at subsidized price of Rs.10/- for all SC/ST households and around 24 lakhs bulbs are distributed in the state under this special scheme.

Installation of LED Street lights in all Municipalities

All the ordinary street lights were replaced with LED Street lights in all 110 Municipalities of the state and out of a total target of 5.6 lakh street lights set initially, 6.10 lakh of street lights have been installed in the project. Centralized Control & Monitoring System (CCMS) for analyzing the energy savings on real-time basis apart from centralized control of all the street lights from a single is also completed in more than 85 municipalities and they are linked to CM dash Board. CCMS installation is under progress in the remaining towns.

Agriculture DSM

A pilot project for replacement of old and obsolete pumps with new energy efficient pumps was taken up in Rajanagaram Mandal of East Godavari and 973 pumpsets were replaced. The new pump sets are yielding about 30% reduction in Energy Consumption and an increased water discharge of 15% and farmers are expressing satisfaction over the increased discharge of water. Considering the success achieved in the pilot project, replacement of One lakh pump sets is taken up, wherein 2283 pump sets have been replaced so far. The State Govt. is contemplating to implement the above AG DSM project across the entire state in a phased manner to cover all existing pump sets of around 15 Lakhs. 3256 Pump sets were installed till date. Energy savings for 3256 Pump sets installed is 4383720.452 (kwh). Monetary savings are Rs.2.42 crore.

Distribution of Energy Efficient Ceiling Fans

The program was launched by EESL, GoI initially in AP in 2016 later across the country. Under this, 5 star rated Fans are distributed to the interested consumers of different categories for direct payment @Rs.1100/- or through monthly EMIs (Rs.53/- per month) for two Years through Electricity Bills. So far about 2,61,218 fans have been distributed resulting in annual energy savings of 25MU. The energy efficient fan is of 50W, while an ordinary fan is of 75W resulting in 33% energy savings. It is further targeted to distribute 19 lakhs EE Fans in the state.

Impact of Energy Efficiency & Energy Conservation activities implemented in the state so far as on 20.11.2017

Name of the Programme	Quantity Distributed/ Installed	Expected Annual Energy Savings (Million Units)	Expected Financial Savings per year (Rs.in Crore)	Expected reduction in Co2 emissions per Annum @(Million Tones)
LED Bulbs Distribution in Domestic Sector	2.17 Crs	1601	887	1.4
LED Street Lights in ULBs	6.08 Lakhs	133	74	0.11
Energy Efficient Pump sets	3256 No.	52	24	0.04
Energy Efficiency Ceiling Fans	2.6 lakhs	25	14	0.02
Total		1811	999	1.57

Action Plan for large scale implementation of energy efficiency measures during 2017– 18

Led street lighting project in Gram Panchayats:

Panchayat Raj Dept, EESL, Govt. of India and APSEEDCO, GoAP have entered into an tripartite agreement to replace 10 Lakh ordinary street lights in Gram Panchayats (Cuddapah, Ananthapuramu, Chittoor, East Godavari, Vijayanagaram) with LED street lights. So far 18,297 LED street lights were installed and the project is targeted to be completed by March 2018. The GoAP is contemplating to replace the remaining 30 Lakh Gram Panchayats Street lights (aprox) with LED street lights in a phased manner. For the replacement of 10 Lakh street lights, estimated energy savings is around 111 MU (Million Units) and total monitory savings per year is Rs.67.19. Crs.

Sale of Energy Efficient Appliances on EMI basis to Domestic Consumers

Distribution of energy efficient LED tube lights was launched in Vijayawada on 22nd Feb-2017 as a first of its kind in the entire country. As a part of this, 20 watts LED Tube lights are distributed to the interested consumers of different categories for a meager price of Rs .220/-as against market price of Rs.400-500. So far about 54,049 Tube lights have been distributed, out of total target of 1.05 Crs. To have wide spread penetration of energy efficiency equipment's like LED Bulbs, LED Tube lights, Energy efficient Fans it is contemplated to distribute this EE equipment's on EMI basis under various financial models as follows.

Energy efficiency measures in School Education Dept

25 model schools/hostels have been selected for implementing the EE&EC measures at approx. Cost of Rs 50 Lakhs and the Project has been successfully completed. GOAP has mandated compliance of Energy Conservation Building Code (ECBC), issued by the BEE for promoting energy efficiency in the building sector. ASCI (Administrative Staff College of India) has been appointed to impart training to important stakeholders like Builders, Architects, Officials of MA&UD, Building Material Vendors. An exclusive ECBC cell to assist Municipalities & Corporations for strengthening the ECBC compliance technically, has been established in 2017 and is placed at Amaravati. The Cell is setup with support of ASCI with SECM as the nodal agency for implementation. Recognizing, AP has been recognized by and has been nominated for construction of Model Super ECBC building in Amaravati with financial support of Rs.5 Crores.

Procurement of Energy Efficient Appliances in Government Buildings

Implementation of energy efficiency measures in all the state Government Buildings by replacing old/obsolete equipment with Energy Efficient Equipment / Appliances of 5 Star rating in all Government Buildings in the State. The equipment includes LED Tube Lights, fans, Air Conditioners, Refrigerators, Water pump sets etc. The project is expected to result in around 30% reduction in electricity bills with reduced energy consumption. For effective implementation of the project, Energy Conservation Cells are to be established in each dept. duly designating a nodal officer for coordination.

Under this project, installation of LED bulbs, Tube lights, Five star rated fans in around 750 schools & hostels buildings under Tribal Welfare Dept, 1150 (approx) of schools & hostels buildings under B.C. Welfare Dept. 1250 (approx) of schools & hostels buildings under Social Welfare Dept. has been taken up. The project is also contemplated to be implemented in around 5,625 buildings under School Education Dept. and Hospitals under Medical & Health Depts.

PAT scheme:

PAT Scheme (Perform Achieve & Trade) is an innovative, market-based trading scheme announced in 2008 under its National Mission on Enhanced Energy Efficiency (NMEEE) in National Action Plan on Climate Change (NAPCC).

PAT Scheme Cycle-I implementation:

Under Energy Conservation Act, 2001, out of 478 Designated Consumers (DC's,) 24 Designated Consumers in PAT Cycle-I covering 8 sectors (aluminium, cement, chor-alkali, fertilizer, iron and steel, pulp and paper, textiles and thermal power plants), the overall target for DC's in nation is reduction in energy consumption in these industries totaling an energy saving of 6.686 million tonne of oil equivalent. An achievement of savings 8.64 mtoe has been reported at the end of PAT Cycle - I.

PAT Scheme Cycle-II Implementation:

In PAT Cycle-II, Additional DC's have been added to the existing DC's constituting around 38 DC's in the state During the course of PAT Cycle – II, 621 industrial units have been assigned reduction targets with projected savings of 8.869 MTOE with inclusion of three new sectors namely Refineries, DISCOMs and Railways. APDISCOM's (APEPDCL, Vizag& APSPDCL, Tirupati) , HPCL Refinery (Vizag)has been covered under PAT scheme. Notification to new DC's has been given to submit their Annual Energy Consumption Report (Form-I) and based on their Annual Energy Consumption report, targets have been fixed to all DC's.

Energy Efficiency Measures in Seven Major Temples

Detailed study on energy consumption of seven (7) major temples has been completed and suggestions on suitable strategy, specific plans for implementing energy efficiency measures were submitted to Government. Implementation of various suggested measures during energy audit has commenced in the temples and are yet to submit the savings accrued.

Arranging awareness campaign through SHG's:

Existing Self-Help Groups (SHGs) in the State to the tune of around 8 lakhs with around 80 lakh women-members are proposed to be involved in energy efficiency & conservation movement in order to take up the energy conservation to the grassroots level.

Appreciations for Energy efficiency activities:

World Bank has ranked the Sunrise State of Andhra Pradesh as No. 1 in the area of "Energy Efficiency Implementation Readiness".

Won BEE National Awards consecutively from the last three years for effectively monitoring, devising, studying the best practices & advising the State Govt. for implementation of Energy Efficiency activities for the years of 2015-16, 2016-17 &2017-18 During Paris COP Summit on Climate Change, AP's Energy Efficiency programs received wide appreciation.

All the representatives of BRICS nations have personally visited & observed the LED street lighting in Visakhapatnam and showered appreciation for the lighting project and evinced keen interest to replicate the model in their countries.

Andhra Pradesh which has shot to fame and won accolades, prestige and honour at Global platforms for its achievements in implementing various Energy Efficiency measures, has once again got the acknowledgements and appreciation from none other than Indo-US Ministerial.

Won "Best energy efficiency project award for year 2016" from ISGF (Indian smart grid forum)

Won Award for energy efficiency from CBIP (Central Board of Irrigation Power) during 2016

APGENCO- Generation Progress

Rayalaseema TPP Stage-IV (1x600MW)

Land acquisition completed. 1.4 TMC of water has been allocated for both RTPP stage-III & IV from SPVB Reservoir. Ministry of Coal allotted 2.31 MTPA long term coal linkage from M/s.MCL for 500MW. Additional coal linkage for enhanced 100MW was sanctioned on 21.8.2017. Boiler Light up was achieved on 29.12.2016. EDTA cleaning of Boiler was completed. The unit was synchronized grid on 02.07.2017. Boiler total tonnage of 26,952 MT out of 29,730 MT have been erected.

Dr.NTTPS Stage – V (1x800MW), Unit#8

LoI was issued to M/s BHEL for Design, Engineering, Manufacture, Supply including supply of Mandatory Spares and Erection, Testing & Commissioning for coal fired 1x800 MW super-critical Unit and Zero date commenced on 15.12.2015.The unit is programmed for synchronization by 14.03.2019.APGENCO has issued Letter of intent for BOP Packages to M/s BGR Energy Systems Ltd, Chennai. The date of LoI i.e., 06.07.2016 is Zero date for BOP. An advance of Rs 229.987 Crores released to BGRESL.

Erection started on 22.05.2017 and 4800MT of material erected. A, B & C ceiling girder erection completed. D & E ceiling girders pre assembly completed. Assembly of roof structures for first half completed.

Sri Damodaram Sanjeevaiah Thermal Power Station Stage – II (2X800MW)

LoI for the BTG package of 1x800MW SDSTPS – Stage –II was issued to M/s BHEL for an amount of Rs..2307 Crores. Payment has been made for an amount of Rs.198.95 Crores on 15.12.2015. Hence, the Zero date for BTG package commenced from 15.12.2015. M/s Tata Projects Limited has emerged as L1 bidder. LoI issued to M/s TPL for execution of BOP package for an amount of RS.2606 Crores on 06-07-2016. Standing Linkage Committee has sanctioned domestic coal linkage from MCL.

Status

Erection work is in progress in ESP area and Boiler area. RCC raft completed in 9 segments out of total 16 at NDCT area. RCC is in progress in pond wall and floor areas. Shell RCC completed up to +14.6mtr height at chimney area. Pile caps and pedestal works are in progress at Power house building area and about 50Nos (out of 73) Pile caps and 59Nos (out of 80) pedestals completed as on date. Piling work is in progress at Air Washer Room and about 12 were completed out of total 21. Piling work is in progress at Ash Slurry Line Corridor and about 142 were completed out of total 1490. Works of Fire & service water tank, sea water reservoir, filter water storage tanks, clarified water storage tanks, desalination water tank, RO buildings, chemical house, RO reject water storage tanks, sludge sump etc., are in progress. BTG and BOP Engineering activities are under progress.

NagarjunasagarTailpond Dam PH (2x25MW)

All execution works completed and Unit#1 COD declared on 05.01.2017and Unit#2 COD declared on 28.01.2017. Details about power generation and distribution are given in Annexure 7.4.

Solar and Wind Power Plants

Establishment of 400 MW capacity Solar Power Plant at Thalaricheruvu, Ananthapuramu.

MNRE has accorded approval for setting up of one solar park of capacity 500 MW in Ananthapuramu-II Ultra Mega Solar Park-II (500 MW) at Talaricheruvu Village, near Tadipatri As per the 152nd Board meeting held on 20.02.2017, LOIs to the firms (M/s Vikram Solar Pvt. Ltd., - 200MW, M/s KEC – 100 MW and M/s McNally Bharat – 100 MW) were issued on 9.3.2017 for executing the solar power projects of 400MW capacity at Talaricheruvu(V), near Tadipatri, Anantapuramu Dist., The detailed contracts were also issued on 02.05.2017. The construction works are in progress. PPA for 400 MW was concluded on 01/07/2017. Consent of APERC is awaited. Tenders were also issued for balance one block of 100MW (P2). The Daft Board note is prepared and is in circulation for placing the same before the Board. Tender for laying of 33KV power evacuation cables from plots to pooling stations was issued.

Polavaram Hydro Electric Project (12X80MW)

Polavaram Hydro Electric Project as a part of Polavaram Multi-Purpose Project is proposed across river Godavari at Anguluru village in Devipatnam Mandal of East Godavari district to utilize the monsoon flows for Hydel power generation. With the utilization of the surplus flows, power generation is possible to an extent of 960MW (12X80MW). The tender for execution of Polavaram Hydro Electric Project (12X80MW) on EPC (TURNKEY) basis was published on ape-procurement platform on 04.02.2017 and the Pre-bid meeting was held on 04.03.2017.

Roads and Buildings

Roads

Roads are one of the basic modes of transportation system and also an priority sector of Infrastructure. Systematic development of roads is one of the important pre-requisites for development and acceleration of growth in the economy. Among the different modes of domestic transportation systems, road transport carries more than 80 percent of the Goods and Passenger traffic. The network of roads, particularly from rural to urban facilitates speedy movement of goods and services and ensures higher growth prospects, connectivity, social integrity and wellbeing of the society. The productivity and efficiency of road transport is directly linked to the availability and quality of road network. In view of the high potential in agricultural activity, there has been huge increase in Road network. The total R&B road network (excluding NH roads) in the state as on 30-04-2017 was 47,002 Kms. Surface wise, lane wise and type of roads details are shown in Table 7.8.

Table 7.8: Status of R&B Roads.

Lane	Length of Road (in Kms)	Surface	Length of Road (in Kms)	Type	Length of Road (in Kms)
Four Lane	2455.00	Cement Concrete	2223.60	National Highways	6401.39
Double Lane	11525.60	Black top	48555.79	State Highways	15,406.00
Double lane with paved shoulders	1010.52				
Intermediate Lane	2833.00	Metalled & Unmettaled	2624.00	Major District Roads	31596.00
Single Lane	35579.27			-	-
	53403.39		53403.39	-	53403.39

Source: Engineer-in- Chief, Roads and Buildings

State Roads

Construction and maintenance of roads and bridges on State Highways, Major district roads, rural roads are taken up by the R&B department. Particularly Roads taken over from Panchayat Raj department or other Local Bodies are brought to the required standards and kept in motarable condition. The R&B department maintains a total of 47,002 Km of roads (excluding NH roads) comprising 15,406 Kms of State Highways, 25,620 Kms of Major district roads and 5,976 Kms of rural roads had taken over from PR department and other local bodies.

The State Roads wing maintains the entire State Roads of 32,825 Km using the State budget grant. There are two types of maintenance works ie., ordinary repairs (annual maintenance) and periodical maintenance on the roads which are ripe for renewal. The repairs are taken up based on the condition of road, year of last renewal.

Special Repairs Programme

235 works costing Rs.322.63 Crores are on hand as on 31.10.2017 of which 56 works costing Rs.78.27 Crores are completed. 122 works costing Rs.178.12 Crores in progress.57 works costing Rs.66.24 Crores in tender stage. An amount of Rs.145.17 Crores was incurred expenditure as against the sanctioned amount of Rs.441.77 Crores during 2017-18. Road lengths of 1625 Km and 16 culverts are improved as against the target of 2665 Km and 35 respectively by the end of October, 2017.

Under State Development Schemes (SH & MDR), 215 works costing Rs.2085.92 Crores as on 31.10.2017, 21 works costing Rs.170.61 Crores are completed.114 works costing Rs.1262.38 Crores are in progress. 17 works costing Rs.198.70 Crores are at tender / agreement stage. 63 works costing Rs.454.17 Crores are at estimate stage.

An amount of Rs.197.05 Crores expenditure was incurred during 2017-18 as against the sanctioned amount of Rs.184.04 Crores. Road lengths of 974 Km and 2 Bridges are improved/widened against the target of 1245 Km up to the end of October, 2017.

Scheduled Caste Component

Under Scheduled Castes Component, an amount of Rs.14.00 Crores budget was provided during 2017-18 against which an amount of Rs.11.04 Crores were spent. Road lengths of 6 Km are improved against the target of 35 Km up to the end of Oct, 2017.

At present the Scheduled Castes Component works are various stages of construction. 20 works costing Rs.30.40 crores are on hand as on 31.10.2017, 6 works costing Rs.9.00 crores are completed, 13 works costing Rs.18.40 crores in progress, and one work costing Rs.3.00 crores is in tender stage.

Scheduled Tribe Component

Under Scheduled Tribe Component, an amount of Rs.20.00 Crores was provided during 2017-18, against which an amount of Rs.16.44 Crores was spent. Road lengths of 27 Km are improved / widened against the target of 55 Km by the end of October, 2017.

At present, the Scheduled Tribe Component works are various stages of construction.27 works costing Rs.270.04 Crores are on hand as on 31.10.2017, 4 works costing Rs.32.77 Crores are in progress, 10 works costing Rs.87.95 Crores in agreement/tender stage,13 works costing Rs.149.31 Crores are at estimation stage.

Road Safety Engineering Works

Apart from the above, Road Safety Engineering Works (RSEW) were also sanctioned. At present the RSEW are at various stages of construction.

An amount of Rs.6.00 Crores budget was provided during the financial year 2017-18, against which an amount of Rs.1.02 Crores was spent. Road length of 13 Km are improved as against the target of 50 Km by the end of October, 2017.

National Cyclone Risk Mitigation (NCRMP)

The project is taken up in 9 coastal districts. The prime purpose of the project is to provide necessary infrastructure either by new construction or by repairs or improvements to the existing damaged roads to the habitations and cyclone shelters to facilitate evacuation or for transport of relief material in quick and uninterruptedly. Some of the roads near sea coast have un-bridged crossings, or with low level causeways. During cyclones or during heavy / flash floods the people living near the sea coast face difficulty to reach safer places. When the people stay in cyclone shelters etc., it is also necessary to supply medicine, water, food and other relief material to the un-interruptedly. Hence, it is very essential to take up the bridges construction and also to make all weather roads.

The Government, Disaster Management (Revenue) have sanctioned 35 Works Costing Rs.347.55 Crores, out of which 22 works costing Rs.108.20 Crores were completed, 12 works costing Rs.232.45 Crores are nearing to completion (progress), all most all the works are to be completed by the end of March, 2018.

A.P.Disaster Recovery Project (APDRP)

This project is taken up in 4 Coastal Districts (Srikakulam, Vizianagaram, Vishakhapatnam and East Godavari) of Andhra Pradesh affected by HUDHUD cyclone. The prime purpose of the project is to finance permanent restoration, reconstruction, strengthening and widening about 250 Km of damaged MDRs including cross-drainage structures, following the IRC and Highways (MORTH) Standards. Procurement Plan was approved from the World Bank for 26 works for an amount of Rs.360.90 Crores.

The Government have sanctioned 17 works with an amount of Rs.240.40 Crores as per revised cost in four districts. viz. 5 works costing Rs.55.10 Crores in Srikakulam, 4 works costing Rs.49.70 Crores in Vizianagaram, 3 works costing Rs.42.50 Crores in Visakhapatnam and 5 works costing Rs.93.10 Crores in East Godavari district.

NABARD Works, RIDF & RIAD

The State Government has taken up infrastructure development in rural areas through financial assistance of NABARD with the funds provided under RIDF (Rural Infrastructure and Development Fund) & RIAD (Remote and Interior Area Development). Since inception of NABARD funding to rural area infrastructure. Nearly 9300 km of rural roads have been brought to riding surface with BT and connected to nearby towns.

So far, 1778 road and bridge works in 23 tranches i.e., RIDF II to RIDF XXIII (including RIAD Phase I to V) (1996-97 to 2017-18) for Rs.3594.30 crores were taken up. 1689 works were completed with a cost of Rs.3053.28 crores and 64 works costing Rs.424.57 crores are in progress. 25 works costing Rs.116.45 crores are at tender stage.

Rural Development Fund

Under this scheme improvement of connectivity of rural areas and to transport agricultural produce to nearby market yards and improving non BT road to BT standard and construction of bridge works are taken up. So far, 1169 works costing Rs. 1,626.36 crores were sanctioned under Rural Development Fund from 2008-09 to 2016-17 and 1097 works costing Rs.1419.51 crores were completed. 67 works costing Rs.196.18 crores are in progress. 5 works costing 10.67 crores are in tender stage.

Upgradation of NREGS works under TSP

During 2017-18, 7 works costing Rs. 40.00 Crores covering a length of 56 Km were sanctioned and are in tender stage.

LWE Works

The work "Construction of High level Bridge" across river Sileru including widening to two lane and improvement from Km 0/0 to 10/0 of Chintur -Motu Road in East Godavari District in Andhra Pradesh (Bridge work only) was taken up under RRP-I scheme. The revised estimate is amounting to Rs.2805.71 lakhs and the work is in progress.

Under Road Requirement Plan Phase II (RRP-II) in LWE affected areas of AP state, 128 works (119 Road Works + 9 Bridge works) were sanctioned by GOI, under centrally sponsored scheme "Road connectivity project for left wing extremism" covering four districts i.e., Srikakulam, Vizianagaram, Visakhapatnam & East Godavari.

28 Works (22 road + 6 bridge works) are taken up by Roads & Buildings Department, out of which estimates for 21 road works costing Rs. 455.05 crores are sent to GOT for according sanction.

Rural Roads Plan Works

5486.07 kms of Panchayat Raj roads are transferred to Roads & Buildings Department in which around 1500 kms are having non BT surface. Hence it is proposed to sanction works for conversion of non BT roads to BT roads in a phased manner under Rural Roads Plan.

So far, 157 works costing Rs. 374.29 crores were sanctioned from 2016-17 to 2017-18 of which 126 works costing Rs.250.40 crores were completed. 24 works costing Rs.74.14 crores are in progress and 7 works costing Rs. 49.75 Crores are in tender stage.

Centrally Sponsored Programmes

The Central Government sanctions works under CRF act, Economic Importance and Inter State Connectivity and allocates the fund in 50:50 ratio i.e. (a).50% of the cess on High Speed Diesel (HSD) Oil for the Rural Roads. (b). balance 50% of cess on High Speed Diesel (HSD) Oil and the entire cess of petrol is distributed as per norms for development and maintenance of roads.

The Government has provided Rs.227.17 crore in 2017-18 and expenditure incurred is Rs.191.34 crore upto 30-09-2017. Government of India sanctioned for 133 works of Rs.1720.60 crores for a length of 1742.32 km and most of the works are under progress. The works are intended for improving the condition of the roads which benefit large number of population to transport their agricultural produce and other industrial goods nearby market yards, towns, cities etc.

Road Over/Under Bridges (ROBs/RUBs)

Road Over/Under Bridges (ROBs/RUBs) railway safety works are constructed mainly in lieu of busy level crossings (manned) where train vehicular units (TVUs) are more

than one lakh. The constructions are taken up under cost sharing basis with railways on 50:50 basis as per the norms and approved by the railway board. As per public representations, ROBs/RUBs are being taken up at LC's where TUV's are less than 1.00 lakh, with 100% share from the Government.

At present, 122 ROBs/RUBs (both 50:50 & 100%) are approved by the Railway Board/GoAP which are at various stages of construction. 60 works costing Rs.1117.67 crore were completed, 19 works costing Rs.661.90 Crore are in progress, and 43 works are at stage 1st level ie., under finalization of alignment gad, designs, estimate along with activities like land acquisition etc.

An amount of Rs.50.00 Crores budget was provided during 2017-18 against which an amount of Rs.35.14 Crores was spent. 2 ROBs/RUBs are completed against the target of 10 ROBs up to the end of December, 2017.

RoBs under Sethu Bharatham on National Highways

Under this scheme, 22 RoBs were sanctioned. Out of which 4 RoBs were grounded, 8 ROBs were in tender stage, 7 ROBs DPRs were submitted and for remaining 3 ROBs DPRs to be submitted. In the 4 grounded works, one work is targeted to complete by the end of December'2018. In the remaining 21 ROBs, 11 ROBs are targeted to complete by the end of March'2020.

National Highways

There are 32 National Highways in the state covering a length of 6401.39 Km of which 2071.02 Kms is four-lane and above, 2447.60 Kms two-lane, 1010.52 two-lane with paved shoulder, 292.00 Kms intermediate lane and 580.27 Kms are of Single lanes(as on 25th January 2018). The density of National Highways is 12.96 Kms per lakh population (2011) in the State as against national average of 8.30 km and in terms of area coverage, a length of 39.90 Kms is available for every 1,000 Sq. Kms in the State as against national average of 30.50 km.

Out of 6401.39 Kms National Highways in the state, a total length of 1897.22 Km are under the control of NHAI for development and 461.56 kms with PIU, Machilipatnam 4042.61 km with State PWD-NH Wing.

Road Safety Implementation Programme (MoRT&H)

A. Operational Road Safety Engineering Audits:

Operational Road Safety Engineering Audits and short term improvements are taken up where execution of major development project on the selected stretches is expected to commence at least after 1 year of implementation of short term measures based on operational audits.

B. Detailed Road Safety Audit:

Stretches where development work like two laning/four laning are neither in Progress nor in pipeline are to be identified and got approved in principle for taking up Detailed Road Safety Audit.

C. Road Safety EPC Works

Most of the works on National Highways with state PWD is taken up under Engineering Procurement & Construction Mode (EPC), wherein the Road Safety works are taken up as per the Road Safety Audit Consultant Recommendations.

Apart from the above the MoRTH has adopted to take up Road Safety Works after conducting Operational Road Safety Engineering Audit & Detailed Road Safety Audit on National Highways. Road Safety Works taken up with the recommendations of these Audit Reports would considerably reduce the road accidents.

D. Road Safety Amenities and resting places for drivers:

Most of the Works on National Highways with State PWD is taken up under Engineering Procurement & Construction Mode (EPC), wherein there is provision for Road Safety Amenities and resting places for drivers.

Sl. No	Work	From-To	Kms	Remarks
1	Two lanning with paved shoulders	Kathipudi to Digamarru on NH 214 (New NHNo.216)	140	Developed by PIU Machilipatnam, MoRT&H /GoI. The works are in progress.
2		Vijayawada to Bhadrachalam on NH 221 (New NH No.30)	70.60	
3		Digamarru-Ongole Road, NH 214A	entire length of 255 Kms	
4	Four laning	NH 4 (New NH No. 69&40)	entire length of 84Kms	Handed over to NHAI
5		NH 63 (New NH No. 67)	entire length of 56 Kms-Rs 995.09 crores	Work is in progress.
6	Rehabilitation and upgradation of roads	Nagarjuna- sagar Dam to Yerpedu section of NH 565	5 works to a length of 337.00 Kms at a cost of Rs. 1403.56 Crore	4 works to a length of 287.69 km at a cost of Rs. 1208.11 Crore completed. 1 work Nagarjuna- sagar Dam to Davulapally arbitration under process.
7	Rehabilitation and upgradation of NH 67 to two lane with paved shoulders	1.Mydukur to Dornala T-Junction.2.Dornala T junc- tion to Atmakur.3.Atmakur to Nellore	Three work on NH-67 to alength of 149.50 km at a cost of Rs 790.94 Crore	2 works to a length of 105.00 km at a cost of Rs. 493.16 Crore completed . 1 work is in progress.
8	Rehabilitation and upgradation of NH42	Karnataka Border to Kuppam	4 works on NH-42 under NH(O) EPC to a length of 253.66 kms at a cost of Rs919.396 crores	Works are in progress.
9	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Muddanuru-Jammalamadugu	One work on NH-67 for a length of 32.15Kms at a cost of Rs 143.87 crores	Work is in progress
10	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Adoni to Madhavaram via Mantralayam	One work on NH-167 for a length of 55.06Kms-Rs.224.83 crores	Work completed
11	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Pileru to Rayachoty	One work on NH-40 for a length of 51.85 Kms-Rs.175.03 crores	Work is in progress
12	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Raipur-Visakhapatnam	One work on NH-26 Four lane for a length of 11.60 Kms- Rs.84.12 crores	Work is in progress
13	Construction of 4-lane ROB in lieu of LC No.122	Chittoor-Kurnool road on NH-18 (new No.40) near Ootokuru village	Sanctioned for an amount of Rs.82.72 crores	Work is in progress
14	Four laning of 5.122 km NH9(New NH 65)(1.40km) with NH5(3.60km)	Bhavanipuram to Kanakaghudhamma Vardhi Junction in Vijayawada City limits	Sanctioned for an amount of Rs 333.22 crores	Work is in progress

Sl. No	Work	From-To	Kms	Remarks
15	Construction of High Level Bridge	Ananthapur-Chennai road of NH-205 (new No.42) under NH(O) across Chitravathi River	Sanctioned for an amount of Rs.19.47 crores	Work is in progress
16	Construction of 4-Lane ROB and its approaches in lien of existing level crossing No.124E/ SPL 3@ Km 1.800(New Chainage km 77.805 on NH 205		Sanctioned for an amount of Rs.98.55 crores	Work to be entrusted
17	Construction of 4-Lane ROB and its approaches in lien of existing level crossing No.23/ SPL class @ Km 3.600 of NH 18		Sanctioned for an amount of Rs.109.03 crores	Work to be entrusted
18	Construction of 4-Lane ROB and its approaches in lien of existing level crossing No.18A/ SPL class @ Km 7.800 of NH 18		Sanctioned for an amount of Rs.113.87 crores	Work to be entrusted
19	Construction of 4-Lane ROBand its approaches in lien of existing level crossing No. 102/3E @ Km 281.200 of NH 205		Sanctioned for an amount of Rs.138.44 crores	Work to be entrusted
20	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 48E/C @ Km 96.80(Railway Chainage 74.431) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.68.83 crores	Recall the tenders
21	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 67 @ Km 133.20(Railway Chainage 109/3-4) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.63.79 crores	RE based on tender quoted value under process.
22	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 30/E @ Km 64.800(Railway Chainage 42.858) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.56.34 crores	LOA is beeing issued
23	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 95 @ Km 183.60(Railway Chainage 145/500-600) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.63.77 crores	Techinical bids under evaluation.

Sl. No	Work	From-To	Kms	Remarks
24	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 95/ SPL @ Km 272.600(Railway Chainage 93/17-19) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.87.66 crores	LOA is beeing issued
25	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 45 C @ Km 93.40(Railway Chainage 70/903) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.60.38 crores	Financial bids evaluation under progress.
26	Construction ofProposed 4-Lane ROBand its approaches in lien of existing level crossing No. 75 @ Km 145.200(Railway Chainage 121/470) on NH 205 in the State of A.P.		Sanctioned for an amount of Rs.68.48 crores	Recall the tenders.
27	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Puthalapattu–Pileru sec) of Chittor-Kurnool road of NH18(New NH-40)	Sanctioned for an amount of Rs.172.53 crores	Work is in progress
28	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Rayachoty-Kadapa Road of NH-18(New NH-40)	51.28 kms –Rs347.40 crores	Work is in progress
29	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Gooty- Tadipatri section of NH 67	63.013 kms-Rs 289.57 crores	Work entrusted
30	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Chintakunta to Adoni Section of NH167	58.80Kms-Rs 290.15 crores	Work is in progress
31	Construction of New Bridge parallel to existing bridge	Km 165/4 of Chittoor-Kurnool road NH18(40)	Sanctioned for an amount of Rs 6.9677 crores	Work is in progress
32	Rehabilitation & up-gradation of NH-340 from section) to two lane with paved shoulders in the State of Andhra Pradesh on EPC mode under NH(O) Annual Plan 2016-17	km 0/0 to km 60/380 (Design Ch. 0/000 to 60/025 excluding Km 55.600 to 57.650 (2.050Km)) (Rayachoty to Angallu	Sanctioned for an amount of Rs 319.28 crores	Work is in progress
32	Construction of 4-lane bypass on EPC mode under NH(O) 2016-17 in Andhra Pradesh	Vijayanagaram Town on NH 43 (New NH 26) from 537/6 to 552/0 (Raipur-Vijayanagaram section)	Sanctioned for an amount of Rs 429.43 crores	Work entrusted
33	Strengthening & Widening to 2 lane with paved shoulders from	Km 552/950 to Km 577/545 of Mangalore -Tiruvanamalai road of NH-234 (New NH -75)	Sanctioned for an amount of Rs 147.66 crores	Tender process

Andhra Pradesh Road Development Corporation

The Road Development Corporation was established in the year 1998 to develop and maintain roads and other allied and incidental activities in the State.

A.P. Road Sector Project

The project (P 096021) was approved by the Government of India and World Bank for widening and strengthening and maintaining certain important and high traffic roads with an objective of smooth travel and to reduce transport cost. The cost of project is Rs.2245.00 Cr.

Major Components of the Project

Road Improvement Components

I. Up-gradation and Improvement component

Five roads consisting of 7 packages with a cost of Rs.1060.00 crore of road length is targeted for widening and strengthening in this component.

a) Kurnool – Devanakonda Road (KD-02): Work is under progress.

b) Mydukur– Jammalamadugu road (MJ-03 & MJ-04): This road consists of two packages i.e., MJ-03 & MJ-04, MJ-03is nearing completion and MJ-04 is under progress.

c) Pedana – Nuzivedu – Vissannapeta road (PNV-08 & PNV-09): This road consists of two packages i.e., PNV-08 & PNV-09. PNV-08 package was terminated and re-bidding is completed. PNV-09 is in progress.

d) Kakinada – Rajahmundry Road (KR-07): Work is delinked from APRSP and subsequently contract was terminated.

II. Output Performance Based Road Contracts (OPRC) 3791 Km.

OPRC Project was taken up at a cost of Rs.975.00 Cr. (5 years duration in 2 phases). Under this component, Phase-I was completed and 19 Packages in Phase-II have been completed during 207-18.

III. Institutional Strengthening, Road Safety & PPP Facilitation Support: Cost Rs.79.20 cr.

Institutional Strengthening Action Plan (ISAP): M/s Lea Associates Ltd. Canada in association with LASA, New Delhi, were appointed as consultants for consultancy services on ISAP implementation.

The consultants submitted inception report for Part A (implementation of ISAP) & Part B (RNMP), draft organization structure, draft report on RDC managed CRN focused Road fund, draft report on baseline settlement and Road Network Analysis. The aspects of Road Fund Mechanism is under the examination of Government level.

Road Safety Component

Under this component, Renigunta- Rayalacheruvu Road of 140 Km length was identified as Demo Corridor for improving Road safety with the objective of implementation of Road accident mitigation activities through multi sector approach. Civil works of APRDC completed. Certain enforcement measures are taken up on the corridor. Procurement of certain equipment pertaining to Transport, Police and Medical Dept. is in advanced stage. Certain Black spots on State Highways in 5 districts have been taken up and completed under the Road Safety Project by improving the safety at the identified black spots. Transport Department is the Nodal/Lead department for implementation of Road Safety Action Plan. During implementation stage 40% reduction in accidents is reported in the demo corridor i.e., Renigunta – Rayalacheruvu Road.

Road Management System (RMS)

APRDC has taken up the establishment of Road Management System for optimum utilization of funds towards road improvement and maintenance by using RDBMS and HDM-4 software. By using RMS, prioritization of roads requiring immediate maintenance and widening for capacity augmentation can be made and based on budget availability prioritized roads may be improved.

RMS involves collection of road asset data like road width, shoulders width, location of electric poles, bridge locations etc., and also road surface details such as potholes, edge breaking, rutting etc., using a Network survey vehicle, which is fitted with requisite equipment to capture all the data on roads.

Configuration & Validation of RDBMS software, data collection is completed and district-wise rolling out plans for state high ways are completed and under implementation.

PPP Scheme

- A second bridge across river Godavari near Rajahmundry including approaches connecting EGK road under (PPP) project costing Rs.808 Cr. was substantially completed and the bridge is in operation.
- Narketpally- Addanki -Medarametla Road connecting Narketpally on NH 65 and Medarametla on NH 16 was taken up and substantially completed at a cost of Rs.1197 Cr. The road is in operation stage and the length of road in Andhra Pradesh is 125 Km.
- Feasibility studies were taken up for 32 roads of length approximately 2000 Km to take up development under PPP.

Annuity Works

Nine road works of a total length of 163.30 Km at a cost of Rs.393.55 cr. were developed and are in Operation & Maintenance stage.

Panchayat Raj Roads

The total length of the rural roads under Panchayat Raj Engineering Department is 79,078 Kms in the state as on 01.04.2017. The surface details of the road length are CC - 2976 Km, BT - 21,695 Km, WBM 10,129 Km, Gravel 20,799 Km and Earthen 23,479 Km.

During the year 2017-18 (Upto December 2017), 1558 Km length of road is completed duly incurring an expenditure of Rs. 630.00 crores.

Buildings

The present activities of Buildings wing include execution of buildings works taken up under Plan/Capital Schemes, Secretariat buildings, Court Buildings and judicial Quarters (under State / Centrally Sponsored Schemes) and Buildings of other Department under Deposit works and Maintenance of Buildings under Non-Plan/Revenue Schemes.

The present plinth areas of Government buildings in the control of R&B Department are as follows.

1.	Non-Residential	30.12 Lakh Sft. + 0.90 Lakh Sft = 31.02 Lakh Sft.
2.	Residential Buildings:	30.81 Lakh Sft.

Construction of Non-Residential and Residential Buildings

- Construction of buildings for Inspection Bungalows/ GHs/other Buildings where in this Buildings are for providing accommodation to VVIPs and Officials during their tours. The IBs / Guest Houses at Rajam in Srikakulam District, Salur in Vijayanagaram, Chinthapalli in Visakhapatnam, Mangalari and Sattenapalli in Guntur District, Chimakurthi in Prakasam District and Nandyal in Kurnool District are in progress.
- Construction of new Residential buildings and renovation for existing Govt. residential accommodation for State Government Officials.
- Construction of integrated office complexes are under progress.
- Construction of Buildings for Revenue offices are at various locations in the state of Andhra Pradesh.
- The R&B Department has taken up the works around 47 No. belongs to 18 departments/ Organizations of the Andhra Pradesh as a Deposit Work
- Construction of Buildings for Integrated Collectorate Complex at Ongole in Prakasam District as a deposit work.
- Construction and renovation of buildings for Judicial Department (Law Dept-Home Dept). An amount of Rs. 40.00 Cr is provided in BE 2017-18 and expenditure incurred in this financial year is about Rs.14.12 Cr.upto January 2018.

Transport

Road Transport plays a prominent role in the economic development of the State. The transport department plays a key role in granting licenses to drivers, registration of motor vehicles, issue of transport permits, levy and collection of motor vehicle tax, enforcement of vehicle violations, and acts as nodal agency for road safety and motor vehicles pollution control.

The State as on 31-9-2017 had a registry of 103.58 lakh vehicles. About 78.62% of the vehicles on road are two wheelers, followed by cars, tractor trailers, three wheelers, buses and goods carriage trucks. Details about registered motor vehicles on road are shown in Annexure 7.5.

The transport department collects revenues from the issue of driving licenses, registrations, permits and taxes. Year wise revenue received is shown in Table 7.9. District wise revenue received upto January 2018 is given in Annexure 7.5A.

Table 7.9: year wise Revenue received

Year	Total Revenue (Rs. Crs)	% of Growth
2012-13	1602.12	8.73
2013-14	1517.83	-5.26
2014-15	1763.37	16.18
2015-16	2128.42	20.70
2016-17	2463.21	15.71
2017-18 (up Jan. 2018)	2613.75	26.28

Source: Transport Department

Enforcement

Active enforcement enables better compliance of registration, licensing and taxation by operators. In the year 2017-18 (upto January, 2018), the department through active enforcement has been able to mobilize revenue of Rs.244.69 Crores. During the current year the enforcement wing is focusing on road safety related violations such as 1) Drunken Driving, 2) Carrying passengers on Goods Vehicles, 3) Over Speed, 4) overload, 5) Driving Without helmet, 6) Not having valid driving license, 7) No reflectors, 8) Not wearing seat belt, 9) Driving in wrong/ opposite direction, and 10) overloading of passengers on vehicles.

During the year 2017-18 (up to 30-9-2017) 9.54 lakh cases were booked against the above violation Special emphasis is being given to enforce wearing of helmet by two wheeler drivers in co-operation with Police Department in entire State.

Road Safety

To minimize the road accidents in the state, Road Safety Programmes and awareness campaigns were conducted in the state with vehicle drivers, students and stake holders.

The Government has reviewed frequently since March 2017 and District level road safety committees also reviewed the road safety situation in the district. The road accidents were comedown by 4.74% upto Sep.2017 due to initiatives taken by the Government.

Enforcement on Road Safety Related Violations:

During the current year the enforcement wing of the Transport Department had focused more on Road Safety related violations and booked 14.00 lakh cases from 1st April, 2017 to 30th September, 2017. The Government have created road safety enforcement teams in each district from April 2017 and booked 1.33 lakh cases against road safety violations upto 30th Sep.2017.

Prosecutions are being launched instead of compounding the offence against the offenders in cases of drunken driving and over speeding and the Magistrates are ordering imprisonment from 3 to 5 days. These prosecutions are having a serious dampening effect on the offenders.

Comprehensive Road Safety Audit

The department had taken up a Comprehensive Road Safety Audit of the National Highways in the state and prepared list of deficiencies with suggested rectifications at each location with lat-long details. The Comprehensive Road Safety Audit will be completed in all districts by December 2017 and reports will be sent to NHAI and the Road Engineering departments for ratification.

Rectification of Black spots

1013 Black Spots were identified, out of which 951 black spots were rectified and the list of the rectified black spots was communicated to the Transport Department officials and they were asked to study the impact of these rectifications in consultation with respective departments. The District Road Safety Committees had inspected the accidents spots and study reports referred to R&B Dept. for appropriate interventions to reduce the accidents in the black spot areas. The accidents were reduced during last two months due to precautionary measures are taken by the government.

Comprehensive road safety project proposal

In view of the increasing number of Road accidents in the state a comprehensive road safety project proposal has been prepared by the department in consultation with road safety experts. The project comprises several activities achieving better drivers, safer vehicles and improved traffic management and response to accidents establishing of highway patrol units implementing engineering interventions removing black spots improving road safety furniture establishing well-resourced development and capacity measures and the government is seeking funding from World Bank for the project and the discussions are in advanced stage by taking of this project the govt. proposes to reduce the road facilities by 15% by 2020.

Trauma Care Centers

The Govt. decided to notify all the Government and private Trauma care facilities as trauma care centres and to publicise the facilities to the benefit of the road users through sinages at appropriate places.

Central Fund tapping

Ministry of Road Transport and Highways sanctioned an amount of Rs.58.64 crores under Nirbhaya fund for installation of IOT device and related software in public Transport Vehicles. Government of India will share the cost in the ratio of 60:40 between Govt. of India and the State Government. State Government to sanction the balance amount for implementation of this project, An amount of Rs. 16.34 crores is sanctioned by Government of India to setup an Institute for Driver Training and Research (IDTR} at Venkatachalampalli village, Darsi mandal, Prakasam district under IDTR scheme of Government of India. A land of about Ac.20.00 has been provided by the State Government and the IDTR is being established with the collaboration of M/s Maruti Suzuki under the Government of India Scheme. The Project foundation stone has been laid on 25th April, 2016 and it will be completed by March, 2018. An amount of Rs, 47 lakhs to be borne by the Government. An amount of Rs. 9 crores are sanctioned by MoRTH, Govt.of India for up gradation of driving testing tracks and setting up training centres at 9 places Gabheeram, Guntur, Nellore, Chittoor, Tirupati, Anantapur, Kurnool, Proddutur in the state. The total project cost is Rs.9.01 crore. Out of this, Govt. of India was initially released an amount of Rs.4.50 crores recently.

I.T. Related Initiatives

- As part of e-Pragati project of Government of Andhra Pradesh to make the citizen services transparent and responsive, the department proposed to make all the 83 services available to citizens online.
- Business process re-engineering is being done in respect of 83 citizen services wherein collection of taxes/fee is being done by SBI, MoPS payment gateway so that revenue collected from the citizens is directly deposited to the treasury.
- All the services are going to be integrated with Aadhar number and authentication by capturing thumb impression of vehicle owner/driver to avoid impersonation by having integration with UIDAI/AP Online.
- All citizen's services are being integrated with Vahan/ Saradhi portals of Govt. of India, wherein details of other State vehicles/Driving licenses will be obtained through web service whenever they approach for any transaction in AP. This initiative will curb entry of fraudulent vehicles/Driving Licenses in AP.
- New registration of the non-transport vehicles is integrated with "Vahan" portal, wherein technical specifications of the vehicles are directly captured by entering chassis number and engine number of the vehicle at dealer level in New Online Application.
- All citizen's services are being integrated with IIB for Online authentication of insurance policy number as well as validity of the insurance.
- Integration with CCTNS, Financiers, Police Department, Income tax Department (PAN) etc., is also being done.

The Online services project was inaugurated on 1st March, 2016 at Visakhapatnam by facilitating the registration of vehicles online at the Dealer point itself, without the owner visiting the RTA office. This process of online registration is already extended to the entire State. While the new owner of a vehicle will get his vehicle registered online without coming to RTA office the other online services facilitate the vehicle owner or license holder to apply online, to pay fee

and upload document online. The officials of the transport department also would approve the transaction online and the applicant will be permitted to download the official document online. The online facility will not only reduce the footfalls of citizens in RTA offices, but would improve the transparency and security of all the transactions

Software is made ready to launch remaining services also in online. Registration of transport vehicles payment of tax, issue new and renewal of permits, issue of fitness certificate, transfer of ownership of vehicle, noting and termination of hypothecation agreement, etc. were also introduced in online system from July 2017 onwards. Issue of learner license is also being issued through online in Nov 2017.

Andhra Pradesh State Road Transport Corporation

The AP State Road Transport Corporation initially had a fleet strength of 609 buses (16 depots) with a staff of 5,081 in 1958. The needs of transport have increased, forcing implementation of nationalization and increase in fleet strength year after year to meet the needs of traveling public as the State has been growing on all fronts since then. APSRTC is the largest state road transport undertaking in the country.

The corporation has 4 zones, 12 regions and 128 depots with a total fleet strength of 11,649 buses and 55049 employees on rolls as on October, 2017. It recorded fuel efficiency of 5.19 per liter up to October 2017, it operates on about 43 lakh kms and transports about 70 lakh passengers daily. The average vehicle productivity per day of its fleet is 369 kms and the Corporation achieved 99.20% fleet utilization upto October, 2017.

The Corporation has introduced trend setting improvements in the quality of travel in rural, urban areas and ghat road passengers by providing newly designed coaches like "Telugu velugu", "Vennela AC Sleeper, Garuda Plus, Garuda, Indra Super Luxury, Metro Luxury AC, "Metro Deluxe" and "Metro Express" "Sapthagiri luxury and Saptagiri express" JnNURM buses, Amaravathi AC services and Ultra Deluxe services.

Special achievements

The Corporation bagged National Awards for 1. Highest Tyre Performance, 2. Fuel efficiency and 3 Productivity 4. Best Branding, Marketing and Communications. Among the STUs in India, APSRTC stands top in physical performance in vehicle productivity and resource utilisation indicators like vehicle utilisation, fleet utilisation, average number of passengers transported, fuel efficiency, tyre life, break down rate and accident rate.

Regular conduct of induction training and refresher courses for defaulting drivers have increased safety during both night and day time operations. The AP State Road Transport Corporation performance from 2010-11 to 2017-18 (Upto Oct-17) is given at Annexure 7.6.

Airports and Non-Metro Airports

Andhra Pradesh Civil Aviation Policy, 2015

With a vision and objective for creation of world class aviation infrastructure in the State that would help provide reliable and seamless air connectivity to regional, national and international destinations by 2022, the Government has brought out Andhra Pradesh Civil Aviation Policy, 2015.

As per the said Policy the Government will encourage private participation in airport development, regional/ national airline operations and other aviation infrastructure through various initiatives which include provision of fiscal incentives, facilitation of gap in financing through Viability Gap Funding Scheme on a case to case basis. Keeping in view the above objective, GoAP has decided to develop new green field airports in the State and also to upgrade existing airstrips into low cost airports for better air connectivity and economic growth of the State. Accordingly, the GoAP

has formed a Special Purpose Vehicle viz., Bhogapuram International Airport Corporation Ltd., (BIACL), a 100% owned Corporation set up in August, 2015 under The Companies Act, 2013. BIACL has been entrusted with the development of the following new greenfield airports and upgradation of existing airstrips into low cost airports in the State.

New Airports

Bhogapuram International Airport

The Government has proposed to develop a new Greenfield International Airport at Bhogapuram mandal of Vizianagaram District near Visakhapatnam. Nearly 80% of land acquisition is completed. HUDCO has sanctioned loan assistance of Rs.854 crores for land acquisition and pre-development activities of the airport. Expenditure of an amount of Rs.468.01 crore has been incurred so far by BIACL towards land acquisition. The Dist.Collector, Vizianagaram has prepared a detailed R&R plan for the benefit of 376 project displaced families (PDFs) at an estimated cost of Rs.38.25 crores towards R&R entitlements and Rs.49.43 crores for provision of infrastructure facilities and basic minimum amenities in the two R&R villages proposed for the PDFs, which was already approved by the R&R Commissioner, for implementation. Steps are under way for implementation of the R&R Scheme.

All required clearances have been obtained for the development of this new green field international airport. The operation of the proposed airport will trigger industrial, tourism, commercial activities in the region. This will improve direct and indirect employment opportunities, revenue generation, commercial and industrial activities, therefore resulting in positive impact on the employment generation and economic growth of the region. About 1000 skilled/semi -skilled workers will get employment and about 5000 unskilled workers will be engaged for various services. Bids have been invited for development of this airport under PPP mode, with highest revenue share as the bid parameter and with a concession period of 66 years.

Dagadarthi Airport

All required clearances i.e. site clearance, in-principle approval have been obtained from the Government of India, Ministry of Civil Aviation. 85% land acquisition is completed for this airport. An amount of Rs.71.30 crores has been spent for land acquisition so far. Bids have been invited for establishment of this new greenfield airport under PPP mode. M/s SCL-Turbo Consortium Ltd., Hyderabad who offered revenue share of 9% has been issued Letter of Award. Concession Agreement to be signed shortly. Airport works are planned to be completed within 18 months from appointed date. This airport will be labour intensive and will have more of specialized manpower as it is envisaged to develop this airport into a cargo airport with facilities for warehousing, inland transport, freight forward and so on, apart from passenger amenities.

Orvakal Airport

Bids have been invited for development of this new low cost airport under PPP mode. GoAP has decided to construct this airport on EPC basis, in public interest. Land acquisition for this airport is completed. Out of 1010 acres required for the airport, an extent of 638 acres of Govt. land was alienated for airport purpose at a nominal price by the Govt. An amount of Rs.24.4 crores has been spent for land acquisition for this airport. Tenders have been called and construction work awarded in two packages. Airport works are planned to be completed within 12 months. In the initial stage the airport will cater for operation of ATR-72 type of aircraft for day operations in Phase-I and all weather operations in Phase-II. This Airport will have more of specialized manpower. Generation of indirect jobs is expected due to spurt in industrial activity around this airport. The foundation stone has laid on 21st June, 2017 for construction of this airport project.

Other Airports

Besides development of the above 3 new green field airports, Government has entrusted BIACL to develop/upgrade the existing airstrips into low cost airports at Donakonda in Prakasam district; Nagarjunasagar in Guntur District and a new Greenfield airport in Kuppam, Chittoor district. BIACL has taken up the matter for identification of suitable additional land for up gradation of these airstrips. Govt., have also directed BIACL to examine the feasibility of making Puttaparthi Airport operational under RCS-UDAN/regional connectivity scheme. Accordingly, BIACL has taken up the matter with Sri Satya Sai Central Trust, to which the private airport at Puttaparthi belongs.

Existing Non-Metro Airports

At present there are six operational airports in the State, at Visakhapatnam, Tirupathi, Vijayawada, Rajahmundry, and Kadapa, which are under operational control of Airports Authority of India, and one airport at Puttaparthi being managed by Sri Satya Sai Central Trust.

Expansion of existing Airports

As per the Thirteenth Schedule of the Andhra Pradesh Re-organisation Act, 2014, under "Infrastructure", among others, the GoI shall, within six months from the appointed day, examine the feasibility of expanding the existing Visakhapatnam, Vijayawada and Tirupathi airports to international standards and take an expeditious decision there.

Visakhapatnam Airport

Visakhapatnam Airport is a civil enclave belonging to Indian Navy and operated by Airports Authority of India (AAI). The passenger traffic recorded during FY 2016-17 was 2.35 million passengers out of which 2.25 million passengers are domestic passengers and 0.097 million international passengers. The passenger traffic growth rate recorded during FY 2015 & 2016-17 is 33%.

Currently, Vishakhapatnam serves flights to Far East and Middle East (one stop). Carriers such as Air Asia, Silk Air, Sri Lankan Airlines and Air India serve to the destinations in the Far – East and Middle East. Cargo facility is now functional at Visakhapatnam airport.

Vijayawada Airport

Vijayawada Airport is the second largest Airport in Andhra Pradesh in terms of air passenger traffic. During FY 2016-17, Vijayawada recorded passenger traffic of 0.65 Million passengers with 12,173 aircraft movements. Vijayawada has been accorded International status from the Ministry of Civil Aviation in June 2017. The airport has all the support functions for the operations viz., immigration process trained personnel, customs and immigration systems etc. Currently, no international flights operate from Vijayawada Airport. Air India Express will be starting Mumbai/Vijayawada/mumbai flights with effected from 15th January 2018 and exploring regulatory approvals for Vijayawada/Mumbai/Dubai&Sharjah.

However, a Singaporean team appointed by CRDA in collaboration with BIACL is exploring options to add SILK Air International flights between Singapore to Vijayawada with effect from next summer schedule. Expansion of existing runway to Code-E type of aircraft is under progress.

Tirupathi Airport

Tirupathi Airport is the third largest Airport in Andhra Pradesh in terms of passenger traffic. During FY 2016-17, Tirupati recorded passenger traffic of 0.48 Million passengers with 7,449 aircraft movements. Indigo has started twice daily flight with effect from 7th January 2018 between Hyderabad/Tirupathi, Bangalore &Chennai. The airport has been granted international airport status from Ministry of Civil Aviation and has all the support functions for the operations in place viz., immigration process trained personnel, customs and immigration systems etc.

The Government has acquired and handed over additional land to an extent of Ac.702 lands in Renigunta and Yerpedu mandsls of Chittoor district to the AAI, for the upgradation of Tirupathi Airport. The District Collector, Chitoor has been authorised to incur an expenditure of Rs.100-00 crore to meet the expenditure towards acquisition of lands and shifting of public utilities for expansion of Tirupathi Airport. The capital expenditure on airport infrastructure is being borne by the AAI. Construction of 3 additional parking bays underway. To add international flights from Tirupati, matter has been taken up with Air India to operate Hub- spoke model in coordination with airport operator i.e AAI.

Rajahmundry Airport

As per the MoU signed between the AAI and GoAP, the State Government has acquired at its own cost, additional land required to an extent of Ac.857.09 required for expansion of Rajahmundry airport at a cost of appxly. Rs.274 crores and handed over to AAI free of cost, besides providing free electricity and water for a period of 5 years, and provide security for the airport. The capital expenditure required for developing airport infrastructure was borne by AAI. 4 new parking bays were constructed and awaiting DGCA approval (expected by December,2017). Works in progress for expansion of runway; targeted to be completed by May 2018. Matter has been taken up with Air India/Jet Airways/Indigo to add direct flights from Delhi/Mumbai/Calcutta from next summer schedule i.e. after Runway expansion works are completed.

Kadapa Airport

The Govt.of India, Ministry of Civil Aviation, has announced a new scheme viz. "Ude Desh ka Aam Naagarik (UDAN) – Regional Connectivity Scheme with a vision of "affordable flying for the common man" and a MoU was signed by the GoAP with the Govt.of India, Ministry of Civil Aviation and the Airports Authority of India in September, 2016 for providing support/concessions such as VGF (80% by Central Government and 20% by State Govts), levy of excise duty by Central Govt., at 2% on ATF, reduction of VAT(SGST) on ATF at RCS airports, etc., under RCS scheme. The Ministry of Civil Aviation has declared Kadapa Airport as RCS airport in AP. In the 1st round of bidding conducted for all the RCS airports in the country, True Jet has won the bidding for operating RCS flights from Kadapa airport. Kadapa is connected to Hyderabad and will be connected to Vijayawada (Trujet) and Chennai (Trujet). Jagadalpur (Air Odisha) by December, 2017.

Sea Ports

Andhra Pradesh has 974 Kms long coast line with a major Port at Visakhapatnam under Government of India control and 14 notified ports under State Government. Of which 4 are captive ports.

Kakinada Anchorage Port

The anchorage port has a capacity to handle about 4 million metric tons of cargo per annum. The port handled 19.50 Lakh Tonnes of cargo and realized revenue of Rs.19.73 Crore on cargo and earned total revenue of Rs.19.73 crore as Government share in 2016-17. The Port handled 11.80 Lakh Tonnes of cargo and earned total revenue of Rs.16.70 crore during 2017-18 (upto the end of Sep. 2017).

Kakinada Deep Water Port

Presently, Kakinada Deep Water Port is under operation with 6 berths and 2 OSV berths and one North return wall berth of 635 Mts. length. The port handled 124.70 Lakh Tonnes of cargo and realized revenue of Rs.404.55 crore. The Government received Rs.89.00 crore as Government share in 2016-17.

The port handled 65.00 Lakh Tonnes of cargo and earned total revenue of Rs.200.00 crore and Government received Rs.44.00 crore as Government share during 2017-18 (upto the end of Sep. 2017).

Gangavaram Port

The Government of Andhra Pradesh awarded a green field deep water port at Gangavaram near Visakhapatnam under PPP. Presently, Gangavaram port is under operation with 9 Berths with a capacity of 45 Million Tons per annum. An extent of 1800 Acres of land was given towards equity and 1052 acres was given on lease basis.

The port handled 180.30 Lakh Tonnes of cargo and realized revenue of Rs.586.09 crore against which they have paid Rs.15.14 crore as Government share for 2016-17. The Port handled 131 Lakh Tonnes of cargo and earned total revenue of Rs.357.83 crore and Government received Rs.7.52 crore as Government share during the year 2017-18(upto the end of September, 2017).

Krishnapatnam Port

Presently, the Port is under operation with 9 berths. Construction of Additional berths under Phase II is in progress. So far, an extent 3462 Acres of land was given as against 5800 acres approved by the Government. The balance land acquisition is under process.

The port handled 361.10 lakh tons of cargo and realized revenue of Rs.1416.48 crore against which they have paid Rs.36.83 cores towards Government share in 2016-17.

The port handled 205.00 lakh tonnes of cargo and earned total revenue of Rs.733.57 crores and Government received Rs.18.02 crores as Govt. share during the year 2017-18 (upto the end of September, 2017).

Rawa Port

Rawa Port is located near Surasenayanam in East Godavari District and it facilitates to transport Crude Oil from S. Yanam to Chennai / Visakhapatnam / Haldia by Sea. The Port is in operation.

The Port handled 11.10 lakh tonnes of cargo and realized revenue of Rs.4.57 Crore in 2016-17. The Port handled 4.50 lakh tonnes of cargo and earned total revenue of Rs.2.44 and Government received Rs.2.44 crore as Government share during the year 2017-18 (upto the end of September, 2017).

HIGHLIGHTS
Growth in Passenger Traffic in Vizag Air Port 33%

Other Non- Major Ports under development

Non-Major Ports at (1) Machilipatnam, (2) Bhavanapadu (3) Narsapur (4) Ramayapatnam (5) Kakinada SEZ (6) Meghavaram Port (7) Nakkapalli Port (8) Nizampatnam, (9) Vodarevu are under development process.Further, Duggarajapatnam Port in Nellore District in under development by Government of India.

Machilipatnam Port

The Government have awarded development of Machilipatnam Port in Krishna District under PPP Model. Land acquisition is under process. Land pooling is under progress to procure lands required for Machilipatnam Port under Machilipatnam Area Development Authority.

Bhavanapadu Port

The port is located in Srikakulam district. There is a defunct fishing harbor, and no commercial activity at this Port. Availability of the Land is 268 Acres. The port can be developed to handle about 6.5 MTPA by 2016-17. The port is initially proposed to be developed under Phase-I with 5 berths.

Narsapur Port

The Port is located in West Godavari district. There is no commercial activity in the port. No port land is available at the port. Development of port work is under progress.

Ramayapatnam

Ramayapatnam proposed site for port development is a coastal village, located at South – East corner of Prakasam district in Ulavapadu Mandal, located 4.5 km East of Thettu on NH-5 and 93 km North of Krishnapatnam Port. It is 12.8 km away from Ulavapadu and 78.7 km distance from Ongole. The connecting straight road joins NH-5 at Thettu. South Central railway passes adjacent to the NH-5 Nearest Railway stations is 'Thettu' located within 6 km from the sea. Development of port work is under progress.

Kakinada SEZ:(Captive Port)

The Government declared the Kakinada SEZ Port in East Godavari District as minor Port to facilitate transportation of refinery products and to handle all special Economic Zone Cargo. Govt. have agreed to the proposal of M/s KSEZ Pvt. Ltd. for conversion of the Captive Port to the Commercial Port through Swiss Challenge Approach, duly following the procedure laid down in APIDE Act, 2001, draft PPP Rules, 2012 and as per the A.P. Port Policy, 2015. The total cost of project includes Dredging, Breakwater revetment, construction of Berths, Port Buildings, Road works, Railway line, Port Craft berth, Miscellaneous etc., is Rs.2123.00 Crores.

Meghavaram Port: (Captive Port)

The State Government declared Meghavaram port in Srikakulam district as minor port for imports of coal, fly ash for the thermal plants. The Port is being developed by M/s East Coast Energy Pvt. Ltd., with an estimated cost of Rs.600 Crores.

Nakkapalli Port: (Captive Port)

The State Government declared Nakkapalli port in Visakhapatnam district as a minor port for export of Alumina by M/s ANRAK Aluminum Ltd. The proposed port is 75 Km from South of Visakhapatnam. M/s. Anrak Alumina Ltd., has proposed to construct 2 berths to handle alumina & thermal coal etc. The cargo handling capacity of the project is 4 MLT per annum.

Nizampatnam and Vodarevu Ports: (under development)

The State Government have proposed to develop Vodarevu port in Prakasham district &Nizampatnam port in Guntur district under Public Private Participation mode on Build, Own, Operate and Transfer (BOOT) basis. The port is at present under dispute.

Duggarajapatnam:

Proposed port at Duggarajapatnam is located in SPSR Nellore district of Andhra Pradesh. The site is located 23 kms north of Sriharikota islands (ISRO) in Vakadu mandal of SPSR Nellore district. Important towns like Gudur are at a distance of 40 km and Vakadu at 10 km.

Communications

There were 10,489 Post offices in the State, of which 59 are Head Post Offices, 8 are Mukhya Dak Ghars, 1,528 are Sub Post Offices and 8894 Branch post offices as on December 2017. Details of district wise post offices data are shown in Annexure 7.7

There were 2,376 Telephone exchanges, 6.24 lakh land line connections, 10229 public telephone connections (Local +STD), 67.45 lakh wireless subscribers (pre & postpaid) and 9996 wireless subscribers WLL (fixed & mobile) up to December 2017 in the state. District wise status of telephone connections are given in Annexure 7. 8.

Banking

There were 7167 scheduled bank offices at the end of September, 2017 in the State. The aggregate deposits amounted to Rs.2,71,737.88 crore and the total bank credit extended was to the order of Rs.2,78,357.39 crore up to September, 2017. The credit-deposit ratio of the banks in the state is 102.44% as against RBI norm of 60%.

The total priority sector advances to Net Bank Credit (NBC) was Rs.1,85,981 crore (68.03%) against RBI norm of 40%. Agricultural advances to Net Bank Credit were Rs.1,16,513 crore (42.62%) against RBI norm of 18%. Non-Farm Sector Advances was Rs. 40,057.98 crore which accounted for 14.65% of NBC. Other priority sector advances are at Rs. 29,215.87 crore forming 10.69% of NBC. Profile of banking institutions in A.P as on 30-09-2017 is given in Annexure 7.9.

Tourism

Tourism in India has grown by leaps and bounds over the years, with each region of India contributing something to its splendor and exuberance. The 'Incredible India' campaign which showcases the best that India has to offer to tourists, now commands worldwide attention.

Andhra Pradesh has the distinction of being a leading tourism destination in India and is presently, the third most visited State in terms of domestic tourism. In 2013, 152.1 million domestic tourists visited Andhra Pradesh, which was about 13.3% of the total domestic tourism market.

The State is a microcosm within itself – offering unmatched tourism potential to investors and tourists. It offers multitude of theme-based options to explore across its length and breadth. As part of its Tourism Mission strategy, the State offers nine major Tourism themes which includes Beach & Water based, Eco-tourism, Buddhist, Religious, Heritage, Spiritual and Medical.

Tourism is an effective instrument in terms of generating employment, earning revenue and foreign exchange, enhance environment, preserving culture and tradition there by resulting in overall development. The government is committed to develop Heritage spots in Kurnool, Prakasam, Rajamundry, Tirupathi, Vijayawada, Visakhapatnam and other important places. Divine destinations like Tirupathi, Srisailam, Srikalahasthi, Kadapa Darga, Mahanandi, Simhachalam, Annavaram, Vijayawada and other places are being integrated in religious tourism circuits. While ensuring that the bio diversity and socio economic needs of the community are maintained, beach tourism is being promoted. World class coastal and eco-tourism circuits are being developed.

Andhra Pradesh Tourism Development Corporation (APTDC)

APTDC, the State Government undertaking was incorporated in 1976. It continues to register significant growth since last few years with focus on creation of tourism infrastructure and products. The Corporation continues to strive for promotion of new tourism products such as eco-tourism, beach tourism and cruise tourism. The river cruise tourism to Pattiseema and Papikondalu on river Godavari, APTDC operates 24 tour packages including on demand tours. The transport fleet is operated through network of 8 tour promotion scheme agents, authorized booking agents and 14 Central Reservation Offices.

Currently, the corporation runs a chain of hotels and restaurants and providing quality accommodation and food for tourists at important locations. 42 hotels with around 974 rooms and 2080 bed strength in prime locations fostering homely ambience packages and an impressive fleet of 32 buses that connect important tourism locations

within and outside the state. The water fleet with 54 boats and launches provide pleasure cruises and river cruises at affordable prices. The corporation runs sound & light shows, river & lake cruise and pleasure rides making tourism a pleasurable experience.

The activities of the corporation can be classified broadly into the eight categories viz. Hospitality (hotels & catering units), transport (guided & package tours), water fleet (leisure cruises & pleasure boating), sound & light shows, eco-tourism, PPP projects, construction of new tourism products, tourism asset management and conduct cultural festivals.

While the primary focus of APTDC remains aggressive in developing a world-class tourism infrastructure, recently, it has ventured into new tourism related fields like, heritage, pilgrimage and eco-tourism etc.

Growth of APTDC

APTDC has registered a systematic growth both in terms of revenue and tourist arrivals over the years. The thrust of the Government of Andhra Pradesh on development and promotion of tourism has enabled this. In line with the policy of the Government, APTDC has focused on development of tourism infrastructure that has led to promotion of new tourism products and successful functioning of tourist centers. APTDC has earned revenue of Rs.87.00 crore and visited 16.53 crore tourists during the year 2017-18.

Tour Packages

APTDC has designed a number of tourist packages to different destinations covering temples, hill resorts, beach resorts, heritage sites both in and outside the state. A modern transport fleet of over 37 buses. The transport fleet is supported by a chain of central reservation offices supported by a network of tour promotion agents. APTDC also enters into strategic alliance with major tour operators. These tours connect major hubs such as Chennai, Bengaluru, Tirupati, Coimbatore seamless travel destination.

Haritha Hotel Chain

The "Haritha Hotel Chain" with 42 hotels (974 rooms) located in important tourist centers provide the right ambience and quality that tourists demand. All APTDC hotels provide necessary facilities. Few places where hotels & resorts are located. New hotels and resorts at Srikakulam, Chinthapalli, Kakinada and Thummalapenta and Tirupati are also introduced along with the existing hotels at other places.

Mega destinations and secondary destinations

APTDC has focused development in and around the three primary destinations of Vijayawada, Visakhapatnam and Tirupathi. In addition, development is also centered in the 3 secondary destinations like Kakinada, Kurnool and Nellore. The development of infrastructure is based on developing destinations and tourism circuits with a funding mix from the Government of India and State Government.

Eco-Tourism Initiatives

The Corporation has taken up the initiative of identifying potential Eco-tourism spots in the state. It has successfully implemented popular eco-projects like the Belum caves, revamping of Borra caves, an exotic Jungle destination by name 'Jungle Bells' at Tyda, the illumination of Ettipothala waterfalls and development of Bhavani river Island.

Community Based Eco-tourism

Andhra Pradesh is encouraging community based Eco-tourism in association with Forest department, under their Community Forest Management program by providing opportunities for jungle walks, forest retreats, wild life tourism, bird watching and trekking.

Maredumilli (East Godavari District), Nelapattu (Nellore District), Mamandur, Talakona, Nanniyal (Chittoor District), Balapalli (Kadapa District), Ettipotala(Guntur District), KambalaKonda(Visakhapatnam District), Orvakallu (Kurnool District) Coringa Wild life sanctuary (East Godavari District) are few of the places identified for Eco-tourism. Transport to and from the destination is provided by APTDC. Vana Samrakshana Samithi(community) provides accommodation, guide services and food facilities. Forest department provides the infrastructure under Community Forest Management (CFM).

GoI (Central Financial Assistance) Projects

APTDC has taken new initiatives to develop tourism in Andhra Pradesh and steps are being taken to tap the Central Financial Assistance for development of tourism infrastructure in various destinations in the State, under which 7 projects worth Rs 234.75 Cr were sanctioned by the Ministry of Tourism, Ministry of Urban Development and Ministry of Shipping, Govt. of India.

- Development of Kakinada Hope Island Konaseema as world class costal & Eco Tourism circuit and development of coastal tourism circuit in Nellore in Andhra Pradesh under Swadesh Darshan Scheme.
- Development of Amaravati town, Guntur District of Andhra Pradesh as a Tourist destination under PRASAD Scheme.
- Up gradation of approach roads to heritage sites and development of heritage walk at Amaravati.
- Development of "Heritage Park at Amaravathi under HRIDAY (Heritage City Development and Augmentation Yojana) Scheme.
- Development of Passenger Jetty at Bhavani Island under Sagaramala Scheme of Ministry of Shipping, GoI.
- Development of Srisailam Temple Town in Kurnool District under PRASAD Scheme (Pilgrimage Rejuvenation and Spirituality Augmentation Drive) of Ministry of Tourism, GoI.

Out of the above 7 projects 5 are under progress and 2 works are yet to be started. Since the 2 projects of Sagaramala Scheme and PRASAD Scheme are recently sanctioned by the Ministry of Tourism.

Proposed projects

Further five new Project proposals worth Rs.362.19 Cr. have been initiated for development with CFA and submitted the DPRs to the Ministry of Tourism Government of India for sanction under PRASAD and SADESH DARSHAN schemes for the year 2017-18 and awaiting sanction form the GOI.

- Development of Mahayana Buddhist circuit in AP under Swadesh Darshan Scheme.
- Development of Rajamahendravaram Heritage, Eco & Nature Tourism circuit (Akhanda Godavari Project) under Swadesh Darshan Scheme.
- Development of Rayalaseema Heritage Tourist circuit under Swadesh Darshan Scheme.
- Development of Temple Town Tirupathi in the State of AP under PRASAD Scheme.

Information Technology and Communications

The Government is committed for making the state as a suitable destination for IT Services, Electronic Manufacturing /Assembling. To achieve this, Government has formed three societies' viz., e-Government authority, Electronic & IT agency, and Innovation society. Andhra Pradesh government firmly believes that technology focus will carve a way forward for the newly formed State of Andhra Pradesh.

- The ITE&C Department has identified three cities namely Vishakhapatnam, Amaravati, and Tirupati as major technology hubs.
- So far, department has been successful in engaging with 291 leads with committed investment of Rs. 8,921.4 Cr. and committed employment of 125,292 jobs across the State is as follows:

IT wings	Total Leads	Committed Investment (Rs.Crore)	Committed employment
IT	245	6,856.70	100550
Electronics	33	2043.20	23140
Fin.Tech	14	12.40	1602
Total	291	8,921.40	125292

Source: ITE&C Department

As of date, 30% of the total leads pursued by ITE&C dept. have already gone into production. The department has been successful in attracting investments from numerous noteworthy companies as follows:

Company Names	Committed Investment (Rs. Crore)	Committed Employment
ACN Healthcare	100	1,500
Tech Mahindra	50	1,000

HIGHLIGHTS

Employment in IT 2017-18 upto Dec

43987

Company Names	Committed Investment (Rs. Crore)	Committed Employment
Innominds	25	1,000
WNS Global	20	850
People Tech	100	500

Source: ITE&C Department

IT Infrastructure

To provide infrastructure which suits the global needs for setting up of IT/Electronic companies in the sunrise state of Andhra Pradesh. The Government has initiated the development of infrastructure like IT parks at Kapulapadda in Visakapatnam and in Tirupathi to attract the global players in IT industry. The proposal to develop Information Technology Investment Region in Vishakhapatnam region in an area of 40.4 Sq.Km with a total outlay of Rs.10,357Cr is under active consideration of GoI.

To facilitate development of the industry, GoAP have been creating world class IT Infrastructure of international standards suitable to the requirements of the IT industry. Some of the crucial infrastructure that is being developed includes:

i) IT Infrastructure (Plug & Play Office Space);

Government has Identifying the ready office spaces for IT companies to commence operations. The following are made operational

Vishakhapatnam: 9, 24,640 Sft which provides 11,550 Seats.

Amaravathi: 8, 27,298 Sft which provides 10,340 Seats.

Tirupati: 1, 68,250 Sft which provides 2100 Seats.

Anantapuramu : 20,000 Sft which provides 250 Seats.

Before bifurcation L&T Infocity formerly known as Medha Towers had providing 2 Lakh Sft with 2,500 seats.

ii) IT Layouts:

Mangalagiri IT Park was developed over an extent of 22 acres and it was occupied by the IT Companies and approvals are in progress to declare 35 acres of land for IT Park. Kapulauppada IT Park, Phase-1 with an extent of 158 acres is under development stage. Amaravathi IT Park with an extent of 200 acres in Ainavolu and Sakhamuru was earmarked and is under development stage.

Before bifurcation Kakinada IT SEZ in 25 Acres (Cyient operating from here in 5 years) and Vishakhapatnam: IT SEZs in Hill 1,2,3 and Ghambeeram.

iii) Electronic Manufacturing Clusters (EMC):

Government has proposed for setting up of three (3) electronic Manufacturing Clusters (EMC), of which one (1) has got final approval, one (1) has got in– Principal approval and other application is under appraisal. In addition to this, private developers are developing two (2) Electronic Manufacturing Clusters (EMC) which has got final approval from GoI.

iv) IT SEZs:

Andhra Pradesh is actively involved in setting up of IT SEZs in the state. The state has 2 SEZ dedicated to IT and is looking to set up additional 4 SEZs in Vijayawada, Visakhapatnam, Chittoor, and Anantapuramu.

IT Innovation & Skill Development:

Incubation Centres:

Government has developed 4 Incubation centers at Visakhapatnam, Kakinada, Tirupati and Anantapuramu which are operated by organizations such as NASSCOM, 7INQ Govin Capital and IC2 University of Austin Texas.

Initiatives in collaboration with Government of India post 2014:

- NIELIT (National Institute of Electronics and IT): To impart the employability to rural graduates in both IT and Electronic Sectors. GoI has sanctioned two centres in Tirupati and Srikakulam.
- SAMEER (Society for Applied Microwave Electronics Engineering and Research): GoI has sectioned the R&D Centre on Environmental Effects in Vishakhapatnam (Gambheeram) with an investment of Rs.80 crores.
- GoI has sanctioned 2,200 Seats under IBPS scheme which helps to create additional employment under

ITES sector. Given utilization of 99% under IBPS, 5,000 additional seats had been requested for further utilization. Of this, 2,300 seats have been allocated and a request has been made to GoI for allocation of remaining 2,700 seats.

Skill development:

- Skill development trainings were conducted to 15,000 ITIs/ Polytechnic students of IT/Electronics through NIELIT, GoI, which is being implemented by AP State Skill Development Corporation (APSSDC).
- International Institute of Digital Technologies (IIDT), Tirupati, a world class institute on digital technologies has been made operational earlier this year and targeted to train 12,500 people over the next 4 years in advanced digital courses. IIDT currently offers two post graduate courses in next generation technologies including Cyber Security and Business Analytics.
- 13 Academic Collaborations were made with prominent technology players from the IT industry including IBM, Oracle, SAP, Infosys, ISB, Autodesk, Microsoft, National Instruments, and DQ. Collaboration with Microsoft, National Instruments and DQ have been established in 2015-16 to impart relevant technology skills to the youth of the state. Development of IT industry are given in Table 7.10.

Table 7.10 Achievement of Software Turnover

Indicator	2015-16	2016-17	2017-18 (upto December,2017)
IT Companies established (Nos.)	246	369	487
Start-ups (Nos.)	30	186	159
EMCs approved (Nos.)	-	3	3
IT Incubation Towers Constructed (Nos.)	-	3	3
Turnover (Exports) (Rs.in Cr)	1850	395.42	246.24
Employment Created (Nos.)	24739	34930	43987

Source: IT&C department

General turn over will be 5 times to Export turn over.

AP Innovation Society

The Vision of APIS is to create a world class technology start-up ecosystem by fostering entrepreneurship and a culture of innovation which contributes to increased knowledge, wealth and employment in our society. Driving the economic development through innovation, innovative methods and products has brought a paradigm change in the Global Economic Landscape in the recent years. APIS is a first-of-its-kind organization setup by the Government of Andhra Pradesh, with a mandate to create policies to promote innovation agenda in the state and design an innovation and transformation academy.

With this vision, The Government envisages to develop "Andhra Pradesh as a destination for innovation of global repute and with a focus to enhance the quality of life of its citizens through high quality education and health care, increased productivity in agriculture and allied activities, creation of employment by promoting innovative products and above all providing Good Governance." Continuing its steady progress, the State envisions its transformation into an innovation-driven society, ranking amongst the three best states in India by 2022 (when India celebrates its 75th year of independence), the best state in India by 2029, and, a leading global investment destination by 2050.

Aim & Objective

- Creation of Innovation Policy and Agenda. Designing Innovation, Futuristic and cost-effective blueprint for the information infrastructure and systems required.
- The state of Andhra Pradesh has to take advantage of the situation to leapfrog in terms of technology and business models, Processes and procedure. The innovation required for such leapfrogging in all areas involving technologies, would be responsibility of the society.
- Promote and encourage the establishment of Innovation and Entrepreneurship culture at all universities and colleges of the State.
- To develop Innovation Centers for each department/ entity of the government.

Working Model

- Starting in right earnest, AP Innovation Society to advance innovation through a four-tier model viz. Government Tier, University Tier, Industrial Tier and Rural / Urban Tier.

- The direction is to promote innovation in universities, capture local innovation and scale it up at district level and promote innovation in governance at the apex / state level. The activities and actions being planned under each tier are such that they are expected to fetch benefits in the near/immediate term, medium term as well as long term, enabling the State to attain a leadership position as outlined in its Vision.

Achievements

- APIS has started faculty mentoring modules to develop support system to student innovators and incubators at various educational institutions. Leveraging the central government schemes Atal Tinkering Labs and Atal Incubation Centers are prioritized and 13 Atal Tinkering Labs have been setup in various schools across the state.
- iBootup Bootcamp Training sessions were conducted in 5 Engineering colleges in collaboration with iBHubs, where college students get hands-on training on IoT technologies. About 500 students from 28 colleges participated in these training sessions.
- In September 2017, APIS in partnership with Indian Innovators Association organized India International Innovation Fair 2017 in Vizag which witnessed 1500 participants from 50 Countries showcasing 500 Innovations to 15,000 unique visitors during a 3-day long event.
- APIS also setup Drone Assembly & Reverse Engineering Centre, a State-Owned Drone Corporation that manufactures a wide range of drones for multi-purpose usage like agriculture, GIS, etc. The first drone from this facility will hit the markets in January, 2018.

Technology Business Incubators

- NASSCOM in association with AP Innovation Society setup '10,000 Startup Warehouse' in the Sunrise Towers, Vizag to create a world class technology startup ecosystem in the state. Co-working space for startups to be housed for 6-month incubation period. Co-working space for entrepreneurs to use on a daily/weekly basis. A well-equipped community events space available for meet-ups & workshops.
- 21 startups from various sectors like IoT, Healthcare, agriculture, Data science, FinTech, etc, have been incubated till date creating 77 full-time jobs and 95 part-time jobs. A funding of Rs 1,05,00,000 has been raised for the startups with a revenue of Rs. 2,99,00,000 being generated till date.
- Govin Capital of Singapore is collaborating with APIS and started a pilot incubator facility in Sunrise Towers, Vizag to incubate 100 startups and nurture 1000 students as first generation technocrat entrepreneurs over the next 5 years.14 Startups have already been incubated in this facility resulting in the creation of 67 full-time jobs and 83 part-time jobs. A funding amount of Rs. 2,00,00,000 has been raised generating a revenue of Rs. 10,00,000.

Technology Business Accelerator

To create a world-class technology innovation ecosystem, APIS partnered with the Global Commercialization Group of the IC2 Institute at the University of Texas at Austin, in concert with FICCI, to setup XLr8AP Technology Business Accelerator in Tirupati. 3 Cohorts were completed till October 26, 2017 and 4th Cohort is ongoing. 124 Startups have been incubated in this facility with 90 startups graduating at the end of each of 3 cohorts. This resulted in the creation of 63 full-time jobs and 220 part-time jobs generating a revenue of Rs.57.62lakhs by raising funds of Rs.60.30lakhs.

APIS forged a partnership with prestigious the Indus Entrepreneurs (TiE), one of world's largest Angel Investors Network to start TiE Amaravati Chapter, which helps in creating access to a pool of Venture Capitalists for raising funds to invest in Startups nurturing in the State in In December 2017.

e-Procurement (www.apeprocurement.gov.in)

The key objectives of this innovation are demand aggregation, transparency, accountability, fiscal savings, standardization of procurement processes across Government entities to enhance administrative efficiency. e-Procurement System is being used in the State for all procurements above the value of Rs.10 Lakhs. The platform is extensively used for procurement works by Irrigation department, Roads and Buildings etc, Government issued orders to Go-Live of new version of e-Procurement system for all user departments and PSUs etc. of Andhra Pradesh with effect from 9th May, 2016. The new system is being used by all user departments/PSUs/ Universities /Local

bodies etc. of Government of Andhra Pradesh. Under this portal 152278 transactions processed worth Rs. 69815 crores from 02.06.2014 to 31.10.2017.

Sl. No	Year	Total Transactions	Total Value (Rs. in crores)
1	01.06.2014 to 31.03.2015	21422	4181
2	2015-2016	43055	17247
3	2016-17	51409	18174
3	01.04.2017 to 31.10.2017	36392	30213
	Total	152278	69815

Source:IT&C department

Automation Eliminated Subjectivity:

The entire e-Procurement process was designed to avoid human interface i.e., supplier and buyer interaction during pre-bidding and post bidding stages. The e-Procurement application provides automatic bid evaluation based on the evaluation parameters given to the system.

Enhanced transparency and competitiveness:

Making the eProcurement system the only channel for public notification has created a real-time procurement information center, with information on more than 320,000 tenders. The system allows cross-agency comparisons of procurement methods and prevents prearranged bidding based on corrupt relationships with potential suppliers.

Achievements

e-Procurement has secured demonstrable and significant benefits by way of cost and time savings to the Government, brought transparency and empowered the small & medium suppliers. The path breaking initiative has proved that transparency, fairness and equal opportunity to private entrepreneurs who bid for Govt. contracts, sell products or expertise to Govt. agencies will not only result in healthy competition, significant contribution to the economy but also makes significant social impact as a citizen assurance on transparent utilization of public funds. As a matter of fact, the successful implementation of this initiative by the state of Andhra Pradesh has motivated the Govt of India and several other state Governments have to embark on e-Procurement initiatives.

Challenges

Government of Andhra Pradesh e-Procurement system still faces challenges. Although the system's hardware is in place, its operating system must be stabilized, users continuously trained, content reliability enhanced, and product choices broadened. For the full effect of e-Procurement reform to be felt, its changes must be internalized, and savings in Government agencies' procurement should be reflected in their expenditure management. Engaging treasury officers in the overall procurement process from demand planning, budget planning, acquisition management, and logistics management, to final disposal-would enable agencies to prepare more accurate expenditure plans, helping ensure more predictable procurement in support of service delivery. Developing this link would require integrating the e-Procurement system with the treasury information management system to allow timely data exchange between them.

Communications Wing

New G2G AP SWAN Network (AP Broad Band Network):

Government has implemented APSWAN connecting the State Capital to all District Head Quarters (DHQs) with 34 Mbps bandwidth and connecting all DHQs with corresponding MHQs with 4 Mbps under AP Broad Band Network. The new Network is completely IP based and provides voice, data and video communications to all Government offices.

APNET/SAPNET

Presently Andhra Pradesh has 2 Channels. Channel 1 is to telecast the recorded programmes and Channel 2 for live Interact is being used for transmission of programmes of Education, Agriculture Department, Indira Kranthipatham and Police, HRD, Social Sector Programs and AP Skill Development Programs etc.

IVRS Project

ITE&C Dept established and commissioned the IVRS for robust broadcasting & feedback system - PBFT Public Broadcast and Feedback Telephony System comprising a Web-portal (https://ivrs.ap.gov.in), Unified Communication

platform for Voice & SMS, IVR dial out calls facility for measuring public satisfaction using SIP trunk technology and fine tuning policies according to the needs of the people with 24/7 customer service support, and the roll out to all the Departments is completed. Presently the system is operating with 15,000 SIP trunks (10,000 from BSNL and 5,000 from Reliance as alternate source for connectivity) with 2 Connectivity Service providers M/s.BSNL and M/s.Reliance with load balance to improve the call success rate of existing SIP based setup. Daily teleconferences and feedback surveys are being conducted on regular basis with Service Providers M/s.Web Country.

Video Conference Facility (VCF)

Video Conference System is connected with all departments and utilizing the network. Mandal level Video Conference system is procured and commissioned. Now Video Conference facilities are extended to new Interim Government Complex (IGC), Velagapudi. The Video Conference System is migrated from Hyderabad and operational from IGC, Velagapudi from last week of October, 2017.

APSCAN (Post AP Reorganisation)

Andhra Pradesh Secretariat Campus Area Network (APSCAN) is connecting all the line blocks and connecting about 5000 nodes for data and presently 2000+ nodes are operational. Apart from this, it provides Internet, Intranet, eMail, SDC Staging & DR Services. Internet Bandwidth is provided through 3 service providers.

AP State Data Centre (APSDC)

APSDC is being shared by both the States. It provides support Infrastructure for Power, (AC, UPS, and Generators etc), Network Infrastructure, Security Infrastructure, Management Infrastructure, Disaster Recovery Setup, Computer Infrastructure and Storage Infrastructure. 160 Applications from 31 departments are hosted.

e-Pragati

Andhra Pradesh has always been at the forefront of implementing e-Governance, having pioneered popular projects like CARD, eSeva, MeeSeva, e-Procurement.

The e-Pragati Authority has made a rapid progress in turning Government of Andhra Pradesh as the first completely digitally transformed State in Government of India. e-Pragati Authority has been pioneering and leading agency in changing the entire approach of government of AP operations, making government agencies more responsible, accountable, citizen centric and proactive to fulfill the desires of the citizen while ensuring that the government department are adequately equipped and facilitated with ICT tools such as online government service delivery platform, Data Analytics, Big Data, Internet of things (IoT), Machine Learning and Block chain.

The year 2016-17 has been declared as an "Year of e-Pragati" and as a part of this drive, around 24 unique in nature IT projects across all departments have been identified and planned to be implemented and rolled out, these projects will cater to more than 200 plus Citizen Centric services. These services will focus on re-engineering the existing processes to improve the efficiency and performance, reducing number of touch points for citizen to avail the services from various departments, automate most of the internal processes for government employee to focus on other pressing issues, support existing business community to flourish and facilitate new businesses venture to establish themselves in State of Andhra Pradesh.

To achieve these goals, the e-Pragati Authority is working on multiple fronts and completed a procurement process of integrated platform which will be available to all the departments. The Core platform has exhaustive features and components list which would be supported through key functionalities of multi-user and multi-layer technology compatible channels, Zero / low code platforms, data and management layers and integration layer.

The e-Pragati Authority has also completed process of installation of important components of core platform, necessary hardware infrastructure, recruiting 20+ Business Analysts and on boarding 5+ System Integrators. The teams of Business Analysts and Projects managers have already initiated their first rounds of engagements with Primary Departments.

ISB Training Program: The e-Pragati Authority signed an MoU with Indian School of Business, Hyderabad; one of the top-ranking Business Institute in the world. As part

of first program, e-Pragati Authority and ISB, Hyderabad convened "Digital Transformation in Public Governance" training program of 6 months on August 1st 2017. More than 96 high ranking officials from various government department participated in this monthly training program. Based on current schedule, all these officers will graduate in "Digital Transformation in Public Governance" course and convocation will be conducted in last week of January,2018.

Core Dashboard: The CM core dashboard will enable a single view for Hon'ble Chief Minister and Common citizen to track the progress of various government scheme across all 33 departments. The Core dashboard has 46 cards for Birds Eye View & Operational View, Tabular views for 34 cards, Links for 10 cards and Analytics view for 2 cards. The CM Dashboard 2.0 will aid the key decision makers of Government of AP to take the informed decisions with associated KRAs, KPIs and Real-Time Monitoring System.

Localization: To increase the outreach of the government online service delivery platform, the e-Pragati has undertaken a mammoth task of renovating existing government portals in the Telugu language, this project uses ANSI code which is an international standard for computer scripts. As a part of this project, the e-Pragati Authority has identified more 130+ websites for Telugu Transformation and intends to complete all these websites before 31st of March 2018. Current, the e-Pragati Authority has completed 20+ websites.

Mee-Seva

Mee-Seva currently has 403 high impact services and the project has already completed 8.5 crore transactions and most of the government departments are now on board. Now Mee-Seva centers are also providing Business Correspondent Services for various banks and achieving financial inclusion for the citizens. This is significant because of the large scale Aadhaar based DBT roll out in the country.

The convergence of services viz., interactive services, payment services through various Delivery Channels/ Kiosks helps citizens access multiple utilities. Bill payments at the same counter through credit cards/debit cards, cash, Demand Drafts and cheques for payments from January, 2017 to December 2017 were Rs.3352 crore through 493.83 lakhs transactions.

MeeKosam

The Government had directed to revamp the existing system and design a new integrated Public Grievance Redressal System. Under the proposed system, all the grievance petitions received at the CMO/Secy./HoDs/ District Collectorates, District level and Mandal level Offices would be registered, tracked and redressed on a common platform, linked to the Aadhaar No. of the petitioner to ensure proper accountability. MeeKosam system receives all the grievance petitions through the new Grievance Redressal System named as "MeeKosam" from 43 departments of our state. Meekosam live portal (www.meekosam.ap.gov.in) was launched by the Hon'ble CM on 26.05.2015 for remaining districts in AP.

Present Status: A total 108.48 lakh of grievances are registered from 02.03.15 to 31.12.17 and 81.56 lakhs were resolved.

Andhra Pradesh Information Technology Academy

The major objectives of APITA are:

a) Support capacity building initiatives of ITE&C Department.

b) Develop and offer courses in IT, Electronics and Communications in collaboration with industry.

c) Bridge the urban rural divide in producing readily employable graduates.

d) Provide conducive environment for learning through value addition programs.

e) Promote a culture of Research and Development in IT, Electronics and Communications.

f) Facilitate e-governance through oriented programs for state government employees.

g) Offer consultancy support in Capacity Building programs.

h) Collaborate with Industry, Educational and Research Institutions for the promotion and development of e-governance.

APITA has academic collaborations with Oracle Academy, IBM, Indian School of Business, National Instruments, SAP, Electronics and ICT Academy of NIT, Autodesk, Trak Invest, eSF Labs, Arjun e-Learning to offer various academic / training programs to the students of Andhra Pradesh.

During the year 2016-17, 222 colleges (135 Engineering / MCA colleges and 87 Degree colleges) in the state are registered with APITA. During the present academic year, up to 31st October 2017, 4796 students are trained in Soft skills, 2306 in Block Chain Hackathon, 2133 in Aptitude and reasoning, 701 in Animation, 588 in Oracle technologies, 292 in IBM Cloud Application, 224 in NI LabVIEW, and 163 on SAP courses. Furthermore, 106 faculty members are trained and certified by Oracle Academy in Oracle Technologies, 149 faculty members are trained in Engineering Education and Research by National Instruments, 40 faculties are trained by National Instruments in Industrial IoT and 44 faculty members in IBM Cloud Application. Under ISB Technology Entrepreneurship Program 478 students are being trained.

APITA is discussing with Unity 3D to launch the AR, VR and MR training and certification program, Mindtree for conducting Design Thinking Workshops, and Amazon Web Services to offer Cloud Computing training to the students of Andhra Pradesh. So far, 807 students got selected for various companies through the recruitment drives conducted by APITA.

Aadhaar Permanent Enrollment Centers

The Government have initiated for setting up of 811 Permanent Enrolment Centre's (PEC) in Mee Seva centers at each Mandal headquarters across the state. During the year 2017-18, 77.47 lakh enrolments done and 76.62 lakh pockets were uploaded.

CHAPTER
8
SOCIAL
INFRASTRUCTURE

Towards Knowledge economy, healthy and happy living

- Transforming the state as a knowledge economy – Commtted to achieve 100% literacy by 2019.
- To set up at least one digital class room in every government school by 2019.
- Periodic reviews to improve IMR, MMR, Anaemia among women and Malnutrition.
- 99% of births institutional. 98% children vaccinated.
- Under-5 mortality rate at 37 is better than national average stands at 39.
- First state in the country to become Open Defecation Free(ODF) in urban areas. All the 110 ULBs ODF
- Around 80% ODF in rural areas and target to become 100% ODF in 2018.
- Focus on habitations to make them covered with 55 LPCD drinking water norms
- Andhra Pradesh Drinking Water Supply Corporation to work to supply 70 LPCD drinking water with house tap connection.
- 16.80 lakh SC, ST, BC, Minorities, Kapu & EBC students benefitting under different scholarship schemes with an annual outlay of Rs 2,981 Crores.
- Chandranna Pelli Kaanuka, a Single Desk for all Marriage Related Incentive Scheme, to be implemented from 2018-19.
- Saadhikaramitra - a SHG women acting as a bridge between Government and 30-35 households in her neighbourhood to improve the service delivery of government schemes to reach the eligible beneficiaries.
- Social Security- Social Safety Nets for Poor and Vulnerable
  - o NTR Bharosa'' social security scheme- 50 lakh beneficiaries are getting pensions largest in the entire country
  - o PMJJBY-Chandranna Bima Scheme covering 2.46 crore citizens of the state providing insurance cover of Rs.5.00 lakhs
- 'Anthyodaya Scheme'- 33 Gram Panchayats of AP identified among 83 most developed Panchayats across the country by RD Ministry
- Transforming villages through MGNREGS -1628 GP Buildings, 3628 Anganwadi Buildings, 346 Mandal Buildings and 15951 km CC roads completed and 2.58 lakh farm ponds grounded during the last 3 years.

Social Infrastructure

Good economic infrastructure is a pre-requisite for sustained development. However, it is the effort that is required to push forward the social sector parameters like education, healthcare, nutrition, water supply, housing, social security and other basic minimum social services that results in a healthy ambience and happy living.

The Government of Andhra Pradesh aims to transform the state into the top three among all states and union territories by the year 2022, the 75th year of India's independence, and the most developed state by the year 2029. To achieve this the state government has adopted mission-based strategy for double-digit inclusive growth on a sustained basis with focusing on improvement of lives and providing quality services to its citizens. Social Empowerment Mission is as one of the seven missions entrusted with the responsibilities of ensuring inclusive and equity based socio-economic growth in the state.

The state should focus on improving the lives of people rather than assuming that economic growth will lead to greater well-being. The strategy would aim at addressing the needs and priorities of the poor, disadvantaged and vulnerable groups. It will also be aligned with the government's strategy on social development by taking into consideration the human development approach and the emerging priorities with respect to sustainable development goals (SDGs).

Strategic interventions of state are required to establish a healthy society. Andhra Pradesh state despite showing decent economic progress, lags behind its southern counterparts. Reduction of IMR and MMR remain critical. The state with 67% literacy with 60 % female literacy is much below the National average literacy. Efforts to be taken to compete with advanced states. Quality education is the need of the hour. 81 lakh children in the age group 5 to 16 will need quality education and smart learning methods much beyond the existing capacity of the system. Issues relating to drinking water and sanitation are to be addressed on priority.

In order to achieve the Human Development Index from current level of 0.66 to 0.9 by 2029, the State has adopted a saturation approach to provide basic services to its people. Nearly 100% households have access to electricity and LPG for cooking. 80% of the rural habitations are connected using all weather roads. The remaining habitations are targeted to be connected by 2019. Fiber Grid, the high-speed internet infrastructure, is set to connect all villages by 2018; household connections will be provided on-demand starting from 2019.

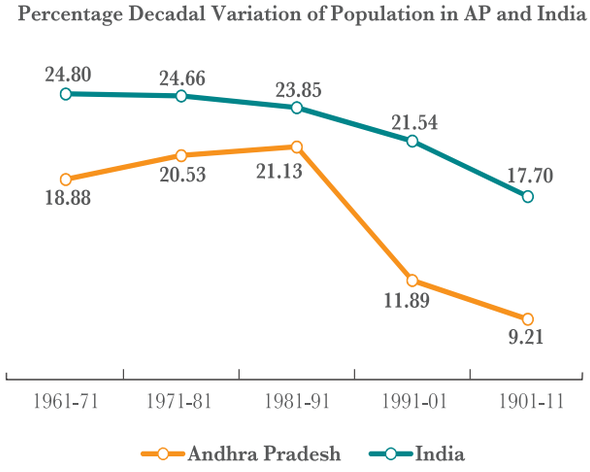
Inclusive growth to be achieved through implementation of schemes and sub plans. The state of Andhra Pradesh has been the pioneer in creating sub plan for the backward classes (BC) by providing budgetary allocation in reducing inequalities towards these groups. From the experience of SCSP and TSP the BC sub-plan needs to be planned and implemented in a more efficient and transparent way and efforts are to be taken to ensure that benefits reach the targeted group Harnessing the strength of the Self-Help Groups and to generate employment, create awareness, improve water-use efficiency and inculcate cleanliness among citizens, stands at the core of the development agenda.

The key focus areas under Social Empowerment mission include providing quality education to children, improving service delivery in public health, ensuring nutrition for all and ensuring safety of women and citizens. The mission also lays special focus on serving the weaker sections of society.

Demographic details - 2011 Population Census:

Andhra Pradesh is the tenth largest state in the Country, in terms of population. As per 2011 Census, the State accounts for 4.10% of the total population of the country. The population of Andhra Pradesh is more than doubled in the last half century from 23.29 million in 1961 to 49.58 million in 2011. Of this, 24.83 million are males and 24.75 million are females. The decadal growth of population rose from 18.88 percent during 1961-71 to 21.13 percent during 1981-91. Subsequently a significant decline was observed in the rate of growth of population and decline is even more prominent at 9.21 percent during 2001-11, lower than the All-India's growth rate of 17.70 percent. Decadal variation of population in AP and India are shown in chart 8.1.

Chart 8.1: Decadal Variation of Population in AP and India



Among the districts, East Godavari is the most populous district in the state whereas Vizianagaram accounts for the lowest population. District-wise population from 1961 to 2011 census is given in Annexure 8.1.

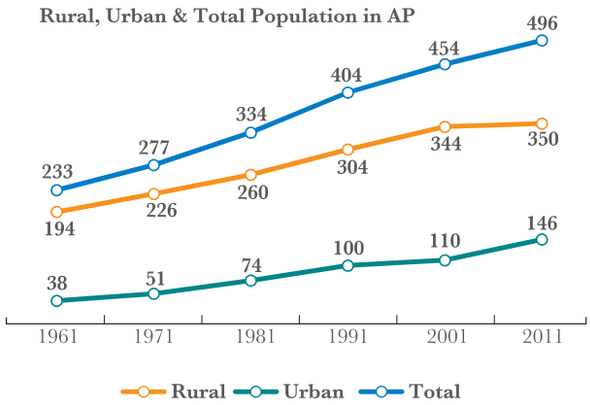
Sex Ratio

Sex ratio, the number of females per 1,000 males, has shown a declining trend in the State till 1991. The sex ratio in the state was up from 983 in 2001 to 997 in 2011 and is higher than all India figures of 943 in 2011. Sex ratio continues to be favourable in Vizianagram and Srikakulam districts. The districts of Visakhapatnam, East Godavari, West Godavari and Guntur have registered a progressive sex ratio moving from less than 1000 category to more than 1000 from 2001 to 2011. District wise population (decadal variation) and sex ratio is given in Annexure 8.2.

Density

Density of population, another important demographic indicator, is defined as per the number of persons living per sq. km. The density of population for Andhra Pradesh is 304 persons per square kilometer, as against 382 persons per square kilometer at all India level in 2011. Krishna district has the highest density at 518 while Y.S.R and Prakasam districts have the lowest population density with less than 200. District wise density of population details are given in Annexure 8.3. Details of total population in rural / urban and total are shown in chart 8.2. (rounded to nearest integer).

Chart 8.2: AP Rural / Urban & Total Population (Lakhs)



Urbanization

Urbanisation has been regarded as an important component for growth realization. The percentage of urban population to the total population in the State is 29.47 percent in 2011 as compared to 24.13 percent in 2001. Among the districts, Visakhapatnam stood first with 47.45 percent of urban population followed by Krishna district with 40.81 percent. Srikakulam with 16.16 percent of urban population followed by Prakasam with 19.56 percent are the least urbanized districts. District wise percentage of urban population to total population is given in Annexure 8.3.

Literacy

A person aged 7 years and above who can both read and write with understanding in any language is considered as literate. The literacy rate of the State is 67.35 percent in 2011 as against 62.07 percent in 2001. The literacy rate of the State is lower than the all India literacy rate at 72.98% percent. The best record in literacy so far at both the national and state levels was during the nineties. A slow growth in literacy rate was identified during the last decade at state and national levels. The decadal improvement at the national level had been not more than 8 percentage points till 1991 and the nineties witnessed an improvement of 13.8 percentage points. The literacy rate has identified an improvement of more than 8 percentage points during 2001-2011 at national level. Literacy in Andhra Pradesh increased over 37 percentage points from 29.94 percent in 1981 to 67.35 percent in 2011. In spite of this fast rate of growth in the last three decades, the literacy rate in Andhra Pradesh is still lower than the all India average. While the literacy rate of Andhra Pradesh was about three fourths of the all India level in 1961, the State has made substantial progress, especially in the last four decades. The overall literacy rate has gone up from 62.07 percent in 2001 to 67.35 percent in 2011; the male literacy rate has increased from 71.28 to 74.77 percent. Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011. West Godavari is at the top with 74.32 percent and Vizianagaram is at the lowest with 58.89 percent in 2011 among the districts. District wise details of male, female and total literacy rate from 1961 to 2011 are given in Annexure 8.4.

School Education

Over the years, efforts are being made both at the state and national levels to achieve the goal of "Education for All". As per Article 45 of the Constitution of India, Universalisation of Elementary Education is a directive principle of state policy that underlines the need to provide free and compulsory education for all children up to the age of 14 years. As per Article 21A and 93rd Constitutional Amendment 2009, Education has become a fundamental right. This article spells out the responsibility of the State for providing free and compulsory education to all children in the age group of 6 to 14 years. To make effective and meaningful implementation of this obligation, elementary education was brought under "Sarva Siksha Abhiyaan"

(SSA) to universalize elementary education. Similarly, secondary education was brought under the flagship programme "Rashtriya Madhyamik Siksha Abhiyaan" (RMSA). These two schemes aim to strengthen school education in terms of access, enrollment, retention and quality.

The Government is committed to achieve total literacy by 2019 and several schemes have been initiated for bringing about both quantitative and qualitative improvement. The department provides schooling facility to school aged population of 69.61 lakh children (Aadhhar linked enrollment).

School Information and Management System

A single portal for all information & services established and made fully functional. It received Manthan Special Mention Award under the learning & Education category among 296 entries in 9 categories from 07 SAARC countries. In 2016-17, it has also received the Silver medal of SKOCH Award.

Universal Access in School Education

The following norms in establishing schooling facilities have been laid down to achieve universal access in school education:

Primary level schools, Elementary level schools, Secondary level schools should be within 1 km, 3 km and a radius of 5 kms walkable distance of all habitations respectively.

On these parameters, our State has achieved 99% access at elementary level and 91.5% at secondary level. Primary schools and secondary schools have been started in areas, which were not served earlier. Details of type of schools and teachers are shown in Table 8.1 and management wise schools and teachers are shown in Table 8.2.

Table 8.1: Type of Schools and Teachers

Sl No	Category of School	No. of Schools	No. of Teachers
1	Primary	39605	107218
2	Primary with UP (I to VII/VIII Class)	9678	53183
3	Primary with UP, Secondary & Higher Secondary (I-XII Class)	201	2944
4	UP with Secondary , Higher Secondary (VI –XII Class)	193	1993
5	Primary with UP, Secondary (I-X Class)	2050	15273
6	UP with Secondary (VI-X Class)	10215	106246
	Total	61942	286857

Source: Commissioner of School Education (Provisional Data of U-DISE 2017 – 18)

Table 8.2: Management-wise Schools and Teachers 2016 - 17

Sl. No	Management	Schools	Teachers
1	Central Govt.	66	1402
2	State Govt.	3761	18634
3	MPP/ZPP	38551	157497
4	Municipal	2108	12377
5	Pvt.Aided	2263	9816
6	Pvt.Un-aided	15193	87131
	Total	61942	286857

Source: Commissioner of School Education (Provisional Data of U-DISE 2017-18).

Key education parameters:

Steps are being taken up for ensuring 100% **access** in Education. Strengthening existing schools, opening new Primary Schools, establishment of alternative schools and other type of educational facilities in smaller and un-served habitations are few of the strategies implemented for universalization of Elementary Education. Enrolment in all types of schools in the state during 2017-18 was 69.61 Lakh out of which 35.49 Lakh in I–V classes; 21.00 Lakh in VI-VIII classes and 13.12 Lakh in IX-X classes. In terms of percentage enrolment of children was about 50.99% in I-V

classes, 30.17 % children in VI-VIII and 18.84% in IX-X. Details of enrolment are given in the Annexure 8.5.

It has been observed that there is a problem of **retention** at different levels in enrolment of school aged group children into the schools. During 2017-18, Annual average **dropout rate** at I-V classes (Primary Level), I-VIII (Elementary Level) was 0% and 3.30% at IX-X (Secondary Level). Necessary measures have been taken to retain children into schools i.e., Badi Pilustondi Programme etc. The details of school dropout rates are given in Annexure 8.6.

A teacher is instrumental in developing knowledge, skills, attitudes and values among children at all stages of Education. It is essential to maintain an optimum **teacher-pupil ratio** to achieve the goal of universal enrolment, retention and improve the Education of children. With a view to maintain an optimum teacher-pupil ratio to achieve the goal of universal enrolment, retention and improve education of children, sustained efforts are being made to recruit teachers in all types of schools. Sustained efforts are being made by the Government to recruit teachers in all types of schools to maintain a reasonable Teacher-Pupil Ratio. Rationalized deployment of teachers, creation of new posts and massive recruitment of teachers helped overcome imbalances in demand and supply of teachers. During 2017-18, there were 1,07,208 teachers in primary schools, 53,183 in Primary with Upper Primary schools(I-VII/VIII), 2944 in Primary with Upper Primary, Secondary & Higher secondary schools (I-XII) and 1993 in Upper Primary with Secondary & Higher secondary schools (VI-XII) 15,273 in Primary with Upper Primary & Secondary schools (I-X) and 1,06,246 in Upper Primary with Secondary (VI- X).

Table 8.3: Teacher Pupil Ratio

Year	Primary	Upper Primary	High School
2014-15	26	21	26
2015-16	22	19	26
2016-17	22	19	27
2017-18	23	19	28

Source: Commissioner of School Education. (Provisional Data of U-DISE 2017 – 18)

Examination results

Performance of students at different levels of education has been conventionally considered as an important indicator for assessing efficiency of educational system. The number of students appearing and passing the S.S.C. examination at the end of secondary stage (cycle) is an important indicator. The pass percentage of students in S.S.C examinations during 2016-17 was 91.92. Details of year wise performance in S.S.C Examinations are given in Annexure 8.7.

Mid-day meal scheme

Mid Day Meal Scheme is implemented in the State for the children of classes I to X and extended to Special Training Centres (NCLP) from 2010. Model Schools are also being covered from the year 2013 – 14. The objective of the scheme is to avoid classroom hunger, to increase school enrollment, school attendance, to reduce gender gap, fostering social equality, to address malnutrition, promoting schools participation, woman empowerment. 34.57 lakh children were covered under this programme during 2017-18, out of which 17.42 lakh are in Primary including NCLP, 10.04 lakh in Upper Primary and 7.11 lakh children in High schools in the state. A flexible menu, provision of mostly rice, sambar and pulihora are the key features of the scheme and also providing three eggs per week under Mid Day Meal.

Monitoring MDM daily attendance and meals taken through SMS and mobile application and the same is linked to CM core dash board and also to GoI portal ie. Automated Monitoring System. Nearly, 86% schools attendance information is being captured in AMS. To avoid supply of underweight bags food grains are supplying through E-PoS system. Accordingly, misuse of 600 MT of rice is prevented during the year 2016-17. In the state 44,644 schools are having LPG connections, the remaining 691 schools are using fire wood and solar as fuel.

Innovative Programmes and schemes

School Health Programmes are conducting every Thursday in all districts of the state and distributing iron and folic tablets for the students from PHCs. Conducted De-worming day in all Government Schools and distributed De-worming tablets to the students.

HIGHLIGHTS

Digital Class Rooms provided in **2358** Schools

Under **Digital Classrooms** concept, DCR equipment is provided in 2358 schools including about 1500 High schools as against the target of 5000 schools. For the DCRs online and offline digital content in all subjects as per the School Education Text Books from Class I to X is being provided both in Telugu medium and English medium. The Total budget required is Rs.105 crores for 2016-17 to 2018-19. Of this, 30% budget is to be mobilized through donor support especially Non Resident Telugu community. Digital Class Rooms are also set up by leveraging the support of other projects and donors. Under Phase III in all 2773 Schools, all of which are High Schools are to be covered with Digital Class Rooms under the 70:30 funding pattern. Subsequently the focus will be on Upper Primary and then Primary Schools based on donor contributions.

Only 26 DCR schools have got Fiber Net connectivity as they are also being covered under the **Virtual classrooms** project. Remaining school's connection is being accessed offline and weekly update of usage is being done through dongles and other networks. During Hon'ble President of India's visit on 27.12.2017 Virtual classrooms are established in 25 schools successfully.

e-Hazar project is being implemented in a phased manner in all schools and School Education administrative offices. 41,536 Schools, 34.24 lakh students and 1.75 lakh teachers are covered under e-Hazar. The biometric attendance of students and teachers captured real time with Aadhaar authentication is monitored through Dashboards provided in CORE dashboard and also under reports link at www.cse.gov.in for different stake holders.

Government introduced **physical literacy** in schools ensuring provision of 6 hours per week for classes 1st to 10th. Yoga, Music, Dance (Bharatanatyam, Kuchipudi) are introduced in Schools by Government of A.P as part of the Physical literacy. The Pilot project is introduced in 50 Schools at Visakhapatnam covering 10,000 students by Tansen Institute of performing Arts with an estimated budget of Rs.4.2 Cr.

The Government has introduced a new scheme called '**Badikosta**' to provide bicycles to IX Class girl students. Under this scheme, 1.82 lakh bicycles were distributed to girl students of class IX in High Schools in all the districts covering all the managements of Government/ Zilla Parishad/ Municipal/ Aided / Model Schools.

For **improving learning levels** among low performing schools and students in partnership with Isha Foundation, J-PAL and Pratham is taken up in the schools of Chittoor, Ananthapur, Kurnool and Vizianagaram Districts. Teaching at Right Level (TaRI) programme has implemented in 1600 schools in 32 lowest performing Mandals of Anantapur District, covering 52,000 students during in 2016-17. Isha Foundation is implementing Happy classroom, Magic English and remediation programme for improving learning outcomes among slow learners in 3000 schools in Chittoor district which is being covered 1.58 lakh children as well as 14,240 teachers in 2017-18.

From 2018-19 onwards parallel **English medium sections** will be started in all model primary schools and other primary schools by up scaling every further class for the consequent further next academic years.

The State have received **Swacha Vidyalaya Puraskar** (SVP) Award for 2016-17. On All India, 172 schools are selected for National Award. Andhra Pradesh is at 2nd position by gaining 21 Awards.

Rashtriya Madhyamik Shiksha Abhiyan

"Rashtriya Madhyamik Shiksha Abhiyan" is a Centrally Sponsored Scheme and is being implemented with the sharing pattern of 60:40 (Central/State). The main objective of this scheme is to provide access to Quality Secondary Education for children in the age group of 14 to 18 years. To facilitate the quality education, a delightful learning environment is one of the factors. In RMSA under strengthening the infrastructure facilities 3205 works had sanctioned from the year 2009-10. Out of which, 1942 works are completed and remaining are in progress. Quality improvement is one of the main thrust areas of RMSA as it is committed to universalize quality education at secondary and higher secondary stages. The quality of secondary education depends upon many factors which inter-alia include suitable curriculum, learning resources, teachers, academic support, teaching-learning process, monitoring, evaluating and supervision, etc.

All Secondary Schools are provided with annual grants to schools to meet school maintenance expenditures like lab consumables Science and Mathematics kits, Electric charges, purchase of library periodicals and other items to achieve objectives of RMSA. Infrastructure strengthening

facilities were sanctioned to secondary schools and the works are at different stages. An amount of Rs.30.12 Crores have been released for 6025 Secondary schools. 884 schools have been approved out of which 171 schools are KGBVs and the rest are ZPHS, MPUPS etc. 9907 in service teachers, 1849 new teachers, 1300 HMs were trained and kalautsav are also conducted under this scheme.

Under IEDSS programme, Environment Building Programmes are conducted in 670 blocks to enhance the activities on IE children. In service Training to 7702 Teachers on special education to emphasize the class room teaching. Escort and Transport Allowances are distributed to 4000 children. As on date, stipend is distributed to 2148 girl children's. Under Girls Hostel Scheme, out of 163 Hostels 131 Hostels are completed and handed over to Principals. Of which 110 Hostels are functioning with 9,358 Children.

Vocational Education Scheme is implemented in 206 schools to enhance a pathway to employment through their development of specialized knowledge and saleable skills. There are about 25000 students are covered under the Scheme of Level-1 & 2 of previous schools and new schools.

In-Service Teacher training is a major input for improving teacher capacities and pedagogical knowledge. Good quality in-service training is expected to have a direct impact on enhancing the learning outcomes of students apart from having a significant impact on enrolment and retention of children in schools. The task of quality improvement is being pursued through quality improvement in content, process of education, re-orientation and strengthening of teacher education, especially in-service teacher training.

Teacher plays a significant role in shaping the personalities and sensitivities of the students. A teacher must generate a spirit of enquiry, exploration, analysis and critical reflection in the students. Keeping in view of the important role of teacher in developing of the students he needs to develop professionally by **building capacities and providing trainings to teachers**. Continuous professional development programmes are essential to facilitate the teachers' performance in classrooms. The training programme has completed on effective utilization of Laboratories in teaching of mathematics and science, Utilization of ICT, Digital Content, Smart Classrooms, Virtual Classrooms, QR Code Textbooks etc.

Model Schools

The Model Schools are established in EBB Mandals in Andhra Pradesh under Andhra Pradesh Secondary Education Society with classes 6th to Intermediate. The maximum student strength per school is 560 @ 80 students per class and 40 in each section. 163 Model schools in Phase – I and 109 Schools under phase II have been sanctioned. The remaining 69 Model Schools under Phase – III is under examination. The APMS Ramakuppam, Chittoor district, which was sanctioned in the Phase – III, was functioning.

Self Defence

Martial Arts Training is provided to the girl students of class VIII and IX studying in Government, Zilla Parishad and Government aided private schools through professional trainers to enable them to protect themselves to enhance their self-confidence, fearlessness among the Girl students. During 2016-17, 5122 Secondary Schools with covering about 3.89 lakh girl students under went through professional trainers and an amount of Rs.4.68 Crs are allotted for this purpose. During 2017-18, 3.88 lakh students in 5725 schools are being covered under this programme. Rs.5.16 Crs. is sanctioned for this purpose for 2017-18.

Vocational Education:

The Scheme is operated in alignment with National Skill Qualification Framework (NSQF), which establishes a system of clear horizontal and vertical educational pathways from school to higher education while providing certification of vocational skills. 206 schools covered in 2 phases to implement the scheme with 2 trades per each school. Out of 206 Vocational Education Schools, 154 Schools (126 of 2016-17 & 28 of 2017-18) are AP Model Schools, 47 APSWREIS, 4 APTWREIS and 1 APREIS Schools. The Government has implementing the Scheme in close collaboration with Andhra Pradesh State Skill Development Corporation (APSSDC) and MoU has been signed. There are 8842 students under Phase I and 6500 students in Phase II are enrolled for the 206 AP Model Schools.

Girls hostels

There are 346 Educational Backward Blocks in all 236 Girls hostels with an intake of 100 girl students are sanctioned in 3 phases for encouragement of the girl's enrolment. Unit cost per hostel in Phase-I, II, III are Rs.128.81 lakhs, Rs.194.21lakhs, 205.44 lakhs. So far 22,100 Girl Students will provide accommodation.

Providing Quality Education in Madarasas

The objective of the scheme is to encourage traditional institutions like "Madarsas" and "Makhatabs" to introduce modern subjects of Science, Mathematics, social Studies and English in their curriculum under the name of Modernizartion of Madarsas Education. Voluntary Organizations/ Societies/ Trusts which are registered under Central / State Governments and Act of Wakf Boards and which are in existence for the past 3 years.

This scheme facilitates education of minorities by strengthening school **infrastructure in Minority Institutions** (Elementary/Secondary/Senior Secondary Schools). Encourage educational facilities for girls, children with special needs and those who are most deprived educationally amongst minorities. It covers the entire country; however, preference will be given to eligible minority institutions located in district, blocks and towns having a minority population above 20%, based on available census data. The scheme "Infrastructure development for minority institutions'' focuses on extending new trends in Education to educationally backward minorities through provision of basic educational infrastructure and physical facilities in 9 areas/blocks indentified by the Government of India in 6 Districts. The scheme provides funds a maximum of Rs.50 Lakh per school for strengthening of educational infrastructure and Physical facilities

Under the Central scheme **'Improvement of Urdu education** financial support is provided to the state governments for appointing Urdu teachers / Honorarium to existing teachers for teaching Urdu.

District Institute of Education and Training

13 Teacher training institutes have been upgraded into District Institutes of Education and Training (DIETs) with an intake of 100 each under Telugu medium. In 5 DIETs, Urdu medium parallel sections are running with intake of 50 in each and in one Tamil medium section 50 intake at Karvetinagar, Chittoor District. During the year 2017-18, 767 private D.Ed. colleges are functioning with total intake of 65,650 (50/100 intake). New syllabus was introduced in D.El.Ed. Internship manual, Model question papers developed for teacher educators. Under capacity building component conducted orientation to teacher educators in both Government and private colleges. SCERT developed ALMANK for 2017-19 batch D.El.Ed course. Introduced in house project work for D.El.Ed students on reading inspiring books. 25 books were selected and decided to distribute to all DIETs by utilizing CSS funds. With the support of D.El.Ed students as field investigators conducted National Achievement Survey NAS – 2017. Conducting teleconference mode of teaching by involving teacher education and student teachers from 2017-18. Virtual class rooms also started in DIETs. Special innovative activities designed for D.El.Ed students such as TLM melas, exposure visits knowledge exchange programmes to make them as inspiring teachers.

Sarva Shiksha Abhiyan

Sarva Shiksha Abhiyan is an effort for universalization of elementary education by bridging social, regional and gender gaps with the active participation of the community in the management of schools. Government of India has enacted RTE Act 2009 to provide free and compulsory education to all the children in the age group of 6-14 years. Sharing pattern of GOI and GOAP is 60:40.

Objectives

- Enrolment of all children in the age group of 6-14 years in regular schools.
- Retaining the enrolled children till the completion of 8 years of elementary education
- Focus on elementary education of satisfactory quality with emphasis on education for life
- Bridge all gender and social category gaps at elementary education level

Important initiatives

- Civil works – Construction of school buildings, addl. classrooms, drinking water facilities etc.
- Strengthening of Mandal Resource Centers (MRC) and Cluster Resource Centers (School Complexes). Conduct of training to teachers.
- Implementation of Innovative activities for Girls' education, education of SCs & STs, Urban Deprived children, minority children and computer education for up schools.
- Interventions for Children with Special Needs.
- Provision to mainstream out of school children by opening of residential/ non residential training centers.
- Supply of 2 pairs of uniforms to all the SC, ST children, girls and BPL boys studying in Government schools in classes I to VIII every year
- Running of special residential schools for urban deprived children.
- Providing transport charges to the children of un-served Habitations.
- Learning Enhancement Programme (LEP).
- Providing of libraries to schools.
- Kasturba Gandhi Balika Vidyalayas (KGBVs).

Kasturba Gandhi Baalika Vidyalaya(KGBV)

Kasturba Gandhi Balika Vidyalayas (KGBV) are providing quality education with boarding facilities at elementary level for girls belonging predominantly to SC, ST, BC and Minorities categories in educationally backward blocks for drop out girls in low female literacy mandals. 352 KGBVs were sanctioned in educationally backward mandals in the state and all these schools were operationalized. Teaching, non-teaching staff and special officers were appointed on outsourcing basis.

Achievements 2017-18

- 255 Madarsas supported with an enrolment of 17,635 and engaged 631 vidya volunteers @ Rs.7,000/- per month.
- Implementing Student Academic Monitoring System (SAMS) in Vizianagaram, Prakasam, Kurnool districts.
- 500 Digital classrooms provided in all 352 KGBVs.
- 82,399 students of Children with Special Needs are enrolled in Government schools and also 226 Bhavitha centres established for providing therapy and educational facilities and similar activities are carried out in non Bhavitha centres in 446 Mandals at MRC/ School points. 11,062 Aides and appliances will be provided to CwSN. 792 corrective surgeries done to CwSN.
- All the 352 Kasturba Gandhi Balika Vidyalayas are functioning with an enrolment of 70,250 children.
- Trainings were given to 1.14 lakh teachers
- Teaching at Right Level (TaRL) was implemented in 1600 schools in 32 lowest performing Mandals of Anantapur District, covering 52,000 students. Being scaled up to 8000 schools in all Mandals in 2 districts – Kurnool, Vizianagaram covering 2.8 laks students. 540 Cluster Academic Coordinators to monitor the program in these three (Anantapuramu -223, Kurnool-165 and Vijayanagram-152) for improving the learning standards of Class III, IV and V children.
- Isha Foundation - Teaching skills enhancement project being implemented in 3000 schools of Kuppam program implementing in collaboration with ISHA foundation in Kuppam Constituency and also setup 100 Biometric Devices in Kuppam Constituency.
- For KGBVs the education is extended upto 10th class. The pass percentage for 10th class in March 2017 is 89%. Proposed to install CCTVs in 317 KGBVs.
- Proposed to introduce Intermediate course in 26 KGBVs in MPC, BiPC, MEC and CEC streams for the year 2018-19.
- Distributed two sets of uniforms to all the 30.14 lakh students studying classes I-VIII in government/MPP/ ZPP/Aided/Model schools and KGBVs.

Unified - District Information System for Education (U-DISE)

Government of India have taken a decision to collect information from class I to class-XII level under the name of Unified District Information system for Education (U-DISE) with December 2017 as reference date during 2017-18.

Out of school children:

Strategy	Target	Achievement
Direct enrolment in regular schools/ KGBVs/ Residential schools	28416	28416
Non-Residential Special Training Centres	19154	14536
Madarasas	21288	17632
Seasonal Hostels (Residential)	13577	10089
Residential Special Training Centres (RSTCs)	1516	656

Source: Sarva Siksha Abhyan

Imporatant programmes:

As per the Guide lines of NUEPA, **Shaalasiddhi Programme** is initiated to establish and refer to an agreed set of standards and to provide clear pathways for each school for self evaluation. All schools will be graded as per the 7 key domains prescribed by GoI. The data of 41,323 schools which includes government schools and government aided schools have been uploaded out of 43,000 Schools.

National achievement survey has been conducted for class 3, 5 and 8th students on learning outcomes in all districts of Andhra Pradesh on 13th November, 2017.

Under **Sankalapam** monitoring team is constituted for monitoring of all academic activities as well as monitaring the schools those who are lagging in academic aspects.

The **Research Studies** include, Teaching at right level, Ananda Lahari Abhyasana (ALA) and study on Digital content which are undertaken by Andhra University and S.V. University.

Enrolment of Students in Govt. Schools and Out of School Children (Provisional) shown in Table 8.4

Table 8.4 Enrolment of sudents

Class	Students
Class I	683022
I to II	708049
II to III	701997
III to IV	706027
IV to V	702254
V to VI	681669
VI to VII	679825
VII to VIII	690929
OSC	71329

Source: Sarva Siksha Abhyan

Badi Runam Thirchukundam (Persons showing gratitude to schools where they once studied): Rallies at Block/Mandal and District levels for inviting Community participation and Involvement in School Development. Positive impact observed by massive community support across the state.

Best Practices implemented for enhancing quality of education among students:

- **Mana Vooru Mana Badi (Amma Vodi)** (Enrollment Drive of 5+ Age Children): This is the programme to identify school age 5+ age children and enroll them in the schools with the help of local Anganwadis and other volunteers. A total of 1,02 lakh children enrolled in the schools during April 2017.
- **Badi Pilustondi**: "Badipilustondi" programme is the clarion call of Government of Andhra Pradesh to create awareness among people that education is the right of every child and each one of them should complete the elementary education cycle. This programme is for enrolment of school age children in the schools.
- **Journalist Awards**: AP SSA issuing awards to selected journalists under 'Dr Sarvepalli Radhakrishnan Best Educational news features Awards' for print and electronic media. This practice has shown interest and competition among journalists to contribute best features on educational innovations.

- **Dial Your SPD**: Dial your State Project Director is a platform in which the children studying in the KGBVs, Staff, Parents and the alumni shared their views and brought the issues and challenges directly to the notice of SPD by phone.
- **Position for Tableau**: The tableaux developed on 'Girl Child Education' got third position in the state level Independence Day celebrations 2017. Similarly tableaux on Badi Runam Thirchukundam, Sahaja and Bala Bima got first position during Republic day 2018.
- Badi Runam Thirchukundam (BRT) ('Giving back to school') This is the trendiest and prevailing initiative which involved Alumni, Individuals, CSR from Industries and organizations, etc., for strengthening of government schools in the state.
- **BRT Cell:** The BRT cell established in the office regularly mobilize the community through phone calls, emails, and social media. BRT Cell members approach and coordinate with the community members who wish to support schools and also document the support being received.
- **Postcard campaign:** Government schools are receiving good support from the alumni towards school development with the 'Postcard campaign' started by Central and state governments and SPD AP SSA for support from school alumni. Collectors & District Magistrates and students are writing one lakh postcards in their respective districts to the alumni.
- **Kasturi:** 'Kasturi' bi-monthly India's first Girl child's magazine not only bringing out the innate abilities of students but also improving academic, health, general knowledge among them. A bi-lingual book on 'Kasturi Poolu' KGBV students success stories is brought out.
- Microsoft dropout prediction: In collaboration with Microsoft, AZURE machine technology is being used for Dropout analysis and prediction; and for taking corrective measures.
- **Monitoring App:** A new App 'Veekshanam' was developed for effective monitoring of school functioning and implementation of SSA activities.
- **Digital Classrooms:** 500 Virtual/ smart classrooms were established in 2017-18 in addition to 250 digital classrooms in 2016-17.
- **Swachhatha App**: Swachhatha toilet sanitation monitoring App is developed by AP Command Control Centre and AP Innovation society is used for monitoring of toilet cleanliness.
- **SAMS:** Student Academic Monitoring Software (SAMS) is used to monitor academic issues like regular updating of registers and records. Started on pilot basis in 3 districts viz., Viziangaram, Prakasam and Kurnool.
- **Aadhaar seeding:** 99.3% UDISE data is seeded with Aadhaar.

Intermediate Education

A policy decision was taken in 1964 to change the structure of secondary school system and introduce 10 year study duration instead of 11 years, followed by two years intermediate education in place of higher secondary and multipurpose system. The plus two stage education was introduced in Andhra Pradesh under 10+2+3 pattern from 1969-70. The Directorate of Higher Education has been bifurcated into two Directorates, Director of Intermediate Education and Directorate of Collegiate Education from 1-11-1989.

There are 449 government junior colleges including 8 government vocational junior colleges besides 128 private Aided Junior Colleges under the administrative control of the Director of Intermediate Education.

Conventional courses in science, arts and, commerce and vocational courses are offered at intermediate in plus 2 education. 27 Vocational courses are also being offered in the field of Engineering & Technology, Agriculture, Home Science, Business & Commerce and Humanities. Details about district wise and category wise functioning junior colleges are given in Annexure 8.8.

The category-wise Junior colleges in the districts under Government are shown in Table 8.5

Table 8.5: Category wise Junior Colleges

S. No.	Category	Number
1.	Government Junior Colleges	449
2.	Private Aided Junior Colleges	128
3	Private Aided composite degree colleges offering Intermediate courses.	30
4	Private Un-Aided Junior Colleges	1445
5	Exclusively Vocational Junior Colleges (Private)	400
6	Others (APRJC, GOI, Social Welfare, Tribal Welfare, Disabled welfare, Co-operative, Railways)	467
	Total	2919

Source: Director of Intermediate Education

Enrollment of Students

Contact/Awareness Programme is conducted at district level/mandal level for identification of SSC dropouts and improvement of enrollment in government junior colleges for the academic year 2017-18. The government has fixed minimum target of 10% increase in enrollment of students in government junior colleges over last year by preparing pamphlet, success stories of the students in the government junior college concerned. Enrollment of Students in the year 2017-18 are shown in Table 8.6

Table 8.6: Enrollment of Students in the year 2016-17

2016-17	Govt. + Aided+ Other Govt.institutions		Private		Total	
	No. of Colleges	Enrolment	No. of Colleges	Enrolment	Colleges	Enrolment
1st Year	1074(449+128+30+467)	1,11,734	1845	4,11,543	2919	5,23,277
2nd Year	1074 (449+128+30+467)	98,137	1845	3,84,544	2919	4,82,681

Source: Director of Intermediate Education

Results, trainings and vocational courses

For 2nd year I.P.E March 2017, 4,29,586 candidates appeared for General Courses of which 3,30,986 students passed out whereas under Vocational courses, of the 27,895 candidates appeared, 19,370 students passed out. District wise General and Vocational courses results are given Annexure 8.9. About 3776 junior lecturers were engaged on contract basis in Government Junior Colleges during the academic year 2017-18. Government has accorded permission with certain conditions for renewal of the contract faculty for the academic year 2017–18. Orders were issued by the Government to renew the Contract Faculty working in Government Junior Colleges for the academic year 201-18. 3668 Contract Faculty have renewed for the academic year 2017-18.

1012 Junior Lecturers were trained in **'INSPIRE** Training Programme for Teachers' (Heart fulness training) at Kolakaluru on academic activities in June 2017. 364 principals were trained by Lead India 2020 Foundation on academic and institutional activities at Vijayawada.

About 3700 unemployed youth have been admitted/registered for 47 **short term vocational courses** till date during 2017-18 in 6/9/12 modules under the notification issued by the State Institute of Vocational Education wing in the Commissionerate of Intermediate Education.

Activities

Government sanctioned an amount of Rs.3.32 crores for **supply of free text books** to the Intermediate Students studying in the Government and Aided Jr. colleges. 4.09 lakh free text books were already distributed.

The Government have sanctioned an amount of Rs.6 Crores for construction of attached hostels and additional class rooms under **ST Sub Plan** 2017-18. Works were sanctioned in Tribal areas of Vizianagaram, East Godavari, West Godavari Districts. Proposals for construction of additional class rooms in Govt Jr Colleges with an estimated cost of Rs.304.15 lakhs under RIDF 23.

The Government have sanctioned an amount of Rs.4.00 Crores for construction of attached hostels and additional class rooms under **SC sub plan** 2017-18. Works were

sanctioned at Anathapuram, Guntur and E.G.Dt for construction of attached hostels for an amount of Rs.420 Lakhs and a proposal submitted to the Government for construction of 57 additional class rooms in Govt Jr colleges with an estimated cost of Rs.939.40 Lakhs under RIDF 23 .

The Government have sanctioned an amount of Rs.20 Crores for construction of buildings and additional class rooms under NABARD RIDF for the year 2017-18. An amount of Rs.12 crores incurred expenditure up to October 2017 towards the construction of buildings and additional Class rooms in Govt. Jr. colleges. 214 works were sanctioned in Govt. Jr. colleges for an amount of Rs.216.42 crores under the RIDF 18,19,20 and 22 tranches. Out of which 140 works were completed and an amount of Rs.119.37 crores has been incurred expenditure up to September 2017.

Collegiate Education

Higher Education Sector in the sunrise state of Andhra Pradesh focuses on the objective to provide quality education and transform the state into a knowledge hub. Access to meaningful learning and particularly to students hailing from marginalized sections of the society is the mission statement.

There are 147 Government degree colleges (146 Degree +1 oriental college) and 141 Private aided colleges (126 degree +15 oriental) with 2,11,670 students (84,917 GDCs+ 1,26,753 Pvt. Aided Colleges) offering UG & PG courses. Out of these, 42 are autonomous colleges (14 GDCs + 28 aided), 16 oriental colleges (1 GDC + 15 aided) & 2 are social welfare Govt. residential degree colleges offering B. Com (Hons). The department has initiated various programmes for sustaining and promoting quality of education.

Details about the number of Degree Colleges and their strength are shown in the Table 8.7.

Table 8.7 Degree Colleges and Students, 2016-17(No.)

Type	Colleges	Students
Government colleges (incl. one Oriental college)	147	84,917
Private Aided colleges (126 Degree +15 Oriental)	141	1,26,753
Total	288	2,11,670

Source: Commissionerate of Collegiate Education

District-wise colleges, strength and category wise enrolments of Government & Private aided Degree colleges during the year 2017-18 are given in Annexures 8.10 and 8.11 respectively.

Government degree colleges - Result

Results of Government degree colleges were analyzed to encourage and motivate faculty members and to create healthy competition among colleges. Average pass percentage in 2016-17 is 72.3%. 294 Lecturers secured 100% results in their subjects and 1041 Lecturers secured more than 90% pass percentage.

New Courses: Restructured courses:

Objectives:

To introduce market oriented course under CBCS through the UGC scheme of restructuring. To re-orient UG education for industry requirement. To help students find immediate employment after graduation

Features of the Courses:

The new market-oriented courses have inbuilt features like online learning, project work, hands-on experience, internship and teaching by industrial experts. They prepare students in the latest domain knowledge and skills in the work areas. Help students find immediate employment after graduation. CCE introduced 25 marked oriented courses such as Office Management & Secretarial Practice, Journalism & Mass Communication and Web Enabled Technologies, Data Science, Multimedia, Cloud Computing, Internet of things etc., from 2017-18. 350 lecturers were trained by industry experts.

Employability Enhancement: Jawaharlal Knowledge Centres (JKCs)

Training in industry needed skills, soft skills and computer-oriented skills is imparted to students through Jawahar Knowledge Centers (JKCs) at a nominal fee of Rs.500/-. However, to ensure equity, students belonging to disabled, SC and ST categories are exempted from payment of fee. Trained students are placed in companies like Infosys, Tech Mahindra, Genpact, Hetero drugs etc

The department entered MoU with **TISS**-Higher Education to train 30,000 students from 100 GDCs in the modules viz., Communication skills, Financial literacy, Youth leadership, Digital literacy, Introduction to Entrepreneurship, Analytical skills, Legal Literacy. To introduce Foundation, course in 1st year and Domain course in 2nd year.

Infrastructure development

Rastriya Uchchitar Siksha Abhyan

Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme (CSS), providing funding to eligible state higher educational institutions. The funding to states would be made based on critical appraisal of State Higher Education Plans, which would describe each state's strategy to address issues of Equity, Access and Excellence in Higher Education which is the objective of RUSA funding and the outcome will be visible through increasing GER, Quality Teaching and Relevance in Research output.

Action Plan under RUSA (Plan period 2012-17) & Beyound

- Creation of Universities by way of upgradation of existing Autonomous College at Govt Arts College, Rajahmundry @ Rs.55 Crores.
- Creation of Universities by conversion of colleges in a cluster at Kurnool @ Rs.55 Crores.
- Construction of New Model Degree colleges in six places viz., Kurnool (Atmakur), Prakasham (Yerragondapalem), West Godavari (Kamavarapukota), East Godavari (Jaggampeta), Srikakulam (Pathapatnam) and Vizianagaram (Cheepurupalli) districts are under progress @ Rs.12 Crores each.
- Upgradation of existing Degree Colleges to Model Degree Colleges in two places at Visakhapatnam (GDC, Bheemunipatnam) and Guntur (GDC, Repalle) @ Rs.4 Crores.
- Infrastructure grants to 56 Govt Degree colleges in the state @ Rs.2 Crores.
- Identification of colleges with NAAC 'A' grade for financial assistance under colleges potential for excellence in RUSA – Phase II.

Quality enhancement

The Department mandated all colleges under its administrative control to get accredited by the (NAAC). The accreditation and subsequent grading by NAAC is a credible indicator of quality of education imparted by the institutions. The department extends necessary support to colleges in the process of accreditation such as training for Principals and Coordinators of (Internal Quality Assurance Cell) IQAC in preparation of Self Study Report (SSR) for submission to NAAC. 84 Government colleges are having valid NAAC grade as on 30.11.2017.

Capacity Building Programmes for Faculty

The department provides training to Principals, Lecturers and non-teaching staff to enhance the academic, administrative skills of the staff. Lecturers working in government degree colleges are nominated by the CCE for training programmes including Refresher Courses and Orientation courses conducted by Academic Staff Colleges (ASC) of the Universities. 152 lecturers from government degree colleges were nominated to Academic Staff colleges of Andhra University, Visakapatnam, Sri Venkateshwara University, Tirupati. In addition, Faculty Development Programmes for various new market oriented/restructured courses introduced by different government degree colleges were conducted at APHRDI, Bapatla.

English Language Labs (ELL)

To improve the English communication skills, 72 English Language Labs (ELL) were established in Government Degree Colleges. ELL software was also provided to 101 Government Degree Colleges to strengthen the skills in students.

Autonomous Colleges

There were 14 Government degree colleges and 28 Private Aided degree colleges are Autonomous upto 2017-18.

MANA TV

MANA TV is ICT based learning resource for students in remote and rural areas. This is two-way audio and one way video tool where students can learn from subject experts.

Government Colleges in the State are having the facility.300 programmes were recorded through MANA TV and also conducted students' programmes involving students from SC & ST categories. MANA TV lessons / programmes are also available on the You Tube.

Awards - State Teacher, Pratibha and Yuvatarangam awards

51 awards were given to teachers on 5th September 2017 on Teachers day (University level-28, Subject wise-11, Subject wise awards to affiliating College teachers-12). The Government has instituted Pratibha awards for the students of Higher Education in recognition to their merit. 312 awards were given to the students of Degree colleges on 15th October 2017 at Vijayawada on Abdul Kalam's Birth day. Each awardee is given Merit Certificate, Medal, Cash prize of Rs.20,000/- and Electronic Tab.

District Resource Centres

District Resource Centers (DRC) were established in select colleges of all districts in the state to optimize utilization of resources by pooling and sharing among all the Government Colleges in the district. The DRCs have been conducting activities like extension lectures, seminars, academic competitions for students by sharing teacher expertise, labs, library, and other learning resources and sports infrastructural facilities.

Key Performance Indicators (KPIs)

The Degree Colleges are graded based on Key Performance Indicators like NAAC accreditation, Infrastructure facilities, Focus on Research, Faculty Training programmes, Results & Placements and the grades are posted on CM dashboard (www.core.ap.gov.in/).

Academic Audit

Academic Audit is the process of internal assessment of Institutions and faculty, introduced to promote right learning environment for students. Trained lecturers from different subjects designated as academic advisors conduct academic audit in line with NAAC criteria in the colleges allotted to them. The initiative helps Institutions to perform well in accreditation and to attain better NAAC Grades. Academic Audit of AP is identified as the Best Practice by Govt. of India.

New Initiatives

Choice Based Credit System

Andhra Pradesh is one of the few States in the entire country that implemented Choice Based Credit System (CBCS) for UG Courses in all Universities in the State.

Virtual Classrooms:

Virtual Classrooms were established in RUSA funded Colleges. District level and state level expertise lessons are telecast daily to improve access to varied teaching experiences and make classroom interactive encouraging active participation of students & teachers. Helps in reaching rural colleges and plug gaps in teaching vacancies and also facilitates video conferencing and review meetings.

AP fibre grid connectivity

Facilitates Wi-fi enabled campus covering all class rooms, staff rooms, library and hostels (100 MBPS - For wi-fi campus &10 MBPS - dedicated leased line for virtual classroom) and installation is completed in RUSA funded Govt. Degree colleges.

Learning Management System (LMS)

Learning Management System (LMS) is an important initiative of the department introduced as an Academic Reform under RUSA to showcase varied teaching strategies like video lessons, power point presentations, problem solving tasks, question banks, case studies and projects to promote active learning in students leading to effective transfer of knowledge and skills to students in and outside the classroom.200 video lessons in core subjects are available and the application will be open for use for students. The platform also motivates young teachers to develop individual teaching kits.

Establishment of Digital Classrooms in 56 RUSA Colleges is in progress 10 MBPS dedicated leased line will be exclusively used for LMS through Digital class rooms

Biometric attendance system:

Adhar based biometric attendance was implemented for staff in all Degree colleges and from July 2017 it was implemented for students and staff of 56 RUSA Colleges.

e-Office: 100% implementation e office in RJDCES and Colleges.

Extra Curricular & Extension Activities

Women Empowerment Cell (WEC) Women Empowerment Cells were established in all Govt. Degree Colleges and Aided Degree Colleges to protect and empower girl students in social, economic and political terms as Women Empowerment is the core part of any development strategy. The Principals and WEC Coordinators in 13 identified Govt. Degree Colleges monitor the functioning of WEC activities in Colleges in respective districts.

"Anti Ragging Committees" are established in all Government and Private Aided Degree Colleges with Senior staff members, students and parents to prevent ragging in colleges. A Toll-free number (1800-425-5314) to help students against ragging.

Navanirmana Deeksha: 2822 students and 770 staff from 76 colleges were participated in the state function and conducted activities like debates, essay competitions and cultural programmes and developmental initiatives.

Vanam Manam - "Karthika Vanamahotsavam"

The Government has taken up the forestation drive under the rubric "Vänam Manam". In all Government & Private Aided Degree Colleges in the state conducted Karthika Vanamahotsavam" celebrations from 04.11.2017 to 10.11.2017. Under this event, Saplings were planted and also Debates, Essay Competitions and Awareness programs were conducted.

Students are encouraged to participate in planting activities to help the Government achieve tree cover over 50% of the total geographical area of the state by 2029. As per the directions of the Government Forest department, 59 colleges involved in the plantation programme effectively by planting nearly 11,814 plants in and around the College premises (i.e., in public areas also) by the students and Staff of all Degree Colleges in the State.

ODF (Open defecation Free)

The Government focuses on Swachha Andhra Pradesh Mission with particular stress on achieving complete Open Defecation Free by 31st Mar'2018. All NSS units functioning in degree colleges were involved in the programme for the achievement of complete ODF in the adopted villages. Every first & third Saturday of the month, the registered students along with NSS Program Officers conducted survey in adopted villages. A mobile App was developed in association with Swachha Andhra Corporation for uploading the survey details. 4610 students were participated from 157 colleges in 417 adopted villages.

Disaster Management Training

Disaster Management Trainings were given to students in degree colleges to enhance capacities of young people to take leadership, to help others and contribute towards nation building.

Conducted 3-day training program in collaboration with IRCS & Youth Services Department in 129 Degree colleges involving 5919 students. The training modules are First Aid, Fire Safety, Rescue operations and WASH – water and Sanitation of Health. Nine (09) Associate NCC Officers from Collegiate Education underwent 4-day training program on Disaster Management at National Institute of Disaster Management in New Delhi from 28.08.2017 to 01.09.2017.

Technical Education

Aim of the dept.is to improve ranking at All India level by enhancing the quality of education in our Polytechnics and increase the number of students who join Polytechnic education.

Our Mission

- Teaching and Learning Suiting Industry needs
- Interaction with Industry for upgrading Courses
- Modernization of Laboratories matching Industry skills-set
- Revision of Curriculum every five years
- Making learning self – targeting for students in need of immediate supervisory technical jobs.
- Accreditation from NBA for Government Polytechnics

Basic Information of the Department of Technical Education

Government Polytechnics	83
Aided Polytechnics	02
Pvt. Polytechnics	72
II Shift in Engineering Colleges	157
Total	314

Courses Offered

- 3 Year Diploma courses are offered in 20 branches of Engineering & Non- Engineering.
- 3 ½ year Sandwich Diploma courses are offered in 5 branches of Engineering.
- 2 Year Diploma course in Pharmacy is offered in 8 GPTs with an intake of 320 and in 11 Private Institutions with an intake of 805.

Admission in Polytechnics of AP- 2017-18

Type	No of Poly-technics	Sanctioned strength	Enrolment	Vacancy	Percentage of enrolment
Government	83	16135	12426	3709	77.01
Private Aided	2	275	275	00	100
Private	229	65828	29910	35918	45.44
TOTAL	314	82238	42610	39628	51.81

Skill Development Activities

- 41 Skill Development Centers have been established in Polytechnics across the State. Technical courses that supplement regular Diploma Courses are offered. 'Polyskills' – a general communication and soft skills training course is offered to Students of all Branches nearly 13 and 172 students were trained in these centers in the last three years.
- 70 Government Polytechnics chosen to have Cisco Academies. Course content of Cisco has been incorporated into the Polytechnic ECE and Computers Diploma courses. Cisco trained staff of Polytechnics in two phases to enable them to run the courses effectively. Students to get 'Certificate from Cisco' along with Diploma Certificate. 4932 students have registered in 56 Cisco Academies started in Polytechnics during the year 2017-18 upto October 2017.

New Proposals

Establishment of Vocational Education and Training Institutions

To set up 4 Vocational Education & Training Institutions in Government Polytechnics at Anantapur, Tirupati, Guntur and Visakhapatnam respectively to draw students from in and around these Districts.

Objectives of the programme is to

- Reduce the mismatch between the demand and supply of skilled man-power.
- Prepare students for identified vocations with an emphasis on development of attitudes, knowledge, and skills for entrepreneurship and self-employment.
- Provide opportunities to fulfill the needs of women, rural and tribal students and the deprived sections of society.
- Provide residential & nonresidential training for candidates from interior & backward areas and also locals from nearby areas.

Infrastructure Requirements

The minimum land requirement is 2 to 5 acres per Vocational Education & Training Institution. Each Vocational Education & Training Institution will have an administrative Block with 8 classrooms, 2 workshop sheds, and 100 bedded residential accommodation. About 200 students can be enrolled for 4 Programmes at a time.

Enrollment in PMKVY –TI- 2017-18

There is a tremendous growth in the industrial sector in India. Studies say that India will have youth in the age group of 18 – 25 years @ 54 % of the population by 2029. It is against this backdrop that mission mode projects like 'Pradhan Mantri Kaushal Vikas Yojana' (PMKVY) etc., are initiated to bridge the gap between Industry needs and output from the Educational Institutions. PMKVY is implemented through AICTE approved Technical Institutes and Polytechnics which are willing to run Skill Development Program using existing infrastructure for running technical skill based courses for the academic year 2017-18 and selected Institutions may run certificate courses "NSQP".

18 Government Polytechnics @ 81 courses with an intake of 1890, 7 Private Polytechnics have applied @ 97 Courses with an intake of 2595 and 55 Engineering Colleges @ 308 Courses with an intake of 7405 have applied for PMKVY.

Institutional and Infrastructure Development

With regards to capital work in government polytechnics, out of 83 Polytechnics 81 having land and other 2 GPs

(GPT, Chodavaram, VSP Dist, and GPT, Aluru, Kurnool – (Private land donation in process)) land is under process. Out of 83 Polytechnics 62 having buildings and remaining 21 are under process.

Tender have been called for **modernization of 8 laboratories** namely, 1. Automobile servicing and reconditioning laboratory, 2. I.C Engines testing and vehicle diagnosing laboratory, 3. Advanced communication systems & networking lab (including computers and Lan), 4. Electrical machines laboratory, 5 Electrical wiring laboratory, 6. Power electronics & plc laboratory, 7. Metal casting lab, 8.CAD lab (Computers, LAN, CAD Software).

New Initiatives for Digitalization

For biometrics in polytechnics, 50594 students and 4890 staff were registered @ 149 Polytechnics (Govt., Aided, Private). Piloting at GPT, Vijayawada for integrated Attendance Management System (iAMS) for testing and trouble - shooting is in progress. Students registered in' Janmabhumi. DSK (Digital Signature Key) Registration in 261 Polytechnics were completed. 305 Renewal admissions, 249 Fresh admissions, 57 Renewal biometric, 7 Fresh biometric and 304 Student confirmations are under process.

Enterprise Resource Planning (ERP) for student data will be completed in 3 months and reflected in CORE Dash Board after analytics are received. Learning Management System is being introduced (Video Lectures, Course Material and handouts for students and Teaching Strategies for Staff). 63 Polytechnics having fiber net services and 20 are under process.

Other Initiatives

Curriculum Revision (C 16)

Revised syllabi were implemented from 2016- 17 taking suggestions from industry after conducting 'Industry Institute Interaction Meet' (IIIM). 'Industrial Training' made compulsory in C 16.

Reviewing Pedagogy

Preparing e-Lessons for all subjects (Theory and Practicals), Included videos / clips / diagrams / animations/ live- demos. Enabling 'hands on experience' through 'Industrial Training' made compulsory.

Modernizing Laboratories

For revitalizing and enhancing the quality of practical training in the Polytechnics the following was taken up:

- Online lab audit to remove obsolescence and gain uniformity across all Polytechnics was done
- Identifying Lab wise 'new experiments' and including them in syllabi as suggested by Industry experts was taken up.
- Identifying IT tools for each practical subject of all branches completed.
- Preparing Lab manuals/handbooks as per Curriculum C–16 in collaboration with NITTTR, Vijayawada is going on.

Faculty Training for C 16

- Conducted 57 training programmes on C-16 in September 2017 and 641 faculty trained by NITTTR, Chennai
- 4 induction training programmes were conducted and 130 staff trained at NITTTR, Chennai
- 90 Electrical Engineering staff were trained on MAT lab in 3 programmes.
- 33 Mechanical Engineering staff members were trained in NC Plot

Poly Tech fest 2017-18 (District Levels and State Level)

In consonance with the vision of 'Make in India' initiative and in line with the vision of the Hon'ble Chief Minister, the Government wishes to empower the students with a scientific temperament and innovative spirit to address societal problems. Conducting first time in Polytechnics.1851 online applications were received from 13 Districts for the branches of Electrical, Mechanical, Electronics and Civil etc.

Achievements:

- Conducted Industrial Training for six months during the final year on Curriculum C 16
- A bi- annual 'Journal of Polytechnics of Andhra Pradesh' – JPAP launched.

- Orders issued by Government for Skill Development, Entrepreneurship & Innovation (Skills) Department, the Government in collaboration with Siemens has selected 7 (seven) Polytechnics to have TSDIs.

Major Achievements of the Department

- Establishment of 5 National level institutions viz; IIT Tirupati, IISER Tirupati, IIM Visakhapatnam, NIT Tadepalligudem, IIIT Kurnool.
- Construction of buildings for new Government Polytechnics with NABARD- RIDF funds to a tune of Rs 27.06 Cr (5 grounded and 4 at tender stage).
- Under AICTE-UKIERI Collaboration, (3) AP Polytechnics worked jointly with UK colleges.

Goals for the Upcoming Years

Establishing Digital Classrooms

- To establish digital classrooms in all the Government Polytechnics and identified 215 classrooms for converting into Digital classrooms in 61 Govt. Polytechnics
- Proposed 1 studio at Guntur to transmit live Lectures.
- Processing with fiber Grid to get 100 mbps leased line to have internet connectivity and receive uninterrupted lectures in virtual Classrooms
- Scheduling of content delivery from centralized server to local servers placed in different Polytechnics.

Accreditation of GPTs by NBA

12 Polytechnics are shortlisted and called for submission of 'pre-qualifiers'application for NBA from these Polytechnics.

Family Welfare

Family Welfare department provides maternal health care, child health care and family welfare services through 7458 Sub-centers, 1147 Primary Health Centers, 193 Community Health Centers, 31 Area Hospitals, 8 District Hospitals, 3 Mother and Child Health Centres and 11 Teaching hospitals, apart from these 73 Urban Family Welfare Centers, 48 Post Partum Units and 222 (e)-UPHCs.

The estimated Crude Birth rate, Crude Death rate and Infant Mortality Rates for the year, 2016 in the state are 16.4, 6.8 and 34 respectively while it is 20.4, 6.4 and 34 for All India (as per Sample Registration System, bulletin September 2017). The Male and Female expected life at birth in the AP including Telangana State is 68.4 and 72.1 respectively as against the All India figures of 68.8 and 71.1 in (2016-20). Maternal Mortality Ratio (MMR) is defined as the proportion of maternal deaths per 1,00,000 live births reported, which is 92 in the combined state as against 167 in All India (2011-13) as per the latest Sample Registration System results.

Demographic Goals

The Goals fixed for State under Infant Mortality Rate, Maternal Mortality Ratio, Total Fertility Rate are <25, <80 and 1.8 respectively. Through Implementation of various planned departmental programmes in a structured process over the years has culminated in achievement of the set demographic goals in the following manner. Status of Achievement in Demographic Goals in AP are shown in Table 8.8.

Table-8.8: Status of Achievement in Demographic Goals – AP

S. No	Name of the Indicator	Goal	Present Status		Source
			AP	India	
1	Maternal Mortality Ratio (MMR) (combined)	<80	92	167	SRS 2011-13
2	Infant Mortality Rate (IMR)	<25	34	34	SRS 2016
3	Under 5 Mortality Rate (U5MR)	<30	37	39	SRS 2016
4	Total Fertility Rate (TFR)	1.8	1.7	2.3	SRS 2016
5	Crude Birth Rate (CBR)	-	16.4	20.4	SRS 2016
6	Crude Death Rate (CDR)	-	6.8	6.4	SRS 2016
7	Adult Sex Ratio (ASR) (Combined)	-	996	943	Census 2011
8	Child Sex Ratio (CSR) (Combined)	-	944	918	Census 2011

Maternal Health Care Services

In Andhra Pradesh, Maternal Health Care Services are being provided to pregnant woman by implementing the following schemes/ interventions:

a. Accredited Social Health Activist (ASHA): 38755 ASHAs are working against the sanctioned strength 39009 in Rural Areas. Similarly, 2502 ASHAs are working in Urban area as against the sanctioned strength of 2660.

b. Comprehensive Emergency Obstetric and Neonatal Care Services: 90 CEMONC centers were established in selected First Referral Units (CHCs/AHs/DHs) in the State.

c. Blood Bank and Blood Storage Centres: 151 Blood Banks, 86 blood component separation units and 56 Blood Storage Centers are functioning in the state. 3.03 lakh blood units were collected, and 2.26 lakh blood units were collected voluntarily between April-2017 to October-2017. 13 Blood Collection and Transportation Vehicles (BCTVs) have procured from NHM funds. 1652 blood donation camps were conducted during the above period. 41 more blood storage centers are in process of establishment under NHM. Two Blood Components suppuration units are being established at RIMS Ongole and District Hospital Eluru.

d. 24-hours Mother & Child Health Centre: 451 MCH centres are functioning in 24 X7. 23628 deliveries conducted by 24x7 PHCs from April to October 2017.

e. Janani Suraksha Yojana: under this scheme 1.10 lakh were benefitted during 2017-18 (upto October 2017)

f. Village Health and Nutrition Day Centres: under this scheme 2.96 lakh VHNDs conducted during 2017-18 (upto October 2017).

g. Janani Sishu Suraksha Karyakram: Under this scheme PWs are availed free entitlements i.e., 1.56 lakh persons availed drugs and consumables,1.51 lakh availed free diet, 1.60 lakh availed free diagnostics, and 0.08 lakh availed free blood during 2017-18 (upto October 2017). "Talli Bidda" ambulance service has introduced for drop back services.

h. Maternal Death Review: Under this scheme 427 Maternal Death cases were registered.

Other Initiatives

- Web portal for tracking mothers and children – 4.34 lakh mothers and 3.78 lakh children were registered during 2017-18(up to October 2017).
- Mother and Child Health Cards provided for every registered pregnant woman. Birth certificates are also included in this card.
- Adolescent Reproductive and Sexual Health (ARSH): The activities include promotive, preventive, curative and referral services. About 409 Adolescent Friendly Health Clinics were established throughout Andhra Pradesh.

Table 8.9 Progress under Key Performance Indicators under Mother Care Services.

(No. in lakhs)

S. No.	Indicator	2016-17	2017-18 (Apr to Oct)
1	ANC Reg.	8.42	4.58
2	High Risk PW	1.23	0.71
3	ANC 4 Checkups	7.30	4.30
4	Deliveries Transported through 108	2.42	1.49
5	Govt. Institutional Del.	3.24	1.94
6	Low Birth Weight (<2.5 Kgs)	0.21	0.25
7	Breast Feeding within 1Hr	6.75	3.85
8	Post Natal Checkups	6.42	2.21

Child Health Care Services

26 Special New Born Care Units (SNCUs), 18 Nutrition Rehabilitation Centres, 95 Newborn Stabilization Units (NBSUs) and 789 New Born Care Corners (NBCCs) are established in the state to reduce Infant Mortality Rate (IMR) by strengthening neo-natal care services. 21 centres will have 20 bedded facilities in district hospitals and teaching hospitals and five will have 10 bedded facilities in area hospitals/community health centres.

Child Immunization

This is an ongoing programme with time to time reviews, reorientation trainings and introduction of new vaccines. A full Immunization (Children below 1 yr.) Coverage 91.12% - consistently in the past 3 yrs and complete immunization (Children of 2 to 5 Yrs) 75.65% was the achieved so far. Special efforts to bring in children of vulnerable groups for immunization coverage are in place and ongoing, through meticulous RI plans – Mission Indra dhanush and Intensified Mission Indra dhanush.

Rashtriya Bala Swasthya Karyakram

The RBSK programme program is broadly aimed at screening children for 4ds (defects at birth, childhood diseases defections and development delays) and providing treatment with early intervention. To provide the referral treatment to school children 16 DEIC (District Early Intervention Centres) are also established to provide comprehensive treatment. The children will be screened for health problems under the program vitamin-A supplementation, bi-annual de-worming and referral services to higher medical institutions for better treatment. Achievements of Rashtriya Bal Swasthya Karyakram Programme are shown in Table 8.10.

Table 8.10. Achievements of Rashtriya Bal Swasthya Karyakram

Intervention	2016-17	2017-18 (upto October 2017
Schools Screening	46043	47518
Screening Children (in lakh Nos)	44.12	28.98
Children Treated by PHC/ UHC MOs team (in lakh Nos)	4.23	2.22
Referral to higher centres (in lakh Nos)	1.65	1.31
Treated Surgical. a) Aarogyasree & b) Non Aarogyasree.	15141	9555
Eye Screening (in lakh Nos)	1.62	6.52
Spectacles Distributed (in lakh Nos)	0.35	0.04
Albendazole Tabs (in lakh Nos)	140.89	71.92
Iron Folic Acid Tabs (Big & Small) (in lakh Nos)	1917.04	1031.62
District Early Intervention Centre	16	16

Source: Family Welfare department

Rota Virus Vaccine

Introduced in to the RI schedule of the state, address the problem of Diarrhoea in children due to virus. Given in a 3 doses schedule at 6th, 10th & 14th week after birth, the % of coverage is 77,75 &75 respectively.

Inactivated Poliomyelitis Vaccine

To continue the Polio free status, as a part of end game strategy against Polio, the State has switched to bOPV (bi-valent Oral Polio Vaccine) and introduced inactivated polio myelitis vaccine in to the RI schedule of the state. Given in a 2 doses schedule at 6th & 14th week after birth and covered 73% & 68% respectively.

Family Welfare Services

World Population Day is celebrated every year on 11th July.

a. Government is providing family planning incentives as compensation towards wage loss an amount of Rs.600/- is paid to Tubectomy acceptors belonging to BPL, SC and ST families and Rs.250/- to other Tubectomy acceptors. Similarly, Rs.1100/- is paid to the Male Sterilization (Vasectomy) acceptors belonging to all categories

b. Medical Termination of Pregnancy Services - The objective of the scheme is to provide MTP services to eligible couples for termination of unwanted pregnancies. These services are being provided at all Government hospitals in the state. 2,541 patients during 2016-17 and 1,821 patients in 2017-18 (upto October 2017) benefited under this scheme.

c. Family Planning Insurance Scheme-. Under the scheme, Rs.2.00 lakhs is given after death of an acceptor due to sterilization operation within 7 days from the date of discharge from the hospital, Rs.50,000 for such occurrence between 8 to 30 days, Rs.30,000 for sterilization failure and a maximum of Rs.25,000 as expenses for treatment of medical complication due to sterilization operation. 5 persons were claimed FP Insurance (upto October 2017).

Urban Slum Health Services

To provide preventive, promotive and curative services to people living in urban slum areas. There are 193 Urban Health centres functioning in the state through NGOs with State government funds. Each urban health centre covers 15,000 to 20,000 people in slum areas.

All the National Programmes are being implemented in e-UPHCs. All the services given to the patients are being captured through online real time software for transparency and efficiency and is reflected on CMs CORE dash board on real time basis at http://www.euphc-ap-gov.in/. ASHAs and Anganwadi workers during UHNDs will educate mothers on health and nutritional activities.

Programme Efficiency Indicators for e-UPHCs:

- Percentage of the urban population using the e-UPHC Programme to the total notified slum urban population.
- Percentage of all laboratory tests ordered by physicians but not completed at e-UPHC to total laboratory tests ordered
- Percentage of Tele-consultations that were interrupted due to technical fault as a percentage of all Tele-consultations
- Percentage of out patients who used Tele-consultancy of the total outpatients
- Percentage lab test for which the report was received within defined TAT to total lab tests conducted in e-UPHC.
- Percentage of drug prescriptions in e-Aushadhi Pharmacy to total prescriptions ordered in e-UPHC

Tribal Health Services

Many interventions are implemented to improve the delivery of effective, accessible and quality health services to the tribal citizens living in the agency areas in the state.

New activities taken up to improve the health care in tribal areas:

- The Drugs available in PHCs, CHCs and AHs increased with respect to baseline data to 160, 249 and 270 respectively and free flow of drugs in tribal areas.
- The number of Diagnostic tests available in PHC's are increased from 7 to 11 on outsourcing duly including Thyroid profile, Liver function test etc. and there by increased the total diagnostic tests to 23 (12 in house and 11 outsourcing). CHC's and AH's shall have 21 and 42 tests done on outsourcing in addition to the 19 tests done in house.
- 15 additional Chandranna Sanchara Chikitsa services at shandies (5 in Paderu, 3 each in Parvathipuram, Rampachodavaram, two in Seetampeta and one each in Chintoor and KR Puram) in tribal areas depending on the density of participation with Rs 437 lakhs.
- In addition to the 108 services, special ambulances, 122 feeder ambulances on PPP mode in tribal areas for transporting the patients from the in accessible areas will be made available.
- 21 mini SNCUs in 18 CHCs and 3 AHs, so that targeted care can be provided to sick new born and to reduce IMR in tribal areas with Rs 1260 lakhs expenditure.
- In remote and inaccessible areas (habitations located at more than 3km away from approach road,) 40 sub centres (20 in Paderu and 10 each in Rampachodavaram and Parvathipuram) shall be converted as e sub centres with telemedicine facility and drug vending machines with Rs. 160 lakhs.
- All 26 CHCs and AHs in tribal areas are being modernized equipment with Rs. 500 lakhs.
- All 153 PHCs in tribal areas are to be converted in to 24X7 operational in ITDA's with 604 additional manpower for round the clock services in primary health care level in tribal areas
- All the vacancies in the tribal areas were filled with 17 Medical Officers, 66 staff nurses, 188 ANMs, 41 MPHA (M), 67 pharmacists and 2652 Community Health workers.
- To prevent vector borne diseases, 10.06 lakh LLINs were distributed in tribal areas for the benefit of the tribal families.
- Each habitation in tribal areas permitted with Community Health workers relaxing the 1000 population norm to provide habitation level health services
- The functioning and availability of the services in the tribal areas to ascertain the accountability among the various stake holders of the tribal health and development, an accountability frame work designed and a web application was designed and integrated to the CORE.

Facilities and Community involvement:

Government sanctioned and constructed 31 **birth waiting homes** in tribal areas of 7 ITDAs to increase institutional deliveries and to reduce MMR and IMR. A policy was evolved to provide complete nutrition and peri-

natal care to the pregnant women who use birth waiting home and their attendants. To prevent female feticide and to improve female sex ratio. So far 2848 Nursing Homes/ Hospitals/**Laboratories and Diagnostic Centers** were registered in the state under PC&PNDT Act. Multi Member Appropriate Authority and Advisory Committees were constituted at State Level, District level and Sub district level.

Community engagement to improve health services in the periphery through Village Health and Sanitation Committee.13119 VHSCs formed. An amount of Rs.10,000/- given to each VHSC every year, for ensuring optimal use of health service in the village, maintaining quality health services and to prevent occurrence of epidemics in the villages.

Special Initiatives

The state is implementing emergency transportation to aid patients in health emergencies, fixed day health services to converge services in each rural habitation for identification, diagnosis, treatment, record keeping and referral of high risk cases and health information help line to provide health advice and health counseling to public.

a. Emergency Health Transportation Scheme

433 ambulances with trained technical staff are available 24 hours /365 days through 108 - toll-free telephone numbers were made operational to cover the entire State. 5.52 lakh patients were transported under the scheme during 2016 and 3.50 lakh patients transported till Oct. 2017.

b. Health Information Helpline

For comprehensive management of issues related to pregnant women, Government initiated process for establishment of 102 call centres. 9.61 lakhs pregnant women including 1.44 lakhs High Risk Pregnant Women and 8.42 lakhs infants were benefited.

Details of achievements of Family Welfare Programme and immunization are given in Annexure 8.12 .

New health Initiatives

To decrease Out of Pocket Expenditure (OPE) of the public, the government has taken up the following new initiatives.

N.T.R. Vaidya Pariksha- Free clinical laboratory services

It is endeavour of the Government to provide free essential laboratory investigations to all the patients visiting public Health Facilities. Government has adopted the national Health Mission mandate of providing 19 free investigations in PHCs, 40 in CHCs, 62 tests in Area and District hospitals.

Out of the 19 tests assured at PHC level 12 tests which are high volume and low cost will be conducted house laboratory by the Technician of the Government. Only 7 tests at Rural PHCs and 11 Tests at Tribal PHCs which are in low volumes and high cost are outsourced to the agency. On the same lines 19 out of 40 laboratory investigations assured in a CHC will be carried out by Government Lab Technician in house and the remaining tests are outsourced. Similarly, 22 out of 62 tests assured at Area and District Hospitals will be conducted in house laboratory and the remaining tests were outsourced to the agency.

Under this scheme all the patients visiting 1156 PHCs, 193 CHCs, 31 Area Hospitals and 8 Districts hospitals in all the 13 districts of state including Tribal and hard to reach areas. So far 45.34 lakhs samples collected, and 131.14 lakhs free lab tests done during the year 2017 (till 15th Nov).

Free Tele Radiology Services

It is endeavor of the Government to provide Tele Radiology Services to all the patients visiting and prescribed by a doctor in all the CHCs, Area and District Hospitals across the State. The above initiative will facilitate the State of Andhra Pradesh to get Tele-Radiology interfaced till CHC level and would be second state in country to do so. 7.78 lakhs under Free X-Ray services, 4.11 lakhs under X-Rays, 60,031 under Free CT-Scan services and 43,732 under CT Scans were benefitted during the year 2017-18 up to Nov.2017.

HIGHLIGHTS

NTR Baby Kits Distributed

1.90 Lakh

Free Dialysis

The Government have established 18 Free Dialysis centers in the state. During the year 2017-18, 1931cases reported for dialysis out of which 1318 cases are presently active and 1 lakh sessions conducted so far. Government is providing Rs.2500/-per month as pension to patients who enrolled for dialysis in Govt. Hospitals.

Bio Medical Equipment Maintenance Programme

Current dysfunctional rate is 28% for equipment inventory of Rs.480 Crores in the state. An initiative for maintenance of equipment of all equipment across all the hospitals hass been takenup with NHM support.

Thalli Bidda Express

Reduction of Maternal Mortality Ratio and Infant Mortality Rates is the High Priority Area for the Government. Providing referral transport to the pregnant women is one of the interventions for reduction of MMR. To ensure provision of drop back service to every pregnant woman from hospital till home a dedicated fleet of 279 vehicles are positioned. So far 2.57 lakh mothers have utilized this service.

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

The Government of India has launched PMSMA to provide quality ANC and also detection, referral, treatment & follow up of High Risk pregnancies and women having complications. Under this initiative at least one Antenatal Checkup will be provided to the pregnant woman by a Doctor / Gynecologist during the 2nd & 3rd trimester of pregnancy on the 9th day of every month to ensure that no High Risk pregnancy goes undetected. This is in addition to the three (3) ANC checkups being conducted by ANMs / Staff Nurses.

NTR Baby Kits

The main aim of the NTR Baby Kits to reduce the Infant Mortality Rate (IMR) and reduce infection rate in mother and baby. It is also motivating the pregnant woman for their safety delivery in Government Hospitals only. The NTR baby kits helps to reduce infections of the Mother and Baby. A total of 1.90 lakh baby kits were distributed in the state upto October 2017.

Dr. NTR Vaidya Seva

Dr.NTR Vaidya Seva' scheme counts to be one of the pioneers in terms of achieving equity and providing accountable and evidence-based good-quality health-care services in the state to assist poor families from catastrophic health expenditure. The scheme is a unique PPP model in the field of Health, tailor made to the health needs of poor patients and provides end-to-end cashless services for identified diseases under secondary and tertiary care through a network of service providers from Government and private sector.

The objective of the scheme is to improve equity of access to BPL families to quality tertiary medical care both by strengthening the Public Hospital infrastructure as well as through purchase of quality private medical services to provide financial support for catastrophic health needs. The treatment of diseases shall be by way of hospitalization and surgeries or therapies through an identified Network of Health Care Providers.

In order to facilitate effective implementation of the Scheme, the State Government set up an independent Trust "Dr.NTR Vaidya Seva Trust", which, in consultation with the specialists in the field of healthcare, runs the Dr.NTR Vaidya Seva Scheme.

Network hospitals - service providers

A health care provider shall be a hospital or nursing home in the state both from public and private sector established for indoor medical care and treatment of disease and injuries and should be registered under Andhra Pradesh Private Allopathic Medical Establishments (Registration & Regulation) Act and Pre-Conception and Pre-Natal Diagnostic Techniques Act (wherever applicable).

District administration- mobilization

District level monitoring committees implementing the scheme through regular review meetings and also help mobilize patients by encouraging them to attend camps, conducting awareness campaigns through people's representatives, Self Help Groups and other field functionaries.

Geometry of health coverage

The Scheme provides Health Coverage to BPL population including Prevention, Primary care and In-Patient care. All the Primary Health Centres (PHCs) which are the first contact point, Area/District Hospitals and Network Hospitals are provided with Help Desks manned by Vaidya Mithra to facilitate the patients The Scheme is intended to benefit 150.95 lakhs families in all districts of the state.

Technology Solutions

A dedicated real-time online workflow system was designed by the Trust in order to bring dynamism and decentralization of work like Online processing of the cases starting from registration of case at first referral center, health camps etc., registration at network hospital, pre-authorization, treatment and other services at the hospital, discharge and post treatment follow-up, claim settlement, payment gateway, accounting system, TDS deductions, e-office solutions etc. The maintenance of the workflow is done round the clock.

The choice of hospital for treatment is with the patient. The entire process from the time of conduct of health camps to the screening, diagnosing, treatment, follow- up and claim payment is made transparent through online web based processing to prevent any misuse and fraud.

Achievements made under the Schemes being implemented by Trust:

1. Dr. NTR Vaidya Seva Scheme and CMCO:

There were 1.98 lakhs patients treated as out- patients and 2.93 lakhs patients treated as in-patients in the Network Hospitals during the period from April 2017 to October 2017. 14.08 lakhs therapies were pre-authorised at the cost of Rs.3934.69 crores for the period from 02.06.2014 to 31.10.2017.

District-wise details of Health camps conducted and the performance in the identified therapies under the Scheme for the period from 01.04.2017 to 31.10.2017 are given in Annexure 8.13.

2. Employees Health Scheme:

Trust is the Implementing Agency for the Employees Health Scheme under the supervision of Government for providing health coverage to all regular State Government employees, service pensioners, family pensioners etc. for 1885 notified therapies in 31 categories in the empanelled Network hospitals. There were 34126 patients treated as out- patients and 47046 patients treated as in-patients in the Network Hospitals. 1.41 lakhs therapies were pre-authorised during the period from 01.04.2017 to 31.10.2017.

Under the Schemes of Dr.NTR Vaidya Seva Government has issued orders for conducting high end procedures of Heart, Lung, and Heart-Lung transplantations and all the employees of above 40 years will be eligible under Employees Health Scheme for a free medical checkup in any “Notified Hospitals” once in a year consisting of comprehensive services.

Government has decided to provide outpatient treatment under Employees Health Scheme for chronic diseases like non communicable diseases (NCDS) such as Diabetes, Hypertension, Coronary Artery diseases, cerebro-vascular diseases, Cancers, Renal failure; communicable diseases such as Tuberculosis, Leprosy, etc., postsurgical, post-traumatic conditions, etc., all of which require longer-term sustained medical treatment, including consultation, medicines and diagnostics in the notified Government Hospitals.

3. Working Journalists Health Scheme:

Providing health services to the accredited Print and Electronic Media Journalists and accredited freelance journalists and their dependent family members in the empanelled Network hospitals. There were 408 patients treated as out- patients and 680 patients treated as in-patients in the Network Hospitals. 1582 therapies were pre-authorized at the cost of Rs.2.07 Crores for the period from 01-04-2017 to 31.10.2017.

Follow-up package for consultation, investigations, drugs etc., for one year for listed therapies formulated by Technical Committee of the Trust in consultation with specialists are listed in website: www.ntrvaidyaseva.ap.gov.in.

Impact on Health Scenario

i) Changing Tertiary care profile
ii) Improvement in documentation and regulatory effect on Hospitals
iii) Improvement in quality of services:
iv) Establishing Medical Protocols tailor-made to local situations
v) Performance of Government Hospitals

104 seva kendram:

The services offered by the 104 seva kendram are two types a) Inbound services - health advice, medical advice, health information, counseling, blood bank information, complaint registry, employees health scheme b) out bound services- health advice, monitoring and evaluation of mother and child health services, feedback of Dr. NTR Vaidya Seva. 71.82 lakh calls were registered under inbound services and 16.10 lakhs were registered under outbound services for the period from 02.06.2014 to 31.10.2017. The Outbound and Inbound calls registered for the period from April 2017 to Coctober.2017 were 1.17 lakhs and 5.55 lakhs respectively.

Cochlear Implantation Scheme:

Financial assistance of Rs.6.50 lakhs is being provided under the Trust to the BPL patients undergoing Cochlear implantation surgery and Audio Verbal Therapy (AVT) for one year to the totally deaf children of below 5 years for Pre-lingual deafness and 12 years of age for Post lingual deafness. 257 hearing impaired children are benefited from cochlear implantation programme.

Special Tribal Health Camps:

The aim of the Government is to achieve "Health For All" in Andhra Pradesh and to bring awareness among the tribal population of State, majority of them are farmers and agricultural illiterate laborers and are not aware of advanced medical treatments and are silent sufferers of ill health. This is truer in case of diseases related to heart, kidney, brain, cancer and injuries due to domestic accidents and burns.

Government has intended to conduct Tribal Health Camps regarding the diseases they suffer from and to provide free medical care and refer the patients to Government and Corporate Network Hospitals for secondary and tertiary care for the procedures identified under the Scheme. Health education is conducted to create awareness about the seasonal diseases.

- The date and venue of Health camp will be intimated to the surrounding villages through IEC Activities. 2 NWHs are permitted to participate in the Tribal Health Camp. and Identified referred patients to Network hospitals. Medicines, Refreshments and Fruits etc are distributed to the beneficiaries in the Health camps. Free diagnostic services are provided in the Health camps.
- The IEC activity during the health camps, screening, counseling and treatment of common ailments in the health camps and out-patient services in network hospitals is supplementing the government health care system in preventive and primary care.
- There were 4075 Medical camps conducted in rural areas and screened 11.27 lakhs patients by the Network hospitals and referred 10080 patients to the Network hospital for further cashless treatment.

New initiatives:

Aarogya Raksha Scheme

The Govt of A.P in order to provide universal health coverage "Health for All" for the uncovered above poverty line population initiated the new scheme "Aarogya Raksha" with an objective of "Universal Health Coverage" of the State of A.P and is being implemented from 07.04.2017 in addition to the existing schemes.

Salient features of the Scheme:

The Scheme covers any family as one unit, in other words, all the members of family can become by paying Rs.1200/- per member per year to avail the benefits of the scheme. The scheme covers 1044 procedures with 138 follow up packages as in Dr NTR Vaidya Seva. The Financial coverage is Rs 2.00 lakhs per year per individual. The beneficiaries are eligible of Semi-private ward in Empanelled Hospitals under Aarogya Raksha Scheme.The enrolment under Aarogya Raksha Scheme shall be done through the website of NTR-Vaidya Seva and through Mee-seva counters.

Awareness Activities under Aarogyaraksha:

To bring awareness about the salient features/ benefits of the Scheme among the people of Andhra Pradesh, An amount of Rs.2.00 crores has been incurred for publicity and advertisement to bring awareness about scheme in 13 Districts of A.P. 101633 family members were enrolled and Rs.12.15 crore premium collected. 2854 claims were submitted and Rs.8.12 crore amount paid to them.

Andhra Pradesh Vaidya Vidhana Parishad

Andhra Pradesh Vaidya Vidhana Parishad (APVVP) is an autonomous organization funded by the Government of Andhra Pradesh, to manage secondary level hospitals. The institutional infrastructure under APVVP in the state is shown in Table 8.11.

Table 8.11: Type of Hospitals in the state

Type of Hospitals	Hospitals	Beds
District Hospitals	8	2200
Area hospitals	34	3400
Community Health Centers	192	6430
MCH	3	200
CD Anantapuramu	1	60
CD	3	0
Total	241	12290

Source: AP Vaidya Vidhana Parishad

Hospital Activities

APVVP hospitals provide outpatient services, inpatient services (including emergency & surgical), diagnostic services and laboratory services. The APVVP deals exclusively with the middle level hospitals of bed strength ranging from 30 to 350. These institutions also referred to as secondary hospitals or first referral hospitals and are called District Hospitals, Area Hospitals and CHCs depending on bed strength.

The District Hospitals (DH) provide service with a bed strength ranging from 200-350 and ten clinical specialties like Obstetrics & Gynecology, Pediatrics, General Medicine, General Surgery, Orthopedics, Ophthalmology, ENT, Dental & others.

The Area Hospitals (AH) provide services with 100 beds and four clinical specialities like Obstetrics & Gynecology, Pediatrics, General Medicine and General Surgery.

The Community Health Centres (CHC) with 30-50 beds provide maternity and child health care services. These Hospitals are provided with professional Staff (Doctors, Nurses and Paramedics) and medical equipment depending upon their service levels and bed strength. Drugs are provided to all Hospitals by the Central drug stores under APMSIDC as per the requirements.

These Hospitals along with the Primary Health Centres and Teaching Hospitals (Tertiary Hospitals) act as a platform for implementation of various National Health Programs like Malaria, Tuberculosis, Family Welfare, AIDS etc.

Hospital Performance

The comparative performance of hospital activities in are shown in Table 8.12.

Table 8.12: Performance Indicators of Hospital Activities (Lakh Nos.)

Sl. No.	Name of the Development indicator	2015-16	2016-17	2017-18 (upto Sept.2017)
1.	Out Patients	154.26	210.91	113.43
2.	In Patients	13.79	17.86	10.40
3.	Major Surgeries	0.75	0.86	0.50
4	Deliveries	1.27	1.58	0.86

Source: AP Vaidya Vidhana Parishad

Human resources

There are 2064 Doctors including specialists, 2203 Nursing, 1193 Paramedical staff and 476 Administration staff working for Health care in APVVP Hospitals. Sanitation, cleaning services and other non- clinical services are taken on third party or outsourcing basis.

Blood Banks

There are 27 blood banks and 92 blood storage centres are functioning in APVVP Hospitals in the State. These blood banks were providing blood to the needy patients in the Hospitals.

Performance of National Rural Health Mission

Under NRHM 13 SNCU, 7 NRC, 95 NBSU, 86 CEMONC, 26 Tribal Hospitals are functioning in APVVP Hospitals. 3 MCH Hospitals are established in APVVP Hospitals.

Special Care New Born Units

Government sanctioned 13 SNCUs to APVVP hospitals. These units provide special medical care and treatment to low birth weight new born babies and premature babies. The Performance of SNCU in APVVP Hospitals are shown in the below Table.8.13.

Table 8.13: Special Care New Born Units

Births under SNCU	No. of units (upto Sep2017)	Births under SNCU	No. of units (upto Sep2017)
Birth weight of babies		Preterm births(Gestation)	
>2500gm	5136	>37 weeks	4820
<2500gm	3166	<37 weeks	3408
1500-2499gm	2820		
1000-1499gm	346		
No. of new borns who required resuscitation at birth	682		

Source: AP Vaidya Vidhana Parishad

New Born Stabilization Units

The NBSUs are used to stabilize new born babies. 95 New Born Stabilization Units are located in APVVP hospitals in the state. During April to October 2017, 27543 cases were admitted, 23175 were discharged, 2214 were referrals and 150 were deaths.

Nutritional Rehabilitation Centres

There are 7 NRCs in the APVVP hospitals. These NRCs provide care to sick and malnourished children. During April to October 2017, 764 cases were admitted, and 725 cases were discharged, 974 were discharged with target weight gain, 11 cases were referrals and 698 cases were children followed up.

Performance of Janani Shishu Suraksha Karyakram under NRHM, RCH-II Programme

Janani Shishu Suraksha Karyakram scheme is being implemented at the Hospital level. The Scheme aims to provide cashless deliveries, free transport facilities and care to sick new born for 1year after birth, make local purchase of emergency drugs and consumables, facilitate diagnostics for ANC checkups and provide free blood and free diet.

Trauma Care Centres

Trauma Care Centre aims to provide immediate emergency Medical Care to accident victims. At present 6 Trauma Care Centres are functioning in APVVP Hospitals located in Andhra Pradesh.

Health

National Vector Borne Diseases Control Program

The National Vector Borne Diseases Control Programme(NVBDCP) deals with Malaria, Japanese Encephalitis, suspected viral encephalitis, Dengue, Chikungunya, Filaria with the support of state government and NRHM programme with broad objective of prevention of deaths due to Vector Borne Diseases and reduction of morbidity . Covering tribal areas of 5 Districts in the state, the major strategies include.

1.Early diagnosis and complete treatment of all Vector Borne Diseases cases. 2. Integrated vector control measures through conduction of insecticidal spray operations, promoting personal Protection measures and source reduction method. 3.capacity building and intersectoral co-ordination with line departments, i e Education, RWS, Panchayathraj, Municipal Administration and Urban Development. Details on Vector borne diseases are shown in Table 8.14.

HIGHLIGHTS
157.25 lakh Free Lab Tests
done for 50.93 lakh Patients.

Table 8.14: Vector Borne Diseases

Diseases	2016			2017 (upto Dec,2017)		
	Blood samples (Lakhs)	Cases	Deaths	Blood samples (Lakhs)	Cases	Deaths
Malaria	66.29	23613	2	55.40	16316	0
Dengue	0.25	3417	2	0.34	4672	0
Chikungunya	0.00	147	0	0.01	104	0
JE	0.00	4	0	0.00	0	0
Filaria	1.46	8	0	1.34	13	0

Source: Directorate of Health and Family Welfare

TB Control Programme

Vision and objectives for Revised National TB Control Programme (RNTCP).

The main goal of the programme is to eradicate TB

Objectives

- To achieve 90% notification rate for all types of TB cases
- To Achieve 90% success rate for all new and 85% for re-treatment cases
- To significantly improve the successful outcomes of treatment of Drug Resistant TB
- To achieve decreased morbidity and mortality of HIV associated TB
- To improve outcomes of TB care in the private sector.

Action Plan

To implement National Strategic Plan 2017-25

- To strengthen rapid diagnosis and start universal DST (by enhancing CBNAAT machines from 15 – 43),
- Treatment regimen changed to Daily Fixed Dose Combinations according to weight bands to prevent Relapse and increase treatment adherence,
- To diagnose and treat all vulnerable groups, unreached population by implementing active case finding strategy.

Performance of RNTC (as per new indicators) details are shown in 8.15

Table 8.15 Performance of RNTC (as per new indicators)

Year	Population in lakhs	Annual Total TB Case Notification Rate.			Treatment Success rate	
		Public	Private	Total	New cases	Re-treatment cases
2013	500.8	124	4	128	90%	78%
2014	504.3	128	14	142	91%	79%
2015	508.4	122	15	137	92%	82%
2016	511.5	125	17	142	90%	82%
2017(Q1)	514.8	126	21	147	91%	83%
2017(Q2)	514.8	117	24	141	91%	80%
2017(Q3)	514.8	117	24	142	91%	84%

Source: Directorate of Health and Family Welfare

National Program for Control of Blindness

National program for control of blindness was started in 1976. Aiming to reduce prevalence of Blindness from 1.4% to 0.3%. The present rate is 1% as per the survey of Government of India.

Strategies: Disease control of avoidable blindness, Training of ophthalmic personnel, IEC activities, Provision of equipment / consumables.

Disease Control

Free Cataract surgeries, both in Government and NGO sector, refractive errors detection, school eye screening, distribution of free spectacles, eye ball collection through eye banks and eye donation centres and early detection of other eye diseases viz., Glaucoma and Diabetic Retinoppathy.

Objectives

To provide high quality eye care to effected population. To expand coverage of eye care services to the under-served areas. To reduce backlog of blindness. To develop institutional capacity for eye care services.

Cataract Operations

3.34 lakh cataract operations were conducted during 2016-17 and 2.37 lakh operations conducted during 2017-18 (upto November 2017. Details about School Children Eye screening are shown in Table 8.16.

Table 8.16: School Children Eye Screening (Lakh Nos.)

Item	2015-16	2016-17	2017-18 (up to Nov 2017)
Teachers Trained	0.11	0.05	0.03
School Children Eye Screened	12.48	7.15	6.01
School Children detected with Reff. Errors	0.66	0.41	0.40
Distribution Free Glass	0.38	0.11	0.084
Eye Ball Collection	0.03	0.03	0.03

Source: Directorate of Health

National Leprosy Eradication Programme(NLEP) 2017-18

Under National Leprosy Eradication Programme (NLEP) if it is to ensure that all Government Health Institutions are diagnosing leprosy cases, treatment and motivating the patients for complete treatment. MCR footwear is being provided twice in a year for protection of foot. For the deform foot, hand and disability of eyes, RCS (Re-Constructive Surgeries) are being performed with the support of NGOs and Government Institutions. The Department is also pursuing for the provision of disability pension, AAY cards and housing facility for the leprosy patients. ASHAs are being paid incentives for identification and for regular monitoring of completion of treatment.

As per the instructions of Government of India, three-pronged approach is being implemented in the State are leprosy case detection campaign for the high endemic districts, focussed leprosy campaign for Hot Spots and case detection in hard to reach areas.

During 2017-18, Leprosy Case Detection Campaign (LCDC) was conducted from 13.11.2017 to 26.11.2017 in 5 districts viz., Srikakulam, Vizianagaram, SPSR Nellore, Ananthapuramu and Kurnool. 719 new cases have been identified and put on for treatment.

Integrated Disease Surveillance Project

Integrated Disease Surveillance Project (IDSP) is a decentralized, district-based surveillance programme intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. Syndromic (Form S), Presumptive (Form P) and Confirmed (Form L) are the different types of surveillance carried out under IDSP. Average Reporting % of S, P, L are given in Annexure 8.14

- Investigated and reported 34 outbreaks during 2017-18 (Jan–Nov) with 1229 cases affected and NIL deaths (ADD-9, Foodpoison-12, Viral Fever-5, Others-8).
- Reported and monitored the status of all Influenza 'A' H1N1 cases (476 cases, 14 deaths)
- Reported 12,832 Sunstroke cases and 74 deaths.

Programmes implementing under Non-Communicable Diseases

Stakeholders meeting conducted on 04-10-2017 on Universal Salt Iodization (USI) and seek inputs from various concerned stakeholders for effective programme implementation. Global IDD prevention day is celebrated on 21-10- 2017 every year and to organize various programmes i.e. District and sub-district level rallies and meetings, Village Level, School Level, Mandal level multi departmental stakeholder meeting and rallies. State level **Iodine Deficiency Disorders prevention** day was conducted at Jangareddygudem, Eluru, West Godavari

Dist., on 21st October 2017 with collaboration of Nursing students, ANMs, ASHAs, Anganwadi along with school children.

The **National Tobacco Control Programme** is implementing in 10 districts except Visakhapatnam and Kurnool. At present 8 TCC are working in the State. The TCC consists of one psychologist and one social worker for counseling and creating awareness among the patients and general public. World No Tobacco Day observed on 31st May of every year. State level world No Tobacco Day conducted at Vijayawada, Krishna Dist.,

Under **National Oral Health Programme,** improvement in the determinants of oral health ie., health diet, oral hygiene improvement etc., and to reduce disparity in oral health accessibility in rural and urban population. Reduce morbidity form oral diseases by strengthening oral health services at sub district and districts hospitals to start with integrate oral health promotion and preventive services with general health care system and other sectors that influence oral health namely national health programmes (NTCP), School heath programme NPCDCS, education social welfare women and child development etc., Promotion of public and private partnership (PPP) for achieving public health goals. Strengthening of dental units in all District hospitals, Area hospitals and CHCs. Monitoring and supervision, Training of health care delivery personnel involved in district level and below regarding oral health. Creating awareness about the oral health and oral cancers.

Under **National Programme for Health Care of Elderly**, all districts of the state have been covered under the programme. Institution based equipment have been installed at the 55 CHCs covered under the programme. Cardiac care equipment have been sanctioned and installed in the CHCs covered under the programme. In each District Hospital, 10 beds allotted for Senior Citizens and necessary facilities arranged to them.

At present **National Programme for Prevention and Control of Fluorosis(**NPPCF) is being implemented in Guntur, Prakasam and Nellore districts. In the PIP 2017-18 the GOI has approved another 6 districts viz., Ananthapur, Kurnool, Krishna, Chittoor, Visakhapatnam and Srikakulam for implementation of NPPCF. Fluoride levels in Ground Water in all the districts along with affected mandals, habitations and villages survey report on NPPCF is given in Annexure 8.15.

Under **National programme for prevention and control of cancer, diabetes, CVDS and stroke programme (NPCDCS),** Screening for Diabetes and Hypertension is going on in all Districts of the state. Under population based screening to all the people who are 30+ is implemented in 3 districts in Vizianagaram, Ananthapur, Nellore districts. As a part of that the state is already screening 30 + women for all three diseases cancer, Hypertension, Diabetes under Mahila Master Health Check-up (MMHC 30+) Programme and the screened data by the trained ANM is getting uploaded to MMHC App developed by EMC2 and connected to CM Core Dash Board. 20.94 lakh persons screened under Population Based Screening.

Under **Chronic Kidney Diseases screening** scheme 15 Special mobile medical teams conducted screening for Kidney diseases in 114 villages in Uddanam area of Srikakulam. 9093 persons had comprehensive health checkups. 22 Dialysis centers are functioning under National Free Dialysis Programme.

Cardiac care units

At present 8 **Cardiac Care Units** are functioning in the State i.e. Srikakulam, Vizianagaram, Krishna, Prakasam, Nellore, Chittoor, Kadapa, Kurnool. During 2017-18 the GOI have sanctioned 5 new CCUs. Funds were released to APMSIDC for procurement of equipment for establishing the CCUs at 5 districts i.e. Visakhapatnam, East Godavari, West Godavari, Guntur and Ananthapur under NPCDCS. Monthly reports are being submitted to GOI.

Achievements

The Government has implemented the following health initiatives with the prime objective of reducing the out of pocket expenditure for the people of the state who are visiting public health facilities for their health problems. These are provided across the state with close monitoring on quality from the level of territory hospitals to the level of primary health centers including the tribal areas. The best part of all these services are all integrated to CORE Dashboard on real time.

a) **NTR Vaidya Pariksha (Free Diagnostics**): providing free diagnostic tests both Laboratory and radiology services including the expensive tests such as Computed Tomography (CT Scan) at all district hospitals. Qualified radiology services provided through "Tele-Radiology". So far 157.28 lakh lab tests done for 50.93 lakh patients, 4.49 lakh X Rays and 0.23 lakh CT Scans were performed so far under teleradiology.

b) **Chandranna Sanchara Chikitsa:** "Primary Medical Care on wheels". Medical services are provided on fixed days to 12000 identified villages every month, which are beyond 5 km from the location of existing health facilities. Providing doctor, nurse, pharmacist and lab technician rendering 10 investigations including ECG and 40 different drugs which include to treat diabetes, hypertension, epilepsy, antibiotics and for all common ailments. Vehicles with GPS tagged; electronic drug inventory and biometric attendance are ensured. So far 1.19 lakh mobile clinics have served to 34.58 lakh patients.

c) **National free dialysis program**: Free dialysis centers are established in all the 13 districts making the quality services accessible to the kidney disease victims which otherwise is an unbearable expenditure to them lifelong. So far 19,666 dialysis sessions done successfully.

d) **Health ATMs installed at remote places**: 25 Health ATMs established at needy villages where doctor is not available providing medicines to the patients prescribed by doctor from the hub after receiving the patient data through GSM service. Already 3500 patients were served through this service.

e) **Scientific Sanitation, Security and pest & rodent control Policy**: Services provided at all major and high load Hospitals with high scientific and technical standards for safe environment in the hospitals to ensure quality care to the patients keeping the infection control protocols in view.

f) **MMHC 35+ screening for women aged 35+:** By 13,000 trained ANMs at 7683 sub centres, screening being regularly done for Oral, Cervical & breast cancers, Diabetes, Hypertension, Hormonal diseases and Eye problems. So far, 3.43 lakh women were screened, 3,940 were referred and 383 were treated.

g) **102 call centre**: Call centre exclusively for advice on mother and child services both through incoming calls and also outbound calls for antenatal and postnatal mothers and for children. Already services provided through 8.33 lakh calls since Jan 2016.

h) **e-Aushadhi logging**: Inventory for all drugs & surgicals and their supply chain management through electronic mode and realtime.100% instructions are enabled for this mechanism and are logging in every day.

i) **Blood Bank Online and Blood Bank app for online information** on availability of different blood groups in nearby blood banks. Blood bank so ware is linked with National health portal. Deployment of 13 Blood bank vehicles to strengthen Blood availability. Blood Storage Units are increased from 57 to 98. So far, 8437 have downloaded the Blood Bank App for blood and also for fixing appointment for donation of blood is made easy through the App.

j) **Expanded Eye care services:** 115 primary vision centers on lines of Arvind Eye Care made operational with required equipment treating minor eye problems, refraction and provision of glasses, screening for cataract, retinopathies and glaucoma, referral for surgeries and follow up. So far, 2 lakh patients were served through the primary vision centres. 32 secondary vision centres (Surgical Centres) are performing IOL surgeries.

k) **Expanded Dental Care services** with 52 facilities (4 centres in each dist) additional dental care services added at 52 Govt facilities became operational since 2016.

l) Sonology (USG Scan) Free ultra sound scan services to pregnant mothers up to the level of CHCs. Ultrasound scans services to pregnant mothers being expanded to 227 facilities. 191 centres are already made functional and another 36 facilities will be made functional (equipment already installed) with trained Gynecologists/lady doctors shortly.

m) **TB Care on electronic** 99 DOTs for ensuring compliance of full treatment (tracking skipped doses). E-Lab Register for tracking of missed +ve cases & bringing them into treatment schedule.

n) ANMOL ("ANM online") all the details of antenatal mothers like dates of antenatal checkups by doctors, due dates, TT doses, EDD, high risk details and child immunization can directly monitored through online for effective care.

o) Dr. NTR Vaidya Seva 102 procedures have been added to the existing 942 procedures, thus Dr. NTR Vaidya seva provides cashless treatment in the empanelled network hospitals for a total of 1044 procedures to the BPL families (approx. 149.98 lakh families) of Andhra Pradesh State. Enhancement of financial coverage from Rs.2.00 lakhs to Rs.2.50 lakhs.

Implementation of New initiatives in 2017

a) **Mukhyamanthri Aarogya Kendramulu:** The Government has upgrading all the existing UHCs into e-UPHCs and named as Mukhyamantri Aarogya Kendram. 222 electronic Health centres in 15 corporations and 39 municipalities across the 13 districts in the state will be dedicated to the people of AP state in the month of January 2017 with facilities like AC waiting hall, 40 in-house lab tests including ECG , Free drugs and Tele-consultations for the core specialties like Cardiology, Orthopedics, Rheumatology, Endocrinology, internal medicine to provide quality medical services to the thickly populated urban dwellers nearer to them . This is first of its kind in the country with an aim to reduce their out of pocket expenses on medical problems but also saves their time, wages and transport to distant major hospitals. Working hours in 2 shifts for better convenience and to save wages and electronic health records for better follow up.

b) **Mukhyamantri Bala Swasthya Bharosa (RBSK):** Comprehensive health care for 87.5 lakh children between 0-18 years is the noble objective. 450 dedicated teams with 900 doctors, 1350 paramedics and 450 vehicles to cover all Govt schools, Govt residential schools, Anganwadi schools and up to 18 yrs students in Govt Junior Colleges. Aadhar based Electronic Health Records for all children for effective referral, treatment and follow up at 16 DEICs (Dist Early Intervention Centres) and higher centres.

c) **Swasthya Vidya Vahini**: Health education for positive living and a healthy Andhra Pradesh is a Unique program and 1st of its kind in the world. Health education in rural areas through students of Medical, Dental, AYUSH, Nursing & Home Science colleges. 30000 students will work as health volunteers visiting the villages assigned to them in the dedicated vehicles, study the health determinants, educate the households and community for healthy life styles and prevention of diseases. They also do project work as a part of their curriculum on their findings, interventions through education and impact studies over 1 year.

d) **Advanced life support ambulances (mini ICU on wheels):** As per norms there needs to be one ALS ambulance per 5 lakh population. 76 ALS vehicles are now being introduced in state in the pool of 435 BLS (108) ambulances. ALS vehicles being equipped with 47 types of major and minor advanced Life Support systems like transport ventilator and defibrillator. In the fleet of 465 BLS Ambulances (108 ambulances) 278 are being replaced by new vehicles.

e) **e-Partograph** an e-aided delivery progress monitoring in collaboration with IIT, Delhi & ICMR. Electronic monitoring on the progress of labor for timely intervention & referral to reduce maternal & newborn deaths. It is an electronic graphic representation of the process of labor. Early warning signals will be identified for intervention and ensure timely referral to higher facilities through on-line information to save mother and child.

f) **Enhanced Neonatal** care through mother centered approach: MoU entered with Ram Manohar Lohia hospital, New Delhi. By empowering mothers to care for LBW babies & to identify danger signs early and timely intervention to reduce neonatal deaths.

g) **Specialists in-sourcing** Website launched for specialists to offer their services at Govt hospitals on need base. Specific specialist needs are being obtained facility-wise in Teaching & APVVP hospitals to invite the concerned specialists through the website to offer their interest in the services in the respective hospitals to meet the dearth of specialists thereby providing quality care.

h) **Sleep Labs:** MoU with AIIMS done. 20-25% population suffering with sleep related disorders can be diagnosed through the Sleep labs and treated accordingly to reduce the cardiovascular risk factors (Heart & Brain Strokes).

i) **Lactation assistance units**: The COLOMBO model improving infant nutrition and immunity to assist and create awareness among the post natal mothers and family attendants regarding early initiation and techniques of breast feeding practices.

j) **Andhra Pradesh Mosquito Breeding Prevention** Act Bill-2016 Dengue Hemorrhagic Fever Dengue shock syndrome Malaria Filarial, Chikungunya, Japanese encephalitis, continues to be a major cause of Public Health concern, with many people getting infected and dying of these diseases and diagnosis of dengue is triggering panic among the people.

k) **Maha Prasthanam Seva** It is proposed that availability of registered carrier vehicle driver and licensed as "Hearse van'' services of Hearse van shall be provided to all bodies for which 'death certificate' has been issued by respective hospitals; for carriage of body within same/adjoining district in a manner

l) **Baswatharakam Mother kits also provided to delivered mothers.**

m) **33. Accountability Frame Work** Andhra Pradesh is committed to achieve Sustainable Development Goals (SDGS) under which importance has been given to comprehensive growth apart from reduction in MMR and IMR.

n) **Promotion of solar Roof Top systems in Medical and Health Institutions:** This proposal relates to installation of Solar Roof top systems in Medical and Health Institutions.There is a good potential for promotion of solar roof top systems in primary health centers (PHCs), Community Health Centers (CHCs), Area Hospitals and Teaching institutions considering the huge resulting in energy savings. It will also helpful in mitigation of climate change by generating eco-friendly green and clean energy.

Aids Control Society

Human Immunodeficiency Virus (HIV) is a retrovirus that eventually causes Acquired Immunodeficiency Syndrome (AIDS), a global public health problem as more than 35 million people are living with HIV/AIDS worldwide. The HIV epidemic has been one of the most challenging modern public health problems for India. Provisional estimates put the number of people living with HIV in India at 25 lakhs and 3 lakhs in Andhra Pradesh.

Prevention Activities:

Basic Services which include free HIV/AIDS counselling, testing services and also prevention of mother to child transmission of HIV/AIDS through 1534 (1357 Govt. & 177 Pvt.) Integrated Counselling and Testing Centres, Prevention of Parent to Child Transmission of HIV/AIDS centres established in all Government Hospitals and Private Hospitals as per the need.

Targeted Interventions(TIs) including Link Workers Scheme are implemented through Non-Government Organisations and Community Based Organisations to provide condom promotion, behavioral change communication and treatment services for sexually transmitted infections to Female Sex Workers (FSW), Men Having Sex with Men (MSM), Transgender, Intravenous Drug Users (IDU), Migrants and Truckers who are highly vulnerable for HIV/AIDS due their life style. At present 87 Targeted Interventions are implemented in the state to cover 7 FSWs, 2 MSMs, 3 IDUs, 65 Core components, 2 Truckers and 8 Migrants in high focused areas. These interventions are covering 88,099 FSWs, 20,311 MSMs, 1,263 IDUs, 1,57,984 Migrants and 21,163 truckers in the state.

Though only 87 NGOs the Key population is adjusted towards the existing TIs and DAPCUs. The coverage PE, HRG and ORW, HRG ratios has been drastically increased.

Blood Transfusion Services(BTS) are provided through establishment and supporting 140 blood banks, 86 blood component separation units, 56 Blood storage centers where blood is tested for HIV and other infectious diseases and safe blood is ensured to be made available to all the needy population who require blood/blood components.

SACS has been providing prevention, treatment, care and support services through the establishments in the state. Details of key establishment under APSAC are given in Annexure 8.16.

AP Blood Cell APP was started for improving the Voluntary Blood Donations.

Prevention of **Sexually Transmitted Diseases** and Reproductive Tract Infection services are provided through establishment of 55 Designated STI/RTI Clinics (DSRCs) in Government Hospitals providing free testing, treatment and drugs. HIV-TB services are provided with free treatment and drugs for PLHIVs who are affected with TB at Directly Observed Treatment Centres (DOTs). 99 DOTS is being implemented in all ART centers by providing daily regimen.

Care, Support and Treatment, including Community Support Services: are provided through establishment of 40 Anti-Retroviral Treatment Centers in Government Hospitals providing free ART medicines to all eligible PLHIV in the state. ART services are widely decentralised with established of 32 Link ART + centres and 114 Link ART Centres. More than 1,53,627 PLHIV are presently receiving ART medicines free of cost from the ART centres in the state. 99 dots implemented for HIV-TB patients. Refresher training for LTs and Data mangers of ARTs. Induction training was conducted to new MOs at COE, Hyderabad. Changed the mode of payment from prepaid cards to savings accounts. 28,985 ART Patients have received ART Pensions through NTR BHAROSA,

Strategic Information Management Unit (SIMU)

Strategic Information Management Unit is responsible for Monitoring, Evaluation & Surveillance of HIV/AIDS related activities in the state, which collects data periodically and a separate reporting system is established for HIV/AIDS related facilities from NACO for this purpose.

PEPFAR (President's Emergence Plan for AIDS Relief):

PEPFAR India, a program supported through CDC with their partners is focusing on the key population of female sex workers (FSW), men who have sex with men (MSM), Transgendered individuals, and people who inject drugs. This programs are being implemented in East Godavari, Krishna and Guntur districts. In 2016-17 PEPFAR India will implement new and diverse HIV testing and counseling approaches in the high priority districts to diagnose and link more people living with HIV to care and treatment, reducing LFUs, activities on PPTCT and HIV/TB co-infection. It also provides technical assistance for service delivery improvement including capacity building quality improvement and system strengthening.

Table 8.17- Physical Performance of APSAC [Apr'17 - Nov'17]

Core Component Name	Indicator	Annual Target (Lakhs)	Achievement (Lakhs)	% achievement
Blood Safety	Total Blood units Collection	2.52	3.38	125%
	Voluntary Blood units Collection	2.27	2.57	114%
Integrated Counselling &Testing Centers	NON Ante Natal Cases Tested	5.87	6.79	115%
	Seropositivity(%)		13702(2.0%)	
	Ante Natal Cases Tested	5.68	4.73	83%
	Seropositivity(%)		442 (0.09%)	
STI component (DSRC)	STI cases treated	1.84	1.00	54%
Anti Retro Viral Therapy	Pre ART	0.14	0.13	94%
	Alive on ART	NA	0.12	NA
TI –NGO	HRG Coverage	106942	104669	100
	FSW(8)	11340	11515	102
	core composite(66)	94358	92362	98
	IDU(2)	1244	792	64
	Migrant 8)	100000	97052	97
	Trucker (2)	20000	19804	99
	Condom Distribution annual average	13318767	7433071.5	56
	Clinic Services annual average	129156	100190.5	78

Source: Aids Control Society

HIGHLIGHTS

Anna Amrutha Hastham... Full meal for Pregnent Women & Lactating Mothers

District wise performance of ICTC programme Non Ante Natal Clients and Ante Natal Clients in 2017-18upto Oct.2018 is given in Annexure 8.17 and District wise Ante Retroviral therapy programme performance is given in Annexure 8.18.

Women Development and Child Welfare

The Constitution of India guarantees equality of opportunity, equal pay for equal work, no discrimination to all women. It also allows special provisions to be made by the State in favour of women and children for securing just and humane conditions of work that renounce practices derogatory to the dignity of women.

Women now participate in all activities such as education, politics, media, art and culture, service sectors, science and technology, etc. All efforts are being made for the development and welfare of children whose overall development is recognized as the ideal way for fostering national human resources. Following are the details of Government run institutions for Women and Children to cater to their needs in difficult circumstances.

Institutions

The department is running 46 Homes for Children and 21 Institutions for women to cater to the needs of children and women.

Women Institutions

- Three Service homes are functioning in the State at West Godavari, Nellore and Anantapuramu districts. At present, there are 125 inmates as against the sanctioned strength of 350.
- Two State Homes are functioning in the state at Srikakulam and Rajahmundry with 94 inmates against the sanctioned strength of 200.
- One Home for aged is functioning in the State at Chittoor with 24 inmates, against the sanctioned strength of 30.
- 4 homes for Collegiate Girls are functioning in the State at Vizianagaram, Tanuku, Guntur and Tirupati with 138 inmates against the sanctioned strength of 170.
- 11 Working Women's Hostels are functioning in the State with 593 inmates against the sanctioned strength of 630.

Ujjawala Scheme

Four Ujjawala Homes are working in Guntur -1, YSR district -1 and Ananthapuramu-2 with full sanctioned strength of 200. Vocational trainings are provided to 108 inmates; reintegrated 113 inmates with their families, 33 inmates are placed and transferred 13 inmates to other homes.

Swadhar Shelter Homes

Twelve Swadhar Shelter Homes are working in 8 districts of Kurnool-1, Guntur-2, Visakhapatnam-2, YSR-4, Vizianagaram-1, Chittoor-1 and Prakasam-1 to care for women in difficult circumstances and aim at covering primary needs of 360 inmates. Vocational trainings are provided to 264 inmates, reintegrated 339 inmates with their families, provided placements to 34 inmates and transferred 20 inmates to other homes.

Institutions for Children

Children Homes

46 Children homes are functioning in the State with 1770 inmates at present against the sanctioned strength of 3110. An amount of Rs.75/- per month per inmate is provided towards cosmetic charges and diet charges @ Rs.750/- per month per child upto 7th class and @ Rs.850/- per month per child for students from 8th to 10th class.

Integrated Child Protection Scheme

Integrated Child Protection Scheme (ICPS) is a centrally sponsored scheme with an objective to provide a protective environment for overall development of children. The Scheme has strengthened the prevention of Child Rights violation, enhanced the infrastructure for protection of services and provided financial support for implementation of the Juvenile Justice (Care and Protection) Act, 2015.

Status of implementation of ICPS (Since 2014-15 till November 2017):

- 1210 Child Marriages were stopped as per the Child Marriage Act, 2006.
- 9884 Child Protection Committees have been formed in the state. Mandal (557), Village/Ward (9284) and major Railway stations identified (30) levels in the state.
- 559 sexual assault cases registered / booked under POCSO Act, 2012.
- 5828 Children in Need of Care and Protection were identified and provided care and protection services.
- 708 Child Labour children were rescued.
- 122 missing children were institutionalized, and children have been repatriated to their families.
- 800 children (HIV Infected/Affected, Physically / Mentally Challenged and others) have been provided Sponsorship and Foster care services.

Orphan Certificate

Government issued orders to earmark 3% of the seats for orphans/destitute in the age appropriate class in Residential Schools, Residential Junior Colleges and Residential Degree Colleges run by Welfare Departments and Education Department. Government issued instructions to create awareness among NGOs regarding procedure to obtain Orphan Certificate. Every district shall have a Monitoring Committee for the management of the institution and monitoring the progress of every child under Rule 55 of Juvenile Justice (Care & Protection of Child) Rules, 2007.

Domestic Violence Act 2005 and Rules 2006 (DV Act No - 2005)

Annually Rs.196.00 lakh is being spent to facilitate proper implementation of the Act. Under this act 25094 petitions are received, of which 11465 Domestic incident reports filed and 7031 are compromised through counseling and 456 Interim Orders received and 3531 final Orders are issued so far.

Integrated Child Development Services-Achievements under ICDS:

- About 5.15 Lakh children are attending pre-school education activities in Anganwadi Centres. 257 ICDS projects are functioning in the State.
- A.P. State is the only State who have developed and launched an activity-based Pre-School Curriculum to promote holistic development uniformly in children throughout the state.
- Organizations like Andhra Mahila Sabha, College of Home Science, KEK Ltd., SODHANA, Pratham, Azimii Premji Foundation and World Vision are being involved actively to strengthen Pre-School activities in AWCs.
- Hot meal with snack was introduced along with 4 eggs in a week for the Pre-school children.

Impact Nutrition Programme

Supplementary Nutrition Programme is being implemented in 257 ICDS projects covering 48770 main Anganwadi Centers and 6837 mini AWCs. The Government is providing nutrition to the children age group of 7 month to 6 years and pregnant and lactating women. Under this programme 5.86 lakh Pregnant & Lactating Women and 14.90 lakh 7 Months to 3 years' children are benefitted.

Balamrutham is the weaning food introduced under ICDS to provide improved supplementary nutrition to children between 6 months to 3 years. The weaning food is a preparation of wheat, chana dhal, milk powder, oil and sugar. It is fortified and thus provides 50% of iron, calcium, vitamins and other RDA that children require per day. 2.5 k.g of Balamrutham packt is been given as THR along with 8 eggs per month per chaild.

Hot Meal (Mid day meal) is provided every day, consists of 75g Rice, 15g Dal, 5g Oil, 25g Vegetables commodities and per child 16 Eggs for month are provided at AWC to 3 to 6 years children. 8.25 lakh children were benefitted.

The Government introduced **"Anna Amrutha Hastam"** (AAH) programme which involves spot feeding of "one full meal" for Pregnant and Lactating Women to address, Nutrition and health at the Anganwadi centre and ensuring administration of Calcium and Iron & Folic Acid (IFA) tablet.

Special care and supervised feeding is called **Gorumuddalu** for the children up to 5 years who are categorized under severely underweight (SUW) severe acute malnourished (SAM) and moderate acute malnourished (MAM), 42640 were benefitted under this scheme.

Recognizing the importance of nutritional needs of children in the Tribal Areas, government is implanting

"**Giri Gorumuddalu"** for all children in the Tribal Areas in 24 tribal ICDS Projects with high tribal density covered in 2540 AWCs and 1818 mini AWCs. The initiative aims at eradicating malnutrition among the 1.52 lakh children of the Tribal Areas.

SABLA (Rajiv Gandhi scheme for empowerment of Adolescent Girls) scheme is being implementing as pilot project in 4 Districts i.e., Vishakapatnam, West Godawari, Chittoor and Anantapur. 2.85 lakh adolescent girls are covered under the programme. Take Home Ration of 3 Kgs rice, 1 kg dal and ½ litre oil are provided to adolescent girls of 11-14 years out of school children and all the girls in the age group of 15-18 years.

IDA Assisted ISSNIP

International Development Association (World Bank) assisted ICDS Systems Strengthening and Nutrition Improvement Project (ISSNIP) is being implemented in 10 Districts of Andhra Pradesh at an estimated cost of Rs.82.80 Crore in the cost sharing ratio of 70:18:12 between the World Bank, GoI and the State Government for a period of 2 years 6 months from the date of the project i.e. 01.12.2015 to 30.06.2018.

The project has four components, viz., 1 Institutional and System Strengthening; 2 Community Mobilization and Behaviour Change Communication (BCC); 3 Convergent Nutrition Actions & Project Management, Monitoring & Evaluation.

196 ICDS Projects and 43,616 Anganwadi Centres in the 10 selected districts in the state except Krishna, Nellore and Guntur are covered under ISSNIP. The achievements in 2017-18 include:Receipt of Challenge fund of Rs 6.40 crore for achievement of DLI, One-day training on NHTS, e-sadhana, and Kaizala APP in the month of October, Community based events like 1.68 lakh srimantalu and 6.87 lakh Annaprasanas were orgnised in 37713 AWCs.

Software support for CAS will include providing troubleshooting for mobile applications for AWWs and Supervisors and reports and dashboard for ICDS functionaries. Pilot of village mapping in West Godavari District and finalising the 11 digit coding in web mpr.

Innovation Pilot progress

The state would promote consumption of 'five-hundreds' during pregnancy within the overall framework of promoting appropriate dietary practices (related Medicines, nutritive food) which includes promotion during the course of pregnancy. All food items except the groundnut and jaggery candies will be supplied through the ICDS. The National Health Mission provides IFA and calcium tablets.

Strengthen the existing platforms of ICDS and Health and Family Welfare and elicit support of the community-based organizations (including the Self-Help Groups-SHGs) and the elected members of the Panchayati Raj Institutions (PRI) to sensitize the families and communities on the need to promote access to key services and practice appropriate behaviors during pregnancy in 377 anganwadi centers of Parvathipuram ICDS Project-Vizianagaram District.

State Level Service Delivery Structures

- State Child Protection Society (SCPS) and State Adoption Resource Agency (SARA) have been functioning at State level as per the pattern prescribed in ICPS.
- State Child Protection Society (SCPS) is set up in every State/UT as the fundamental unit for the implementation of the scheme. The SCPS takes care about the implementation, supervision and monitoring of ICPS and all other child protection schemes/programs and agencies/institutions at State level.
- State Adoption Resource Agency (SARA) is a unit under the SCPS, to support CARA in promoting in-country adoption and regulating inter-country adoption and to coordinate, monitor the work of adoption.
- District Child Protection Unit (DCPU) in each district is a fundamental unit for the implementation of the scheme. The DCPU shall coordinate and implement all child rights and protection activities at district level.
- In 13 Districts, District Child Protection Societies are established under the Chairmanship of District Collector, and District Child Protection Units with 12 officials are functioning under the control of Project Director, DWCDA.

Specialized Adoption Agencies (SAAs) / Sishugruhas

The Department is promoting adoption through establishment of 14 Specialized Adoption Agencies (SAA) (Sishugruhas), in 13 districts (2 SAAs in Krishna District). In-country and Inter - Country Adoptions are being processed through online CARINGS, duly following the CARA guidelines. Adoption process is decentralized to the district level. At present 158 children are housed in 14 Sishugruhas.301 children are placed for in- country adoption and 35 children are placed for Inter-Country adoption.

Prohibition of Child Marriage Act, 2006

- 40% of child marriages in the world takes place in India only.
- India is in 11th position among 68 nations, where child marriages are reported.
- AP has the highest prevalence among Southern States as per NFHS – IV.
- 2047 child marriages have been stopped.
- Development of 1381 Child Friendly Villages @100 in each district.
- Involvement of community, youth and adolescent group for supporting network.

Bangaru Talli

Under this programme 1, 62,613 beneficiaries have been covered by SERP and MEPMA. The scheme is under active consideration of Government.

Girl Child Protection Scheme (GCPS)

The Government of Andhra Pradesh have implemented the New Insurance Scheme for Protection of Girl Child in collaboration with LIC. The New Girl Child Protection Scheme is aimed at preventing gender discrimination by empowering and protecting the rights of Girl Child through direct investment from Government.

The nominee of the insured parent-member whilst he/she is the Insured Member under Janasree Bima Yojana, is entitled to be paid Rs.30,000 for natural death of insured, Rs.75,000 for death or total permanent disability due to accident and Rs.37,500 for partial permanent disability due to accident. 4.15 lakh beneficiaries benefitted as against the 4.34 enrolled members under the scheme.

Construction of Buildings under RIDF

RIDF	Sanctioned	Completed	Under progress	Balance works
XVI 2010 -11	731	509	20	202 (cancelled)
XIX 2013-14	364	265	47	52 (yet to be stated)
XX 2014-15	492	308	85	99 (yet to be stated)
“Strengthened & Restructured ICDS” (APIP)	3535	2250	294	991 (cancelled)
Strengthened & Restructured ICDS”.	4828	2624	1097	1107 (yet to be stated)
CDPO office buildings	149	71	57	21 (yet to be stated)
AWCs under MGNREGA	7048	3683	3059	306 (yet to be stated)

Women Development& Child Welfare Department

New Sanctions

Multi Sectoral Development Programme (MSDP)

Proposals were submitted to Government (Minority Welfare) for construction of 500 AW buildings in identified Blocks and Towns in the Districts of Kadapa (100), Kurnool (270), Ananthapur (69) and Guntur (61) under Multi Sectoral Development Programme (MSDP). Government of India have released Rs.4.59 Crores as 1st installment for construction of AW buildings in Kadapa (50 AWCs) and Kurnool (154 AWCs).

Vedanta Foundation

Under Vedanta Foundation, proposals were submitted to Government of India for construction of 300 AWCs in the Districts of Srikakulam (25), Vizianagaram (66), Visakhapatnam (67), East Godavari (67), West Godavari (25), Kurnool (25) and Ananthapur (25)

RIDF XXIII

The proposals were submitted to Government for construction of 223 AW buildings @ Rs.11.20 lakhs per each AWC building in 13 Districts under RIDF-XXIII during 2017-18. The proposals were also submitted to Government for construction of additional 223 AW buildings @ Rs.11.20 lakhs per each for an amount of Rs.2500.00 lakhs in 4 Districts i.e Kurnool, Ananthapur, Chittoor and Guntur under RIDF-XXIII during 2017-18.

Incomplete Buildings

The District Collectors have provided funds for Rs.5746.34 lakhs for completion of 1977 incomplete buildings in full shape.

Infrastructure facilities

No. of Anganwadi Centres	55607
No. of Anganwadi Centres having toilet, drinking water & electricity facilities	23308
No. of AWCs having Toilet facility	30325
No. of AWCs having Drinking Water facility (connections)	36677
No. of AWCs having Electricity facility	34303

Toilet facility to 25280 centres, drinking water connections to 18929 centres and electricity connections to 21302 centres are required for which the District Collectors have sanctioned funds for 3599 toilets, 962 water connections and 1813 electricity connections under MGNREGA, Swachh Bharat, 14th Finance Commission, 15% ZP funds etc., In the Districts, Backward Region funds, Mineral Development funds, 15% ZP funds , MP LADs which are under the discretion of the District Collectors are also provided for completion of incomplete buildings and also for improving facilities. NRI funds are provided for additional facilities to AWCs in Visakhapatnam District.

Juvenile Welfare, Correctional Services and Welfare of Street Children

The Juvenile Welfare department endeavors to undertake necessary steps for all round development and rehabilitation of "Children in need of Care and protection" (children who have been alleged to have committed offences) up to the age of 18 years. There are 757 Children staying in 32 homes and 12 open shelters as on 01-11-2017. In January, 2016, the Parliament has enacted a new Juvenile Justice (Care and Protection of Children) Act, 2015.

Institutional Services

There are 4 **observation homes** functioning at Visakhapatnam, Eluru, Kadapa & Tirupati for **reception & rehabilitation** of 'children in need of care & protection' who are admitted as per the orders of the Child Welfare Committee. The Government have issued orders to start 7 additional children homes in the state with the sanctioned strength of 50 children in each Home and it will start functioning shortly in Srikakulam, Kurnool, Guntur, Nellore, East Godavari, Prakasam & Vizianagaram districts.

There are 6 **observation homes** functioning at Vijayawada, Rajahmundry, Visakapatnam, Kurnool, Tirupathi and Ananthapuramu for **juveniles** in conflict with law during pendency of cases against them before Juvenile Justice Boards. The observations of the Hon'ble Supreme Court of India in WP (Civil) No. 473/2005 filed by Sampurna Behrua Vs UoI to reduce the distance between the Juvenile Justice Boards and Observation Homes, the Govt have notified certain NGOs as Certified Observation Homes and also to start certain Observation Homes as Extension Homes by the dept in addition to already functioning 6 Observation Homes for boys and 2 homes for girls.

- 2 Special Homes are functioning for juveniles in conflict with Law after completion of cases against them by the Juvenile Justice Boards at Visakapatnam and Tirupathi for reception and rehabilitation.
- There is a temporary reception for girls in need of care & protection and in conflict with law referred by the CWCs & JJBs.

The Government issued orders to establish two **places of safety** attached to the Observation Home for Boys and Girls each and two places of safety attached to the Special Home for Boys and Girls each in Tirupathi and Visakhapatnam to house the persons who have committed heinous offences.

Non-Institutional Services - Probation:

The department implements the Probation of Offenders Act 1958. The District Probation Officers appointed under this Act work to rehabilitate Ex-Convicts released from Central Jails/ juveniles/children by enforcing the conditions of the orders of Hon'ble Court/Juvenile Justice Board/Child Welfare Committee and Jails. First offenders are placed on probation instead of committing to the jails.

Welfare of Street Children – Open Shelters:

The Government of India is providing grant in aid to the Non Government / Voluntary Organizations for establishing and maintaining Open Shelters for these children in the ratio of 60:30:10, Presently, 12 Open Shelters are functioning in the State.

Statutory Bodies

Juvenile Justice Boards (JJB):

Government have constituted Juvenile Justice Boards to deal with the cases of 'children in conflict with law' in all the 13 districts. All the Juvenile Justice Boards are headed by the lady Magistrates, as Principal Magistrates. Since January-2017, 1050 cases are disposed by JJBs and 932 cases are pending for disposal.

Child Welfare Committees (CWC):

Government have constituted Child Welfare Committees to take with the cases of 'children in need of care & protection' in all the 13 districts. During the year 2017-18 (upto Sept-2017), 4668 cases were disposed by the Child Welfare Committees in the State and 1807 cases are pending for disposal by the CWCs as on 30.09.2017.

Achievements:

- 2812 children have been either rehabilitated or reintegrated or reunited with their families. Besides this, 72 children who belong to other states were repatriated to their native states.
- Seven children have passed the SSC exam regularly, of which one girl was topper of the School (KGBV, Y.V. Palem) and 16 children have passed through Open School. Three children have appeared Intermediate examinations and passed in 1st class. Four children have appeared and passed Intermediate 1st year exams through Open School.
- The 27 Counsellors/ Social Workers working under ICPS program were trained on 'Basics of Child psychology and Counselling skills', 'Child abuse and trauma issues' and also on 'Psychosocial interventions for Children in Conflict with the Law' respectively in three Phases by the NIMHANS, Bengaluru.
- As per the directions of the Hon'ble Supreme Court of India in W.P (Civil) No. 102 of 2007 and as per the guidelines issued by the State Govt. vide G.O.Ms.No.3 & 8, the department has issued notification for registration of all the Child care Institutions in the State U/s 41 of the JJ Act, 2015 and Provisional Registration Certificates are issued to the eligible Child Care Institutions which have applied and Final Registration Certificates will be issued by the District Collectors after antecedents verification reports are received from the police department.

Welfare of Differently Abled & Senior Citizens

The Persons with Disabilities Act, 1996 deals with both prevention and promotional aspects of rehabilitation of education, employment and vocational training, creation of barrier-free environment, provision of rehabilitation service for persons with disabilities.

To look after the welfare of the disabled, an independent corporation (1981) and a separate department (1983) were established in the State. The department is working towards implementation of persons with Disabilities Act, 1996 and National Trust Act, 1999 that ensures multi sectoral coordination with various government departments for prevention, early identification and detection, education, employment, rehabilitation, mainstreaming, networking and monitoring of Government of India grant-in-aid projects of NGOs.

As per the census 2011, the total number of people with disabilities in the state of Andhra Pradesh is 11,03,789. Out of them visually handicapped people are 2,03,167, hearing handicapped people are 2,90,146, orthopedically handicapped people are 3,12,782, mentally handicapped people are 1,02,166, multiple handicapped people are 1,95,528. As per the census 2011, the population of Senior Citizens in the State is 33.75 lakhs out of which 16.08 lakh are male and 17.67 lakh are female.

A number of schemes are being implemented for the empowerment and rehabilitation of persons with disabilities. These schemes aim to promote physical, psychological, social, educational and economic rehabilitation and development of persons with disabilities to enhance their quality of life and enable them to lead their lives with dignity.

Pensions:

Through the Panchayat Raj and Rural Development, pensions are being sanctioned every month to 5,21,723 Differently Abled persons and 19,53,621 Senior Citizens in this State.

Education

- 18 pre-matric and 2 post- matric hostels are working with a sanctioned strength of 1,780 boarders.
- Out of 6 Residential schools , 3 for hearing Impaired at Vizianagaram, Bapatla, Ongole and 3 for visually impaired at Vizianagaram, Visakhapatnam, Hindupur are functioning with a sanctioned strength of 860.
- One Residential Junior College for hearing impaired at Bapatla, Guntur District with a sanctioned strength of 50.
- In 2016-17, Scholarships were sanctioned to 3361 Differently Abled students including Mentally Retarded and to 1758 students in 2017-18 up to Oct, 2017.

Social Security

- A subsidy of Rs.1.00 lakh was sanctioned to Differently Abled persons under economic rehabilitation scheme. 446 persons benefitted in 2016-17 and 621 were covered in the year 2017-18 (up to Oct, 2017).
- 1335 persons have got Marriage Incentive Awards in 2016-17 and 662 persons were covered under the scheme in the year 2017-18 (up to Oct, 2017).
- Petrol subsidy to the disabled persons who are having motorized own vehicle for self-transportation and income upto Rs.1,00,000/- per annum was sanctioned.

Construction

Government allocated an amount of Rs.4.90 crores for the year 2017-18 for construction of Hostels, Homes and Schools.

Institutions

There are 4 Homes are functioning in the State at East Godavari, Anantapur, Chittoor and Krishna Districts with a sanctioned strength of 100 inmates in each Home.

Survey, Assessment of Needs and issue of medical certificates and identity cards

The department in close collaboration with departments of rural development, Medical & Health, NIMH, NGOs has evolved a scientific computer aided disability assessment

strategy. This software is called as SADAREM (Software for Assessment of Disabled for Access, Rehabilitation & Empowerment).

Aids and Appliances

Camps are conducted for differently abled people for distribution of tricycles, wheel chairs, walking sticks, Braille slates, laptops, tape recorders, CD players and smart canes to needy people.

Senior Citizens

The Government of India has enacted Maintenance and Welfare of Parents and Senior Citizens Act, 2007. Tribunals have been constituted in all the Sub Divisions and Appellate tribunals were also constituted in the state to ensure that the SCs are able to live with dignity and that their needs for maintenance, welfare, medical care and protection.

Action Plan

- It is proposed to establish four homes for Destitute Aged and Crippled persons at Srikakulam, Eluru, Nellore and Kurnool with an estimated cost of Rs.185.14 lakh per annum @ Rs.46.28 lakh for each home on PPP mode.
- Proposed for conversion of 18 Hostels and 6 Residential Schools into Integrated Schools for Children with Special Needs of OH, HI and VH @ 1 School in each District.

Achievement during the 2017-18 (upto 10/2017)

- To establish a Study circle exclusively for Persons with Disabilities at Vijayawada.
- To enhance the diet charges to post-matric students in the Hostels functioning under the control of the Department from 850/- per month to Rs.1050/- per month.
- To establish 3 Old age homes on PPP mode at Visakhapatnam, Guntur and Ananthapuram with an estimated cost of Rs.139.92 lakh per annum @ Rs.46.64 lakh for each home with an intake capacity of 100 boarders in each home.
- Government of India sanctioned Centre for Disability Sports at Visakhapatnam and handed over 10.00 acres to the National Institute of Mentally Handicapped.
- Sanctioned a Home for Orthopedically Handicapped at Guntur.
- Government have launched a special recruitment drive for filling up the backlog vacancies reserved for the differently abled. The period for recruitment has been extended upto 31.03.2018.

A.P. Differently Abled & Senior Citizens Assistance Corporation (APDASCAC)

The corporation has taken up the programme to differently Abled i.e. supply of prosthetic aids and mobility aids, supply of educational aids to individuals and institutions, facilities to impart training in various technical and non-technical trades, organizing employment generation production units with assured market for products and creating awareness among parents for early detection and stipulation and treatment of various disabilities.

Government of India sanctioned Braille Press to Guntur District under the scheme of modernization / capacity augmentation for starting new Braille Press and released Rs.129.77 lakhs to Andhra Pradesh Differently Abled and Senior Citizens Assistance Corporation.

Rehabilitation and Supply of Prosthetic Aids

Under this scheme, Differently Abled and Senior Citizens Assistance Corporation supplies aids and appliances such as tricycles, wheel chairs, crutches etc., to Persons with Disabilities (PwDs). Government issued orders permitting Andhra Pradesh Differently Abled and Senior Citizens Assistance Corporation (APDASCAC) to extend the facility of supply of aids and appliances/assistive devices to Senior Citizens on par with Differently Abled. During the year 2017-18, upto October, 2017, 11035 beneficiaries covered for supply of various aids appliances and also proposed to distribute 2500 three wheeler motorized vehicles to Orthopedically Handicapped Persons.

Government of India Schemes

The Government of India, Ministry of Social Justice & Empowerment has sanctioned Deendayal Disabled Rehabilitation Scheme (DDRS), Integrated Programme

for Older Persons (IPOP) and Prevention of Alcoholism and Substance (Drugs) Abuse Scheme. The Government of India sanctioned 7 Disability Rehabilitation Centres at East Godavari, Vizianagaram, Kurnool, Prakasam, Nellore, YSR and Chittoor districts and alsosanctioned the composite regional centre for Mentally Handicapped at Nellore.

Backward Classes Welfare

Population belonging to backward classes pursuing traditional activities such as cattle and sheep rearing, toddy tapping, earth works, fishing, weaving, goldsmith, blacksmith, brass smith, carpentry, stone carving, laundry, pottery, oil pressing, basketry, hair dressing, tailoring and dyeing fall under 138 communities listed are divided into five Groups viz., Group A, B, C, D and E.

Government is implementing various welfare, educational and economic development programmes for the welfare of the backward classes people. Without hurting the interests of BCs, the Government is committed to provide reservation to Kapu / Balija / Ontari / Telaga communities.

Pre-matric hostels

Hostels are providing free boarding and lodging to students belonging to backward classes and enabling them pursue their Pre-Matric studies. At present, there are 897 government B.C. hostels, (692 hostels for boys and 205 hostels for girls). A total strength of 90,611 boarders were admitted in the B.C. hostels during 2017-18. All these hostels have a combination of 76% Backward Classes, 10% Scheduled Castes, 5% Scheduled Tribes, 3% Minorities and 6% other castes for encouraging Social Integration.

Of the total 897 hostels, 556 hostels are in government buildings, in the remaining hostels, 48 buildings are under construction. Still 293 buildings are to be constructed. Diet charges and cosmetic charges. are provided to boarders and also supplied note books, four pairs of dresses and bedding material every year. 96.11% of X class students in BC hostels were passed against the 91.92% of state average during the year 2016-17.

Residential Schools

Government have sanctioned 3 new BC Residential Schools in Ananthapuramu District and 6 new Residential Schools for the children of Fishermen @ one in each District of Srikakulam, Vizianagaram, Visakhapatnam, West Godavari, Guntur and Prakasam Districts. 2 Junior Colleges are sanctioned, one for Girls and one for Boys in Ananthapuramu District. With the sanction of new institutions, the total No. of Institutions comes to 43 (Boys-22, Girls-21). The total admitted strength is 14,552 (Boys- 8529, Girls- 6023) in 2017-18. Admission pattern in residential schools is BC-A: 7%, BC-B: 10%, BC-C: 1%, BC-D: 7%, BC-E: 4%, SC: 15%, ST: 6%, EBC: 1%, Orphans: 3%.

In BC residential schools the admission pattern is BC-A: 20%, BC-B: 28%, BC-C: 3%, BC-D: 19%, BC-E: 4% SC-15%, ST-6%, EBCs-2% and Orphans-3%.

With an objective of improving the infrastructure, Govt. have sanctioned Rs.160.00 Cr. towards major works in 10 BC residential school buildings.

Post-Matric scholarships and reimbursement of tuition fee to BC students

Government is implementing the Post Matric Scholarships and Reimbursement of Tuition fee scheme to eligible BC students who pursue higher education. 7.33 lakh BC students were sanctioned Post Matric Scholarships and Reimbursement of Tuition Fee in 2016-17. 5.28 Lakh students were benefited under Post-Matric scholarships scheme in 2017-18 (April to Oct 2017) and 84 lakh students were benefited under reimbursement of tuition fee scheme in 2017-18 (April to Oct 2017).

Reimbursement of Tuition Fee to EBC students

The Government has been implementing the scheme of Reimbursement of tuition fees for the Economically Backward Classes (EBCs) on saturation basis on par with BCs. 1.81 lakh EBC students were sanctioned reimbursement of tuition fee during the year 2016-17. 1.24 lakh students were benefited under this scheme in 2017-18(April to Oct 2017).

College Girls and Boys Hostels

During 2017-18, 356 College Hostels (178 Boys College Hostels and 178 Girls College Hostels) are functioning with a total strength of 38,300 boarders (19132 Boys and 19168 Girls). All these College hostels for boys and girls have a combination of 69% Backward Classes, 15% Scheduled Castes, 6% Scheduled Tribes and 10% Minorities for encouraging Social Integration. 35,600 students were benefited under this scheme in 2017-18(April to Oct 2017).

NTR Videsi Vidyadharana

Under this scheme 485 students were selected in 2016-17 and 168 students were selected in 2017-18 (April to Oct. 2017).

AP Study Circles for BCs

There are 13 BC Study Circles functioning in the State to provide free coaching facilities to eligible BC unemployed graduates and post graduates, who are appearing for various competitive examinations of State and Central Government like Civil Services, Group-I and Group-II, etc. 750 candidates were selected for training during the year 2017-18. All these Study Circles have an admission pattern of 66% Backward Classes, 20% Scheduled Castes and 14% Scheduled Tribes for the purpose of Social Integration.

NTR Unnatha Vidyadarana

Government have introduced NTR Unnatha Vidyadarana Scheme for imparting coaching in reputed Pvt. Institutions for providing financial assistance to the candidates through the prescribed process for (UPSC Civil Service Examination Prelims-cum-Mains and interview). Students will be paid a stipend of Rs. 10,000/- month for 9 months. One time traveling allowance will be paid to each student – Rs. 2000/- Institutional fee is paid to the institution - Rs. 1,50,000/-. BC Students are sponsored to 10 empanelled institutions. 1534 students were provided professional guidance in 2017-18. Amount to be spent on each student – Rs. 2,50,000/-(Including Institutional Fee).

Welfare schemes

Welfare schemes are being implemented through the following institutions for providing self employment to poor B.C families.

A.P Backward Classes Cooperative Finance Corporation Ltd., A.P. Washermen Cooperative Societies Federation Ltd., A.P Nayee Brahmins Cooperative Societies Federation Ltd., A.P Vaddera Cooperative Societies Federation Ltd., A.P.Sagara (Uppara) Cooperative Societies Federation Ltd., A.P Valmiki/Boya Cooperative Societies Federation Ltd,A.P Krishna Balija, Poosala Cooperative Societies Federation Ltd., A.P. Bhattraja Cooperative Societies Federation Ltd., A.P. Medara Finance Corporation Ltd., A.P. State Viswabrahmins Cooperative Corporation Ltd., A.P. State Kummari/ Shalivahana Cooperative Societies Federation Ltd.,

A.P Backward Classes Cooperative Finance Corporation Ltd.,

The Corporation is being implement the schemes of (i). Subsidy scheme in rural areas (Margin Money) and (ii). Subsidy in urban areas (BC Abhyudaya Yojana).

Margin Money

Action Plan for the year 2017-18 is to benefit 52,500 beneficiaries under Margin Money scheme with a total value of Rs.525.00 Crore, out of which Rs.119.03 Crore towards Subsidy provided to 18290 BC beneficiaries by the Corporation.

BC Abhyudaya Yojana

The Annual Action Plan for the year 2017-18 is to benefit 11900 beneficiaries under Urban Areas scheme with a total Value of Rs.119.00 Crore, out of which an amount of Rs. 35.64 Crore towards subsidy released to 4299 BC beneficiaries.

Schemes for the benefit of individual families

There is a common financial assistance scheme being implemented for the welfare of individual families of different communities covered by 11 federations. It is implemented by taking one society affiliated to concerned federation comprising 15 members as one unit.

22,087 primary co-operative societies have been registered in all districts of the state for 11 Federations.

Scheme for community services:

Construction of dhobi ghats is being implemented through A.P. Washermen Co-operative Societies Federation with 100% subsidy with a unit cost of Rs.5.60 Lakh. Government have allotted Rs.20 crores for construction of 357 dhobi ghats during 2017-18.

Social Welfare

The Scheduled Castes Population in the state has increased from 74.28 1akhs in 2001 to 84.69 lakh in 2011, registering a growth of 14.01 percent. As per the 2011 Census, Scheduled Castes population forms 17.08 percent of the total population of Andhra Pradesh and 79.98% of the Scheduled Caste people live in rural areas. Sex Ratio among the Scheduled Castes is 1007, which is higher than the state average of 996. The literacy rate among SCs was 64.47, lower than the State's Literacy rate of 67.41. SC population ranges from 7.68% in Visakhapatnam district to 23.19% in Prakasam district. Literacy rate among SCs ranges from 55.26% in Kurnool district to 71.43% in West Godavari district. SC enrollment ratio 82.29% and dropout rate was 39.64%. as against the general rate of 33.41%.

Educational programmes

Hostels

758 Hostels are functioning in the state, with an admitted strength of 78,851 in 2017-18. 36 Integrated hostel Welfare Complexes are functioning in the State with an admitted strength of 8,149.

The students studying from class III to X will be admitted into these hostels in the ratio - SC: 70%, Christian converts from SCs: 12%, ST:5%, BC:9% and Others: 4%. The amenities are provided to the students like Diet, cosmetic charges, bed sheets, sports material etc. and 5 to 18 note books as per class of the student.

Ananda Nilayams

At present 17 (8 boys and 9 girls) Ananda Nilayams are functioning in the State in 2017-18. 50% of the seats in Ananda nilayams are filled with orphan students and the remaining 50% with children whose parents are engaged in unclean occupations. The inmates in these Ananda nilayams are provided all facilities on par with the boarders in Social welfare hostels.

Bio-Metric attendance

Bio-Matric Attendance is implemented in 758 Pre-Matric and 308 Post-Matric Hostels. Laptops and finger print devices are provided to mark biometric attendance.

Residential quality education to hostel boarders

195 hostels were merged into social welfare residential schools, benefiting 11,878 students during 2017-18.

Results

Out of the 13,736 students who appeared for SSC Examinations in March 2017; 12,183 students passed. The overall pass percentage is 88.69 as against the State average of 91.92.

College Hostels

There are 308 College hostels (153 boys and 155 girls) functioning with an admitted strength of 27,292 students.

Post-Matric scholarships

An amount of Rs.705.96 crores is provided for 3.42 lakhs students in the year 2017-18.

Dr.B.R. Ambedkar Overseas Vidyanidhi

Under this Scheme, financial assistance is provided to the eligible SC students for pursuing higher education

abroad. The selected SC students are sanctioned Rs.10.00 (5.00+5.00) lakhs grant in two installments. 55 students have been selected and assisted under this scheme and an amount of Rs.31.35 Crore was released during 2017-18.

Skill Upgradation

Govt is implementing the scheme for giving coaching to SC students for eligibility test such as TOEFL/IELTS and GRE/GMAT and other for admissions in foreign universities. An amount of Rs.2.25 crore is provided for the target of 1500 students during 2017-18,

Pre-matric scholarships for students belonging to SCs studying class V to X

The objective of the scheme is to support parents of SC children for education of their wards studying in classes V to X so that the incidence of drop-out, especially in the transition period from the elementary to the secondary stage is minimized. During 2017-18 an amount of Rs.63.33 has been released. Of which 61071 scholarships were sanctioned and incurred an expenditure of Rs.25.03 crore.

Best Available Schools schemes

Under this scheme, preference is given to the children of those belonging to the families of agricultural labourers, jogins, bonded labourers and orphans. During 2017-18 an amount of Rs.36.76 Crores has been released out of which Rs.14.98 Crores is incurred expenditure for 18414 students.

Backlog vacancies.

Under this 3523 SC vacancies and 2480 ST vacancies are identified. Of which 2344 are filled by SCs and 1475 filled by STs.

PCR ACT, 1955 and POA ACT, 1989:

Special sessions courts:

Government sanctioned 13 Special sessions courts in all districts of AP. There are 3332 SC/ST Cases pending as against 5402 cases registered during 2017-18 upto September 2017.

Special Mobile Courts:

Government sanctioned 13 Special Mobile Courts in all the districts of A.P. The Special Mobile Courts were constituted for dealing with offences under PCR Act, 1955 in the State from 1978. The Mobile Courts are headed by First Class Judicial Magistrate and assisted by Asst. Public Prosecutor.

Relief and Rehabilitation to the victims of Atrocities:

Under Rule 14 & 15 of the POA Rules, the scheme of Relief and Rehabilitation to the victims of Atrocities is entrusted to the State Government and enhancing the Relief and Rehabilitation amount fixing the monetary limits.

Rehabilitation of bonded labour

Rehabilitation of bonded labour is a centrally sponsored scheme with funding pattern of 50:50 between the state and the centre. The A.P. Scheduled Caste Cooperative Finance Corporation is rehabilitating the identified bonded labourers out of the Corporations funds initially with the help of District SC Co-operative Service Societies.

Rehabilitation of Jogins

Economic Support Schemes with a unit cost of Rs. 20,000/- per family has been implemented for rehabilitation of Jogins of which Rs. 10,000/- is subsidy. The District SC Societies are implementing schemes for the benefit of Jogins through Bank Linked Schemes like Milch Cattle, Bullock carts and Kirana shops etc.

Incentive award for inter-caste married couples:

Government have been encouraging Inter-Caste marriages for social integration and social reform with an objective of eradication of caste system in the society. The incentive award for inter-caste married couples increased from Rs. 10,000/- to 50,000/-. The incentive award can be sanctioned to the couple where one of the spouses belongs to Scheduled Caste.

NTR Vidyonnathi

700 SC candidates were selected through an entrance exam conducted by the JNTU, Kakinada during the year 2017-18 and they have been allotted to five reputed institutions in the Country. (1) Brain Tree, Hyderabad (2) R.C Reddy IAS Study circle, Hyderabad (3) Sri Ram's IAS, New Delhi (4) Universal coaching centre, Bangalore (5) Dr. Lakshmaiah I.A.S Study Circle, Hyderabad. An amount of Rs.18.00 crores was allocated in Budget Provision 2017-18 for this scheme.

Free Power to SC House holds:

On the Occasion of 110th Birth Anniversary Celebrations of Dr. Babu Jagjeevan Ram, Government launched "Jagjeevan Jyothi" scheme extending the benefit of free power upto 75 units in respect of SC&ST Households, consuming power upto 100 Units per month by covering 14.24 Lakhs SC&ST Households from 01.06.2017 onwards. During 2017-18 (upto Oct., 2017) 10.29 Lakhs SC families were benefited and incurring expenditure of Rs.65.16 Crores under this Scheme.

Scheduled Castes Sub Plan

This is designed for development of SC's & ST's at least in proportion to their population with an objective to bridge the gaps in development indicators between the general population and SC's and ST's. During 2017-18, an amount of Rs.9847.13 Crores is allocated and incurred expenditure of Rs.5554.76 Crores (Upto October, 2017).

Andhra Pradesh Scheduled Castes Cooperative Finance Corporation Ltd

The main objective of A.P. Scheduled Castes Cooperative Finance Corporation Ltd is to provide financial assistance for creation of income generating assets to the poor belonging to Scheduled Caste households for social and economic development.

The Corporation mainly prepares plans, promote and take up economic assistance programs in the fields of Agriculture, Animal Husbandry, Marketing, Procession, Supply and Storage of Agriculture Products, Small Scale Industry, Cottage Industry, Trade, Business or any other activity which enables Scheduled Castes members to earn a better living and improve their standard of living. Special emphasis is on vulnerable sections like scavengers / safai karamcharis, bonded labour, flayers & tanners, jogins. All these schemes are implemented with loan tie up from the banks towards providing skills for enhancement of opportunities for wage employment and self employment.

Under SC Action Plans, an amount of Rs.1252.10 crore was provided towards financial assistance for the benefit of 91,279 SC beneficiaries for the year 2016-17. An amount of Rs.2731.11 crore is allocated for the benefit of 1.48 lakh SC beneficiaries for the year 2017-18.

Implementation of Schemes - Special Central Assistance

Government of India is providing Rs.44.42 crore under Special Central Assistance to the State Government for taking up schemes for the benefit of Scheduled Castes and the funds are utilized for providing subsidy and for non-recurring items.

Enhancement of Subsidy

The Government have enhanced the subsidy component for economic support schemes and the subsidy component is 60% or Rs 1.00 lakh (whichever less) in case of the self-employment schemes.

E-payments

The Government have implemented bank-linked subsidy schemes through e-payment system of direct release of subsidy to beneficiaries' loan account to all welfare departments.

Innovative activities

Vulnerable Groups

Providing financial assistance with 100% Grant to vulnerable groups like Leather workers (F&T / Cobblers), Safai Karamcharies (families involved in sanitation work), Manual scavengers (Fresh cases), Jogins, Bonded Laborers / Atrocity Victims and Surrendered extremists with an amount of Rs 6.54 Cr. for the benefit of 654 beneficiaries.

Minor Irrigation

Providing irrigation facilities like bore wells, submergible pump sets to the lands of poor scheduled castes families to take out their livelihood with a total outlay of Rs 14.45 Cr for the benefit of 2,225 beneficiaries with 90% subsidy.

Land Development

Land Development scheme is being taken up in assigned lands which were not covered by DWMA with an amount of Rs.20.00 Cr. to cover 19997.50 acres of land.

Land Purchase Scheme

Social Welfare Empowerment & Tribal Welfare Empowerment has taken a conscious decision to implement the land purchase scheme for Elimination of Rural Poverty with a systemic approach to reduce the incidence of poverty among poor persons in the State. The main objective of this scheme is to empower the poor Agricultural Scheduled Caste Women in the society by providing means of livelihood as well as economic security. An amount of Rs 199.95 crores is provided under SCAP for the year 2017-18 for the benefit of 1833 SC families for purchase an extent of 4333 acres of Agriculture land.

Chandranna Cheyutha

- To encourage skill development for SC youth by providing employability linked training programs.
- To encourage standardization in the certification process and initiate a process of creating a registry of skills
- Enable and mobilize a large number of SC youth in the state to take up skill training and become employable and earn their livelihood.

Around 31,815 SC Youth were benefited with a monetary benefit of Rs.233.31 crore under this programme.

National Scheduled Caste & Finance Development Corporation & National Safai Karamcharis & Finance Development Corporation

The broad objective is to enable easy access to credit for SC educated un-employed poor youth belonging to SCs at cheaper rate of interest for self employment units and to identify entrepreneurial capabilities among them. With a view to encourage SC educated youth, the APSCCFC has revived the self employment programmes with the loan assistance from NSFDC during the year 2017-18.

An amount of Rs 128.00 crore allocated for the benefit of 1812 SC beneficiaries with a crop subsidy of Rs.55.76 crores and NSFDC loan of Rs.69.68 Crores under NSFDC scheme. An amount of Rs 58.07 crore allocated to assist 1109 SC beneficiaries with subsidy of Rs 22.17 Cr and NSKFDC loan of Rs. 34.74 Crores under NSKFDC scheme.

Tribal Welfare

The tribal population of Andhra Pradesh according to 2011 Census is 27.39 lakh constituting about 5.53% of the total population of the State. The scheduled areas extend over 14,132.56 sq.kms which is about 8.82% of total area of the State with 5,318 villages spread in Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari districts. There are 34 ST communities living in the State. Of the 27.39 lakh tribal population, 10.54 lakh are found in the above mentioned 5 districts. The ST literacy rate is 48.83% (Female 39.40, Male 58.37). Government accorded high priority for development of tribals. Major focus is on education, health, skill development and creation of social infrastructure including road connectivity and supply of drinking water in inaccessible tribal areas.

Important Goals

A perspective plan is prepared envisaging 3 broad aims translated into 19 goals in tune with the MDGs and SDGs. Project based with 81 ongoing and new projects in the areas of infrastructure development including housing Schemes benefitting individuals for poverty alleviation and social empowerment with an estimated cost of Rs.23766.98 crore for 7-year period.

Residential Education

Government converting 50 Tribal welfare Hostels in non-Scheduled area into 50 TW Residential schools. 30 hostels were converted into Residential schools in non-Scheduled area. These 80 residential schools were started functioning with a strength of 10028 from class 3rd to 6th. Converting 30 TW hostels into Ashram schools in Scheduled area with a strength of 4910.

Quality Initiative under Education:

There are 378 Ashram Schools, 29 Hostels, 4 IWCH (including merged Mandal) and 98,271 students have been enrolled so far. An amount of Rs.567.27 Cr is provided in Budget for 2017-18 towards Diet and other maintenance charges. 10725 ST students are admitted in 77 Best Available Schools for the year 2017-18.

Gurukulam has secured 4 seats in IITs,17 seats in NITs, 1 seat in NEET and more than 120 tribal students got seats in reputed Engineering Colleges.

SSC Results 2016-17:

S. No	Name of the Institutions	No. Appeared	% of Pass
1	Ashram schools & Hostels	10922	97.53%
2	Gurukulam	3067	96.74%

Source: Tribal Welfare department

Other Livelihood Promotion activities:

Promoting potato cultivation in Paderu and Seethampeta and also taken up Apple cultivation with 100 farmers by introducing low chill verities of Apple in Paderu and RC Varam. Beside this, some trials are being taken up on other temperate fruit crops plums and pears and Japanese permissions in Paderu Agency area to evaluate the feasibility.

In order to improve the livelihood and income of tribal farmers, comprehensive coffee project is being implemented in ITDA, Paderu area of Visakhapatnam District with financial outlay of Rs.526.16 crores for the period of 10 years in convergence of TSP, coffee board and beneficiary contributions. From 2017-18 onwards, MGNREGS is taking part in implementation of the project under convergence. The major components of this project are expansion of new coffee in 1 lakh Acres and shade plantation in 65000 Acres, Consolidation / Rejuvenation in 45000 acres, improving quality of coffee through supplying 11500 baby pulpers, Marketing supported organic certification for better remunerative price.

As per the planned target for the year 2017-18, new coffee plantation in 12000 acres, shade plantation in 13040 acres was completed and rest of 1960 acres in progress, completed Rejuvenation in 15000 acres. 1000 Baby Pulpers are being supplied to the farmers. Organic certification process is going on in 5000 acres. Under marketing support, 330 Mts of raw coffee was pooled during the cropping season of 2016-17. For 2017-18, it is targeted to pool 1500Mts of raw coffee and pooling of raw coffee harvesting is already going on.

Economic Support Schemes:

It is proposed to cover 10,736 beneficiaries with an amount of Rs.9128.17 lakhs for effective implementation of the economic support schemes. Under this scheme, selected ST beneficiaries/ST group will be provided financial assistance 60% of the unit cost or Rs.1 lakh whichever is less, in which the PvTGs and other vulnerable groups are allowed 90% subsidy of the unit cost or 1 lakh whichever is less. An amount of Rs.4267.82 lakhs released to 5586 beneficiaries.

Skill Development:

Under this programme, 3393 ST youth were trained. 643 under EDP, 2167 placed through direct placement, 123 through competitive examinations, 277 under SIEMENS, 47547 students are benefited through Vocationalisation,- 277 schools through APSSDC in all Districts.

Entrepreneur Development Programme was implemented to 50 candidates through DICCI as a pilot basis. Out of 50 candidates 10 ST candidates are uploaded and registered their DPRs in Stand up India web portal for sanction of subsidy and margin money. Aspiration training infrastructure was created by consulting 28 Youth training centers which are facilitating as skill development centers of excellence. MoU between Tribal Welfare Department (TRICOR) and AP State Skill Development Center (APSSDC) is entered for providing skill up gradation training for employability of ST youth. Pre-training orientation Bavitha Campaigns are being organised which is to mobilize ST youth. Career guidance and counselling Job Meals/direct placement drives are being organized for placement to the skilled youth. Training in 19 skill sectors in 30 trades working with 45 training partners, are being offered to ST youth from the YTCs and Pool Training Centers.

Coffee Project:

Total cost of project is Rs.526.16 Crores and subsidy from Coffee Board is Rs.160.360 Crores. Subsidy from TSP is Rs.364.008 Crores. Beneficiary Contribution is Rs.1.792 Crores.

Duration of the Project is 2016-17 Season a Quantity of 330 M.Ts of (146 M.Ts of parchment and 184 M.Ts of Cherry) was pooled with GCC. This entire was cured and sold through weekly e- auctions.

Tribal farmers got an Average sale rate of Rs.81.72 a kg (Rs.12 more than last year's rate) for Arabica Cherry coffee. The average sale rate obtained for Robusta cherry was Rs.60.62 a kg. For parchment, the farmers got an average sale rate of Rs.151 a kg on par with International market rates. Total sale value of Rs.364.56 lakhs was paid to 1932 coffee farmers.

During 2017-18 (ensuring season) a quantity of 1500 M.Ts of row coffee is expected to be pooled. The pooling operations have been commenced on 12-12-2017.

Organic certification of coffee has been taken up in Chintapalli and G.K. Veedhi Mandals. 10 farmers group have been formed with 2500 farmers. The certification is under process.

Post – Matric Scholarships

The Government have indicated a budget provision of Rs.120.00 Crores. For providing scholarships to benefit 66,000 ST students for the year 2016-17. Students registration for sanction of Scholarships is through online. In this Scheme incurred expenditure an amount of Rs.15581.81 lakhs has distributed to 67637 ST students covered in 13 Districts.

IT Initiatives

To enhance service delivery system to reach up to the last mile taken up through e-Hostel, e-pass, e-Office etc., Biomatric Attendance implemented in all District by A.P. Online. Dairy Attendance captured on android based Mobiles/Online. Bogus attendance was controlled. Financial accounting system introduced in TRICOR & Gurukulam. Online monitoring of Post-Matric, Pre-Matric Scholarships, Corporate Colleges, BAS Schemes, NTR Vidyonnathi, Giriputrika Kalyan Yojana Schemes. Student academic & Biomatric Attendance monitoring system introduced in Gurukulam.

New Initiatives and Achievements:

- 4 Tribal students scaled Mount Everest successfully during May 2017 and awarded Rs.10.00 lakhs per student and 3 are also participated to scale the Mount Everest and awarded Rs.5.00 lakhs per student by Government of Andhra Pradesh.
- Introduced digital Classes in (80) Residential Schools.
- The GoI have sanctioned ATAL Tinkering Labs in (6) institutions sponsored by the NITI Ayog, Government of India.
- Introduced "Spell-Bee" in all Gurukulam schools to improve English vocabulary and pronunciation among the tribal students.
- Skill Development training program is also introduced in 48 institution in coordination with AP State Skill Development Corporation.
- Vocational cources introduced in 4 identified Gurukulam Institution from 9th class onwards in coordination with Rastriya Madhyamika Siksha Abhayan (RMSA).

Alluri Seetha Ramaraju Museum

Foundation stone laid for the museum in the seven acres of land in Visakhapatnam on 09.10.2017. Rs.48.00 crore sanctioned for the Museum. Expert group constituted for collection and finalization of artifacts. 3 to 4 galleries exclusively for 3D digital art based on tribal themes. The plans and structure of designs are approved. Proposed date of completion is 31.10.2019.

Girijan Cooperative Corporation (GCC) Ltd.

GCC has procured in Rs.24777 lakhs into tribal economy through its core activities and fixed an annual target of Rs.31700 lakhs for the current financial year 2017-18. GCC has procured Rs.1282 lakhs worth Minor Forest produce and Rs.350 lakhs worth Coffee, supplied Rs.2396 lakhs of essential commodities and Rs.18120 lakhs worth Domestic Requirement through GCC owned DR Depots (Fair Price Shops). Value addition to forest produce, organic

certification to MFP produce and launching of new products through retail chain have generated additional business of Rs.2310 lakhs and also enabled GCC to ploughing back returns by enhancing MFP purchase prices to tribal.

GCC Other Activities

During the year 2017-18, MFP/Agricultural produce worth Rs.452.54 lakhs has been procured till November, 2017 as against the target of Rs.2000 lakhs. The procurement of major items is being taken up from the current month onwards.

Sale of Essential commodities and other food provisions, cosmetics, petrol & HSD oil is Rs.14915.23 lakhs till the end of November, 2017 as against the annual target of Rs.24600.00 lakhs. Efforts are being made to achieve the targeted sale in the coming months.

Sale of value added "Girijan" brand products record level Rs.1325.16 lakhs during the current year up to November, 2017. The sales turnover of these products would go up to Rs.25crorec by the end of March, 2018.

Sale demand for Araku valley coffee (4 variants viz., pure coffee, 60:40 filter coffee, 70:30 filter coffee and Roasted Beans) is increasing month after and so far 2 lakhs pack (200 grams) sold. Another variant "Araku Valley Instant Coffee" will be launched into the market shortly.

Short Team Agriculture loans of Rs.164.71 lakhs have been disbursed to tribal farmers during the current year. In addition to this, short term loans to a tune of Rs.174.50 lakhs have also been disbursed to coffee farmers linking recovery with coffee grown.

The overall business target for the current financial year is Rs.31700 lakhs against which the achievement up to November, 17 is Rs.16984.07 lakhs.

Organic Certification for 15 MFP items has been obtained for the year 2017-18. Sale of organic products has been taken up.

15 Petrol & HSD bunks have been opened in tribal areas of Paderu agency. One more bunk at Chinture of E.G. District also opened. An annual sale turnover of Rs.250 lakhs is aimed at through these new bunks. Proposals are under process to open another 5 bunks.

Important Activities

Tribal Sub Plan (TSP)

Andhra Pradesh is the first state to enact AP SCSP and TSP Act, 2013 to provide legal backing for allocation, expenditure and monitoring of TSP. Providing quality education to ST Students, committed to implement TSP in true letter and spirit, providing safe drinking water to all ST habitations, providing connectivity to unconnected villages, electrification of un electrified ST habitations, empowering building and skill up gradation of ST youth and committed towards gender empowerment by providing necessary support in education, Health improvement, income Generation, Capacity building and Skill up gradation.

An amount of is Rs.892.36 crore allocated to the department and Rs.530.56 crore was released towards educational programs. For implementation of Welfare programs an amount of Rs.3099.96 crore is allotted under Tribal Sub Plan (TSP) to various line departments and an amount of Rs.2446.46 crore is incurred expenditure by the 42 line departments covering 204 schemes.

Giriputrika Kalyana Padhakam

The aim of the scheme is to extend the financial assistance of Rs. 50,000/- to tribal girls at the time of their marriage with a view to alleviate financial difficulties to celebrate marriage in the families of Scheduled Tribes in the state. 1388 beneficiaries were covered under the scheme during the year 2016-17. So far, 1105 beneficiaries availed benefit as against online registration of 2459 during 2017-18 upto December 2017.

Synopsis of activities in the implementation of ROFR Act 2006

The enactment of the scheduled tribes and other traditional forest dwellers (recognition of forest right) ACT-2006, otherwise known as FRA, is an important legislation, passed by the Parliament in the context of tribal empowerment, relating to tenure security on forest and forest land. The act is intended to recognize, vest and record forest rights of the forest dwellers who have been residing in forest areas for generation and whose right could not be recorded.

Under the Act, the Scheduled Tribes and Other Traditional Forest Dwellers (OTFDs) who are dwelling in the Forest Land for years, and eking out their livelihood from the forest produce prior to 13-12-2005, are eligible for forest right on the forest lands.

The STs and OTFDs are eligible for Forest Right on the Forest Lands, as afore mentioned up to a maximum extend of 10 Acres per family. The claimants can make their claims for Forest Right on the Forest Land in the Gram Sabha; the claims are processed by Gram Sabha, SDLC & DLC and final orders on the issuance of titles are issued by the DLC.

Implementation of Recognition of Forest Rights (ROFR)

Special training programmes were conducted for the field functionaries and the Inter District field visits to the ST Farmers under ROFR, to facilitate them to interact with their counter parts in other District on the issues of methods of cultivation, land development, rising of crops/ plantation and related issues.

Besides the above, in the office of SPMU-ROFR, the newly established Resource Center, as acted as a knowledge hub to the field functionaries of ROFR Programme, particularly in the matter of Geo mapping for identification of claimants lands.

1.74 lakh claims were received with an extent of 9.85 lakh Acres. Of which 1.71 lakh were surveyed with an extent of 9.61 lakh Acres and 0.88 lakh distributed (titles issued) with an extent of 6.29 lakh acres.

AP Schedule Area Land Transfer Regulation (LTR)

Article 244 is the most significant article in the Constitution regarding the governance of the Scheduled Areas particularly the tribal land rights. It also permits the Governor, on the recommendation of the TAC, to regulate the transfer of tribal lands in the Scheduled Areas.

The AP Scheduled Area Land Transfer Regulations 1 of 59 as amended by 1 of 70 were brought to prevent alienation of tribal lands and also restoration of alienated lands to tribals in the Scheduled Areas (SAs) of the State. Until and unless the contrary is proved, the land in occupation by non-tribals shall be deemed to have come through a transfer from tribals as per the provision of section 3(1)(a) of Land Transfer Regulations (LTRs) (Amended) 1 of 1970. Non tribals are taking the advantage of the loopholes in the provisions of LTR, and securing orders in their favour in LTR court cases.

In this backdrop the Government of Andhra Pradesh constituted a committee to look in to land issues including tribal lands and for recommendations. The GOAP accepted most of the recommendations given by the Land Committee. There are 17 recommendations pertaining to the tribal land issues. Implementation of some of the recommendations of the KRRC, required certain legal changes to the existing provisions of the LTR 1 of 59 as amended by 1 of 70 as well as Ryotwari Settlement Regulations in force in the Scheduled Areas.

PESA Act 1996, Act 1998 & Rules 2011

The enactment of the Panchayats Extension to Scheduled Area (PESA) Act 1996 by the Parliament is an important watershed in the history of tribal affairs and autonomy of Gram Sabha for the local self-governance in Fifth Scheduled Areas of the country. The Government of Andhra Pradesh brought state legislation in 1998 through an amendment to the AP Panchayat Raj Act 1994 (Known as AP State PESA Act) by extending the special provisions for the local governance in the Scheduled Areas of A.P. The State PESA Act came operational through notifying the elaborate PESA Rules in 2011 governing the role of Gram Sabha in the local administration. The Government also notified the villages for the purposes of constituting GSs in the year 2013 in the Scheduled Areas and enabling them to function as a self government unit within the framework of PESA Act and Rules for effective governance.

The PESA Act 1996 mandates that the legislature of a State shall not make any law inconsistent with the basic features of the Central PESA Act 1996. The provision of the Section 4 of PESA Act 1996 is that “Not withstanding anything contained under Part IX of the Constitution, the Legislature of a State shall not make any law under that part which is inconsistent with any of the features mentioned in the clauses (a) to (o). (These are related to the powers of Gram Sabha and Gram Panchayats as the case may be).

Very recently the AP High Court passes a ruling (Writ Appeal No 1506 of 2017) holding that the authorities under AP Excise Rule 24 of 2012 cannot exercise their power to grant liquor shop or a bar license in the Scheduled Areas without a specific resolution of the Gram Sabha under AP PESA Rules and PESA Act 1996.

Therefore, there is a need to examine all the State laws and GOs for required amendments in consonance with the provisions of Parliament enacted PESA Act 1996.

Minorities Welfare

As a secular country, the Government's endeavour has always been to ensure progress to all population, including the Minorities. Several schemes and policies have been put in place to ensure up-liftment of Minorities under the aegis of the Minorities Finance Corporation. Development of Minorities requires attention from several angles. The minority population is mostly urban-based. A large segment of the Minority population is below poverty line. The share of Minorities in different economic support schemes has also been very low.

Minorities Welfare

The primary objective of the department is socio economic development and educational advancement of minorities in the state. The department has taken up various schemes for improvement in livelihoods, educational upliftment and imparting training for enhancing employment opportunities for the minorities.

Scholarships

Government is providing Scholarships both MTF and RTF to the Post Matric Students covering Intermediate, Graduation, Postgraduation, M. Phil, Ph. D, diploma courses like Polytechnic, Nursing etc., Professional courses like MBBS, B.Tech, MBA, MCA etc., on saturation basis. 1,23,980 students applied online and still registration is going on.RTF of Rs.134.62 Crore and MTF of Rs.29.03 Crore has been sanctioned to 126512 students during 2017-18 (upto January, 2018).

Dulhan Scheme

An amount of Rs.6000 lakhs was released towards implementation of Dulhan Scheme for the BPL families in the state in the year 2017-18.

Minorities Welfare Hostels

There are 6 Prematric Minorities Hostels and 9 Post matric Hostels functioning aiming the educational and social development of the poorest of the poor minority students. Rs.2.00 crore have been released to all the Districts for maintenance of Minorities Welfare Hostels upto Jan 2018.

Residential Schools

There are 6 Residential schools in the state aiming the educational and social development in Minority students with residential amenity. An amount of Rs.6.00 crore have been released to A.P. Residential Schools in the state upto Jan 2018.

The Multi Sectoral Development Program

MSDP funds have been released to 4 Districts viz., Ananthapuramu, Guntur, Kurnool and YSR district for implementation of the Scheme. The works are under progress.

Overseas Educational Scholarships Scheme

This Scheme has been introduced in 2016-17 for the Minorities for pursuing their higher studies in abroad and an amount of Rs.10 lakhs is being sanctioned for each student. Till now 99 students were sanctioned and release process is going on.

Andhra Pradesh State Minorities Finance Corporation APSMFC)

The APSMFC Limited encourages the socio economic development of weaker sections of Minorities viz., Muslims, Christians, Sikhs, Buddhists, Jains and Parsis, educational development skill upgradation through training, developing confidence among Minorities of being important stakeholders in nation buildings. Assistance is

provided through banks for which the corporation provides subsidy component under economic assistance for setting up business, industry, service, agriculture and allied viable activities and grant in aid for welfare schemes.

Schemes

Subsidy for Bankable Scheme

The scheme is being implemented for minorities to setup viable Self-employment scheme. During the financial year 2017-18, an amount of Rs.5083.86 lakh released and 7,370 persons were benefitted under the scheme.

Training & Employment and placement

The main objective of the scheme is to improve the technical skills under various traded and to create self employment among the educated unemployed youth in Minority communities. The training is being given on Electronic, Automobile, IT & ITES, Banking, Construction, Beauty Culture & Hair Therapy, Health & Medical, Retail, Manufacturing, Textile, Hospitality, Electrical, Education, Police recruitment, Job Melas, Pre recruitment coaching for competitive exams etc.,

Empanelment of Training Partners

The placement linked training programme shall be organized with the Training partners empanelled with A.P.S.S.D.C. and Government Organizations like APSRTC, CITD, CIPET. During the Training Period Stipend of Rs.500/- per month will be paid to the eligible trainees. During the year 2016-17, 7316 unemployed minority youth were trained in this programme with an amount of Rs.836.38 lakhs. Police pre-recruitment training already commenced. The Corporation is planning to conduct high-end training programmes for the benefit of B.Tech, M.Tech and M.C.A. unemployed candidates. During the year 2017-18 APSMFC stated impart training to 3664 unemployed youth with an expenditure of Rs. 517.63 Lakhs.

Law Graduates Scheme:

Training & Employment Corporation is implementing Minority Law Graduate Scheme for the benefit of Law Graduates to undergo Training in Administration of Justice under Public Prosecutor / Government Pleader for a period of 3 three years. During the year 2016-17, 78 candidates have been selected for Law graduate training programme with an expenditure of Rs.6.78 lakh as against the target of 88 candidates.

During the period, every Minority Law Graduate shall be paid a stipend of Rs.1,000/- per month uniformly for all 3 years, an amount of Rs.6,000/- towards purchase of Books and Furniture as one time grant in the 1st year. An amount of Rs.2,000/- per annum will be sanctioned to the candidate under training for Administration of Justice, for attending seminars, workshops, symposiums etc., that enhances advocacy skills of the candidate and enrollment fee of Rs.585/-and wherein the enrollment fee will be reimbursed to them. During the year 2017-18, 63 candidate (Fresh + Renewal) students trained as against the target of 96 students with an expenditure of Rs. 11.00 Lakhs.

Central Government Schemes:

Pre Matric Scholarships

Pre Matric Scholarships will be sanctioned to the Minority Students pursuing studies in a Government or private School from Class I to X whose parent / Guardians income from all sources does not exceed Rs.1.00 lakh per annum and students must have secured not less than 50%marks in the previous final examination. An amount of Rs.2708.14 lakh released under pre Matric Scholarships to 1.08 lakh students out of 2.01 lakh students applied in the year 2017-18.

Post Matric Scholarships

Post Matric Scholarships will be sanctioned to the Minority Students pursuing studies in a Government or private colleges from Intermediate, Technical and vocational courses in Industrial Training Institutes. During the year 2017-18, an amount of Rs.919.03 lakh released under Post Matric Scholarships to 11,486 students out of 26,955 students applied.

Merit-cum-Means Scholarships

Merit-cum-Means Scholarships will be sanctioned to the Minority Students pursuing studies in a Government or private colleges in Professional Courses (B.Tech, M.Tech, B.Pharmacy, M.B.B.S., M.B.A. M.C.A etc). During the year 2017-18, an amount of Rs.309.27 lakh released under Merit cum Means Scholarships to 1,160 students out of 6,274 students applied.

AP State Christian Minorities Finance Corporation

Government has been in the forefront in implementing Welfare Schemes for the Christian Minorities. Many new initiatives brought out such as Christian Bhavan, Pilgrimage to Holy Land of Jerusalem, Financial Assistance to Self Employment Schemes, Grant in Aid to Churches and Church run Institutions, Scholarships, Trainings for Unemployed, Coaching Programmes, Training for Christian Minority Law Graduates, Dulhan etc., are implemented throughout the state. During the FY 2017-18, Rs.59.21 Crore allotted for the AP State Christian Minorities Finance Corporation.

Highlights and Progress of APSCMFC till date

Christian Bhavan: Government allotted Ac.2.00 land for the construction of Christian Bhavan with a budget of Rs.10.00 Crore. Construction work is under progress.

Pilgrimage to Holy Land of Jerusalem: Government revived the scheme of Pilgrimage to Holy Land of Jerusalem and provided a budget of Rs.5.00 crore during the FY 2017-18 for providing financial assistance to 2500 Pilgrims. First Batch of 46 pilgrims was travelled on 03-12-2017. Next batch will be travel for 393 persons.

Taxi Subsidy Scheme: 150 cabs are allotted for distribution to eligible Christian Minorities in Krishna, Guntur and West Godavari districts under Economic Support Scheme.

District Level High Tea Programmes: The budget for conducting of High Tea Programme at District Head Quarters is enhanced to Rs.50000/- from Rs.30000/- per district.

Distribution of Sewing Machines: 540 Christian Minority Women were trained under Training, Employment and Placement Scheme.

Chandranna Christmas Kanuka: Government provided basic commodities to 1,00,000 poor Christians during the Christmas season as Chandranna Christmas Kanuka .

Schemes & Activities of the Corporation

Subsidy for Bank Linked Income Generated Schemes (Economic Support Scheme):

The scheme is for individuals who desires to setup self-employment activities where the maximum unit cost is up to Rs.2,50,000/-. The Corporation provides a subsidy @ 50% of the total unit subject to a maximum of Rs.1,00,000/-. 576 and 651 persons were benefitted under this scheme for the year 2016-17 and 2017-18 respectively.

Training and Employment

APSCMFC offers industry specific training across sectors including IT and ITES, Hotel Management, Retail, Engineering etc., at exclusive skills centres through multimedia content. The unique skill delivery process begins with the identification of jobs and ends with the placement of trained youth in various sectors. 1210 candidates were benefitted under this scheme for the year 2017-18 and 2500 candidates were mobilized and training will be commenced shortly.

Scheme of training for Christian (Minority) Law Graduates in Administration of Justice is intended to prepare Law Graduates to practice as Advocates.11 candidates were trained during 2017- 18 with an expenditure of Rs.5.34 Lakh. 15 members were benefitted under free coaching for competitive exams programme during 2017-18.

Construction of Churches and Church Run Institutions: APSCMFC has sanctioned Rs.5.73 crores for construction of churches and Church Run Institutions at various places.

Centre for Educational Development of Minorities

CEDM are located at Kurnool, Guntur and Visakhapatnam and implementing three major state government sponsored projects.

A. An integrated project on improving classroom performance of minority school children:

Provides special free coaching in core subjects of Mathematics, Physical Sciences, Biology, English and Telugu / Social Studies to X class Urdu / Telugu medium minority students at 57 centres in 9 districts of the State except East Godavari, West Godavari, Vizianagaram and Srikakakulam and 5000 were benefitted under this scheme. Providing free work books to X class Urdu medium coaching and non-coaching students in all districts. The pass percentage of coaching students in SSC-2017 is 96%.

B. A comprehensive project for improving participation and performance of minority candidates in competitive entrance examinations:

Free Coaching and study material given to 1547 students seeking admission to courses like POLYCET, DEECET, EAMCET, ICET, EdCET, etc. in Hyderabad and other minority concentrated districts of AP.

C. Chamak Scheme: Free coaching to minorities for job oriented competitive examinations and provides free coaching to job-oriented competitive examinations like, UPSC Civil Services (Prelims), APPSC Group I, II & IV examinations etc. 516 persons were benefited under this scheme. An amount of Rs.200.00 lakh has been released for implementation of the above schemes for the year 2017-18.

D. NTR Vidyonnathi : A new scheme "NTR Vidyonnathi" is introduced in the year 2017-18 for Minorities for providing professional guidance for Civil Service Examinations for sponsoring the meritorious students to reputed private institutes to extend the benefit for 300 students yearly. 2050 students were attended for entrance exam, 300 students qualified and allotted Institutions.

A.P. State Haj Committee

The AP State Haj Committee is constituted for making arrangements for the Haj pilgrimage of Muslims. An amount of Rs.3.00 crore was provided as grant-in-aid to the Haj Committee during the year 2017-18, 2802 pilgrims proceeded to Haj during the year 2017. Every year, the AP State Haj Committee deputes the Khadimul Hujjaj (Haj Volunteers) to assist Haj Pilgrims in Makkah Mukarramah and Madina Munawwarah. 14 Volunteers were deputed in 2017.

Andhra Pradesh State Wakf Board

The Government sanctioned an amount of Rs.1150.00 Lakh in the year 2017-18 for construction, repairs to Mosques, Edgahs etc. and benefited 2677 Waqf Institutions. Under Protection of Right and Divorce Act, 1986 an amount of Rs.100.00 Lakh was allocated and benefited to 75 Muslim Divorced Women.

For development of Waqf Institutions to generate the income, Rs.500.00 Lakhs was allocated as revolving fund in the year 2017-18. (10) waqf institutions got identified for construction of shopping complexes.

As on 09-01-2018, an amount of Rs.2675.84 Lakhs have been utilized to benefit 4,181 Masjids i.e., 8,362 Imams and Mouzans towards honorarium of Rs.5,000/- per month to Imam and Rs.3,000/- per month to Mouzan.

Urdu Academy

Basically Urdu Academy functioning with schemes & projects meant for the promotion & protection of Urdu Language & Literature. Its activities are basically literary & academic in nature pertaining to the welfare.

Preserving/promotion of Urdu language

Implementing the financial assistance to publication of urdu manuscripts, urdu libraries in shape of books, urdu news agencies, urdu periodicals, etc. and awards such as maqdoom award, life time achievement award, Moulana Abul Kalam Azad National Award, best urdu teachers, students award,etc. Providing financial aid to the reporters of electronic channels and cable TVs. An amount of Rs.2000 lakh was sanctioned to implement the above schemes during during 2017-18.

Maulana Abul Kalam Azad Award and Makhdoom Award:

The A.P. Urdu Academy has instituted a National Award of Maulana Abul Kalam Azad comprises of a Cash Prize of Rs.1.25 lakh once in every year and Makhdoom Award is a prestigious National Award carries a Cash Prize of Rs.1.00 lakh given once in every year.

Vocational training in urdu computer education

The Urdu Academy is maintaining 36 Computer Training Centres and Urdu Libraries. The duration of course is 6 months. The intake capacity of each computer centre is 70 students.

Construction of Urdu Ghar cum Shadikhanas

Urdu Academy has been releasing Rs.15.00 crores for construction urdu/completion Urdu Ghar-cum-Shadikhanas at various places.

Youth Services

Youth Welfare schemes are implemented in accordance with the aspirations and needs of the youth. The department organized youth festivals at Divisional, District and State Level, National Youth Week Celebrations including Tribal & Multi-Cultural Youth Festivals, youth exchange programmes, celebrations of National importance days are being organized with coordination of other departments.

Youth empowement programmes

Youth festivals:

To encourage the youth to participate in cultural programmes and to provide them a platform to exhibit their talents, Divisional level youth festivals in all the divisions and district headquarters of the State were conducted.

Disaster Management & First aid training programme:

To make endeavours towards creating awareness among the youth about disasters and natural calamities and to prepare them in advance to face such situation and to ensure their participation in the disaster mitigation plans, Disaster Management and First Aid Training Programmes have been conducted in coordination with Indian Red Cross Society in subjects like disaster management, first-aid, psycho social care, public health in emergencies, search and rescue, health hygiene and sanitation, climate change etc., So far 4,837 (both Student and Non- Student) youth have been imparted training.

Inter-district youth exchange programme:

Inter-District Youth Exchange Programmes have been taken-up and 100 Youth in (2) batches per district were sent to districts in other regions. Efforts are being made to send another contingent of 300 youth in batches to other regions of the State.

Observance of national / international important days:

The Department has been observing important days of national and international importance every month in all the districts of the state by organising suitable programmes involving youth members of youth clubs, non-governmental organisations, NCC, NSS, educational institutions etc., The programmes include 'Blood Donation Day', 'World Population Day', 'World Nature Conservation Day', 'Independence Day', 'Sadhbhavana Diwas' 'National Sports Day' and 'Anti suicide and Anti drug day' etc.,

Formation / Rejuvenation of Youth Associations / Youth Clubs:

There are 2861 Youth Associations / Youth Clubs which are being reactivated. 567 youth Associations / Youth Clubs are newly formed. It is making continuous efforts to conduct awareness camps every month in every nook and corner of the district to form new clubs / associations and rejuvenate old and dormant groups into live.

Construction of yuva bhavans: (Youth empowement centres)

It is proposed to establish Youth empowement centres in all the District Head Quarters with a project cost of Rs.5.00 crores which will be the centres for youth excellence and conduct of various youth welfare activities. The Higher Education Department has also been requested to transfer lands in the identified colleges proposed to establish Yuva Bhavans at Amaravathi and all Divisional Headquarters.

Youth advancement programmes

Pre-recruitment trainings for Army & Air Force Rallies.

Pre-recruitment training programmes are organised for enrolling more number of youth of Andhra Pradesh in Indian Army, Air force and allied forces. Department of Youth Services & APSTEP made arrangements through A.P. Skill Development Corporation and imparted pre-trainings to eligible youth at free of cost with boarding

and lodging facilities for one month to groom the eligible youth to participate in the rallies effectively. 2862 youth were trained and were provided with free boarding, lodging, track suits, shoes, study material etc., on free of cost for Indian Air Force Rally held at Vijayawada in the month of September, 2017. 2,078 youth were imparted training for Army Recruitment Rally held at Vizianagaram in the month of October, 2017 for all the Districts in Andhra Pradesh.

Financial Assistance to youth to undergo training course in adventure activities:

Eligible youth will be provided financial assistance for helping them to undertake basic/advance training courses on adventure activities at recognised institutions like: Himalayan Mountaineering Institute, Darjeeling, Nehru Institute of Mountaineering, Uttarakashi, National Institute of Mountaineering and Allied Sports, Dirang, etc., 27 youth members were given financial assistance to undergo training at HMI, Darjeeling & National Institute of Mountaineering and Allied Sports, Dirang.

Mount Everest Expedition: A Five (5) member team from Department successfully reached the summit of Mount Everest during 2016-17. This year also it is proposed to send a team to Mount Everest on Expedition.

Women start up camps:

In collaboration with 'Girls-in-Tech Foundation' organised two day Hackthon on Smart City at Visakhapatnam.

Andhra Pradesh (youth leadership, innovation and entrepreneurship awards) for 'future stars' awards':

To identify and publicly recognize the excellence of Young Inventors and Innovators and Entrepreneurs who have been the most successful in continuously developing a stream of value-creating new products and services, Future Stars Awards in two streams i.e., Student and non-student are proposed 128 awards in District and State level.

Sports Material:

To encourage the youth to keep themselves fit and to channelize their energies towards participating in community welfare programmes/social service for the welfare of the society, supply of sports material is proposed to 3000 youth clubs/associations in the state. The material will be supplied to the eligible youth clubs/organizations by procuring through SAAP shortly.

Action Plan:

- Self Defence Training for women Youth;
- Organising Youth Parliament/Assembly at District and State Levels;
- Sending of A.P. Contingent to visit Punjab under "Ek Bharath Shresht Bharat".

Housing

Andhra Pradesh State Housing Corporation has been the pioneer in implementation of Weaker Section Housing Programme along with adequate amenities.

APHCL acts as a Techno Financing Agency in shelter delivery in rural and urban areas by encouraging construction of houses through self- help and mutual help basis. It also encourages community participation in the construction of houses.

APSHCL encourages production and usage of cost effective and minimize cost of construction. 46 Nirmithi Kendras / Sub Nirmithi Kendras were established all over the State for spreading awareness about the use of such materials and technologies. Building components have been produced and utilized for the housing program taken up by the corporation so far.

The State Government intends that no Urban Poor Person in the State of Andhra Pradesh should be left without a pucca house and every eligible person should own a house by 2022, when India celebrates 75th Independence Day.

APSHCL is the executing agency for taking up urban houses in all the municipalities under the centrally sponsored PMAY-HFA (U) –BLC scheme and Rural housing gramin dovetailing with PMAY(G) besides taking up IHSDP scheme and few BSUP projects along with local bodies under JNNURM.

Weaker Section Housing Programme

Under Weaker Section Housing Programme 59,00,175 houses have been completed up to December 2017 comprising 53,76,663 in rural areas and 5,23,512 in urban areas under Weaker Section Housing Programme since

1993-94. District wise details of houses constructed during the year 2016-17 and 2017-18 (upto December 2017) are given in Annexure 8.19.

Under IHSDP 24,194 houses were sanctioned with a project cost of Rs.387.77 Crore out of which, 21,065 houses were completed with an expenditure of Rs.358.16 Crore.

Under BSUP 10,903 houses were sanctioned with a project cost of 301.84 Crore out of which 10,087 houses were completed with an expenditure of Rs.251.87 Crore.

Action Plan for 2017-18 (Rural Housing)

NTR Rural Housing

- APSHCL has taken up 2.00 lakh houses under NTR Rural housing programme dovetailing with MGNREGS during 2016-17 with a unit cost of Rs.1,50,000 per each house with a project cost of Rs.3000.00 crore. Out of which 1,16,477 Houses were completed by Dec, 2017.

- 4.00 Lakh houses were sanctioned under NTR Rural Housing Program @ 2.00 Lakh houses each for the years 2017-18 & 2018-19 with a project cost of Rs. 6000.00 crores. 26,586 Houses were completed up to Dec, 2017 under 2017-18 programme.

NTR Special Housing (HUD HUD) 2016-17:

9,170 houses were sanctioned for HUD HUD cyclone victims during the year 2016-17 with a Project cost of Rs. 399.62 Crores. Of which 3592 Houses were completed by Dec, 2017.

NTR Rural Housing(Gramin)

APSHCL has taken up 72,885 lakh with a unit cost of Rs.2,00,000/- houses under NTR Rural housing (Gramin) programme dovetailing with PMAY-G and MGNREGS with a project cost of Rs.1457.70 crore. Out of which 17,329 Houses were completed by Dec, 2017. 48,058 houses were sanctioned in 2017-18 with a project cost of 961.16 crores.

NTR Upgradation

Rs.150.00 crore was sanctioned for taking up repairs to houses constructed prior to 2004 to make them habitable with a maximum financial assistance of Rs.10,000/- per house.

NTR Urban Housing: BLC

31,401 houses were sanctioned under NTR urban housing dovetailing with BLC component of PMAY, HFA (U) with a unit cost of Rs.3.50 Lakhs per house and with a project cost of Rs.2556.44 Crores. Of which 17,532 Houses were completed by Dec, 2017. 1,02,977 houses were sanctioned in 2017-18 with a project cost of 3604.19 crores.

Details of Houses Completed under Weaker Sections Housing Programme from 2014-15 to 2017-18 upto Dec are shown in 8. 18

Table 8.18 Houses completed under weaker sections housing programme

Sl. No.	Year	Rural	Urban	Total
1	2014-15	25050	4292	29342
2	2015-16	62584	2967	65551
3	2016-17	47851	5016	52867
4	2017-18 (upto Dec 2017)	203367	21124	224491

Source: A.P. State Housing Corporation Limited.

PMAY NTR Nagars Affordable Housing in Partnership (AHP-APTIDCO)

The Government has decided to construct and handed over 5 lakh dwelling units by March 2019. So far 4.81 lakh houses sanctioned in 98 Municipalities out of 110 Municipalities under PMAY NTR Nagars Scheme with a project cost of Rs.38266 crores. Out of 4.81 lakh sanctioned houses 4742 houses were completed and upto February 2018. GoAP would bear the cost of construction including external infrastructure over and above the fixed beneficiary share and GoI Subsidy. The Government of AP share for each house will be about 4 to 5 lakhs per houses. Details of houses sanctioned and completed are given in Annexure 8.20.

Public Health & Municipal Engineering

Urban Water Supply and Sanitation

The Department is dealing investigation, design, preparation of estimates and plans and execution of water supply and sewerage schemes in all 110 Municipalities including 13 Municipal Corporations.

Water Supply Improvement Schemes are being taken up in Urban Local bodies from time to time to improve per capita water supply on par with National Standards. In addition, the technical control over all Engineering Works in 110 Municipalities including 13 Municipal Corporations of the state is exercised by Engineer–in-Chief (PH). The operation and maintenance of Water Supply & Sewerage Schemes is being attended by the respective Municipalities and Municipal Corporations.

Status of Water Supply

As per the standards stipulated in Central Public Health Engineering Environmental Organization (CPHEEO) manual, the rate of drinking water supply to be maintained is as follows:

Town with Under- ground drainage - 135 LPCD

Town without Under-ground drainage - 70 LPCD

The State Government is giving top priority to provide protected drinking water to all urban local bodies by strengthening existing infrastructure and service levels. 35 water supply schemes with an estimated cost of Rs.833.99 crore were completed in 35 ULBs adding 368.92 MLD of water, thereby increasing the average water supply from 63 LPCD to 85 LPCD. With the increase in water supply approximately 34.90 lakhs of population were benefitted and have access to safe and clean water.

The normal daily water supply in 110 Urban Local Bodies varies from 40 LPCD to 150 LPCD and the frequency of water supply is Daily in 99 ULBs, Alternate days in 10 ULBs, once in three days and above in one ULB to cater the drinking water needs of the people in urban areas.

38,154 bore wells are functioning and catering to the water supply needs of the habitants in all ULBs. At present, 566 tankers make 3771 trips per day to un-served areas.

Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

65 Mission cities/ Urban Agglomeration are covered under JNNURM. The mission aims to encourage reform and fast track infrastructure development. The focus is on improving efficiency in urban infrastructure and services delivery mechanism, community participation, accountability of ULBs/ Parastatal agency towards citizens.

Schemes under Implementation

Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

Under UIDSSMT, Anakapalli Strom Water Drainage Scheme with a cost of Rs.29.15 Crs completed duly benefiting 1.23 lakhs population and Chirala Solid Waste Management scheme with a cost of Rs.3.87 crores completed duly benefiting 0.90 lakhs population in 2016-17.

I) Water Supply Sector

Under the Water supply sector, the following are in progress:

APMDP: Six projects with a cost of Rs.1046.52 Cr. in Vizianagarm, Kakinada, Markapur, Badvel, Guntur and Anantapuram are in progress and will be completed by March 2018.

UIDSSMT: Two projects with a cost of Rs.61.30 Cr. under UIDSSMT in Pithapuram and Ramachandrapuram will be completed by May 2018.

HUDCO: One project with a cost of 585.05 Cr. in Nellore will be completed by March 2018.

Plan grants: Two projects with a cost of Rs.58.90 Cr. in Ongole and Jaggaiahpeta will be completed by October 2018.

II) Storm Water Drainage sector:

In the storm water sector, it is proposed to take up comprehensive storm water management schemes, so that, the storm water is effectively discharged for avoiding stagnation and inundation of the low lying areas in the ULBs.

Ongoing projects:

One-time Spl. Assistance scheme from Government of India: One project with a cost of Rs.461.04 cr in Vijayawada Municipal Corporation will be completed by Aug 2019 .

One Project with State funds of Rs.23.82Cr in Mandapeta will be completed by March 2018.

III) Under Ground Drainage Sector:

Construction of sewage treatment plants in 5 ULBs at a cost of Rs.1682.64 Cr are in progress and the ULBs i.e. Yemminganur, Kadapa, Nellore, Guntur & Narsaraopeta to add additional sewage treatment capacity 284.35 MLD and are proposed to be completed by March 2019.

AP Projects:

10 schemes were cleared by SLSC to take up these projects and meet the expenditure of these projects from Plan funds. Out of 10 projects, 5 are in water supply sector costing Rs.136.80 Crores, 3 are in Sewerage sector costing Rs.171.74 Crores and 1 is in Storm Water Drain sector costing Rs.33.41 Crores and 1 project Machilipatnam SWD proposed under AMRUT Phase-II.

Out of these, 3 water supply schemes covered in 3 ULBs provided water to 5.50 lakhs of population are completed and the balance schemes are proposed for safe closure.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

Government of India launched Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with a view to improve the quality of life by providing basic services (eg. water supply, sewerage, urban transport) to all households and build amenities, as a National priority.

- Achieving universal coverage for water supply and sewerage is the priority. The GoI announced the list of 30 cities/towns covered under AMRUT.
- AMRUT ULBs prepared Service Level Improvement Plans (SLIPS) in Water Supply, Sewerage, Storm water drainage, Urban Transport and Parks & Green Spaces for the first year of the Mission.
- Accordingly Sate annual action plan (SAAP) was prepared for 2015-16 and submitted to GOI for Rs.662.86 Crores and the same was sanctioned for 662.86 Crores in which the Central Share is Rs.300.41 Crores. Later Government sanctioned Rs 804.46 Crores (including in all components of the project) in respect of all the AMRUT towns for taking up the sanctioned projects and are in progress.

The details of the projects under AMRUT PHASE - 1 are as below. Action Plan for completion of on-going Schemes:

Project status as on December 2017:

Under Phase I- 22 ULBs with an estimated cost of Rs.658.70 Cr and work is under progress.

Under Phase II- 28 ULBs with an estimated cost of Rs.2083.55 Cr. and work is under progress

Action Plan for completion of on-going Schemes for 2017-18

- 8 water supply schemes in 7 ULBs costing Rs.1665.27 Crores are aimed to be completed for benefitting 18.60 lakhs population. (Vizianagaram, Kakinada, Guntur, Markapur, Badvel,Ananthapuramu, Pithapuram & Nellore).
- 2 Schemes in Kadapa and Emmiganuru costing Rs.152.49 Crores are aimed to be completed in 2 ULBs under UGD Sector for benefitting 4.84 lakhs population.
- 1 Scheme costing in Atmakur (N) Rs.39.20 Crores is aimed to be completed under Storm Water Drainage Sector for benefitting 0.33 lakh population.

Action Plan for the year 2018-19

- 2 water supply schemes in 2 ULBs (Ramachandrapuram & Jaggaiahpeta) costing Rs.48.90 Crores is aimed to be completed for benefitting 1.04 lakhs population
- 2 Schemes in Narsaraopeta & Guntur costing Rs.973.38 Crores is aimed to be completed under UGD Sector to benefit 8.70 lakhs population.

- 1 Scheme in Mandapeta costing Rs.23.82 Crores is aimed to be completed under Storm Water Drainage Sector to benefit 0.60 lakhs population.
- AMRUT projects will be completed.

Rural Water Supply

The Rural Water Supply and Sanitation Department is nodal agency in the State for providing drinking water and Sanitation facilities in rural areas. The drinking water facilities are being provided by various types such as Spot sources (Bore Wells fitted with Hand Pumps), Protected Water Supply Schemes (for one habitation/village), Comprehensive Protected Water Supply Schemes (for a group of habitations/ villages).

The main objective of the government is to ensure that by 2022, every rural person is supplied 70 LPCD safe water within their household premises or at a horizontal or vertical distance not more than 50 meters from their household.

Various State and Central Government programmes such as NRDWP, Finance Commission, Swachh Bharat Mission and other external agencies provide the funds for implementing schemes/works for providing drinking water and sanitation facilities to habitations. Funds are also being tapped in the form of loans from NABARD, World Bank etc.

Rural Water Supply infrastructure created

There were 2,03,162 bore wells fitted with hand pumps, 33,985 PWS Schemes and 561 CPWS Schemes (including Sri Satya Sai Schemes) existing as on 01.04.2017. 1473 habitations were covered incurring an expenditure of Rs.393.70 crores under all grants during 2016-17.

RWS ongoing programme 2017-18

275 works were taken up at a cost of Rs.827 crore to cover 2,700 habitations, of which 1,047 habitations are targeted for coverage during 2017-18. 570 habitations are covered duly incurring an expenditure of Rs.260.00 crore under all programmes up to November, 2017.

New sanctions (2017-18)

850 problematic habitations including kidney affected areas in Srikakulam & Prakasam districts are sanctioned with a cost of Rs. 45.87 crores to cover with community treatment plants through Hub & spoke model. Under NABARD, 312 habitations in the categories of QA, PC1 & PC2 are sanctioned for an amount of Rs. 102.86 crores. 2162 SC&ST habitations in the categories of QA, PC1 & PC2 are programmed to cover with an amount of Rs. 405.55 crores.

NTR Sujala

The Government has decided to cover all problematic habitations with safe drinking water through community treatment plants by Hub & Spoke model (clusters).

Drinking Water Corporation

Government has decided to supply with 70 LPCD service level with house tap connections to all households. AP Drinking Water Corporation has been formed and drinking water project proposals were prepared for an amount of Rs. 21,968 Crores.

Municipal Administration

Urban Sanitation – Door to Door Garbage Collection

The main aim is garbage free roads, free flowing of side drains, controlling the insanitary conditions created by stray animals and mosquitoes has been achieved. There are 110 Urban Local Bodies i.e., 14 Municipal Corporations, 71 Municipalities and 25 Nagara panchayaths in the State. As per 2011 census, urban population of the state is 132.23 lakhs. The total garbage generation in 110 ULBs ie., 1,97,997 MTs and Waste lifted is 1,94,373 M.Ts per month or to the tune of 98.17%. Out of total 36.09 lakh households, household wise garbage collection is covered in 35.17 lakh households or to tune of 97.44% household covered by door to door garbage collection.

Establishment of Waste to Energy Plants under SWM:

The Swachha Andhra Corporation is exclusively established to deal with sanitation and solid waste management matters. To improve the sanitation conditions and to arrest open defecation, the Swachha Andhra Corporation has sanctioned individual household toilets on saturation mode in 110 ULBs. All the 110 ULBs in the state have been declared as ODF.

The Swachh Andhra Corporation, setup as State Mission Directorate for Swachh Bharat/Swachh Andhra Programme, under the directions of the MA&UD Department has initiated action for setting up of Waste to Energy Plants under PPP mode, in cluster approach. At present concessionaire agreements were entered with the agencies for establishment of 10 waste to energy plants (10 Clusters with 53 ULB) at 10 different locations i.e. Visakhapatnam, Vizianagaram, Tadepalligudem, Guntur, Machilipatnam, Tirupathi, Nellore, Kurnool, Anantapur and Kadapa in the State for processing the Municipal Solid Waste around 4471 MTs of solid waste generated in 53 ULBs per day to generate 63 MW Power. In addition to this, the Swachh Andhra Corporation has also initiated action for setting up of Municipal Solid Waste Management Projects in rest of the 57 Urban Local Bodies by using different technologies i.e., Waste to Compost/RDF/Bio-methanization/Bio-fuel.

Solid Waste Management (SWM)

The Government of Andhra Pradesh, with a vision of transforming Cities and Towns in the State into the best Cities and Towns in terms of live ability, environment and health standards and Providing 100% service coverage to make these Cities & Towns clean and litter-free and issued Operational Guidelines for Maintenance of Sanitation and Solid Waste Management for uniform implementation in all the ULBs in the State.

The main objective of these guidelines is to guide the ULBs in the area of source segregation, collection, and transportation of solid waste by rationalizing norms for manpower, transportation vehicles, tools and implements etc., and to shift from "Worker Outsourcing System" to "Work Outsourcing System". Out of the 110 Urban Local Bodies in the State, 94 ULBs have obtained administrative sanction from the Government, 88 Urban Local Bodies have invited tenders and 31 ULBs have finalized the procedure of selecting the successful bidders, out of which 5 ULBs are going to issue work orders. In the remaining ULBs processing of tenders is at different stages.

Black Spot Monitoring & Management App (BSMM)

Sanitation teams of Public Health workers will daily monitor through photos/videos and tracked live 24x7 at the Command & Communication Centre established in MA&UD Dept at Velagapudi. First time in the country Black Spot Monitoring and Management App. has been designed and developed to monitor garbage vulnerable points and other sanitation issues in two levels;

Priority Black Spots – Covers main roads and Commercial areas with floating population and sensitive zones including hospitals, educational institutions etc.

Normal Black Spots: Low visibility areas and internal roads, open plots in the wards etc.

Conversion of Black Spots into green spots: Database of all Black spots in all 110 ULBs is being monitored 24x7 to convert into green spots. If a black spot being cleared off regularly by sanitation staff and after a period of 7 days, the said green spot will be converted as green spot. So far, total 6,750 black spots were converted as green spots, out of total 19,016 black spots.

Creating clean & green ULBs by ensuring constant garbage vulnerable points monitoring and sustained cleanliness in the communities for the benefit of the citizens of the ULBs.

RTMS – Real Time Monitoring System

Technology enabled objective tracking of Gate to Gate solid waste collection across all the cities down to the extent of micro-pocket.

- Developed Real Time Monitoring System (RTMS) for managing Sanitation and Solid Waste Management activities on real time basis. RTMS is designed to meet the unique requirements of SWM activities to capture, in real time attendance of the PH Workers, service coverage, punctuality of the transport vehicles, and conversion of black spots into green spots, feedback from the public and redressal of their grievances.
- This tool acts as an advisory to the ULB for making payments to the service provider basing on the performance, objectively verified, calculated penalties to levied for default of services, indicator wise.

Accountability of public expenditure – better service delivery as per benchmarks leads to higher ranking of the ULBs in Country with respect to scientific and transparent operations of sanitation. Speedier disbursal and better remuneration and incentivization to PH Workers who are from underserved communities, with dignity of labour.

14th Finance Commission Grants

The 14th FC has recommended grants to ULBs in two types i.e., 1) Basic Grant for Rs.2908.64 Crores and 2) Performance Grant for Rs.727.16 Crores (total for Rs.3635.80 Crores) on the ratio of 80:20 basis. For release of performance grants from 2016-17 onwards, the ULB has to fulfill the conditions from the year 2015-16 onwards. Making available data on local bodies receipt and expenditure through audited accounts, Improvement in own revenues and measure and publish service level benchmarks (SLB) for basic services.

As per the guidelines to execute the works like water supply, sanitation including seepage management, sewerage management, solid waste management, storm water drainage, maintenance of community assets i.e. development of parks, protection of open spaces, development of play grounds, maintenance of municipal school buildings, Maintenance of roads and Burial and cremation grounds and street lighting.

Government have issued permission to all 32 AMRUT ULBs to utilize the 14th FC Grants as ULB matching contribution under AMRUT scheme.

Smart Village -Smart Ward Programme:

Smart Andhra Pradesh Foundation (SAPF) has played a pivotal role in building partnerships with various corporates, Non- profits and motivated individuals for furtherance of the goals of the Smart Village Smart Ward Programme (SVSW). Several partners have contributed to the betterment of their communities through activities like community mobilisation for infrastructure creation, livelihood promotion, installation of digital classrooms, promoting innovative technology models, awareness generation programs etc. Several NRIs have contributed financial and material resources to their villages and communities under the SVSW programme.

Government is also supporting the partner initiatives through matching grants. A state level committee has been setup to sanction the grants which sanctioned Rs. 33.22 Cr in 2017-18.

More partners have shown interest in partnering with SAPF and taking up innovative projects in the villages and towns of the state in the areas of climate smart agriculture, waste management, improving quality of education, nutrition support etc. Large number of corporates like Rural Electrification Corporation (REC), ITC, Cyient, Divi's labs, Cocacola, Royal Bank of Scotland (RBS) etc. and Non-profit agencies like British Asia Trust, United way, Digital Empowerment Foundation etc. have come forward to support the programme. 660 villages and 110 wards were selected for scale up under this programme.

State, District and Mandal level Nodal Officers have been appointed by the key Departments to co-ordinate with the partners and streamline the process of project implementation. 28 villages, 2 in each district & 4 in Krishna district , have been selected in coordination with District Collectors to be developed as model smart villages at a fast pace to act as demonstration sites, inspire and encourage participation from other villages and towns. To scale up the programme, one Panchayat per Mandal and One Ward per ULB have been selected in the subsequent phases of developing model demonstration sites.

Swachha Andhra Corporation

Swachha Andhra Corporation was established after launching of Swachh Bharat Mission (SBM) and taking up the activities in ULBs with a target to achieve 100% by Oct 2019 i.e. 150th birthday of Mahatma Gandhiji.

Objectives

Elimination of open defecation, eradication of manual scavenging, modern and scientific municipal solid waste management, to effect behavioral change regarding healthy sanitation practices, generate awareness about sanitation and its linkage with public health, capacity augmentation for ULB's and to create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance).

Achievements:

Declared open defecation free state. QCI had issued certificates for 109 out of 110 cities so far.

Out of 2.22 lakh eligible households, 2.16 lakh individual household toilets grounded and 2.07 lakh were completed upto December, 2017. An amount of Rs.299.88 crore released to the households so far.

8401 number of community toilet seats were completed and 654 are in progress. Rs.29.37 crore was released to ULBs. 5002 number of public toilet seats were completed and 222 are in progress.

Waste to Energy Projects

Municipal Solid Waste (MSW) Management is a modern and scientific approach. 10 waste to energy projects were awarded by NREDCAP (Energy department) to various agencies. The daily generated waste of quantity 4514 TPD form 56 Municipalities would be transferred to the these 10 waste to Energy plants for disposing in as per MSW rules.

Status of MSWM projects:

Swachha Andhra Corporation has awarded 36 MSWM projects covering 37 ULBs to various agencies to dispose municipal solid waste as per MSW rules. One ULB named Chirala is doing MSWM project on its own. As such, the daily generated waste of quantity 868 TPD form 37 Municipalities will be processed in these plants.

Status of C&D Projects:

Tenders have been floated to set up C & D Waste Management plants at GVMC, VMC & TMC. After finalizing the tenders all the three works were awarded to M/s VVD Constructions, Bangalore.

AP Municipal Development Project

The Andhra Pradesh Municipal Development Project (APMDP) is a world Bank (IBRD) aided project with an estimated cost of Rs.1218.24 crore which aims at creating sustainable urban infrastructure in the urban areas as well as creating managerial capabilities along the policy makers and the people who provide services to the urban population.

Component wise expenditure is shown in Table 8. 19

Table 8.19 Component wise expenditure (Amount Rs.in crore)

Component	Allocation	Total expenditure up to 2016-17	Total expenditure up to 2017-18 (upto 31-12-2017)	Total Expenditure	Percentage
State level policy and institutional development support	5.70	1.98	0.68	2.66	46.58
Capacity enhancement	99.30	37.96	22.62	60.58	61.01
Urban infrastructure investment	1065.00	670.65	32.00	702.65	65.98
Project management technical assistance	45.60	23.66	3.75	27.41	60.12
Total	1218.24	734.25	59.05	793.30	65.12

New Capital Amaravati – Accelerating Progress

The milestones achieved by the Government in the challenging journey of development of Amaravati are spectacular and the speed is unequalled given the short span of 38 months' time. Amaravati, is envisioned as the people's capital with world's best infrastructure and as a global destination of people, investments and jobs. The planning principles of Amaravati ensure to make it the most livable, efficient, sustainable blue and green city. Amaravati is destined to become the Happy City on the globe. The city's development has entered crucial phase of construction. The innovative and equitable Land Pooling Scheme has become a case study across the globe. As on date, 33,556 acres have been pooled from 27,315 volunteering farmers. The Government has delivered its mandate by re-allotting 60,115 number of plots to 24,383 LPS farmers of which 35493 residential and 24,622 commercial plots.

The Amaravati Government Complex, in an area of 1375 acres would essentially be the hub of State Administration and Governance with the Legislative Assembly, Council, High Court, Raj Bhawan, Secretariat, HOD buildings and government housing. AGC master plan has been developed with world's best sustainable planning principles like micro climatic conditioning, blue green interface, eco-friendly non-motorised transportation, green energy, energy saving district cooling systems etc.The Legislature Complex is being built with an iconic design and people-centric approach, with a built up area of about 8 lakh sft.

Amaravati has been declared as first greenfield Smart city Amaravati is envisioned not just as an administrative capital but also as a global economic hub. Top-notch universities VIT, SRM have already started their academic sessions in their newly built Amaravati campuses with about 1000 students and other universities like Amrita are going to start from next academic year. The master development of the Start Up Area by Singapore Consortium is going to start in 2018. MICE hub has been planned to be developed through PPP with an estimated investment of INR 1220 Cr.

Mission for Elimination of Poverty in Municipal Areas (MEPMA)

National Urban Livelihood Mission (NULM)

National Urban Livelihood Mission (NULM) project is implemented in all 110 ULBs in the State. The aim of the Mission is to reducing poverty and vulnerability of urban poor households by enabling them to access gainful self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grassroot level institutions of the poor.

Social Mobilization and Institutional Development (SM & ID)

The main objective of MEPMA is to organize poor women into Self Help Groups by covering all families living in slums and enable them to become self-reliant. A total of 2,56,279 Self Help Groups, 7,068 Slum Level Federations and 143 Town Level Federations were organized upto October, 2017.

30,520 Persons with Disabilities (PWDs) are also organized into 3,050 exclusive SHGs, 79 Town Vikalangula Samakyas (TVSs) and 111 Parents Associations of Persons with Mental Rehabilitation (PAPWMRs) were formed in the State.

Employment through Skill Training and Placement (EST & P)

It is proposed to provide placement linked skill trainings to 50,000 beneficiaries in 110 NULM towns during the year 2017-18 with 50% placements. 4,242 youth were trained and 12,996 were placed during 2017-18.

Self Employment Programme (SEP)

This programme focuses on providing assistance to individual urban poor beneficiaries for setting up gainful self employment ventures and micro enterprises with interest subvention with an upper limit of Rs 2.00 lakh cost per unit. The target for the year 2017-18 are 8200 (individual) and 120 (Group), of which 3,499 (individual) and 62 (Group) SEP units have been sanctioned and grounded.

Shelter for Urban Homeless (SUH)

During 2017-18, 49 shelters are functioning under this scheme and shelters were sanctioned by State Level Sanction Committee in 32 ULBs with an amount of Rs.1218.62 lakhs.

Scheme of Support to Urban Street Vendors (SUSV)

1,76,295 Street Vendors were profiled. 69,386 were submitted and 52,023 have been issued ID cards, Town Vending Committees have been formed in 110 ULBs..

SHGs Bank Linkage

MEPMA facilitated SHG Bank Linkage worth more than Rs.1319.76 crore to 31,076 Self Help Groups during the year 2017-18.

Vaddi Leni Runalu

The Scheme is introduced to reduce interest burden on the urban poor for the loans taken by the Self Help Groups (SHGs) from the Banks for improving profitability of SHG enterprises. An amount of Rs.37.04 crore has been given to 84,817eligible SHGs.

Sthree Nidhi

An amount of Rs.42.17 Cr was given to 3321 SHGs as soft loan under the scheme.

Capital infusion

So far, an amount of Rs.473.05 crores released to 15,78,970 SHG members. Second instalment of Rs.477.94 crore released to 16,21,951 beneficiaries.

Chandranna Bhima

Under this programme 30 lakh members were enrolled by covering SHG members, rickshaw pullers, domestic workers, street vendors, self-employed and differently abled persons. 130 lakh members have been surveyed so far. 49.54 lakh members registered as unorganized sector.

SHG Livelihoods EDP Trainings

During the year 2017-18, 93,632 SHG members have been trained against the target of 1,62,000 in Entrepreneur Development Programme through ALEAP, APITCO, KVT, Andhra Bank, Canara Bank, Andhra Mahila Sabha and NGOs etc, in advanced tailoring, food processing, jute product, handicrafts, readymade garments, glass paintings, bangles making and catering etc., livelihood units are grounded though SHG Bank Linkage and SHG Corpus benefitting 3 lakh SHG members.

City Livelihood Centres

47 City Livelihood centres were established in all ULBs and 35 City Livelihood Centres are functioning. As per NULM guidelines the first installment of Rs.3.00 lakhs per CLC was released for 35 CLCs for procurement of computer, phone with net connection and recruitment of staff. Services started in all CLCs. During 2017-18 implementing DRP (Marketing Resource Person) Strategy for strengthening of CLCs.

Common Facility center/Production Centers

61 Production centers were established in all districts and activities like tailoring, making of jute products and pickles.

Generic Medical Stores

58 Generic Medical Stores and 30 Pradhanamantri Janaaushadi Kendras grounded in the ULBs.

MEPMA Bazars

MEPMA has facilitated urban SHGs' for participation in Regional SARAS Mela in collaboration with District Rural Development Authority (DRDA) and also exhibited all the products in New Delhi, Maha Pushkaralu, Hyderabad exhibition to encourage the market for SHG products. Establish Dwacra Bazars in Perment Govt.Buildings at District/ULB level to encourage the market for SHG products. During 2017-18 to conduct monthly/Quarterly/ occasionally (festivals, holidays, special days, Independence day, Republic day etc.,) MEPMA Bazaars at District level to encourage marketing of SHG products. Bazaars which is conducting once in a month @ all corporations once in quarter at all Municipalities having more than 1 lakh population. Family average income of SHG Women who have taken up EDP trainings and started their own livelihood units was increased from Rs.6000/- to Rs.8000/- per month.

Rural Development

It is possible to increase productivity of degraded lands with proper planning, scientific approach and efficient management and create huge employment opportunities for the poor. It is firmly believed that development of degraded lands is an important input required for eradication of poverty. The Commissionerate of Rural Development is implementing various rural development programmes like Watershed Development programme, Self Help Groups and related programmes and Mahatma Gandhi National Rural Employment Guarantee Scheme.

Watershed Development Programmes (DPAP, DDP, IWDP, IWMP), Comprehensive Land Development Programmes (Indira Prabha & NTR Jala Siri under RIDF XIII, XV & XVII) and Wage Employment Programmes (MGNREGS) are being implemented and monitored through software solution RAGAS (Rashtra Grameena Abhivridhi Samacharam). The entire data displayed on respective websites, thereby bringing in transparency and accountability in these programmes.

Watershed Development Programmes

Watershed programmes are being implemented in the State for over two decades. Watershed programmes are concentrated only in rain-fed areas which have undulating terrain and are prone for degradation of soil (soil erosion). These areas are generally characterized by very poor groundwater profile. The programme envisages demarking 500-hectare area as a micro watershed. The watershed so delineated is treated for conservation of soil and moisture ridge to valley approach.

Watershed development programmes are being implemented under Centrally Sponsored Schemes of DPAP, DDP and IWDP to comeback recurring drought conditions in the state. Watershed Development Projects has brought all schemes

under one umbrella and provided for cluster approach wherein, contiguous areas upto 5000 Ha. are to be taken up for treatment from 2008. 3933 Watersheds covering an area of 19.67 Lakh Ha. has been taken up for Watershed Development so far. Of which 3907 Watersheds with an area of 19.54 lakhs ha. were completed. 374 watershed projects are in progress under IWMP.

A series of structures like sunken pits, rock fill dams, percolation tanks, check dams, farm ponds, earthen bunding, vegetative barriers, plantations etc., are constructed to reduce velocity of water and allow percolation. They also control soil erosion and improve vegetative cover on the land so as to augment productivity.

Watershed Development Component of Pradhan Mantri Krishi Sinchayee Yojana (Previously IWMP):

The major objective of the IWMP program is to improve the ground water level by constructing the water harvesting structures like mini percolation tank, percolation tank and check dams etc. The main aim of IWMP is to restore ecological balance by harness, conserving and developing degraded natural resource such as soil, vegetative cover and water. Prevention of soil run-off, regeneration of natural vegetation, rain water harvesting and recharging of ground water table are few outcomes of these programs. This enables multi-cropping, introduction of diverse agro-based activities, and help provide sustainable livelihoods to people in watershed areas. IWMP programme has defined appropriate institutional arrangements, budget allocations, capacity building strategies and project management cycle. The proposed processes integrate gender, equity and livelihood concerns in the framework of Watershed development programme. Details about the achievements under this programme are shown in Table 8.20.

Table 8.20: Watershed development under IWMP

Item	2016-17	2017-18	Total
No. of watersheds	432	4 IWMP Projects from Khammam District, Telangana transferred to Andhra Pradesh	436
Proposed for treatment (Lakh.ha.)	18.10	3.42	18.28
Expenditure (Rs.in crores)	917.74	86.42	1004.16

Source: Rural Development department

Component wise progress under IWMP and activities taken up under Natural Resource Management (NRM) are shown in Annexure 8.21.

Activities taken up under Entry Point Activity (EPA)

Sl. No.	Name of the activity	No. of Activities	Expenditure (Rs. In Crores)	No. of Beneficiaries benefitted
1	RO Plants	318	61.29	60,872
2	Solar street lights	4614		
3	Cattle / Goat / Sheep troughs	4014		
4	Animal health / sheep health / fertility camps	2795		
5	Trevices	922		
6	Extension of pipe line for drinking water	1025		
7	Tent house	580		
8	School related like furniture, shed, building repair, lab etc.,	600		
9	Others	1314		
	Total	16182	61.29	60,872

Solar street lights Water purification plants

Activities taken up under Production Systems Improvement (PSI)

Sl. No.	Activity	No. of Activities	Expenditure (Rs crore)	No. of beneficiaries benefitted
1	Agriculture activities	33368	94.95	95,645
2	Custom Hiring Centres	104		
3	Implement Service Stations	690		
4	Individual High cost machinery	567		
2	Animal Husbandry activities	28489		
3	Other line dept. activities	4722		
	Total	67,940	94.95	95,645

Activities taken up under Livelihoods for Assetless:

Sl. No.	Activity	No. of Beneficiaries benefitted	Expenditure (Rs in crores)
1	Dairy activities	16411	42.06
2	Small Ruminants	12956	33.21
3	Petty Business	6910	17.71
4	Skilled Business	2591	6.64
5	Agriculture	4319	11.07
	Total	43187	110.69

NTR Jala Siri (RIDF – XVII)

The programme is essentially focus on utilization of available ground water resources and to promote conjunctive use of surface water and groundwater duly adhering to the norms mentioned under AP Water, Land and Trees Act-2002. Optimum use of available ground water resources by adopting water intensive irrigation techniques like drip / sprinkler which helps in scaling up of rural income there by improving the livelihood of farmers. The programme is taken up in all districts except Anantapuramu. Providing adequate water for the agriculture activities is one of the pre-requisites for achieving Double Digit Growth in primary sector/ agriculture sector. The government has taken up this selective bore well programme for eligible and needy small and marginal farmers. Solar pump sets were installed to the bore wells. Total unit cost of the pumpset is Rs.3,12,253.

Under NTR JalaSiri Phase-II programme, 17,631 bore wells drilled as against the target of 35,000 Bore wells.14,103 bore wells LTs filed for energisation. 3,380 Bore wells energised with solar pumpsets. Total expenditure incurred Rs.63.85 Crs. for drilling and installation of solar pump sets. The NREDCAP and AP TRANSCO have to complete the Solar Installation for the remaining 14,251 bore wells by the end of December- 2017. Under this programme the Government has sanctioned NABARD loan of Rs.116.50 Crs for drilling and energisation of 17,369 bore wells to achieve the remaining target.

MGNREGS

Mahatma Gandhi National Rural Employment Guarantee Act is a legal Guarantee of 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. The objective of the Act is providing not less than one hundred days of unskilled manual work as a guaranteed employment in a financial year to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability. Also, to strengthen the livelihood resource base of the poor, proactively ensuring social inclusion and Strengthening Panchayat Raj Institutions. This programme is being implemented in all districts of the state.

All the works executed are grounded into four categories viz., a) Public works relating to Natural Resources Management, b) Individual assets for vulnerable sections, c) Common infrastructure for NRLM compliant self help groups and d) Rural Infrastructure. This is a centrally sponsored scheme with 90:10 central and state share respectively. The Central Government releases 100% for wage payments, 75% for material payment and 6% for administrative expenditure. Remaining 25% of amount is to be released by State Government for material payments, Unemployment allowance and MGNREGS-AP State Council expenditure.

Performance of MGNREGS

MGNREGS is being implemented in 12,946 Gram Panchayats in 661 Mandals of 13 districts. 84.85 lakh job cards were issued covering 1.74 crore wage seekers since inception of the scheme. 5.47 lakh Srama Shakti Sanghams have been formed with 60 lakh households covering 116 lakh wage seekers.

Performance during the year 2017-18:

Andhra Pradesh occupies 2nd place in the country in generating of person days (17.17Cr.as against the target of 20 crores) with an average wage rate of Rs. 141.4 per day per person as on November 2017 and timely payment of wages. Total expenditure incurred is Rs. 3882.53Cr. 59.80 lakh wage seekers belonging to 37.24 lakh households were provided wage employment with an average employment of 46.1 days per household. Total number of households which completed 100 days is 2,78,601. Out of these 386 Lakh. Person days generated by SCs, 173 lakh by STs and 845.9 lakhs by BCs.

Over view of MGNREGS during 2017-18 (up to Nov 2017) are shown in Table 8.21

Table 8.21: Overview of MGNREGS-AP

Particulars	During 2017-18	Cumulative performance
Job Cards issued (lakh Nos.)	2.02	86.67
Works Completed (lakh Nos.)	5.25	49.78
Total Expenditure (Rs.in crore)	3882.53	33817
Households provided wage employment (lakh Nos.)	37.24	60.01
Individuals provided wage employment (lakh Nos.)	59.80	116.00
Total person days generated (crore)	17.17	198.39
Persondays generated for SC(crore)	3.86	46.63
Persondays generated for ST(crore)	1.73	22.73
Persondays generated for BC (crore)	8.46	96.61
Households completed 100 days (lakh Nos.)	2.79	70.38
Average No. of days employment provided per HH	46.1	-
Average Wage rate per day per person (Rs.)	141.03	108.5

Source: Rural Development Department

Key decisions taken during the year

Wage rate enhanced from Rs. 194/- to Rs. 197/-. The average wage rate should be improved from Rs.140/- in 2016-17 and to reach Rs.165/- during 2017-18. The Department shall ensure 100% timely payment within 15 days during 2017-18 and 95-96% within week. Registration of Wage seekers those completed 50 days of work as building and other construction worker to get the benefits of the scheme. Opening of PMJDY accounts to all wage seekers or converting existing saving bank account to PMJDY account, to avail all the benefits. All the wage payments will be directly credited into the wage seekers accounts and are paid only based on biometric authentication. SECC data survey and issuing new job cards. Job card Verification and

updation. Geo tagged and worksite boards to be erected for all works.

Neeru – Chettu & Neeru - Pragathi works on priority.

Mission Water Conservation – 88 blocks were selected by GoI, but in all blocks in the similar mode works to be taken up. Expenditure to be incurred on NRM works shall not be less than 65% and on Agriculture & allied activities shall not be less than 60%.

State Convergence action Plans for 2017-18 has been prepared in consultation with HoDs of line departments of School Education, Sports Authority, Agriculture, Animal Husbandry (Oorura Pasu Graasa Kshetralu – Perennials & annuals), Fisheries, Sericulture, Horticulture and Avenue plantation with SERP,Minor Irrigation, Panchayat Raj, Tribal Welfare, Forest, IWMP (Greening of Hillocks) and work out to Rs. 12578.24 Cr with RD share of Rs. 8172.54 Cr and line department share of Rs. 4405.70 Cr. Action plans are to be prepared and approved by DPCs.

Project LIFE aimed at skilling of wage seekers who have completed 100 days of wage employment.

Implementation of Solid Waste Management Works in convergence with PR dept.

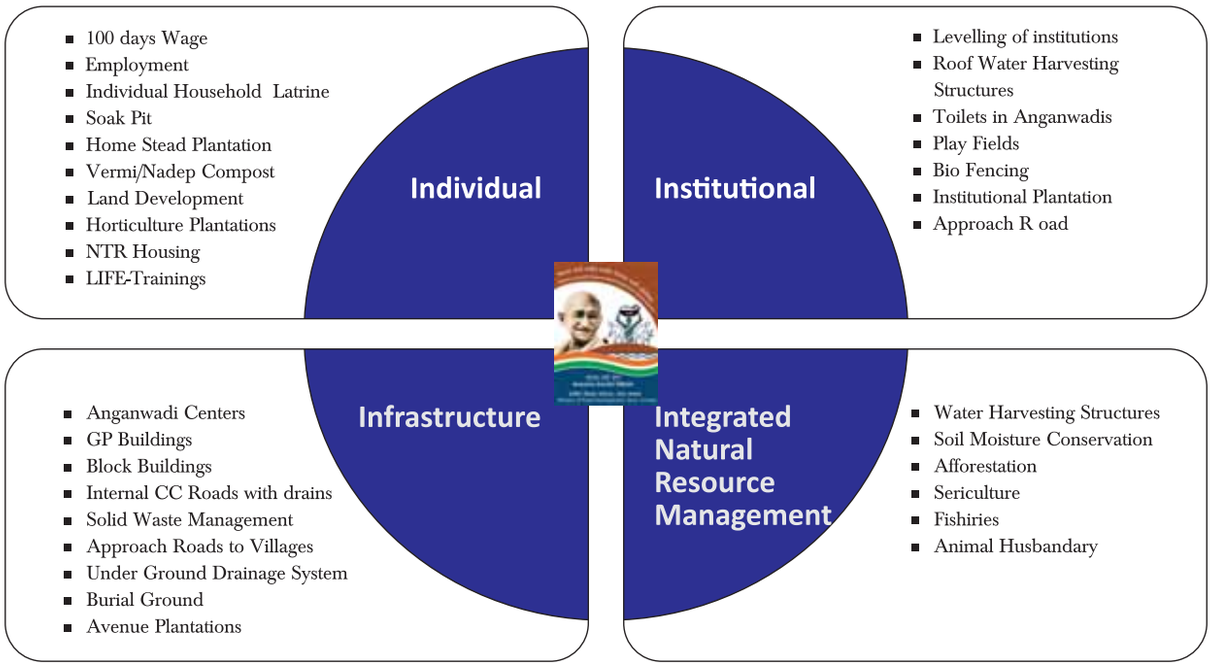
Laying of 6,000 Kms. C.C. roads with an estimation of Rs. 2,295.10 Cr. proposed in convergence with 13th and 14th Finance funds with 50:50 sharing basis.

Target 4 lakh farm ponds under 'Pantala Sanjeevani' program to harvest rain water during rainy season and using the same for providing supplementary life saving to standing crop.

The Government has sanctioned houses under NTR Rural Housing Programme for the year 2016-17, duly dovetailing funds from PMAY-G and MGNREGS. 90-person days under MGNREGS shall be provided for each new house taken up under NTR Rural housing programme by the Housing department depending on the stages of construction.

For transformation of villages a plan namely 'Chaturmukha Vyuham' is implemented through MGNREGS.

Chaturmukhavyuham
(Transforming Villages through MGNREGS)



Neeru – Chettu: As per the present focus under Water Mission Conservation the following works are taken up to improve water table and green cover and the progress is as follows:

- Water harvesting structures (WHS) – 4.52 lakh works taken up with an expenditure of Rs.1735.75 Cr as against the target of 7.30 lakh works worth Rs. 3699.86 Cr.
- Under Soil Moisture Conservation (SMC) 14,678 Works taken up with an expenditure of Rs.203.49 Cr, as against the target of 91,148 works with an estimation of Rs.272.23 Crs.
- Under Neeru-Chettu programme 1.20 lakh acres with an expenditure of Rs.101.59 Cr were taken up as against the target of 1.94 lakh acres with an estimated cost of Rs.1243.76 Cr.
- 19,533 water harvesting structures like Check Dams, percolation tanks are taken up with an expenditure of Rs.147.36 Crs. and 5660 Mini percolation tanks/ Percolation tanks are taken up with an expenditure of Rs.25.02 Crs etc. During the year 2017-18 upto November 2017 a total No. of 1,52,431 other water harvesting structures were taken up with an expenditure of Rs.364.82 Cr.

Progress of the Flagship Programmes

Panta Sanjeevani (Farm ponds): The Government has launched 'Panta Sanjeevani' program (Construction of farm ponds) apart from other drought proofing activities under flagship program of 'Neeru – Chettu' and 'Neeru – Pragathi' to support the small and marginal farmers who are facing difficulties due to erratic, reduced rainfall, prolonged dry spells and continuous drought conditions leading to crop failures.

The Pantala Sanjeevani programme, has been taken up as a massive key initiative to harvest rain water during rainy season and using the same for providing supplementary life saving to standing crop by promoting indigenous rain-water harvesting technologies, besides percolating the runoff water into ground. During the year 2017-18, 9 lakh farm ponds, which can augment 6 TMC of water, are being taken up.

A farm pond is a dug-out pond constructed in or near the farm, wherein rainwater is collected in the pond and stored for future life saving of standing crop, recharging groundwater, and providing drinking water for farm animals. A farm pond can percolate water to a tune of 5 times of volume of farm pond. The farm-pond construction will be supported under MGNREGS upto 5 acres. 2.48 lakh farm ponds are grounded, and 1.25 lakh are completed with an expenditure of Rs.484.70 Cr.

Solid waste Management works: Solid waste management in rural areas includes collection and segregation of solid waste, provision for conversion of biodegradable solid waste into vermi compost and land fill arrangements to non-degradable solid waste. Liquid waste management includes construction of pucca drains or underground pipeline and collection of same to a distance point and to take up low cost preliminary treatment for reuse the same for agricultural purpose. Estimates were generated for 9502 works worth of Rs.45134.05 Lakhs. All Gram panchayats are taken up this project. Out of which 3134 works are under progress and 318 were completed with an expenditure of Rs.1092.91 lakhs.

Individual household latrines (IHHLs): Under MGNREGs 1.07 lakh IHHLs are completed with an expenditure of Rs.90.97 Cr as against the target of 2.50 lakh for the year 2017-18 and 1.11 lakh IHHLs are under progress.

CC Roads: 3148.32 Kms of CC roads were laid with an expenditure of Rs.553.26 Cr. as against the target of 6000 Kms,

NADEP/Vermi Compost pits: 41,424 pits were completed with an expenditure of Rs.5583.8 lakhs as against the target of 2.00 lakh works and 51,424 are under progress.

Housing Program: 90-person days under MGNREGS shall be provided for each new house taken up under NTR Rural housing programme by the Housing department depending on the stages of construction. Estimates were generated for 1,66,620 wage seeker's houses with an estimated amount of Rs.301.75 Cr. and 87,602 houses are under progress and 1690 completed.

"Plantation Programmes" under MGNREGS 2017-18

The Department is promoting Horticulture, Avenue Plantations & Other Plantation Programmes under MGNREGS, as a means of providing & creating productive

assets for the poor wage seekers so that there is a sustainable source of income. The main object of the implementation of the Plantation Programmes under MGNREGS is to give guarantee to livelihood employment to the SF, MF & SC, ST Rural poor.

As a part of this Programme the following Plantation activities are being taken up under MGNREGS, A.P.

1) Horticulture Plantation.

   Horticulture fruit crops like Mango, Cashew, Sweet orange, Acid lime, Guava, Sapota & Coconut are being distributed through this programme. Maintenance is given for 3 years @ 100 days per year as wage component. During the year 2017-18, targeted 50,000 acres and achieved 63,276 Acres.

2) Avenue Plantation.

   The Avenue plantation is being taken up at 400 plants per 1 KM both sides of the roads grown spacing of 5 Mtrs between the plants. Duration is 3 years. For maintenance of avenue plantation beneficiaries are identified from SHGs & Tagging with 400 plants for each SHG. Usufruct rights are being given to the SHGs. Target for the FY-2017-18 is 10,000 KMs and Achievement is 9854 KMs.

3) Homestead Plantation.

   Five types of fruit plants per household with 100 % free of cost are being distributed one time to enhance the nutritional values of the rural Poor.1,90,069 plants were planted in 75, 552 households under Homestead Plantation during 2017-18.

4) Institutional Plantation.

   It is proposed to take up plantation in available vacant /unutilized lands in schools, colleges and other Govt institutions. The objective of this plantation is to develop tree planting consciousness among children, increase the greenery and to get income to the institutions. Duration of this Programme is 5 years. For raising and maintenance of 100 plants for 5 years, it will cost Rs.1.20 lakhs. Two types of plants are being planted i.e. Fruit bearing & Shade plants. 28629 Plants were planted in 283 Institutions under Institution Plantation FY-2017-18.

5) Block Plantation in Community Lands.

   Planting of shade, ornamental and fruit plants in vacant village common lands, such as community land, burial grounds and endowment lands under green village concept and to create green cover in vacant land to arrest soil degradation and to protect the environment. 1.45 lakh plants were planted in 584 community blocks during 2017-18.

6) Bund Plantation.

   Teak plants and Red sanders are being planted on the field bunds of the farmers to create permanent tree assets on the bunds of land holdings of SC/STs and SF and MF category beneficiary farmers without disturbing the regular agricultural crops to provide supplementary income to the farmers. 55210 Plants were planted covering 252 farmers in the year 2017-18.

7) Greening of Barren Revenue Hillocks.

   Under MGNREGS, “Greening of Barren Revenue hillocks” by Self Help Groups in Non-Watershed areas was taken yp for increasing green cover outside the forest area. With the help of Gram Panchyat, the DWMA has identified nearby revenue hillocks for plantation, protection and management. SHG members, SSS groups, Velugu staff shall prepare a holistic three year work plan for implementing Ggreening of Barren Revenue Hillocks” with minimum area of 20 Acres and maximum is 100 Acers. Hillocks with existing staggered trenches are taken up as priority. 35,600 plants were planted in 35 Hectares under Greening of Hillocks in Non IWMP areas plantation in 2017-18.

Best Practices

End to End IT Utilization

Rashtriya Grameenabhivruddhi Samacharam

The use of ICT becomes necessary especially in registration of wage seekers, estimation of works, disbursement of wages and effective monitoring for ensuring transparency in the execution of MGNREGS in Andhra Pradesh.

MIS (Web) Reports

Web reports provide detailed information under various sections and subsections covering all aspects of MGNREGS activities. The user can access all reports in the website www.nrega.ap.gov.in, which offers information related to employment generation, physical and financial performance.

Key initiatives

The Government had made effective use of IT applications in implementation of the programme and observed standard procedures, proper record keeping and transparency in the entire system. NREGA has popularized ICT as a tool for empowerment amongst the rural masses - grievances recording and accountability has eliminated the middle-men enabling true G2C interaction.

Transaction based software to provide end-to-end solutions:

Andhra Pradesh is the first state to introduce comprehensive IT software that provides end-to-end IT solution with transaction based software in place since inception under MGNREGS. Various modules for execution of NREGS works etc., are prepared based on different aspects of the programme implementation. Web based monitoring reports are placed in the official website of http://www.nrega.ap.gov.in/, capturing every work and transactions on real time basis which are kept available for public access.

Electronic Muster and Measurement System

The objective is to achieve complete transparency in implementation of MGNREGS by obtaining LIVE data from the Worksite to the Website on a daily basis. The mobile technology is customised and deployed for the MGNREGS field functionaries through different mobile applications like e-Muster, e-Measurement, e-muster verification and e-check measurement. eMMS is designed to arrest distortions in the programme like Muster Fudging; Delays in Payments; Binami Wage seekers; Fake Measurements and Work Duplication. eMMS is being implemented in all the districts.

Geo-tagging of all works wherein public money involved in execution.

Under MGNREGA, while at planning stage, it is made mandatory to get GPS coordinates (Latitudes & Longitudes) to be taken to a particular work for the generation of estimate and capture images with GPRS tag for every payment and also date and time of visit to the work location. All such works are put in public domain for enhanced transparency. Demand capture/ allocation of works/daily attendance to work sites and geo tagging are done through these mobiles and all the functionaries are trained to utilize this technology.

Financial transparency through Electronic Fund Management system (eFMS)

eFMS has been established with the objective of implementing an efficient fund transfer system through online money transfers. eFMS avoids unnecessary parking of funds at mandal level. An amount of Rs.2,421.70 Crores were transferred through eFMS system to the individual wage seekers accounts during 2017-18. All payments are made to the individual Bank/Post office accounts directly by the disbursing authority; it has reduced delay in payments.

Payments to wage seekers through Direct Benefit Transfer (DBT) using Biometric Authentication

Government started DBT Project in NREGS-AP as Smart Card Project. It is a pioneering initiative in Financial Inclusion and the only one of its kind and scale in India. All the Gram Panchayats have been converted into the postal payments with Aadhaar Enabled Payment System(AEPS) authentication mode.

Government has migrated from the Electronic Funds Management System (EFMS) in which the wage payments were being routed through a Nodal account maintained by the department at the state level with funds sanctioned by the MoRD to the National Electronic Funds Management System (Ne-FMS) from 19.12.2016. In this system the MoRD will approve a "Mother Sanction" at periodical intervals basing on the approved labour budget & Utilization Certificates submitted and process the wage FTOs through Public Funds Management System (PFMS)

and credit the wage amounts directly into the accounts. Wage disbursements are now being made through Aadhaar Payment Bridge (APB) mode for the wage seekers having account with banks and seeded with Aadhaar in the NPCI. For the remaining wage seekers, mostly in the agency area, where connectivity is a problem , the wage payments are being made in the Automated Clearing House (ACH) mode by the Department of Posts through their Core Banking accounts. During the year, 2017-18 an amount of Rs.3,094 Crs.has been generated towards wage payments and Rs.1,883 Crs. as material payment in the Ne-FMS. 90% of the wage payments are being credited within 15 days from the closure of the muster.

Biometric payments / Iris based payments

The Department has provided the IRIS devices to all the districts for making of wage payments in the case of Biometric authentication failures to know the status of the wage disbursements made to the wage seekers in a real time MIS.

APNGO alliance (APNA) for MGNREGA

AP NGO Alliance (APNA) has been formed with 253 NGOs in 428 mandals to organize the rural poor to demand their rights under the MGNREGA. The NGOs are given the tasks of organizing the poor into SSSs, training them, overseeing implementation of the programme, observing the social audit system, etc. The services of the APNA have been utilized for the capacity building of wage seekers, formation of 3.41 lakhs Shrama Skhakthi Sanghas (SSS) and 5130 SSS federations in 6859 GPs. The NGOs have facilitated the formation of 4705 SSS Federations in 2711 GPs in 190 mandals. APNA NGOs have helped the project staff in identifying the 8338 Samakya Mitras out of 11974 Samakya Mitras. NGOs have helped the project staff in training of 4966 Srama Mitras out of 6179.

Vigilance on programme initiatives

The Government has established Vigilance Cells at the State and District levels to take up follow up action on the Social audit reports with the objectives of speedy redressal of deficiencies, improve the delivery mechanism, ensure accountability, close monitoring of disciplinary action, boost up the public confidence and ensure people's faith in Governance. Thorough vigilance mechanism not only helped in evaluating the performance of implementation and improving the service delivery, but also in enhancing the awareness levels and participation.

Community monitoring through Social Audit (SA)

Governments are facing an ever-growing demand to be more accountable and socially responsible and the community is becoming more assertive about its right to be informed and to influence governments' decision-making processes. Faced with these vociferous demands SOCIAL AUDIT was felt needed.

Social audit process as it is being implemented under MGNREGA in AP, includes public vigilance and verification of the various stages of implementation following which 'Social Audit Forums – Public Hearings are organized where information is read out publicly, and people are given an opportunity to question officials, seek and obtain information, verify financial expenditure, examine the provision of entitlements, discuss the priorities reflected in choices made and critically evaluate quality of works as well as the functioning of the programme staff. The Social Audit Public Hearing is not only gives people an opportunity to review compliance with the requirements of transparency and accountability, but also serves as an institutional forum where people can conduct a detailed public audit of all NREGA works that have been carried out in their area since the inception of the scheme. Social Audit will be conducted once in six months by the village social auditors.

Web based monitoring reports are placed in the official website of http://www.socialaudit.ap.gov.in/, social audit schedules and action taken reports are kept available for public access.

Social Audit follow-up action upto November 2017

Rs.175 crore was covered by financial deviation in social audit (including convergence department). Rs.79.37 crore has been determined as misappropriation and Rs.24.83 crore has been recovered, but still Rs.54.53 crore is yet to be recovered. Amount referred under RR Act is Rs.17.31 crore. 973 functionaries were suspended, 30,295 functionaries were removed and 39,503 punishments were

imposed and 164 FIR being filed. 4243 persons were referred under RR Act.

Quality Control cell

The main objectives of the QC teams are to ensure quality, quantity & qualitative analysis. Each district having one QC team and each team will be assigned online by TCS with 58 EGS works, 8 IWMP works every month and also will be assigned Social Audit inspections.

8389 works were assigned and 8250 (98.34%) works were inspected. 6598 (79.97%) works found with no deviation. 1401 (16.98%) works found within permissible limits. 251 works proposed with deviation for which recoveries/ penalties. An amount of Rs.111.58 lakhs was proposed for recovery. Quality control inspection reports are kept open to public in the MGNREGS Web site.

GeoMGNREGA

G Phase – I : Objective is only for completed works (assets) through NRSC's Bhuvan mobile app.

GeoMGNREGA Phase –II:

All the MGNREGA works will have to be geo-tagged at three stages i.e. (i) Before the start of the work (work site location), (ii) During the work (with working wageseekers / ongoing stage) and lastly (iii) After completion of the work/ asset by using NRSC's Bhuvan mobile application from 1st November 2017.

All the works administratively sanctioned on (or) after 1st November 2017 will be made available in MSE (MGNREGA Spatial enumerator) (at Gram Panchayat level) Mobile application logins for geotagging of work location before starting of work. Once the geotag is accepted in Bhuvan by GAS, status of the said work will flow to TCS Online applications for further processes. It is advised that MSE should put some identification mark to the point from where Stage-I geotag is captured so that Stage-2 and Stage-3 geotag's can also be captured from the same point.

Public Grievance and Redressal system

Grievance day is being organised on every Monday at GP level/Mandal Level/District level on every Monday to register and monitor complaints from beneficiaries. Issues related to the entitlements of Wage Seeker, Work Related, Material Payments, Wage Payments, Corruption, Social Audit, APNA NGO, Disability, Tribal Welfare Department, Forest Department, P.R Department, others are redressed through www.meekosam.ap.gov.in.

Out of 2.21 lakh complaints registered, 2.07 lakh complaints were redressed (93.5%) and 14347 are pending so far. The ultimate goal is to create a one-stop public grievance handling and resolution system, characterized by high efficiency of resolution and real time reporting. Beneficiary satisfaction is the key driving force in this Grievance redressal.

Information, Education and Communication

Awareness among wage seekers and general public was created through display of hoardings, advertisements on auto back panels, display of IEC content in C C Tvs in Railway stations with special focus on the rights and entitlements of the wage seekers and the facilities extended by the Government.

Shrama Shakti Sanghas (Labour groups)

Despite the spectacular success in implementation of MGNREGS by introducing many initiatives, still there are many challenges to be addressed to ensure that the entitlements due to the wage seekers under the MGNREGS are assured. In order to achieve this , Shrama Shakthi Sanghaas (SSS) groups are formed to facilitate activities like monitoring collection of demand, identification of works, opening of work, timely wage payments, provision of work site facilities, concurrent social audit etc. 5,47,612 groups were registered and 86,66,016 wage seekers were covered in the groups.

Formation of Srama Shakti Sanghala (SSS F) federations

SSS federations formed at the village level will ensure higher level of labour participation, build confidence among the wage seekers and also empowers the SSS groups. 10,181 SSS federations have been formed with 1.32 lakh SSS groups in 5777 GPs of 417 mandals.

Organisation of Rojgar Diwas:

The Rojgar Diwas is being organized on the 1st Saturday of every month in the Gram panchayats. The main objective of this meeting is to create the awareness among the wage seekers and general public about the MGNREGS Scheme.

Spl. Provisions to PwDs:

Separate groups (Vikalangula SSS) are formed with persons with disabilities and provisions like 30% additional wage rate, preference to PwDs in the selection of mates, separate schedule of rates for PwDs and exclusive works for PwDs identified. 164663 Job cards were issued for PWDs. 14876 PWD groups formed. 10086 PWD mates were selected so far.

Special Strategy – ITDAs (Tribal Region)

MGNREGS Strategy in Tribal Areas:

Government have issued orders to oversee the implementation of the scheme in tribal areas. Separate DCCs are established for implementation of works like Check dams etc. in ITDA areas are taken up through ITDAs. Horticulture is given importance and plantations like Coffee, Mango, Rubber and Cashew were predominantly taken up in ITDA areas along with Land development activities. Provision of 150 days employment is being proving for RoFR (Forest Right Act) beneficiaries.

Special Strategy - Chenchu Primitive Tribal Group

Out of 33 tribal groups, 8 groups are recognized as Particularly Vulnerable Tribal Groups (PVTG). Chenchus are also recognized as one among the 8 PVTGs. The MGNREGS Chenchu Special Project has been implementing to address the cases of extreme poverty, hunger & starvation and to arrest distress migration among Chenchu.

Convergence with PMKSY(IWMP)

A state specific clearcut convergence policy with MGNREGS scheme for holistic treatment has been evolved and is being successfully implemented in the state. All the identified works in MGNREGS are categorized into 26 projects out of which 15 projects are watershed related works like land development, drainage line treatment, Ground water recharge, Afforestation, Fodder development, Horticulture and CPR land development works. Other projects like flood control, irrigation drains & channel, rural sanitation, rural connectivity projects are not directly related to watershed type works. The convergence strategy has been devised with segregation of projects between Watershed Computer Centers (WCCs) of IWMP and Mandal Computer Centers (MCCs) of MGNREGS using IWMP and MGNREGS funds in order to treat the entire watershed area on saturation basis.

As a result of convergence with MGNREGS, Rs 699.64 Crores have been spent for undertaking land development works, dry land horticulture and raising fodder crops in PMKSY-Watershed villages from MGNREGS. Of which Rs 471.48 Crores as wage, Rs 228.16 Crores as material. 301.85 lakh mandays wage employment in IWMP villages. During 2017-18, a total of Rs.101.07 Crores expenditure made with EGS funds.Rs 92.38 Crores as wage, Rs 8.69 Crores as material. 62.59 lakh mandays wage employment in IWMP villages.

Physical Achievements PMKSY(IWMP):

Activity	Achievement	
	Since inception	During 2017-18
NADEP Compost pit (No.)	13067	5686
Staggered Trenches (No.)	961	242
Farm ponds (No.)	92028	38235
Percolation Tank (No.)	127	5
Recharge Pit (No.)	1495	440
Repairs to existing WHSs (No.)	3413	25
Raising of Perinnial Fodder (Ha.)	1166	5
Construction of silo pits (No.)	183	0
Dry Land Horticulture (Ha.)	27288	766
Avenue Plantation Kms.	1502	0
Barren Hill Afforestation / Greening of Hillocks (Ha.)	2374	2372
Block Plantation (Ha.)	959	0

Rural Development Department

Animal Husbandry initiatives

Rural Development has formulated a strategy to converge the efforts of Animal Husbandry department for improving the productivity of existing Livestock. Perennial fodder, cattle drinking water trough and Silvi Pasture etc. works were taken up with MGNREGS. The department involved in identification of beneficiaries and extending technical support to the field staff.

Sericulture

Mulberry Plantations &Tassar Host Plantations and silk work rearing sheds were being taken in the lands of SC & ST and SF & MF in convergence with Sericulture Department in accordance with the works included in the category II of Schedule I of MGNREGA.

Fisheries Department

Excavation of fish breading ponds projects are being taken up in the fishermen villages to provide additional income to the fishermen community. Unit cost of each fish breeding pond is Rs.8 lakhs, out of which Rs.6 lakhs towards excavation is met from EGS funds and Rs.2 lakhs towards material component like finger lings etc.,is included from the line department funds.

Horticulture Department

Horticulture plantation programme is being implemented under MGNREGS to enhance the livelihood security of farmers belonging to SCs and STs through creation of productive assets. Horticulture crops like Mango, Sweet orange, Sapota, Acid lime, Guava, Tamarind and Custard apple are being promoted.

Forest department

Through Forest Department, various NRM works like Check dams, CCTs, afforestation activities such as raising of nurseries, avenue plantation, casuraina plantations etc, are taken up to improve and conserve the vegetation and water. Raising of nurseries for forest species, raising of plantations, water and soil moisture conservation works in the Reserve Forest Areas.

Panchayat Raj & Tribal Welfare Engineering department

37 DCCs to PR Engineers and 5 DCCs to Tribal Welfare Engineers were established at divisional head quarters. Identification of works, estimate preparation, muster maintenance, execution and payments in other than tribal villages were made through the DCCs, Panchayat Raj and in tribal villages through DCCs, Tribal Welfare department. The works taken up through these departments include laying of CC Roads, Rural Connectivity works, Bharat Nirman Rajiv Gandhi Seva Kendras at Mandal and GP level.

Rural Connectivity Projects

Rural roads are the critical infrastructure that is needed for bringing economic development in rural areas. A good net work of all weather roads in rural area accelerates the development by connecting the village economy to the state and national markets.

Internal CC Roads in SC/ST colonies in villages

In order to improve the village basic infrastructure especially in the SC/ST habitations, construction of Cement Concrete Road works were taken up in a big way under MGNREGS with technical expertise of PR Engineering Department.

Panchahyat Raj Department -Solid Waste Management

In order to promote better sanitation in rural areas, the Panchayat Raj, Rural Development and AP Swachch Bharat Mission have joined hands to promote Solid Waste Management units in Gram Panchayats. Under this initiative, the waste management is being tackled in a scientific manner, in which solid waste is being collected, transported, segregated and at Gram Panchayat Level in a centralised manner by Gram Panchayats. The Gram Panchayat is taking care of collection, transportation, segregation and the Try Cycles through sanitation workers called as “Green Ambassadors”. Effective conversion of waste into wealth is transforming the villages as clean villages and improving the living standards of the rural people.

Tribal Welfare and Coffee Board:

Government of Andhra Pradesh have sanctioned Coffee Project under MGNREGS for taking Coffee Plantations in 1.04 Lakh acres and Shade Plantations in 1.00 lakh acres. It is expected that each family would get an amount of Rs.45000/- per acre from coffee plantations.

Swachch Bharath Mission:

IHHLs are taken up in convergence with Swachh Bharat Mission, Society for Elimination of Rural Poverty (SERP). Identification of the eligible beneficiaries for IHHLs was done by Village Organizations of the SHGs. The tasks in the estimate are divided into EGS tasks, Swachh Bharat tasks. RWS & S department accord technical support in implementation of IHHL works.

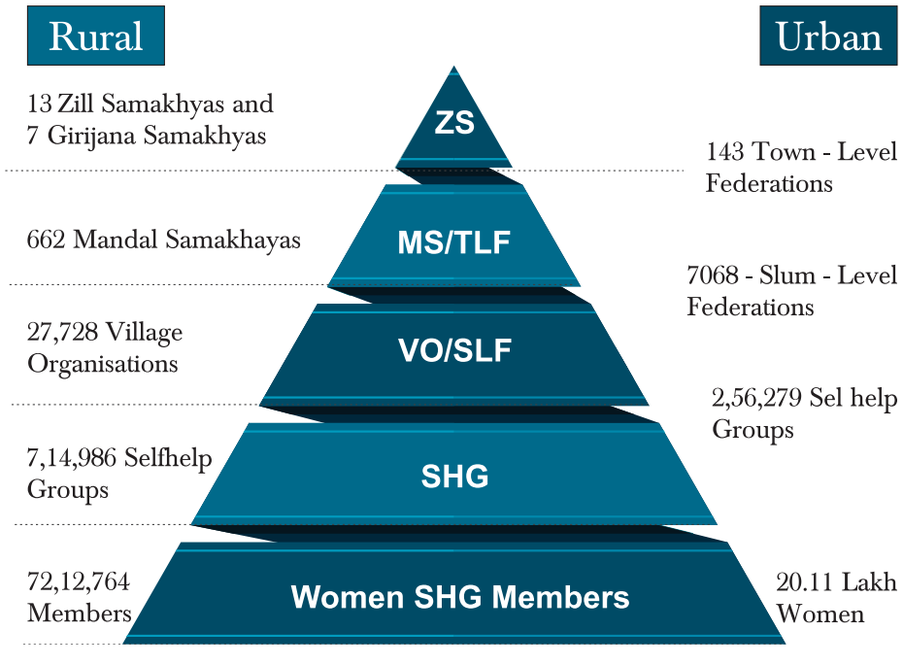
Awards:

- The MGNREGS-AP software has been recognized as one of the best ICT solutions in the country and world-wide and has won the awards.
- National Award for effective initiatives under MGNREGA in Transparency and accountability, by GoI for the year 2016-17.

AP Mahila Sadhikara Samstha - Society for Elimination of Rural Poverty

Government of Andhra Pradesh's women's empowerment and poverty eradication agenda intends to ensure that disadvantaged communities in both rural and urban areas shall be empowered to overcome all social, economic, cultural and psychological barriers through self-managed organizations. Velugu, implemented through Society for Elimination of Rural Poverty (SERP) and Mission for Elimination of Poverty in Municipal Areas (MEPMA), this movement has achieved significant poverty reduction and social capital creation over the last decade through a holistic approach of facilitating and promoting empowerment, creating opportunities, providing mechanism for social security, and working for equity. Community Based Organisations (CBOs) have built up enormous financial capital base through savings corpus. Besides this, the human capital aspect of the SHG members has been built over the years and is continuously in the process of being strengthened through various programs and initiatives.

Nearly 100% Aadhaar authenticated database along with a robust community-based monitoring system, support the targeted and efficient implementation of programmes. The federated structure of the institutions is given below



HIGHLIGHTS
Chandranna Cheyutha..
Rs.8604Cr. to 87 lakh SHG Women

Institution Building

Self Help Groups (SHGs)

Currently, there are 92.24 Lakh members in 9,71,265 Self Help Groups (SHGs). Of these, 72.12 Lakh members are in rural areas (7,14,986 groups) and 20.11 Lakh members are in urban areas (2,56,279 groups). The total member's savings is Rs. 4,936.29 crores and the total corpus is Rs. 7,075.89 crores in rural areas. The urban SHGs are having the total corpus of Rs.1208.27 crores.

SHG Federations

Currently there are 13 Zilla Samakhyas, 662 Mandal Samakhyas and 27,728 Village Organizations in rural areas and 7,068 SLFs, 143 Town Level Federations in the urban areas.

Aadhaar Seeding

Aadhaar seeding has been taken up on campaign mode to ensure beneficiary level data is authenticated and unique. The current member Aadhar seeding status is 98.91% (Total 91,28,796- Rural – 71,35,121 + Urban -19, 93,675 members of the 92.24 lakhs total members).

SB Accounts for SHG Members

Out of 72.12 lakh rural SHG members, around 92.3% of the members (66.53 lakh) have their individual members SB accounts in banks. Of these, 45.64 lakh rural SHG members accounts are seed with National Payments Corporation of India (NPCI). Out of total 20.11 lakh urban SHG members, SB Accounts are opened for 14.44 lakh members.

Seeding Mobile Numbers

APMSS have collected mobile numbers from 79.28 lakh SHG members (66.61 lakh (96.5%) of rural SHG members and 12.67 lakh (66%) urban SHG members).

SHG - Bank Linkage

SHG Bank linkage is a successful programme in the State with almost 30% of SHG bank linkage in the country being deliveredhere. During 2017-18, ann amount of Rs.5757.72 Cr. of bank linkage has been facilitated against a target of Rs.13584.94 Cr upto Sep 2017.

Chandranna Cheyutha - Investment Capital

An amount of Rs.8604 crores has been sanctioned to 87 lakh SHG Women @ Rs.10,000 per member under capital infusion, out of which Rs.4972 crores has been released to 86,04,304 both rural and urban SHG women in the first & second phases. In addition to the above, an amount of Rs.1338.83 Cr was paid to 6,20,956 SHGs by the Government Interest Redemption Grant for the period from February 2014 to April 2015.

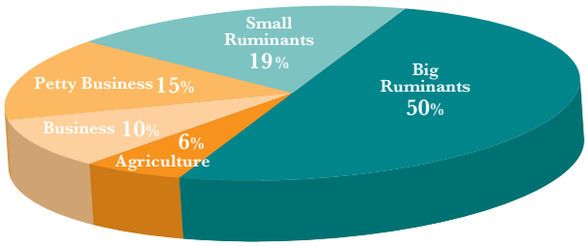
SERP has taken systematic measures to ensure the process to go smoothly by:

- Identification and authentication of SHG members through Aadhar seeding
- Drafting and issue of clear guidelines on issue of capital infusion, payment advice, sanction letters as well as publicity and IEC materials for the same
- Training all SHGs and SHG members on the benefits of Capital Infusion and the most appropriate methods of deployment of the same
- Building an enterprise support system so that capital infused can result in a positive economic outcome for the SHG members.

Unnathi (PoP) SCSP/TSP/IWMP

Unnathi – Strategy is to enable every poor family in the state comes out of poverty with increased and sustainable livelihood opportunities with various funds like SC, ST Sub plan funds from State Government and Other funds from GoI funds etc. Provided Livelihood from 2014-15 under "Unnathi". Livelihood /assets to 1,48,462 households with Rs.486.87 Cr by mobilizing funds from various sources SCSP & TSP and other funds.

Livelihood pattern



Loan and Livestock Insurance is provided to the beneficiaries (at free of cost) by Government. The SC/ST and IWMP funds are released to VOs as a Revolving Grant and loan to members to cover more beneficiaries in the VO by way of recycling. Member will repay loan with 0% interest and the recovered loan amount will be rotated to the same member to a max.of 3 time, remaining SC/ST members also be provided funds basing on the available funds.

Stree Nidhi

Stree Nidhi Credit Cooperative Federation Limited, Andhra Pradesh operates in Rural areas as well as Urban areas with an objective of providing low cost and timely credit to poor SHG women in transparent and easily accessible manner through SHG federations i.e. VO/SLFs and MS/TLFs. In addition to the loan services, Stree Nidhi, also provides deposit services for resource mobilization, loan insurance, works as Business Correspondent to all Banks and also as a Channelizing Agency for financing livelihood activities under SC/Tribal Sub Plans, IWMP, NRLM etc., and is emerging as a gate way for transferring funds to the target group under different programmes.

Performance of Stree Nidhi as on 31.10.2017

Credit Disbursement

An amount of Rs.645.55 Crores loan was disbursed to 2,74,225 SHG members comprising of 48,810 SHGs (92%) up to 31.10.2017. Since inception i.e. from October 2011, loans were disbursed to an extent of Rs.4135.40 Crores to 19.95 lakhs of SHG members. The Annual Credit Plan (ACP) projected for 2017-18 is Rs 1200 Crores and achieved Rs.645.55 Crores as against the target of Rs.700 Crores up to Oct 2017. The loan outstanding as on 31.10.2017 is Rs.1367.71Crores.

Resource mobilization:

The MS/TLFs have contributed Rs.67.79 Crores and State Government has contributed Rs.98.06 Crores as share capital including capital grant of Rs.33.19 Crores. An amount of Rs.246.05 crores has been mobilized as deposits from SHG federations including deposits of Rs.27.96 Crores during the year 2017-18 up to 31.10.2017.

Borrowings of Stree Nidhi:

Stree Nidhi has mobilized funds of Rs.1294 Crores as borrowings from different sources (banks & financial institutions) as cash credit and term loan, out of which Rs.667.74 Crores used for on lending to SHGs upto 31.10.2017.

Recovery performance:

The recovery rate during 2017-18 stands at 90.59% as on 31.10.2017. Stree Nidhi has ensured the asset quality by restricting NPAs to 3.27% of total loan amount outstanding of Rs.1367.71 Crores as on 31.10.2017.

Interest margins and Profit distribution:

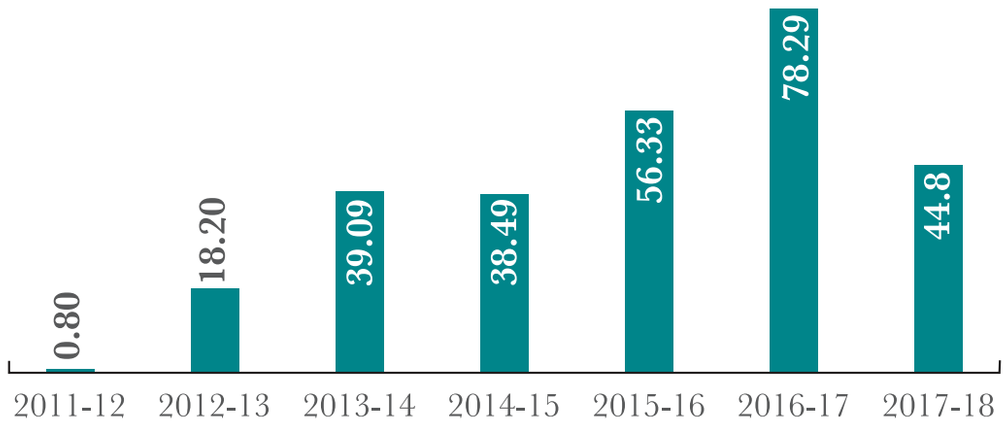
Stree Nidhi is recovering interest at 13% on loans disbursed to SHG members through Mandal Samakhya (MS) and Village Organization (VO), the federations of SHGs. Of the 13% interest collected, 2% will be payable to the respective VO and MS towards their administrative and service charges in equal proportion i.e. 1% each. As such, the effective interest rate charged by Stree Nidhi is only 11%.

Business correspondent activities:

Stree Nidhi is working as a Business Correspondent (BC) to major banks in the state to provide financial services to the disadvantaged and low-income groups at their door steps. Stree Nidhi has started the BC services in more than 178 locations covering more than 700 villages.

Vaddileni Runalu

Stree Nidhi has provided an amount of Rs.78.29 crores in the year 2016-17 and Rs.44.80 Crores are eligible for VLR during 2017-18 (upto Sep 2017).



Family Investment Opportunity Survey:

In order to leverage the capital infused into DWCRA groups, SERP is facilitating an intensive Family Investment Opportunities Survey (FIOS). The survey is going on.

Diversified Livelihoods Strategy

Community Based Organisations have built up huge financial capital base through savings and corpus. In addition to this, huge credit has been provided to CBOs through bank linkages. Therefore, it becomes imperative that this credit and these capacities are converted into productive outcomes for the SHG members as well as for the economy around them. SERP's livelihood strategy is therefore, now focused at three levels- on household-based livelihoods grounding, supporting and nurturing SHG linked enterprises and businesses and finally, on building value chains, second generation institutions and verticals around sectors that can create high value for the SHG members in terms of income increase.

Primary Sector Based Producer Groups

APRIGP - Primary Sector Based Producer Groups-Value chain-based approach for FPOs

Under this approach, building & strengthening of Farmer Producer Organizations (FPO) have been taken up in order to harness higher value chain-based returns in the primary sector. The idea is to enable establishment of institutions of the Farmer Producer Groups formed at the Village level participate actively in the FPO development under the Primary Sector Mission driven by the Government of Andhra Pradesh. This potential of SHGs can be further enhanced by building them into a network of producer companies/organizations where their capacities are built to function as autonomous stand-alone institutions. SERP and the concerned Departments like Agriculture, Animal Husbandry, Horticulture have agreed to work together on a convergence mode in promotion and strengthening of FPOs in 150 APRIGP Mandals. 2.28 lakh farmers have been mobilized into 19,780 FPGs spanning across 22 value chains in 150 most-backward mandals across 13 districts of the State as against the target of 2.50 lakh farmers upto Nov 2017 in the year 2017-18. Out of 161 FPOs, 154 FPOs have already been registered under the APMACS, 1995 Act. District wise details are given in Annexure 8.22.

SHG Enterprise Strategy Comprehensive platform for SHG enterprises-Rural retail chains

APRIGP through retail chain strategy aims to establish a platform to market SHG-made products and other FMCG products to increase the access to quality goods at reasonable prices in villages. Rural Retail Chains sub-component while strengthening the livelihoods of rural kirana stores, envisages to increase incomes of 7500 retailers and 7500 entrepreneurs (of whom at least 70% are Poorest of the Poor) by at least 50% and creates access to affordable, good quality nutrition and hygiene products to consumers by linking both the SHG (home-made) products and Fast-Moving Consumer Goods (FMCG) via the network of branded rural retail chain in 150 backward mandals across 13 districts over the project implementation period.

All marts indentified have contributed Rs.5000/- each as share capital towards the establishment of a Mandal Nodal Store (MNS) to facilitate logistics and collective procurement. 66 MNS were operationalized and Rs.183 lakh sales were made in the month of October 2017 in the state.

150 aggregated nodal stores will be formed at Mandal-level to improve market access to SHG products and to increase profitability through demand aggregation of Kirana Stores and also as a push-point for products with social value. As part of enterprise development, the way forward is to work with the existing SHG entrepreneurs and also new entrepreneurs to enhance their turnover and profitability by enabling a range of business development services and access to finance. In addition, enterprises linked to the processing of the agriculture produce and manufacturing of nutrition products will be promoted and linked to the rural retail stores.

Identification of mart owners at village level is under process, mini mart owners have been identified, formed loose federations, collected share capitals, opened bank accounts and share capital amount has been deposited. Formation of committees is under progress. 80 mandals have been identified for MNSs in the state.

Mandal Nodal Store as a platform for SHG products (Nutri, Hygiene, General). 2096 nutri entrepreneurs were trained in 114 mandals. An amount of Rs.97.87 lakh was provided as loan to 737 members to start the business. Of which, 695 were stated business and 152 were tied upto MNSs. 509 members were doing business at open markets.

Human Development

The main focus of Human Development component under Rural Inclusive Growth Project (RIGP) is to bring Behaviour change at individual, house hold and community levels on Health, Nutrition & Sanitation interventions to contribute towards sustainable human development through empowering the communities.

Under Health and Nutrition, it is increased maternal knowledge on care during pregnancy and IYCF Nutrition security at household level leading to a decrease in the number of underweight and stunted children and a reduction in anemia. SERP has been implementing for a long period to change the household level food consumption patterns and enhance the nutritional status of the people. Strengthen the community organizations to demand for quality nutrition, health and sanitation services. Linkcages with value chains to improve household level food consumption patterns and nutritional outcomes.

WASH (Water Sanitation Hygiene)

18.75 lakh ISLs were completed as against the target of 24 lakhs toilets upto November 2017. SERP has taken up a significant role in the entire mission, through its huge field cadres and community, involving mobilization, and inculcating behavioral change through communication. Each Mandal HD Coordinator has to take up at least 2 villages for water interventions like giving training to SHG women in coordination with RWS regarding water quality assessment and safe handling of drinking water.

Achievements under ODF

Out of 3072 RIGP GPs, 824 GPs have been declared ODF. HDIF worth Rs.70.05 crores have been sent to the districts to initiate and speed up the process of IHHL construction. Besides this, Streenidhi loans worth Rs.178 crores have been given for 1,52,495 IHHLs. IEC funds worth Rs.1.95 crores received from SBM and Rs.72 lakhs from RIGP funds have been sent for utilization to the districts for IEC related activities.

Safe Drinking Water

Out of 520 in 4 TPMUs, 41 have been completed, 51 are under progress. An amount of Rs.10 crores have released from the Tribal Sub Plan.

Nutri-Gardens

150 Model Nutri-Gardens initiated by Mandal HD Coordinators. 1.2 lakh families have set up Nutri-Gardens. Nearly, 300 SHG Entrepreneurs is developing seeds for their continuation of nutri-gardens.

Nutri-Entrepreneurs

So far 2096 Nutri-Entrepreneurs were trained as against the target of 6000 members @ 40 per Mandal. Mandal level training has been completed for 3585 Entrepreneurs. Provided Rs.97.87 lakhs as Loans to 737 members to start the business.

Backyard Poultry

21 Mother Units were grounded in the TPMUs and one at Vizianagaram DPMU.

Livelihood Achievements 2017-18

- 22 Value chains for promotion of FPOs were identified for implementation across 150 Mandals in 13 districts under Rural Value Chains component comprising of both Agriculture & Livestock commodities.
- 19,780 Farmer Producer Groups were formed comprising of 2,28,357 small & marginal farmers upto Nov 2017
- Under APRIGP out of 161 FPOs, 154 FPOs are successfully registered under MACS Act 1995
- Rs.10.13 Crores is released to 10,139 FPGs for revolving fund, with each FPG receiving Rs. 10,000. In the fiscal year 2016-2017, in convergence with Olam Agro India, 300 MT of RCN of worth Rs.4 Crore was procured from 11 Cashew Value Chain from 3 Districts.
- In convergence with Horticultural dept. 383 drip irrigation and 83 Sprinkler were distributed among 264 and 58 FPGs respectively.
- Under Backyard Poultry, 46,111 units of unit size 15 birds were grounded in DPMU & TPMU areas across the State in all 13 districts. In Convergence with Animal Husbandary dept. 11,370 units of Back Yard Poultry with a Unit size of 45 birds is grounded against the target of 10,000 units with a subsidy of Rs. 3350.00 per unit.
- 21,286 sheep & goat farmers are being organized into 1799 small ruminant farmer producer groups for establishment of 17 small ruminant farmer producer organizations in 12 districts with a membership of 15-20 rearers per group. 3.53 lakh Livestock units with the financial outlay of Rs.1521.86 crore are grounded upto Nov.2017.
- Under SCSP, 26,028 Milch animals were distributed for SHG members across the State. Under other schemes like Bank Linkage, 1.84 lakh units were grounded in the State. Totally 2.11 lakh Milch animals were distributed for SHG members to supplement their income.
- About 5,866 Azolla units were grounded to SHG members with a view to enhance productivity of Milch animals
- 68,132 Ram Lamb Units with unit size of 4 ram lambs were distributed to SHG members across the State. Under SCSP, 5,006 units of breeding rams with a unit size of 10 is grounded to the SHG members against the target of 5000 units. Under SCSP, out of the given target of 9379 units, 8,390 pregnant heifers are grounded till date to the SHG members in convergence with AH dept. with a subsidy of Rs.45,000 per unit.
- Oorura Pasugraasa Kshetralu program was envisaged to increase the fodder production by involving livestock owning SHG members to cultivate the fodder crop in convergence with AH dept. Out of 30,000 acres of target, 45,120 acres of land has been identified till date for cultivating fodder out of which 45,000 acres of land has completed the agreements. Technical sanctions have been done for 38,517 acres of land. Administrative sanctions have finished for 36,542 acres of land. Plantation has accomplished in 20,274 acres of land.
- To promote SHG enterprises, estimates are generated for 2,60,267 Vermi-compost units out of which 250,111 units are sanctioned under NREGS scheme. 50,692 units are under progress and 39,141 units are completed.
- A total of 618 988 SHG members have been trained on various areas ranging from school sanitation, EDP training, value chain, retail chain training and smart phone usage for business.
- 231 Generic stores have been registered and are functioning in rural, urban and tribal areas till date registering a turnover of Rs.13.00 crores.
- 5188 food enterprises have been facilitated in 13 districts by providing credit, skills and market linkages.
- In 152 stitching training centers, 16,142 SHG members have been trained so far.10,960 sewing machines were distributed.
- 27,882 Government elementary, upper, primary and high schools sanitation are being managed by SHG federations in all the districts. The enterprise opportunity from this is roughly 25 Cr. per annum in wages and Rs.7.5 Cr. per annum in cleaning materials backward linkage.
- 55 DWCRA Bazaars have been established across 13 districts in which SHG products like garments, pickles, powders, handicrafts etc.
- 704 Concrete mixers have been provided across 13 districts.

Anna Sanjivini Project

The objective of Anna Sanjivini Project is "to provide quality braded generic medicines at affordable prices to all the people". Anna Sanjivini Generic Medical Stores (ASGMS) are established and managed by the community-based organizations of Zilla samakhyas, Mandal samakhyas, Town level federations and Individual Entrepreneurs from SHG members. 266 Anna Sanjivini generic medical stores (194 under DRDA, 14 under Tribal, 58 under MEPMA) are established across 13 districts of Andhra Pradesh. SERP (DRDA / MEPMA). Government is providing a web based real time software to all the ASGM Stores (annasanjivini.ap.gov.in).

Startup Village Enterprise Programme (SVEP)

Startup Village Entrepreneurship Program (SVEP) is sub project of National Rural Livelihood Mission (NRLM) implemented on pilot basis in 20 Mandals covering in 2 Districts Chittoor and Vizianagaram. Main objective of the program is to promote Non-Farm Livelihood enterprises through our SHG women. Continuous Handhold support will be provided to the entrepreneur at various stages / phases of the enterprise growth. Total of 8705 entrepreneurs need to be supported in 4 years and total cost of the project is 23 Crores. So far, 1920 SHG entrepreneurs have been trained and provided loans for starting the enterprises. Till date total loans provided to SVEP beneficiaries is Rs. 7.38 Crores.

School sanitation & Hygiene

Sanitation is being managed by SHG Federations in 27,882 schools in all the districts. SHG women are being provided skills on stitching clothes through training centres. 27,123 SHG members have been trained in 395 stitching training centers and 10,960 sewing machines were distributed in districts. So far., 200 members were trained in National Institute of Fashion Technology.

Rural self-Employment Training Institutes

15 RSETIs are established by the lead bank in the districts for training unemployed youth on various vocational courses to create self-employment opportunities.6528 members were trained during the year 2017-18 upto Nov.2017.

Market Access:

55.58 lakh metric tonnes of Paddy worth Rs.8261.28 crores from 2,25,912 farmers have been procured by SHG Federations. 35 City Livelihood Centres were established in 32 NULM ULBs and 10 to 40 services started in each CLC to avoid gaps in availability of services to the urban poor and to create a platform where the urban poor can offer their goods and services in an organized manner to the potential buyers. 3622 service providers have been registered in these CLCs so far.

Rural and Urban SHGs have provided with market access through regular DWCRA Bazaars and SARAS exhibitions. During 2017-18 SARAS exhibitions will be held in Jharkhand and Haryana.

Social Security- Social Safety Nets for Poor and Vulnerable

NTR Bharosa has turned public service delivery into a reality- at the door step of the beneficiary with timely and hassle-free delivery of services month on month, at a huge scale of over 45.28 lakh pensioners with an annual outlay of Rs.5878.16 Crores. The CORE (Chief Minister Office Real-time Executive) Dashboard has been developed to monitor pensions closely. 99% of Pensions in the state are Aadhaar authenticated. District wise category wise pensions distributed upto October 2017 are given in Annexure 8.23.

Chandranna Bima - Insurance for unorganized sector workers

The main object of the scheme is to provide relief to the families of unorganized workers in case of death or disability of the un-organised worker leaving the families in great distress. Under this scheme 2.13 crores workers were enrolled upto October 2017. LIC of India has sanctioned scholarship for an amount of Rs. 172.35 crores to 14.36 lakh children @ 1200 per child under Chandranna Bima.

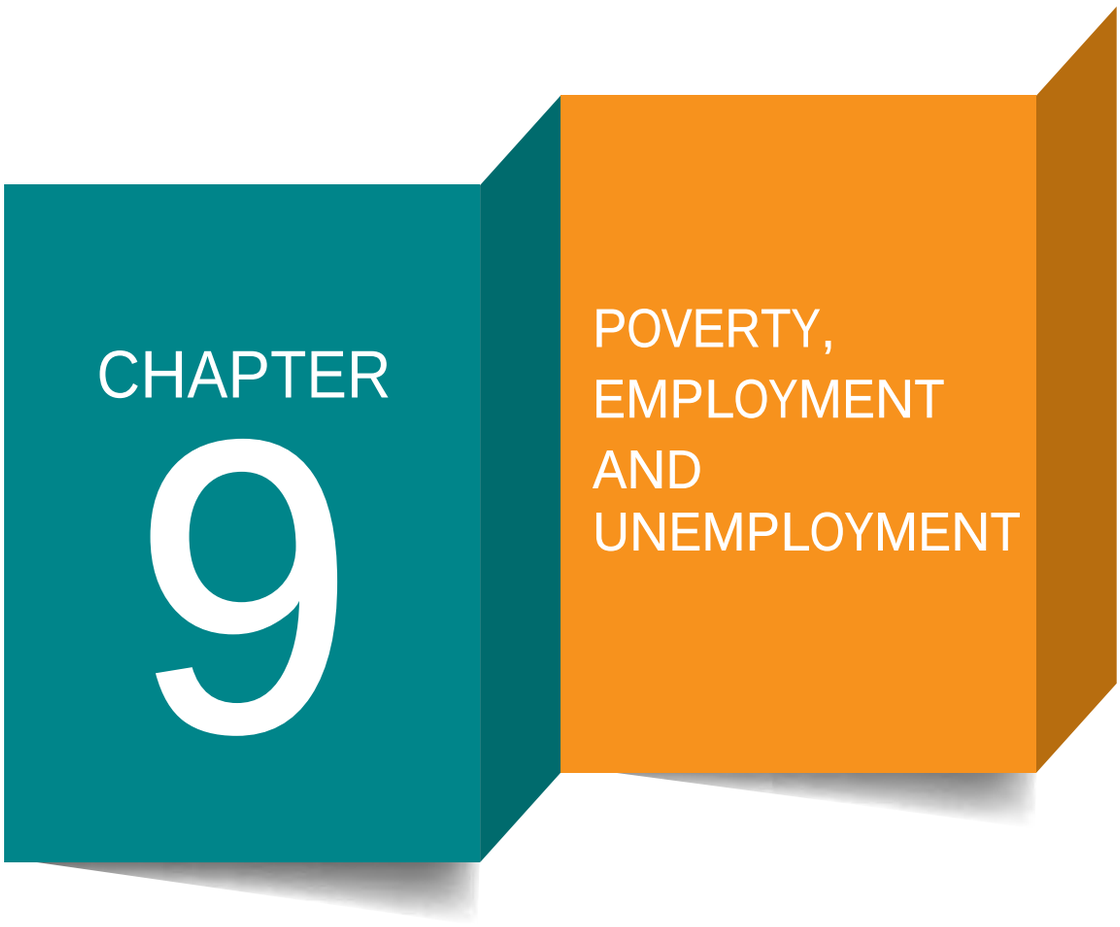
Pradhan Mantri – Chandranna Bima (2nd year scheme – From 02/10/2017 onwards)

To co-terminate with the uniform timeline of the convergence scheme across the country, the implementation of convergence scheme (PMJJBY, PMSBY and AABY) commencing from 02.10.2017 to 31.05.2018 (8 months). A sum of Rs.5.00 lakhs to accidental death, Rs.5 lakhs to total disability and Rs.2.50 lakh for partial disability covered under age group of 18-70. Rs.1200 scholarship also covered under the age group of 18-60. A sum of Rs.2 lakhs covered to Normal death under age group of 18-50 and Rs. 30,000 covered to 51-60 age group. Under this scheme, 2.45 crores workers were enrolled. 9177 natural Death claims and 781 accidental death claims registered and immediate assistance of Rs. 5000/- paid to 9134 claims within 24 hours of claim registered from SERP as advance for funeral expenditure.

Digital Marketing:

The Government of Andhra Pradesh seeks to support the livelihoods of SHG members who engage in handloom and handicraft activities in the state by increasing the market each and customer base for these SHG members by retailing their products through Digital platform under the brand name 'Urban Village'. The aim is to increase the income of the SHG members and to showcase the heritage of Andhra Pradesh to Pan India.

The products identified are being listed in Flipkart, Snapdeal etc. e-commerce portals registered by both the Zilla Samakhyas under the brand name 'Urban Village'. This project, running under the guidance and support of SERP implemented through the Zilla Samakhyas. Currently Krishna Zilla Samakhya and Visakhapatnam Zilla Samakhya are registered as sellers in various e-commerce portals and the products are listed online for sale. Two separate warehouses have been established in Vijayawada and Visakhapatnam. 398 products have been uploaded into the e-commerce portals for sale. 150 new products were identified, and these products also will be listed in the e-commerce portals for sale. Digital Marketing is developing its own e-commerce portal with domain name www.urvill.com, covering Apparel, Toys, Home decor, Accessories and Kitchenware categories. 752 products were sold under this scheme. The further plan to take this initiative forward is to increase the product range and artisan participation.


CHAPTER
9
POVERTY,
EMPLOYMENT
AND
UNEMPLOYMENT

Pedarikam Pai Gelupu – Empowering, Just not handholding

- Strategy and Action plan to ensure a monthly basic income of Rs. 10,000 for every household in poverty - land-based activities, MSMEs, and retail.
- Poverty rate of Andhra Pradesh(Combined AP) at 9.2%, much lower than India's 20.9%.
- Aggressive fight against poverty through Pedarikam Pai Gelupu – Proven power of DWACRA women and Self-Help Groups.
- Skills training and job facilitation activities taken up in a big way for the benefit of students and unemployed youth
- To train atleast 2 lakh unemployed youth in high demand job roles in 20 identified key sectors in FY 2018-19.
- Strengthening ITIs in the State – Imparting employable skills
- AP State Development Corporation and SIEMENS establish 40 training centres in identified Universities, Engineering and Polytechnic colleges in the state – Hub and Spoke Model
- Employability Skill Centres – Skilling in degree colleges – two way learning systems – Common Core Skills and Domain specific skills.
- ASPIRE – AP State Skill Development Centre's skilling programme for school children. 1.27 lakh Social Welfare, Tribal Welfare and Model school children trained in 2017-18 in life skills, future skills, vocational workshops.

Poverty centre

Poverty alleviation continued to be the principal component of the state and central government initiatives. Over the decades, poverty has been interpreted and measured by experts in several methods. However, discussions centering around different dimensions of poverty remained the core welfare agenda in almost all the national and international forums. Several development paradigms, including the more recent Sustainable Development Goals (SDGs), emphasize ending poverty in all its dimensions.

Concept and measurement of poverty

In a larger context, poverty is a state where a person is unable to maintain a minimum socially accepted level of standard of living. Although there is a diversified opinion on the definition and measurement of poverty, it is regarded as the root cause for low levels of health and educational outcomes, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity for mobility. The concept and measurement of poverty have undergone changes over decades. The official estimates of poverty for the period 1973-74 to 2011-12 are placed in the Annexure 9.1.

The very definition of poverty has undergone change over the decades and continued to evolve in a wider perspective. Several committees and expert groups have studied the poverty measurement methodologies in the past. The recent expert group under the Chairmanship of Prof. Suresh D. Tendulkar recommended using poverty lines which are substantially higher than earlier ones. As per the latest estimates of the Planning Commission released in July 2013 for the year 2011-12, the poverty ratios for rural and urban areas of united Andhra Pradesh were 10.96% and 5.81% respectively and combined ratio stands at 9.20%. The corresponding figures for All India during the same period were 25.70%, 13.70% for rural and urban areas and the combined was 21.92%. Annexure 9.1 depicts the percentage of people below the poverty line in united Andhra Pradesh and at All India level for different time periods. However, there has been widespread criticism that government grossly underestimated the number of poor in the country through a choice of unrealistic poverty lines.

Andhra Pradesh – hub of innovative poverty alleviation programmes

Andhra Pradesh enjoys the legacy for introducing and implementing innovative poverty alleviation programmes.

HIGHLIGHTS

Poverty Rate

AP 9.2 %

All India 21.92%

Apart from general economic policies, targeted poverty alleviation programmes for women's empowerment, providing housing and other infrastructure like pensions, land distribution and health insurance helping the poor in various dimensions. Increasing budgetary allocations, improving delivery systems in poverty alleviation programs and effective monitoring can help reduce severity of poverty.

Categorization of states based on head count ratio

NITI Aayog has categorized the states into five classes based on their relative poverty head count positions in 2011-12 with scales of <10%, 10-20%, 20-30%, 30-40% and >40%.

Standing of Andhra Pradesh

Urban Poverty(<10% range)- Andhra Pradesh, Goa, Sikkim, Himachal Pradesh, J&K, Mizoram, Kerala, Tamil Nadu and Meghalaya.

Rural Poverty(10%-20%) – A.P., Haryana, Meghalaya, Rajasthan, J&K, Nagaland, Tripura, Tamil Nadu, Uttarakhand.

With better and more focused implementation of various livelihood and employment generating schemes in the recent past, poverty in Andhra Pradesh is expected to further decline both in respect of rural and urban areas.

Employment & Unemployment

The Employment and Unemployment surveys of National Sample Survey (NSS) are primary sources of data on various indicators of labour force at National and State levels. These are used for planning, policy formulation, decision support and as input for further statistical exercises by various Government organizations, academicians, researchers and scholars. NSS surveys on employment and un-employment with large sample size of households have been conducted quinquennially since 27th round onwards.

The National Sample Survey Office (NSSO) during the period July 2011 - June 2012 carried out an all-India household survey, ninth in its series, on the subject of employment and unemployment in India as a part of 68th round of its survey programme. In this survey, the nation-wide enquiry was conducted to generate estimates of various characteristics pertaining to employment and unemployment and labour force characteristics at the national and State levels.

The main objective of the employment-unemployment surveys conducted by NSSO at periodic interval is to get estimates of level parameters of various employment and unemployment characteristics at national and State level. These surveys collected information on several variables to capture the multidimensional aspects of employment and unemployment in the country. Persons engaged in any economic activity are termed as workers. Unpaid helpers who assist in the operation of economic activity are also considered as workers.

Labour Force

Persons categorized as working (employed) and also those who are seeking or available for work (unemployed) together constitute the labour force. The Labour Force Participation Rate (LFPR) is defined as the number of persons in the labour force per 1000 persons. The estimates of Labour Force Participation Rate based on current daily status are presented in Annexure 9.2. Labour Force Participation rates for both rural and urban areas in Andhra Pradesh were higher compared with all India levels. However, over the years, the LFPR of all persons of rural areas have shown a decline, while urban LFPR has shown improvement. The trend is visible both in Andhra Pradesh (combined state) as well as India.

Work Force (Employed)

Persons engaged in any economic activity constitute the work force. The number of persons employed per 1000 persons is known as Work Force Participation rate (WFPR). The work force participation rate per 1000 persons is based on current daily status. As per the current daily status, a person is considered working (employed) for the entire day if he/she had worked for 4 hours or more during a day. Work force participation rates in 2011-12 compared with the rates in 2009-10 have increased both in rural and urban areas of Andhra Pradesh. Details are given in Annexure.9.3.

Apart from the quantum of employment, the quality of employment also remains a concern in the state. Problems

such as wage rate, seasonality, job insecurity, illiteracy, occupational hazards etc., continue in the state. Around 94% of the workers in A.P. are in the unorganized sector and in fact, the state reports the highest employment in the unorganized / informal economy.Further, demographic dividend, which is one of the indicators of future economic growth, is expected to increase the working age group in the state and reduce dependency ratio. Reduction in dependency ratio is likely to increase savings and investments. Shifting workforce from Agriculture to non-farm sector is the best way of enhancing income levels of the poor by creating quality non-agriculture work opportunities through skill development in rural areas.

Unemployment

The National Sample Survey Office (NSSO) provides Unemployment estimates on the basis of the Quinquennial surveys. Persons are considered unemployed, if he/she was not working, but was available for work for a relatively long time during the reference period.

Unemployment rate is defined as the number of persons unemployed per 1000 persons in the labour force. This in effect gives the unutilized portion of labour force. It is a more refined indicator of unemployment in population than the proportion of unemployed, which is nearly the number of unemployed per 1000 persons in the population as a whole.

Unemployment rates based on the usual principal and subsidiary status have shown a mixed trend during the period 1993-94 to 2011-12 in Andhra Pradesh and at All India level. Details about the unemployment rates on usual (principal and subsidiary) status of various rounds for Andhra Pradesh and All India are presented in Annexure-9.4.

After an initial rise in the rural and urban unemployment rates between 1993-94 to 1999-2000 in Andhra Pradesh, there has been considerable moderation in the rural and urban unemployment rates from 1999-2000 to 2004-05. However, while in urban areas declining unemployment trend continued till 2009-10, it again went up by 2011-12.The rural unemployment increased quite alarmingly during the period 2004-05 to 2009-10 and remained at the same higher level in 2011-12.

Employment and Training

The department of Employment and Training trains the unskilled into skilled trainees so as to meet the demand of the Industry. Once the trainees come out from the institute, the employment wing will provide employment assistance and as such both the wings have come under one umbrella.

Craftsmen Training scheme

The craftsmen training scheme was introduced to ensure a steady flow of skilled workers in various vocational trades to meet the manpower requirements in industries to raise quantitatively and qualitatively the industrial production by systematic training of workers. And also to reduce unemployment among the educated youth by providing them employable training and to cultivate and nurture a technical and industrial attitude in the minds of the younger generation.

There are 79 Govt. ITIs are functioning in the state. In all these ITIs the admitted trainees will be imparted technical training in various trades as per the norms and syllabus of Director General of Training, New Delhi.

Vocational Training Improvement Project- (VTIP)

This is a Centrally Sponsored Scheme implemented with the assistance of World Bank and introduced in a phased manner. 19 ITIs are covered in the fold of VTIP. Various development activities are taken up. All the 19 ITIs are modernized with Machinery & Equipment as per the latest syllabus and the demand of the Industrial market. The total project outlay is Rs.83.05 crore, of which Rs.77.65 crore was spent.

Upgradation of existing ITI as Model ITI

The objective is to upgrade one existing ITI from the state as model ITI with total cost of Rs.10crore in the ratio 70:30 by Central and State share respectively. Government ITI Gajuwaka, Visakhapatnam has been selected under this scheme. Out of central share of Rs.700 Lakhs, GoI have released two installments at the rate of Rs.175 lakhs each.

Public Private Partnership (PPP) Scheme

31 ITIs are covered under the scheme from all the districts of the state. Each Institute is funded with Rs.2.50 crore of towards construction of Buildings, procurement of Machinery and Equipment and other infrastructural facilities.

Skill Development Initiative Scheme under Modular Employable Skills(MES)

Government of India have introduced this scheme to provide vocational training to school leavers, existing workers, ITI graduates, etc. to improve their employability by optimally utilizing the infrastructure available in Govt., private institutions and the Industry. Existing skills of the persons can also be tested and certified under this scheme. The scheme is intended to build capacity in the area of development of competency standards, course curricula, learning material and assessment standards in the country. There are 68 sectors and 578 courses designed under MES.

Scheduled Caste Sub Plan

There are two Residential ITIs (RITIs), one at Macherla, Guntur Dist. and another at Kadapa, YSR Dist functioning with hostel facilities both boarding & lodging exclusively for SCs in the state. An amount of Rs. 79.14 Lakhs has been allocated in 2017-18 under the scheme.

Tribal Sub Plan

There are 5 Residential ITIs at Visakhapatnam, Srikakulam, Vizianagaram and West Godavari Districts exclusively for the ST candidates. An amount of Rs. 30.60 Lakhs has been allocated in 2017-18 under TSP and also proposals were submitted to Government for establishment of one new Govt. Model RITI for STs, at Achutapuram, Visakhapatnam District.

Left Wing Extremism (LWE)

"Skill Development in 47 identified districts affected in LWE", is a Centrally Sponsored Scheme to create Skill Development Infrastructure in 47 districts closer to the people of LWE affected Districts. Funding pattern of central and state share is 75:25.The objective of the scheme is to establish one ITI in each of 47 districts and to run demand driven vocational training courses to meet the requirement of skilled manpower of various sectors of economy in and around these areas, to provide youth opportunities of decent livelihood. Government has issued orders to establish one new ITI at Visakhapatnam District from A. P. State with an estimated cost of Rs.7.35 crores. Government of India have released an amount of Rs. 412.92 lac as the 1st installment towards Central Share. The Govt. have been addressed for creation of posts. Soon after the creation of posts, the functioning of the said new Govt. ITI will come into force for functioning.

Multi Sectoral Development Programme (MSDP)

The Multi Sectoral Development Programme (MSDP) was conceived as a special initiative of the follow up action on the Sachar Committee recommendations. It is a Centrally Sponsored Scheme (CSS). The programme aims at improving the socio-economic conditions of minorities and providing basic amenities to them for improving the quality of life of the people and reducing imbalances in the identified minority concentration areas. The projects to be taken up under MSDP would be related to the provision of better infrastructure for education, skill development, health, sanitation, pucca housing, roads, drinking water, besides schemes for creating income generating opportunities. Muslims, Sikhs, Christians, Buddhists and Zoroastrians (Parsis) have been notified as minority communities under Section 2(c) of the National Commission for Minorities Act, 1992.Four Govt. ITIs for minorities have been sanctioned under this scheme in the State viz., Narasaraopet, Guntur Dist (funding pattern 100:0), Rayachoti, YSR Dist. (funding pattern 100:0),Adhoni, Kurnool Dist. (funding pattern 100:0) and Chagalamarri, Kurnool Dist. (Funding pattern 60:40). The GoI extends financial support only for construction of ITI along with 100 bedded hostel facilities.

Employment Wing

Through employment wing the Registration, renewal and placement are being done. The district-wise registration details are given in Annexure 9.5.

Skill Development

The government has set out an ambitious goal of making the state a skills and knowledge hub over the next few years. The Government is working closely with reputed organizations to devise employable and effective skill development strategies so as to synergize the skilling efforts and deliver a structured, sustainable and scalable framework to impart 'state of the art' skills to the unemployed, underemployed and un-benchmarked youth in the state. A Knowledge and Skills Mission has been set up to achieve the objective in a mission mode manner. Skill development is being given to 5 lakh academic and non-academics as against the target of 6 lakh persons and 75% (non-academics) got placements under various skill segments during the year 2017-18. The government is contemplating to offer assistance to such unemployed youth with a pre-defined educational qualification and utilize their energies in the social service programmes.

AP State Skill Development Corporation (APSSDC) Key initiatives

SIEMENS centers

APSSDC has joined hands with SIEMENS to establish SIEMENS training centers (COE &t-SDI) in 40 identified universities, engineering and polytechnic colleges across the state. It follows a hub and spoke model. Expensive state-of- art laboratories have been kept in the hub i.e. center of excellence (COE), which will also function as center of higher learning and research while the commonly required trade labs have been spread into spokes.The annual throughput of SIEMENS project is 1 lakh candidates per year. Government will facilitate the project as well as finance to a tune of 10% of the cost of the project while 90% of the cost is met by Siemens' under their CSR. Govternment have permitted 40 centers in the state, out of which six are centers of excellence while 34 are TSDIs. So far 20,608 were trained.

Skilling in Engineering and Polytechnics

APSSDC is in the process of expanding the activities like Siemens Center of Excellence (COE), Siemens Technical Skill Development Institutes (t-SDI), training in Cyber Security, Data Analytics in partnership with NASSCOM etc. In order to improve the skills of the students and make them industry ready, APSSDC is putting best efforts in training as per industry norms and establishment of world class labs in Engineering and Polytechnic colleges. To benefit the students of Andhra Pradesh, APSSDC is also in the process of signing MOUs with Industry in different sectors. Some of the programs are being implemented in colleges. 1.52 lakh were trained and 23,000 got placements so far.

Google Code Labs

Code lab will focus on faculty training on all Google products and programs in a hub and spoke model. While institution is to only provide the space and connectivity, Google will be investing in workstation, equipment, F&F (Workstations, Android device, Chrome book, Nexus devices, IOIO dev board, Wearables, IOT toys). VVIT is hosting India's first lab in AP, the MoU is under consideration.

Skilling in Degree colleges and Employability Skills Centers (ESCs)

The objective is to enhance skills through volunteered gradual approach, which imparts two ways of learning systems namely Common Core skills, which covers English Language Proficiency, Mastering Communication, Presentation skills, Aptitude & General Knowledge and information on various government jobs like UPSC, Defense etc., ESCs also impart various modular short-term programs for its students to enhance domain specific skills in the emerging areas in IT, Fin Tech, Accounting. Based on current job skills special trainings are conducted on certain courses like SAP-ERP, Java-Selenium, Web Designing, Digital Marketing, Logistics & SCM etc., and it vary from time to time. APSSDC supported progressive institutions, colleges and universities with IT, & other infrastructure to strengthen training delivery and ensure its reach to remote areas 3.28 lakh were trained and 7,693 got placements.

Skilling in Schools

a. ASPIRE (Andhra Pradesh Schools Program for Innovation, Research and Excellence):

APSSDC along with other stakeholders has conducted labs focusing on future skills, vocational workshops,

Life skills and English courses for students from 316 Government (Social Welfare, Tribal Welfare & Model) schools and 1.27 lakh students covered under this programme during 2017-18. The website of the department is https://aspire764.wordpress.com.

b. Centrally Sponsored Scheme for Vocationalization of Secondary and Higher Secondary Education:

During 2017-18, 126 schools are covered under this programme. 252 Vocational Trainers, 2 in each school trained the students on Beauty & Wellness, Retail, IT/ITES, Media & entertainment, Health care, Agriculture, Apparel and made-ups, Banking and Finance, Physical Education, Hospitality. Certified courses in 10 Trades up to Level IV of NSQF also introduced.

Deen Dayaal Upadhyaya Grameen Kaushalya Yojana (DDUGKY)

SEEDAP is the State implementing agency targeted to train 57,966 persons. Of the 32,033 trained, 17,665 got placements. The program is implemented in PPP mode. 70 Project Implementing Agencies (PIAs) are imparting trainings out of 106 empanelled. 74 Training Centres are functioning in the state.

Pradhan Mantri Kaushal VikasYojana (PMKVY2.0)

Pradhan Mantri Kaushal VikasYojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). The objective of this Skill Certification Scheme is to enable a large number of Indian youth to take up industry-relevant training that will help them in securing a better livelihood. Under PMKVY 2.0, APSSDC fixed with a target with a state mandate of 64,000 candidates to be trained in a period of 2016 –20.

Electronics System Design & Manufacturing (ESDM)

State mandate of 7500 was allocated for improving the employability of the students/unemployed youth under 'Scheme for Financial Assistance to select States/UTs for Skill Development in Electronics System Design and Manufacturing (ESDM) sector and scheme for 'Skill Development in ESDM for Digital India. Under the scheme, trainings are to be conducted in cyber security, Data Analytics, test engineer, design engineer, junior data Associate, Software Developer & other new job roles. So far 598 candidates have got placements out of 2531 candidates trained.

Industrial outreach and custom made training and CSR

a. GAIL – APSSDC Multi Skill Centre:

For the first time in India, APSSDC has initiated training program in Hydrocarbon sector with the objective of enhancing the employability of the youth through provision of high quality globally relevant vocational training of candidates in Hydrocarbon, Oil and Gas sector across Andhra Pradesh State. APSSDC has adopted a new financial model in order to operate the project in a more cost effective manner and thereby train more number of candidates by implementing on its own with the help of knowledge partner. During 2017-18, 55 were trained.

b. HPCL (Hindustan Petroleum Corporation Limited):

HPCL has been entrusted to set up the Skill Development Institute (SDI) at Vizag along with other oil sector PSUs. The objective of the SDI, Vizag is to impart skills to the needy youth of Andhra Pradesh and enhance the employability opportunities and which is a non – profit initiative. There are ten technical courses running in SDI and the training is completely taken care by HPCL as a part of their CSR initiative, APSSDC has an agreement with SDI, Vizag to support this initiative and share the recurring training cost. The indicated outcome through this initiative is to provide the placement linked skill training programme for at least 800 candidates per year with 70% of placements. To train 1500 youth every year of which, 10% Scheduled Tribal youth to be trained. So far, 1158 were trained and 569 got placements.

Job Fairs

These job melas are organized in highly professional and systematic way by utilizing tech and conventional tools in reaching out each needy job seeking youth. APSSDC has planned to organize 4 Job fairs in each constituency and totally 700 Job fairs in the state during 2017-18. In each job fair, it is aimed that a minimum of 250 youth should get the jobs, i.e. 1.75 lakh jobs will be created for the youth in the

state during 2017-18. APSSDC is also acting platform for bringing awareness on skill enhancement / development programs like SIEMENs centres (unique set up by state government), DDU-GKY, YTCs, etc. APSSDC also organizes company specific job drives to capitalize bigger requirements from any company. So far 221 Job melas were organized and 41,968 got placements.

Amaravati Skill Development Institute

A special training program was organized with the job roles like Jute bags making, Maggam work, herbal product making, Industrial Automation, Land Survey etc. "Amaravathi Skills Development Institute" was established to train & provide placement assistance to youth from CRDA area. So far 1025 candidates trained in 13 trades including driving, technicians etc. and 784 got placements.

Accelerator/Incubator (NU)

International Institute of Entrepreneurship Development (i2E):

APSSDC in partnership with Northeastern University, Boston, Massachusetts, USA, is establishing International Institute of Entrepreneurship Development (i2E) to rapidly build a vibrant ecosystem consisting of world-class entrepreneurship development centers, supported by maker spaces, mentor/investor networks, e-clubs and a host of other catalytic incentives. i2E Venture Development Process consists of several components and is supported by a number of resources, participating organizations and support entities. The objective is to move students with business ideas to initiate and develop viable ventures and help them launch those ventures into the real world. Venture Initiation Centres (VICs), Venture Acceleration Centre (VACs) are facilities, where students begin their entrepreneurship journey.

Tribal youth training centre (YTC)

APSSDC had signed an agreement with TRICOR to handover all youth training centres and to train the unemployed Tribal Youth and provide employment opportunities through Job melas. So far 12165 were trained and 7645 got placements.

Support for Overseas Employment (UN Women)

A comprehensive induction programme conducted to female migrant domestic workers planning to travel abroad. So far 140 were trained.

Recognition of Prior Learning (RPL)

APSSDC has started the Recognition of Prior Learning (RPL) programme in key sectors. Skill certification and reward scheme aims to enable and mobilize skilled workforce from Andhra Pradesh to take up RPL and certify their existing skill set. Trainings were conducted in service trade workers like masons etc, Agriculture & allied sectors and Crafts & allied sectors. So far 3736 were trained and got placements.

Special Projects

a. AP Model Career Centre (Employment Exchange):

Need felt for upgradation of existing employment exchanges, to help connect the private industry to the industry, facilitating the unemployed to access various employment opportunity. Objectives among others is to identify competency gaps and provide Training, Apprenticeship to fill such gaps, to establish relationships with local industries and understand their manpower needs, Build industry and job seeker linkages by providing periodic industry interaction to the job seekers. So far, 6026 got placements.

b. Udyogaratham:

A mobile van was launched in Vijayawada and capital area, as a unique and easily accessible mode for candidates to register for jobs and for employers to offer jobs. Identifying local jobs especially with MSME sector. So far, 977 got placements.

Pilot Programs

a. Pilot with Mind Map Consulting in BFSI (Banking and Financial Services) Domain:

This program is intended to enhance the Livelihood / Employability among technical and non-technical graduates in ITEs sector specific to BFSI segment and 1702 were trained and 805 got placements.

b. Skill Development programs for youth of traditional fisherman community in Andhra Pradesh in association

with National Fisheries Development Board (NFDB):

NFDB has decided to conduct a pilot program in AP and APSSDC as PIA in selected coastal districts of Andhra Pradesh. So far 257 were trained in connection with Assistant Electrician, Automobile Technician etc. and 80 got placements.

c. Pilot with New Direction for Need Based Training

The objective of the course is to help students to understand digital marketing methods, from a variety of perspectives—as analysts, consumers and entrepreneurs. The emphasis in this course will be on developing fundamental concepts along with practical application. To expect participants of this course to start working independently in digital marketing domain. So far, 139 were trained and 99 got placements.

d. Pilot with Dhanush Engineering for Livelihood Enhancement:

To bridge the skill gap in the construction sector by giving training to the Technicians and Engineers in Mechanical, Electrical and Civil Courses and also provide jobs to youth. The training is offered at Guntur Centre. So far, 337 were trained and 111 got placements.

Placement Incentive Scheme

Unique scheme for placement agencies to get monetary incentive for every placement made from AP and the placement can be within or outside the state and even globally with an Incentive range from flat Rs.2,000 to 1.25 lakhs. To provide access to suitable jobs for the youth of Andhra Pradesh. to make Andhra Pradesh a 'preferred destination' for job fulfillment for local, national and global jobs. So far, placed 150 persons.

Awards, Accolades &Recognition

Secured "National Awards" by ASSOCHAM in following categories:

- Best State in Skill Development and Best Institute in Placement (A DDUGKY Training Center in Guntur District).
- Best Skill Development Institute (SDI, Visakhapatnam)
- Best Innovative Training Program for Tribal Youth (YTC, ITDA, Rampachodavaram).
- Best Performing State in DDU-GKY by MoRD, GoI.
- "National Excellent Innovation in School Education for Weaker Section Children" Award by Communication, Multimedia and Infrastructure (CMAI) Association of India.
- Showcased skill development initiatives of APSSDC at the India pavilion of World Skill Event - 2017 held in Abu Dhabi, UAE.
- Largest capacity for training in industrial manufacturing (SIEMENS training labs with throughput of 1.00 lakh per year)

CHAPTER
10
REAL TIME
GOVERNANCE

Real Time Governance

One of the major issues of governance in India is the inefficiency in delivery in public services in the face of rising expectations from the public. India's experience since the independence has shown that expansion of opportunities both social and economical, removal of poverty will only result in good governance. However India has been in the backseat in many a development indicators like illiteracy, infant and maternal mortality, per capita income, employment, infrastructure, etc. The emphasis therefore comes to the major ailing factors in good governance viz., inefficient public service delivery, corruption, delay in services, random and skewed welfare distribution due to lack of proper data/information.

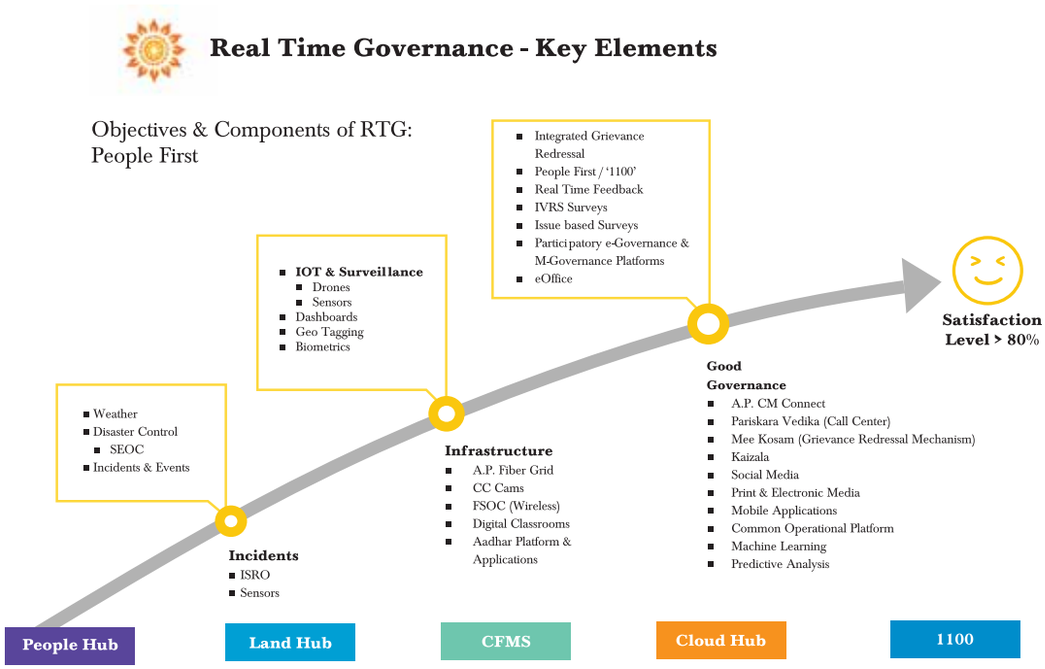
This therefore brings us to the need of an integrated system where services are devised citizen-centric as follows:

- Develop responsive solutions to citizens grievances
- Deliver services to the citizens anytime and anywhere
- Customize solutions for citizens ascertaining their needs
- Reduce delays for processing times serving at citizen's doorsteps
- Increase transparency, accountability and government efficiency
- Improve citizen satisfaction through responsive and efficient governance

Thus it is essential to bring in innovative practices in governance and public administration that enhance transparency, accountability and efficiency in provisioning of government services. Transparency and information create more opportunities for citizens to participate in governance and thereby demand better services.

Andhra Pradesh- the roll model

Real Time Governance of Govt. of Andhra Pradesh is an endeavour wherein government attempts to improve delivery of services in an agile and responsive manner through data analytics, beneficiary feedback, project monitoring and process re-engineering of welfare provisions such that atleast 80% public satisfaction is achieved in all government programs.

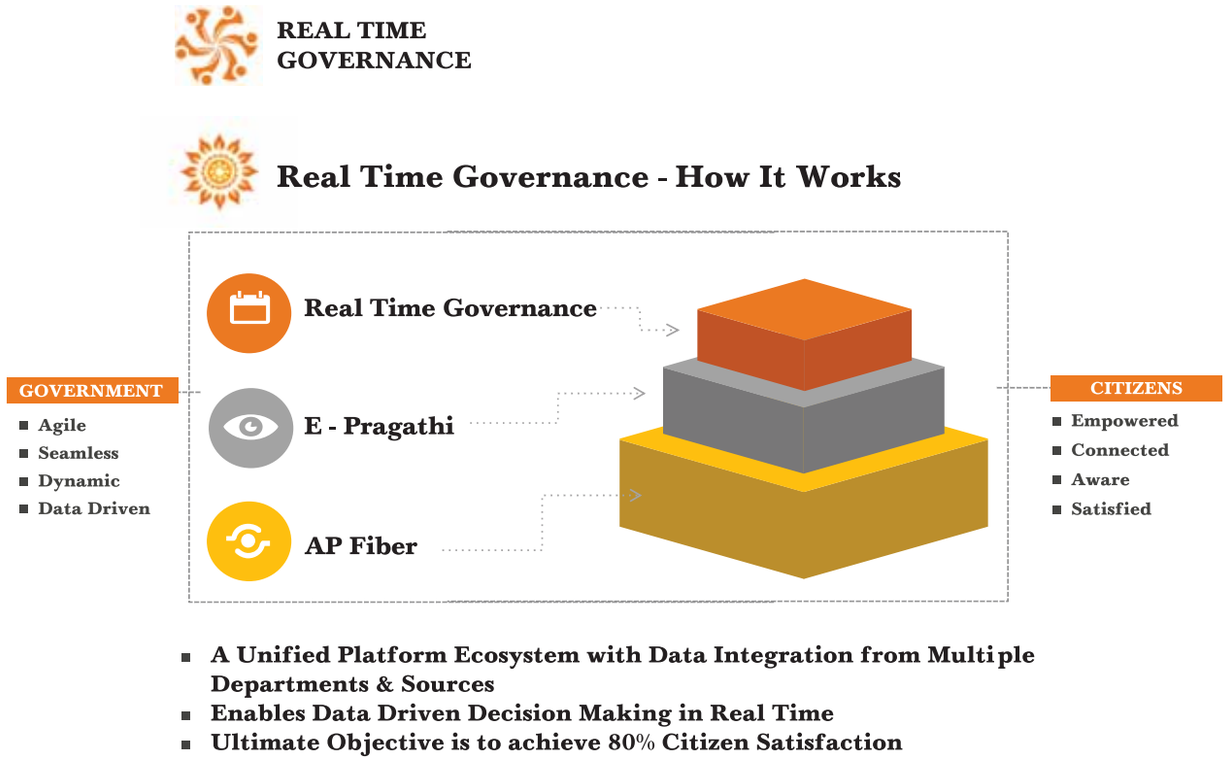


2. Brief overview of RTG

Real Time Governance (RTG) is a new institutional framework devised by Govt. of Andhra Pradesh - to bring in positive 'disruptive' changes in Governance, Public Administration and Management leveraging the tools of e-Governance, technology and electronic communication.

Real Time Governance aims to create radical changes in the way public services are delivered to the citizenry. The Real Time Governance system utilizes the tools of e-governance to develop an institutional mechanism for developing Good governance practices and effective provisioning of public services.

Govt. of Andhra Pradesh has established an institutional framework through RTGS - Parishkara Vedika to achieve transparency, accountability, and to make public service delivery efficient. RTGS is utilizing all technological applications of e-governance for real time grievance redressal.



- **A Unified Platform Ecosystem with Data Integration from Multiple Departments & Sources**
- **Enables Data Driven Decision Making in Real Time**
- **Ultimate Objective is to achieve 80% Citizen Satisfaction**

Major thematic areas of operation of Real Time Governance:

1. Grievance Management - for entire citizenry of the state with the motto of "People First" - through a 1100 Call Centre (24x7), called Parishakara Vedika
2. Beneficiary Feedback: on service delivery of social welfare benefits, pensions, public distribution system, scholarships and other govt. programs and Perception analysis on flagship schemes of the government.
3. Data mining and analytics: for independent performance measurement system at state level focusing on program outcomes and dispensing feedback to officials at multiple administrative levels.
4. Weather Forecasting and Early Warning System: to monitor weather events like rainfall to provide real time agro-advisories to farmers at village level. Establishing communication channels for disaster prevention and mitigation for preventing loss of lives and property during cyclonic events, flood and other calamities.

5. Innovation and Incubation: to promote Andhra Pradesh as a knowledge hub and fostering an enabling ecosystem to nurturing start-ups

6. Social Media: to broadcast information to the public on important governmental activities and programs; along with exploring the potential of various social media in citizen engagement and interaction in grievance redressal, trust building and enhancing participation.

The RTG employs emerging technologies like Drones, PTZ Cameras, Biometric augmented technology and virtual reality, machine learning technology, Internet of Things (IoT), Call Centre, etc.

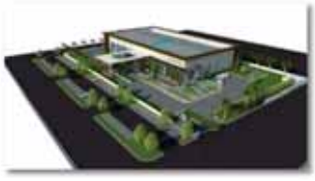
REAL TIME GOVERNANCE

RTGC –THE INFRASTRUCTURE

Conference Room

Control Room

Strategy Room



Annexe

District Centers

Addressing problems – the RTG way

Real Time Governance is an integration of platforms and addresses the problems as follows:

a. RTGS acts as an integrated Grievance Redressal Platform for all the citizens of Andhra Pradesh with the underlying motto of "People First" – "*PrajalaMundu*". Through a integrated Call centre 1100 with a work force of upto 1750 (in 3 shifts), grievances are collected from the general public across the state. The call centre has a capacity of inbound calls.

b. Real Time Governance leverages the tools of e-Governance, technology and electronic communication and associated administrative reforms.

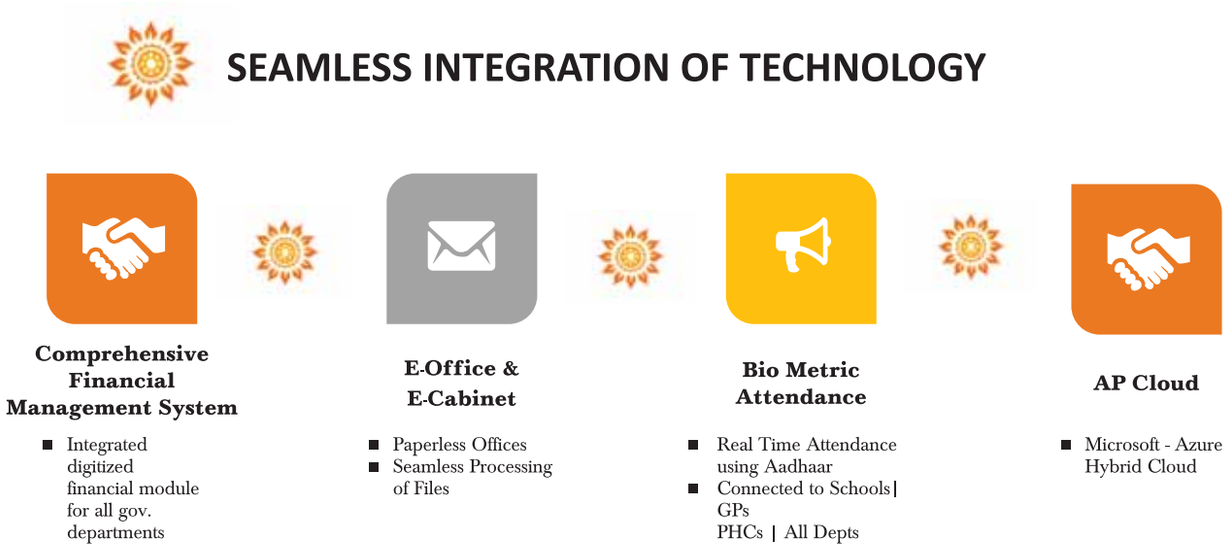
c. RTGS attempts to do away with the culture of corruption in public service delivery. Citizens who might have come across with issues of bribe and corruption can lodge their complaints to 1100 which shall in turn escalate the complaints to the appellate authority of respective departments including the Chief Minister's Office.

d. RTGS leverages e-Governance tools to institutionalize and devise key performance indicators along with their monitoring in real-time - for effective and efficient public delivery.

e. Making case studies on major policy programs, RTGS develops Good governance practices at all institutional levels for effective provisioning of public services, adopting international standards of governance.

f. Real Time Governance integrates core data of AP State of various programs for data analytics.

g. RTGS implements and monitors State Command and Communication Centre (SCCC) and 13 District Command and Communication Centres (DCCC). RTG operates from State Command and Communication Centre with data input from CC Cameras, Drones, Biometric augmented technology and virtual reality, machine learning technology, all Internet of Things (IoT), etc., adopting the most advanced technology of international standards for governance.



h. RTGS conducts field level surveys, program evaluations, perception analyses and various other performance evaluation activities of all major governmental Programs through phone, mobile applications, etc.

i. RTGS endeavours to bring in meta-level trends in governance in line with aspirations of the polity, through robust beneficiary feedback mechanisms that impact the citizenry in real time. Real Time Governance envisages Participatory governance with citizens as partners of institutions, ascertaining their felt needs.

j. RTGS collectivizes the efforts of all departments through better coordination, enhancing decision support systems, institutionalizing key performance indicators (KPIs) - leveraging ICT, innovation, crowd sourcing calls for bringing rapid and exemplary shift in governance.

k. RTGS through State Data Centre brings symmetry in collating data/information on various developmental and welfare schemes.

l. Real Time Governance innovates in improving organizational capacity of governmental institutions and their programs for effective delivery of services bringing transparency, accountability along with optimal use of public resources.

Special technology and management tools employed in RTG

Real Time Governance employs several latest technologies for Data Mining, Data Analytics and Visualization. The following are some of the technology and management tools being used:

1. **Business Analytics:** Pentaho and Oracle

   RTGS employs one of World's top Business Analytics Tools namely the Pentaho and Oracle BI. Pentaho provides integration of all data in an intuitive way providing bulk data upload, encryption and compression, predictive analytics, coordination, file management and transfer.

2. **Visualization Suite:**

   RTGS has Hitachi Smart Visualization Suite in its State Centre at Amaravathi from where RTG operates. This is a complete suite of solutions for integrating disparate video and data sources, including third party video systems, CAD / 911 systems, license plate recognition (LPR), traffic, weather, evidence, to create alerts, insights, analytics and visualization. The Hitachi Visualization Suite provides on-premise and cloud based deployment and integration with Cameras, Sensors and other IoT devices – controlled through single interface. It also has an Intelligent Suite of Predictive Analytics. The Visualization suite in RTG State Centre is one of the largest in Asia.

   Solution Benefits

   - Real-time tracking and monitoring using Video, GPS and other smart devices.
   - Reduced staffing requirements with real-time push alerts to persons concerned.
   - Events can be visualized as they occur both centrally and remotely (device agnostic) and measure the effectiveness of security policies.

3. RTG brings latest use of technology like Drones in projects monitoring. High priority infrastructure projects are monitored with the help of drones from RTG. In addition Machine learning tools are employed for amplifying the efficiency in grievance redressal, beneficiary feedback, etc.

4. RTGS has a Weather Forecasting and Early Disaster Warning System wherein Weather Forecasting Models like ECMWF, FORTRAN, GrADS, FERRET, Shell scripting for short, Medium and long term weather forecasts, sea state forecasts are employed. Agro-Metereology Modelling like Dssat (Decision Support System for Agrotechnology Transfer), AgMIP (The Agricultural Model Intercomparision and Improvement Project) , SWAT (Soil and Water Assessment Tool), Python are being used for Crop yield forecasting whereas ArcGis 10.5 , R program, MATLAB and Grads are used for weather data analytics.

Cloud Hub& State Data Center (SDC)

Cloud Hub aims at hosting the data of all Departments on Hybrid Cloud in a secured manner

a) AP SDC is setup to provide fundamental compute and storage infrastructure for various e-Governance programs being used by AP Govt. The main purpose of this data centre is to provide a physical facility for hosting various state level e-governance applications.

b) M/s Pi-Data Centres Pvt. Ltd, Mangalagiri selected as hosting agency for AP State Data Centre. LoA issued and Master Services Agreement (MSA) being finalised.

c) Site inspection completed and feedback provided.

d) RFP for setting up of Network Infra at SDC being finalised.

Key Benefits

- Centralized and standardized platform for all applications of State Govt.
- Provides cloud based services to Govt. departments thereby reduces decentralized procurement and hosting costs. Offers flexibility and scalability required.
- High availability with good security and reliability

a. e-Office is a step forward into an era of paperless administration, which is a Digital Workplace Solution that replaces the existing manual

handling of files and documents with an efficient electronic system. Being an electronic system, it has its inherent advantages such as data is stored digitally with audit trails for every transaction being done. Regular backups and Disaster Recovery systems are in place which ensures that Government files are not damaged in case of any mishap. In addition, this being a web based application, employees can access it from anywhere, continue their work while at offsite.

b. **Attendance Management:** for tracking attendance from anywhere using Aadhaar Biometric Attendance

c. **People First -1100 Call Center – Parishkara Vedika:** With a seating capacity of 2000 to function 24 hrs a day and 365 days a year, the 1100 Call Center, called as 'Parishkara Vedika' has been playing a key role as an integrated grievance redressal platform and as a survey & communication wing for RTG

By aligning all the above components, the ultimate objective is to achieve Good Governance and ensure that the Satisfaction Level of all the Citizens in the State crosses 80%.

e- Pragathi & CORE 2.0:

CORE 2.0 is the improved version of the Dashboard that provides real time data to the Hon'ble CM that ranges from Street Light information, Agriculture, Ground water, Rainfall, Health, Ration, Pensions and a host of other Departmental data online that also provides datalytics aiding monitoring key performance indicators.

ROMS

Real time Outcome Monitoring System (ROMS) is an online and app-based system created in consultation with the line departments for measuring **function-based status & progress report** on SDGs, Samaja Vikasam, Kutumba Vikasam, GVA, and KPIs.

Internet of Things

Andhra Pradesh pioneered the act of using IoT devices for the overall monitoring and in turn efficiency levels – by incorporating more than I million IoT Devices, which range from Street Light Censors, e-PoS Devices at the Fair Price Shops, Biometric Authentication Devices for disbursing Pensions and NREGA wages and Attendance at PHCs, Panchayats and Schools.

Aadhaar enabled Public Distribution System:

The Aadhaar enabled PDS is a revolutionary way of implementing Public distribution program. Andhra Pradesh is the first state to implement Aadhaar enabled PDS catering to nearly 3.6 crores beneficiaries. Aadhaar enabled PDS ensures prompt service delivery of food ration to beneficiaries' families through biometric authentication, streamlining supply chain management at all levels, allowing no scope for diversion of food stocks. Through integration of cashless Aadhaar enabled PDS has brought in transparency, accountability and accessibility of ration anywhere, anytime. Being citizen centric to the core, Aadhar enabled PDS has re-engineered public welfare systems in the country.

Aadhaar enabled Pensions

Andhra Pradesh is the first state in the country to initiate the disbursion of social security pensions directly to beneficiaries' bank accounts. The Aadhaar enabled Pensions is a change management initiative based on Jandhan-Aadhaar-Mobile (JAM) platform offering seamless services of banking at the door step of pensioners till the last mile beneficiary. Integrating Aadhaar and banking, Andhra Pradesh government is providing services of financial inclusion viz., – withdrawal, deposit, fund transfer, mini statement are available to all at their finger-tips. The State is providing social security pensions to more than 43 lakh beneficiaries such as old age people, destitute women, specially abled people, etc in a record time of first 3 days of a month.

JAM based NREGS wage payments:

Like in pensions disbursion, opening bank accounts to wage labourers and integrating with their mobile and Aadhaar (JAM), Andhra Pradesh government has opened the spillways of social inclusion to the most needy sections of our population. NREGS Wage labourers in AP now receive their wages in their bank accounts. Further, placement of banking correspondents has ensured that beneficiary can access banking services at their door step. Thus through provisioning of Aadhaar to 100% of its population along with ensuring mobile connectivity across the state, AP is

engineering a paradigm change in social and economic inclusion to the most backward sections among the populations.

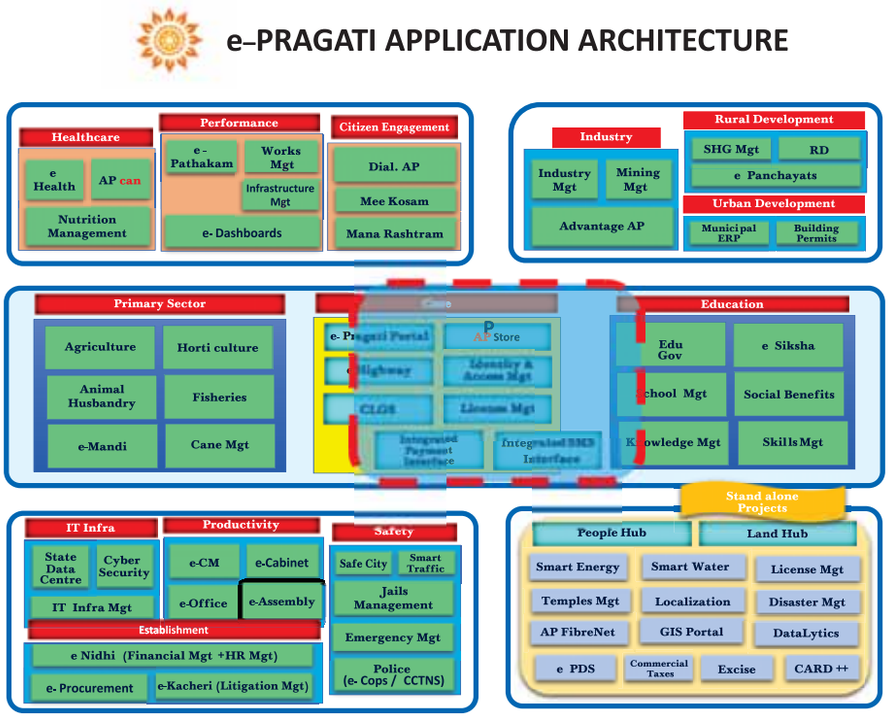
Aadhaar enabled Biometric Attendance System:

Aadhaar enabled Biometric Attendance System reforms to ensure efficiency in public administration of the state. Through Aadhaar enabled Biometric Attendance System, it is imperative for any government official to punch his biometric to register his time of working thereby preventing inefficiency and unchecked absenteeism from work. A change management initiative, Aadhaar enabled Biometric Attendance System is being implemented by more than 40 departments bringing significant changes in service delivery of health, nutrition, revenue and other important public service systems. This management initiative will be rolled to all government departments.

Using IoT, the state also monitors Ground water level, rain Fall, temperature, Air Quality and reservoir status.

I. AWARE (Andhra Pradesh Weather Forecasting and Early Warning Research Centre)

Andhra Pradesh Government established Andhra Pradesh Weather Forecasting and Early Warning Research Centre (AWARE) under Real-Time Governance (RTGS) with support of Indian Space Research Organisation (ISRO) (MoU with ISRO dt.15.03.2017). AWARE team is generating weather forecasts regularly for the State in the areas of climate, air quality, station-level weather forecasts, river runoff predictions, agro advisories, sea state advisories, tropical cyclone genesis, and track forecast in Bay of Bengal. The team is undertaking micro-level weather predictions for one to ten days with the help of Sathish Dawan Space Centre, SHAR Srihari Kota (SDSC SHAR - ISRO) since August 2017.



A.2.1: GVA/GSDP Estimates at Current Prices from 2011-12 to 2017-18 in New Base 2011-12 Rs. in Crore

Sl No.	Industry	Estimates at Current prices						
		2011-12	2012-13	2013-14	2014-15	2015-16 SRE.	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8	9
1	Agriculture,Live Stock, Forestry & Fishing							
1.1	Agriculture	52041	61230	71147	78898	83468	95570	115117
	a)Agriculture	29782	36743	39269	40540	39056	37611	39610
	b)Horticulture	22259	24488	31878	38358	44412	57958	75507
1.2	Live stock	27588	33584	36430	43127	53472	66418	76974
1.3	Forestry & Logging	2503	2530	2805	3464	3506	3704	3826
1.4	Fishing	11877	14519	18573	22707	32085	42190	56929
	Agriculture Sector	94008	111864	128956	148196	172531	207881	252847
2	Mining & Quarrying	14162	14590	14192	12914	15473	16635	19451
3	Manfacturing	50706	42377	42423	54532	58882	63795	71021
4	Electricity, Gas, Water Supply	10765	7130	10141	11513	12745	14627	15936
5	Construction	37026	37590	40651	45324	46221	50093	56074
	Industry Sector	112660	101687	107408	124282	133322	145150	162482
6	Trade,Hotel & Restaurants	26736	31792	37849	42018	46471	52921	57994
7	Transport, Storage & Communications							
7.1	Railways	2643	3037	3345	4331	4386	5150	5476
7.2	Transport by Other means & Storage	24470	28536	32353	35050	38767	44535	50899
7.3	Communications	5402	6214	7960	8991	10805	12756	14895
8	Financing,Insurance, Real estate & Business Services							
8.1	Banking & Ins.	14256	15843	17105	19047	20665	20929	24150
8.2	Real est.,O'ship of Dwellings	28338	34341	38973	44652	49712	56132	64046
9	Community, Social & Personal Services							
9.1	Public Admn.	13938	15524	17390	19439	23625	28999	32689
9.2	Other Services	27304	30639	35383	41703	51698	60289	70230
	Services Sector	143086	165925	190359	215230	246129	281711	320380
	GVA	349753	379477	426722	487709	551982	634742	735709
	Product Taxes	42439	46565	52635	54183	62681	76540	85523
	Product Subsidies	12790	14638	15085	16916	14365	15791	17359
	GSDP	379402	411404	464272	524976	600298	695491	803873
	NSDP	339996	370196	413164	470933	541165	627508	725057
	Population ('000)	49275	49566	49857	50151	50446	50743	51041
	Per Capita In Rs.	69000	74688	82870	93903	107276	123664	142054

Source:Directorate of Economics & Statistics

A.2.2: Sector-wise Contribution of GVA at Current Prices from 2011-12 to 2017-18 in New Base Year 2011-12

Sl No.	Industry	% Contribution						
		2011-12	2012-13	2013-14	2014-15	2015-16 SRE.	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8	9
1	Agriculture,Live Stock, Forestry & Fishing							
1.1	Agriculture	14.88	16.14	16.67	16.18	15.12	15.06	18.14
	a)Agriculture	8.52	9.68	9.20	8.31	7.08	5.93	5.38
	b)Horticulture	6.36	6.45	7.47	7.87	8.05	9.13	10.26
1.2	Live stock	7.89	8.85	8.54	8.84	9.69	10.46	10.46
1.3	Forestry & Logging	0.72	0.67	0.66	0.71	0.64	0.58	0.52
1.4	Fishing	3.40	3.83	4.35	4.66	5.81	6.65	7.74
	Agriculture Sector	26.88	29.48	30.22	30.39	31.26	32.75	34.37
2	Mining & Quarrying	4.05	3.84	3.33	2.65	2.80	2.62	2.64
3	Manfacturing	14.50	11.17	9.94	11.18	10.67	10.05	9.65
4	Electricity, Gas, Water Supply	3.08	1.88	2.38	2.36	2.31	2.30	2.17
5	Construction	10.59	9.91	9.53	9.29	8.37	7.89	7.62
	Industry Sector	32.21	26.80	25.17	25.48	24.15	22.87	22.09
6	Trade,Hotel & Restaurants	7.64	8.38	8.87	8.62	8.42	8.34	7.88
7	Transport, Storage & Communications							
7.1	Railways	0.76	0.80	0.78	0.89	0.79	0.81	0.74
7.2	Transport by Other means & Storage	7.00	7.52	7.58	7.19	7.02	7.02	6.92
7.3	Communications	1.54	1.64	1.87	1.84	1.96	2.01	2.02
8	Financing,Insurance, Real estate & Business Services							
8.1	Banking & Ins.	4.08	4.17	4.01	3.91	3.74	3.30	3.28
8.2	Real est.,O'ship of Dwellings	8.10	9.05	9.13	9.16	9.01	8.84	8.71
9	Community, Social & Personal Services							
9.1	Public Admn.	3.98	4.09	4.08	3.99	4.28	4.57	4.44
9.2	Other Services	7.81	8.07	8.29	8.55	9.37	9.50	9.55
	Services Sector	40.91	43.72	44.61	44.13	44.59	44.38	43.55
	GVA	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source:Directorate of Economics & Statistics

A.2.3: Sector-wise Growth Rates of GVA Estimates at Current Prices from 2012-13 to 2017-18 in New Base Year 2011-12

Sl No.	Industry	% Change over previous year					
		2012-13	2013-14	2014-15 TRE	2015-16 SRE.	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8
1	Agriculture, Live Stock, Forestry & Fishing						
1.1	Agriculture	17.66	16.20	10.89	5.79	14.50	20.45
	a)Agriculture	23.37	6.88	3.24	-3.66	-3.70	5.31
	b)Horticulture	10.01	30.18	20.33	15.78	30.50	30.28
1.2	Live stock	21.74	8.47	18.38	23.99	24.21	15.89
1.3	Forestry & Logging	1.08	10.85	23.51	1.19	5.65	3.31
1.4	Fishing	22.25	27.92	22.25	41.30	31.49	34.94
	Agriculture Sector	18.99	15.28	14.92	16.42	20.49	21.63
2	Mining & Quarrying	3.02	-2.73	-9.01	19.82	7.51	16.93
3	Manfacturing	-16.43	0.11	28.54	7.98	8.34	11.33
4	Electricity, Gas, Water Supply	-33.77	42.23	13.52	10.70	14.77	8.94
5	Construction	1.52	8.14	11.49	1.98	8.38	11.94
	Industry Sector	-9.74	5.63	15.71	7.27	8.87	11.94
6	Trade,Hotel & Restaurants	18.91	19.05	11.01	10.60	13.88	9.59
7	Transport, Storage & Communications						
7.1	Railways	14.92	10.13	29.49	1.27	17.42	6.34
7.2	Transport by Other means & Storage	16.61	13.38	8.33	10.61	14.88	14.29
7.3	Communications	15.04	28.10	12.94	20.18	18.05	16.77
8	Financing,Insurance,Real estate & Business Services						
8.1	Banking & Ins.	11.13	7.96	11.35	8.49	1.28	15.39
8.2	Real est.,O'ship of Dwellings	21.18	13.49	14.57	11.33	12.91	14.10
9	Community, Social & Personal Services						
9.1	Public Admn.	11.38	12.02	11.78	21.54	22.75	12.72
9.2	Other Services	12.22	15.48	17.86	23.97	16.62	16.49
	Services Sector	15.96	14.73	13.07	14.36	14.46	13.73
	GVA	8.50	12.45	14.29	13.18	14.99	15.91
	Product Taxes	9.72	13.04	2.94	15.68	22.11	11.74
	Product Subsidies	14.45	3.05	12.14	-15.08	9.93	9.93
	GSDP	8.43	12.85	13.07	14.35	15.86	15.58
	NSDP	8.88	11.61	13.98	14.91	15.96	15.55
	Population('000)						
	Per Capita in Rs.	8.24	10.96	13.31	14.24	15.28	14.87

Source:Directorate of Economics & Statistics

A.2.4: GVA/GSDP Estimates at Constant Prices from 2011-12 to 2017-18 in New Base 2011-12

Sl No.	Industry	GSDP at Constant prices (Rs. in Crore)						
		2011-12	2012-13	2013-14	2014-15	2015-16 SRE	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8	9
1	Agriculture,Live Stock, Forestry & Fishing							
1.1	Agriculture Proper	52041	52569	60624	60983	57870	63760	73363
	a) Agriculture	29782	30479	34194	34075	29590	27517	30901
	b) Horticulture	22259	22090	26429	26908	28280	36243	42462
	Live stock	27588	29247	29721	31185	36218	41907	47376
1.2	Forestry & Logging	2503	2469	2491	2412	2360	2291	2336
1.3	Fishing	11877	13546	15516	17620	24479	30999	40559
	Agriculture Sector	94008	97831	108353	112200	120927	138957	163635
2	Mining& Qurr	14162	14283	13880	12798	15009	15969	17391
3	Manfacturing	50706	40188	38575	48828	55609	60369	65415
4	Electy., Gas, Water Supply	10765	7345	9815	10251	11544	13367	14580
5	Construction	37026	35571	37076	39963	40426	41952	45451
	Industries Sector	112659	97387	99345	111842	122588	131657	142837
6	Trade,Hotel & Restaurants	26736	29554	33149	36789	42310	47576	50471
7	Transport,Storage & Communications							
7.1	Railways	2643	2897	3105	3781	3732	4088	4219
7.2	Transport by Other means & Storage	24470	26720	28378	29968	32232	35609	39398
7.3	Communications	5402	5845	6988	7692	9014	10224	11474
8	Financing, Insurance, Real estate & Business Services							
8.1	Banking & Ins.	14256	15635	16515	18063	19152	19228	21139
8.2	Real est.,O'ship of Dwellings	28338	32426	34130	37025	39048	41738	46101
9	Community, Social & Personal Services							
9.1	Public Admn.	13938	14468	15318	16371	19102	22249	24119
9.2	Other Services	27304	28252	30303	33281	38098	41049	45047
	Services Sector	143086	155796	167887	182970	202688	221760	241967
	GVA	349753	351014	375585	407011	446203	492374	548439
	Product Taxes	42439	43155	44807	51629	57107	65997	71889
	Product Subsidies	12790	13540	13277	14076	11613	12267	12940
	GSDP	379402	380629	407114	444564	491697	546104	607388
	NSDP	339996	341335	360239	397064	439977	489032	543818
	Population('000)	49275	49566	49857	50151	50446	50743	51041
	Per Capita in Rs.	69000	68865	72255	79174	87217	96374	106545

Source:Directorate of Economics & Statistics

A.2.5: Sector-wise Contribution of GVA at Constant Prices from 2011-12 to 2017-18 in New Base Year 2011-12

Sl No.	Industry	% Contribution						
		2011-12	2012-13	2013-14	2014-15	2015-16 SRE.	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8	9
1	Agriculture,Live Stock, Forestry & Fishing							
1.1	Agriculture Proper	14.88	14.98	16.14	14.98	12.97	12.95	13.38
	a) Agriculture	8.52	8.68	9.10	8.37	6.63	5.59	5.63
	b) Horticulture	6.36	6.29	7.04	6.61	6.34	7.36	7.74
	Live stock	7.89	8.33	7.91	7.66	8.12	8.51	8.64
1.2	Forestry & Logging	0.72	0.70	0.66	0.59	0.53	0.47	0.43
1.3	Fishing	3.40	3.86	4.13	4.33	5.49	6.30	7.40
	Agriculture Sector	26.88	27.87	28.85	27.57	27.10	28.22	29.84
2	Mining& Qurr	4.05	4.07	3.70	3.14	3.36	3.24	3.17
3	Manfacturing (Org.&Un-org)	14.50	11.45	10.27	12.00	12.46	12.26	11.93
4	Electy., Gas, Water Supply	3.08	2.09	2.61	2.52	2.59	2.71	2.66
5	Construction	10.59	10.13	9.87	9.82	9.06	8.52	8.29
	Industries Sector	32.21	27.74	26.45	27.48	27.47	26.74	26.04
6	Trade,Hotel & Restaurants	7.64	8.42	8.83	9.04	9.48	9.66	9.20
7	Transport,Storage & Communications							
7.1	Railways	0.76	0.83	0.83	0.93	0.84	0.83	0.77
7.2	Transport by Other means & Storage	7.00	7.61	7.56	7.36	7.22	7.23	7.18
7.3	Communications	1.54	1.67	1.86	1.89	2.02	2.08	2.09
8	Financing, Insurance, Real estate & Business Services							
8.1	Banking & Ins.	4.08	4.45	4.40	4.44	4.29	3.91	3.85
8.2	Real est.,O'ship of Dwellings	8.10	9.24	9.09	9.10	8.75	8.48	8.41
9	Community, Social & Personal Services							
9.1	Public Admn.	3.98	4.12	4.08	4.02	4.28	4.52	4.40
9.2	Other Services	7.81	8.05	8.07	8.18	8.54	8.34	8.21
	Services Sector	40.91	44.38	44.70	44.95	45.43	45.04	44.12
	GVA	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source:Directorate of Economics & Statistics

A.2.6: Sector-wise Growth Rates of GVA Estimates at Constant Prices from 2012-13 to 2017-18 in New Base Year 2011-12

Sl No.	Industry	% Change over previous year					
		2012-13	2013-14	2014-15 TRE	2015-16 SRE.	2016-17 FRE	2017-18 AE
1	2	3	4	5	6	7	8
1	Agriculture, Live Stock, Forestry & Fishing						
1.1	Agriculture Proper	1.02	15.32	0.59	-5.11	10.18	15.06
	a) Agriculture	2.34	12.19	-0.35	-13.16	-7.01	12.30
	b) Horticulture	-0.76	19.64	1.81	5.10	28.16	17.16
	Live stock	6.01	1.62	4.92	16.14	15.71	13.05
1.2	Forestry & Logging	-1.36	0.90	-3.19	-2.14	-2.93	1.97
1.3	Fishing	14.06	14.55	13.56	38.93	26.64	30.84
	Agriculture Sector	4.07	10.75	3.55	7.78	14.91	17.76
2	Mining& Qurr	0.85	-2.82	-7.79	17.27	6.40	8.90
3	Manfacturing	-20.74	-4.02	26.58	13.89	8.56	8.36
4	Electy., Gas, Water Supply	-31.77	33.62	4.45	12.61	15.79	9.07
5	Construction	-3.93	4.23	7.79	1.16	3.78	8.34
	Industries Sector	-13.56	2.01	12.58	9.61	7.40	8.49
6	Trade,Hotel & Restaurants	10.54	12.17	10.98	15.01	12.45	6.08
7	Transport,Storage & Communications						
7.1	Railways	9.62	7.19	21.77	-1.31	9.54	3.20
7.2	Transport by Other means & Storage	9.19	6.21	5.60	7.55	10.48	10.64
7.3	Communications	8.19	19.57	10.08	17.18	13.42	12.22
8	Financing,Insurance,Real estate & Business Services						
8.1	Banking & Ins.	9.67	5.63	9.37	6.03	0.39	9.94
8.2	Real est.,O'ship of Dwellings	14.43	5.25	8.48	5.47	6.89	10.45
9	Community, Social & Personal Services						
9.1	Public Admn.	3.81	5.88	6.87	16.69	16.47	8.41
9.2	Other Services	3.47	7.26	9.83	14.47	7.75	9.74
	Services Sector	8.88	7.76	8.98	10.78	9.41	9.11
	GVA	0.36	7.00	8.37	9.63	10.35	11.39
	Product Taxes	1.69	3.83	15.23	10.61	15.57	8.93
	Product Subsidies	5.86	-1.94	6.02	-17.50	5.63	5.49
	GSDP	0.32	6.96	9.20	10.60	11.07	11.22
	NSDP	0.39	5.54	10.22	10.81	11.15	11.20
	Population('000)						
	Per Capita in Rs.	-0.20	4.92	9.58	10.16	10.50	10.55

Source: Directorate of Economics & Statistics

A.2.7: All India Industry-wise First Revised Estimates of GVA for 2016-17 at Current Prices (Rs. in crores)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	1501948	1675106	1926373	2093612	2225367	2484006
1.1 Crops	982151	1088814	1248776	1292874	1327997	1530137
1.2 Livestock	327334	368823	422733	510411	584070	639912
1.3 Forestry & logging	124436	137558	156674	173760	182247	180465
1.4 Fishing and aquaculture	68027	79911	98190	116567	131053	133492
Agriculture Sector	1501948	1675106	1926373	2093612	2225367	2484006
2. Mining & quarrying	261035	285842	295794	308476	301230	332947
3. Manufacturing	1409986	1572837	1713452	1878369	2116119	2329220
4. Electricity, gas, water supply & other utility services	186668	215350	260155	282258	336978	363482
5. Construction	777335	849365	921470	979086	992298	1028463
Industries Sector	2635024	2923394	3190871	3448189	3746625	4054112
6. Trade, repair, hotels and restaurants	883582	1054533	1184560	1320833	1431016	1586238
6.1 Trade & repair services	793681	954683	1078421	1206474	1304935	1446832
6.2 Hotels & restaurants	89901	99850	106140	114359	126082	139406
7. Transport, Storage, Communication & services related to broadcasting	529535	609454	689908	786763	872233	935575
7.1 Railways	61150	72296	78724	92459	100436	106582
7.2 Road transport	262442	300652	338306	370364	399976	434588
7.3 Water transport	6910	7190	6476	7590	7354	6848
7.4 Air transport	4393	8128	6853	11820	20350	20655
7.5 Services incidental to transport	63602	72054	75719	91681	94139	103496
7.6 Storage	5108	6165	6026	6407	6655	6888
7.7 Communication & services related to broadcasting	125930	142969	177804	206442	243323	256518
8. Financial, Real estate & professional services	1530877	1776632	2069508	2363346	2631284	2857322
8.1 Financial services	480226	536819	599341	661411	727254	742936
8.2 Real estate, ownership of dwelling & professional services	1050651	1239813	1470167	1701935	1904030	2114386
9. Public admn and Def and other services	1025982	1163574	1301935	1491536	1660120	1924339
9.1. Public administration & defence	491155	546231	601912	676818	731640	859615
9.2. Other services	534827	617343	700023	814718	928480	1064724
Services Sector	3969976	4604193	5245911	5962478	6594653	7303474
GVA at basic prices	8106946	9202692	10363153	11504279	12566646	13841591
GDP	8736329	9944013	11233522	12467959	13764037	15253714
Population (In million)	1220	1235	1251	1267	1283	1299
Per Capita NNI (Rupees)	63462	70983	79118	86647	94731	103870

Source:Directorate of Economics & Statistics

A.2.8: All India Industry-wise Contribution of First Revised Estimates of GVA at Current Prices (%)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	18.5	18.2	18.6	18.2	17.7	17.9
1.1 Crops	12.1	11.8	12.1	11.2	10.6	11.1
1.2 Livestock	4.0	4.0	4.1	4.4	4.6	4.6
1.3 Forestry & logging	1.5	1.5	1.5	1.5	1.5	1.3
1.4 Fishing and aquaculture	0.8	0.9	0.9	1.0	1.0	1.0
Agriculture Sector	18.5	18.2	18.6	18.2	17.7	17.9
2. Mining & quarrying	3.2	3.1	2.9	2.7	2.4	2.4
3. Manufacturing	17.4	17.1	16.5	16.3	16.8	16.8
4. Electricity, gas, water supply & other utility services	2.3	2.3	2.5	2.5	2.7	2.6
5. Construction	9.6	9.2	8.9	8.5	7.9	7.4
Industries Sector	32.5	31.8	30.8	30.0	29.8	29.3
6. Trade, repair, hotels and restaurants	10.9	11.5	11.4	11.5	11.4	11.5
6.1 Trade & repair services	9.8	10.4	10.4	10.5	10.4	10.5
6.2 Hotels & restaurants	1.1	1.1	1.0	1.0	1.0	1.0
7. Transport, storage, communication & services related to broadcasting	6.5	6.6	6.7	6.8	6.9	6.8
7.1 Railways	0.8	0.8	0.8	0.8	0.8	0.8
7.2 Road transport	3.2	3.3	3.3	3.2	3.2	3.1
7.3 Water transport	0.1	0.1	0.1	0.1	0.1	0.0
7.4 Air transport	0.1	0.1	0.1	0.1	0.2	0.1
7.5 Services incidental to transport	0.8	0.8	0.7	0.8	0.7	0.7
7.6 Storage	0.1	0.1	0.1	0.1	0.1	0.0
7.7 Communication & services related to broadcasting	1.6	1.6	1.7	1.8	1.9	1.9
8. Financial,real estate & professional services	18.9	19.3	20.0	20.5	20.9	20.6
8.1 Financial services	5.9	5.8	5.8	5.7	5.8	5.4
8.2 Real estate, ownership of dwelling & professional services	13.0	13.5	14.2	14.8	15.2	15.3
9. Public admn and Def and other services	12.7	12.6	12.6	13.0	13.2	13.9
9.1. Public administration & defence	6.1	5.9	5.8	5.9	5.8	6.2
9.2. Other services	6.6	6.7	6.8	7.1	7.4	7.7
Services Sector	49.0	50.0	50.6	51.8	52.5	52.8
GVA at basic prices	100.0	100.0	100.0	100.0	100.0	100.0

Source:Directorate of Economics & Statistics

A.2.9: All India Industry-wise Growth Rates of First Revised Estimates of GVA at Current Prices (%)

Industry	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	11.5	15.0	8.7	6.3	11.6
1.1 Crops	10.9	14.7	3.5	2.7	15.2
1.2 Livestock	12.7	14.6	20.7	14.4	9.6
1.3 Forestry & logging	10.5	13.9	10.9	4.9	-1.0
1.4 Fishing and aquaculture	17.5	22.9	18.7	12.4	1.9
Agriculture Sector	11.5	15.0	8.7	6.3	11.6
2. Mining & quarrying	9.5	3.5	4.3	-2.3	10.5
3. Manufacturing	11.5	8.9	9.6	12.7	10.1
4. Electricity, gas, water supply & other utility services	15.4	20.8	8.5	19.4	7.9
5. Construction	9.3	8.5	6.3	1.3	3.6
Industries Sector	10.9	9.1	8.1	8.7	8.2
6. Trade, repair, hotels and restaurants	19.3	12.3	11.5	8.3	10.8
6.1 Trade & repair services	20.3	13.0	11.9	8.2	10.9
6.2 Hotels & restaurants	11.1	6.3	7.7	10.3	10.6
7. Transport, storage, communication & services related to broadcasting	15.1	13.2	14.0	10.9	7.3
7.1 Railways	18.2	8.9	17.4	8.6	6.1
7.2 Road transport	14.6	12.5	9.5	8.0	8.7
7.3 Water transport	4.1	-9.9	17.2	-3.1	-6.9
7.4 Air transport	85.0	-15.7	72.5	72.2	1.5
7.5 Services incidental to transport	13.3	5.1	21.1	2.7	9.9
7.6 Storage	20.7	-2.3	6.3	3.9	3.5
7.7 Communication & services related to broadcasting	13.5	24.4	16.1	17.9	5.4
8. financial, real estate & professional services	16.1	16.5	14.2	11.3	8.6
8.1 Financial services	11.8	11.6	10.4	10.0	2.2
8.2 Real estate, ownership of dwelling & professional services	18.0	18.6	15.8	11.9	11.0
9. Public admn. and Def. and other services	13.4	11.9	14.6	11.3	15.9
9.1. Public administration & defence	11.2	10.2	12.4	8.1	17.5
9.2. Other services	15.4	13.4	16.4	14.0	14.7
Services Sector	16.0	13.9	13.7	10.6	10.7
GVA at basic prices	13.5	12.6	11.0	9.2	10.1
GDP	13.8	13.0	11.0	10.4	10.8
Population	1.2	1.3	1.3	1.3	1.2
Per Capita NNI	11.9	11.5	9.5	9.3	9.6

Source:Directorate of Economics & Statistics

A.2.10: All India Industry-wise First Revised Estimates of GVA for 2016-17 at Constant (2011-12) Prices (Rs. in crores)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	1501947	1524288	1609198	1605715	1615216	1716746
1.1 Crops	982151	983809	1037060	998425	966345	1033008
1.2 Livestock	327334	344375	363558	390449	421369	448964
1.3 Forestry & logging	124436	124743	132093	134609	137022	138779
1.4 Fishing and aquaculture	68027	71362	76487	82232	90480	95996
Agriculture Sector	1501947	1524288	1609198	1605715	1615216	1716746
2. Mining & quarrying	261035	262609	263107	288685	328453	371066
3. Manufacturing	1409986	1486873	1560709	1683938	1898790	2048711
4. Electricity, gas, water supply & other utility services	186668	191635	199601	214047	224198	244934
5. Construction	777335	780050	800771	835229	866440	878110
Industries Sector	2635024	2721167	2824188	3021899	3317881	3542821
6. Trade, repair, hotels and restaurants	883582	981620	1034506	1135841	1259039	1370909
6.1 Trade & repair services	793681	888665	941941	1037640	1148216	1250502
6.2 Hotels & restaurants	89901	92955	92565	98201	110823	120407
7. Transport, storage, communication & services related to broadcasting	529535	569523	617556	671847	734588	767093
7.1 Railways	61150	69162	73685	80720	85452	85494
7.2 Road transport	262442	282425	300563	320813	342021	362077
7.3 Water transport	6910	7052	7345	7954	8100	8578
7.4 Air transport	4393	4183	4550	5188	6053	7184
7.5 Services incidental to transport	63602	66480	70172	75596	80683	86617
7.6 Storage	5108	5716	5210	5529	6061	5869
7.7 Communication & services related to broadcasting	125930	134505	156031	176047	206218	211274
8. Financial, real estate & professional services	1530877	1680031	1867407	2073715	2299913	2437857
8.1 Financial services	480226	529792	577914	627255	674022	682553
8.2 Real estate, ownership of dwelling & professional services	1050651	1150239	1289493	1446460	1625891	1755304
9. Public admn and Def and other services	1025982	1069645	1110794	1203115	1276711	1413103
9.1. Public administration & defence	491155	501383	510046	543853	565019	637056
9.2. Other services	534827	568262	600748	659262	711692	776047
Services Sector	3969976	4300819	4630263	5084518	5570251	5988962
GVA at basic prices	8106946	8546275	9063649	9712133	10503348	11247629
GDP	8736329	9213017	9801370	10527674	11386145	12196006
Population (In million)	1220	1235	1251	1267	1283	1299
Per Capita NNI (Rupees)	63462	65538	68572	72805	77826	82229

Source:Directorate of Economics & Statistics

A.2.11: All India Industry- wise Contribution of First Revised Estimates of GVA for 2016-17 at Constant (2011-12) Prices (%)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	18.5	17.8	17.8	16.5	15.4	15.3
1.1 Crops	12.1	11.5	11.4	10.3	9.2	9.2
1.2 Livestock	4.0	4.0	4.0	4.0	4.0	4.0
1.3 Forestry & logging	1.5	1.5	1.5	1.4	1.3	1.2
1.4 Fishing and aquaculture	0.8	0.8	0.8	0.8	0.9	0.9
Agriculture Sector	18.5	17.8	17.8	16.5	15.4	15.3
2. Mining & quarrying	3.2	3.1	2.9	3.0	3.1	3.3
3. Manufacturing	17.4	17.4	17.2	17.3	18.1	18.2
4. Electricity, gas, water supply & other utility services	2.3	2.2	2.2	2.2	2.1	2.2
5. Construction	9.6	9.1	8.8	8.6	8.2	7.8
Industries Sector	32.5	31.8	31.2	31.1	31.6	31.5
6. Trade, repair, hotels and restaurants	10.9	11.5	11.4	11.7	12.0	12.2
6.1 Trade & repair services	9.8	10.4	10.4	10.7	10.9	11.1
6.2 Hotels & restaurants	1.1	1.1	1.0	1.0	1.1	1.1
7. Transport, storage, communication & services related to broadcasting	6.5	6.7	6.8	6.9	7.0	6.8
7.1 Railways	0.8	0.8	0.8	0.8	0.8	0.8
7.2 Road transport	3.2	3.3	3.3	3.3	3.3	3.2
7.3 Water transport	0.1	0.1	0.1	0.1	0.1	0.1
7.4 Air transport	0.1	0.0	0.1	0.1	0.1	0.1
7.5 Services incidental to transport	0.8	0.8	0.8	0.8	0.8	0.8
7.6 Storage	0.1	0.1	0.1	0.1	0.1	0.1
7.7 Communication & services related to broadcasting	1.6	1.6	1.7	1.8	2.0	1.9
8. Financial,real estate & professional services	18.9	19.7	20.6	21.4	21.9	21.7
8.1 Financial services	5.9	6.2	6.4	6.5	6.4	6.1
8.2 Real estate, ownership of d welling & professional services	13.0	13.5	14.2	14.9	15.5	15.6
9. Public admn and Def and other services	12.7	12.5	12.3	12.4	12.2	12.6
9.1. Public administration & defence	6.1	5.9	5.6	5.6	5.4	5.7
9.2. Other services	6.6	6.6	6.6	6.8	6.8	6.9
Services Sector	49.0	50.3	51.1	52.4	53.0	53.2
GVA at basic prices	100.0	100.0	100.0	100.0	100.0	100.0

Source:Directorate of Economics & Statistics

A.2.12: All India Industry- wise Growth Rates of First Revised Estimates of GVA for 2016-17 at Constant (2011-12) Prices (%)

Industry	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	1.5	5.6	-0.2	0.6	6.3
1.1 Crops	0.2	5.4	-3.7	-3.2	6.9
1.2 Livestock	5.2	5.6	7.4	7.9	6.5
1.3 Forestry & logging	0.2	5.9	1.9	1.8	1.3
1.4 Fishing and aquaculture	4.9	7.2	7.5	10.0	6.1
Agriculture Sector	1.5	5.6	-0.2	0.6	6.3
2. Mining & quarrying	0.6	0.2	9.7	13.8	13.0
3. Manufacturing	5.5	5.0	7.9	12.8	7.9
4. Electricity, gas, water supply & other utility services	2.7	4.2	7.2	4.7	9.2
5. Construction	0.3	2.7	4.3	3.7	1.3
Industries Sector	3.3	3.8	7.0	9.8	6.8
6. Trade, repair, hotels and restaurants	11.1	5.4	9.8	10.8	8.9
6.1 Trade & repair services	12.0	6.0	10.2	10.7	8.9
6.2 Hotels & restaurants	3.4	-0.4	6.1	12.9	8.6
7. Transport, storage, communication & services related to broadcasting	7.6	8.4	8.8	9.3	4.4
7.1 Railways	13.1	6.5	9.5	5.9	0.0
7.2 Road transport	7.6	6.4	6.7	6.6	5.9
7.3 Water transport	2.1	4.2	8.3	1.8	5.9
7.4 Air transport	-4.8	8.8	14.0	16.7	18.7
7.5 Services incidental to transport	4.5	5.6	7.7	6.7	7.4
7.6 Storage	11.9	-8.9	6.1	9.6	-3.2
7.7 Communication & services related to broadcasting	6.8	16.0	12.8	17.1	2.5
8. Financial,real estate & professional services	9.7	11.2	11.0	10.9	6.0
8.1 Financial services	10.3	9.1	8.5	7.5	1.3
8.2 Real estate, ownership of dwelling & professional services	9.5	12.1	12.2	12.4	8.0
9. Public admn. and Def. and other services	4.3	3.8	8.3	6.1	10.7
9.1. Public administration & defence	2.1	1.7	6.6	3.9	12.7
9.2. Other services	6.3	5.7	9.7	8.0	9.0
Services Sector	8.3	7.7	9.8	9.6	7.5
GVA at basic prices	5.4	6.1	7.2	8.1	7.1
GDP	5.5	6.4	7.4	8.2	7.1
Population (In million)	1.2	1.3	1.3	1.3	1.2
Per Capita NNI (Rupees)	3.3	4.6	6.2	6.9	5.7

Source:Directorate of Economics & Statistics

A - 3.1: State's Own Tax Revenue (Rs. Crores)

SN	Tax/Revenue	2014-15 #	2015-16	2016-17	2017-18 RE
1.	Sales Tax	21672	29104	32484	32894
2.	State Excise	3642	4386	4645	5886
3.	Taxes on Motor Vehicles	1423	2082	2467	2950
4.	Stamps and Registration	2561	3527	3476	4000
5.	Land Revenue	28	52	167	300
6.	Professional Tax	185	250	254	415
7.	Electricity Duty	118	176	333	350
8.	NALA	130	196	192	320
9	State Goods and Services Tax (SGST)				4426
10	Goods and Services Tax Compensation Cess				1000
11	Other Taxes and Duties	97	148	163	176
Total		29857	39921	44181	52717

From 2nd June, 2014 to March, 2015
Source: Finance Department

A - 3.2: State's Own Non-Tax Revenue (Rs. Crores)

Sl. No.	Tax/Revenue	2014-15 #	2015-16	2016-17	2017-18 RE
1.	Mines and Minerals	811	1523	1628	2200
2.	Forests	414	471	234	350
3.	Interest Receipts	371	133	113	102
4.	Education	1087	856	577	71
5.	Medical and Health	72	70	83	65
6.	Others	1200	1867	1354	2559
Total		3955	4920	3989	5347

From 2nd June, 2014 to March, 2015
Source: Finance Department

A - 3.3: Resource Flows from the Centre to the State (Rs. Crores)

SN	Item	2014-15 #	2015-16	2016-17	2017-18 RE
I.	Finance Commission	15557	30078	34309	36202
a)	Tax share (Devolution)	11446	21879	26264	29001
b)	Grants	4071	8199	8045	7201
II.	Plan Assistance and EAP	11998	12668	13321	28747
a)	Normal Plan Assistance	11542	11978	12495	23747
1	Grants	11542	11978	12495	23747
2	Loans	-	0	0	0
b)	Externally Aided Projects	456	690	826	5000
1	Grants	10	5	12	3500
2	Loans	446	685	814	1500

A - 3.3: Resource Flows from the Centre to the State (Rs. Crores)					
SN	Item	2014-15 #	2015-16	2016-17	2017-18 RE
III.	Non-Plan Grants	588	1746	2794	3100
IV.	Non-Plan Loans	466	757	-1132	-1212
a)	Small Savings (Net)	466	757	-1132	-1212
b)	Others	-	0	0	0
	Total	28569	45249	49292	66837

From 2nd June, 2014 to March, 2015

Source: Finance Department

A 3.4: Composition of Total Expenditure (Rs. Crores)					
Sl . No.	Item	2014-15 #	2015-16	2016-17	2017-18 RE
1	Revenue Expenditure	79472	95950	116178	127272
2	Capital Outlay	6520	14172	15181	22875
3	Loans & Advances	745	674	564	1150
Total Expenditure*		86737	110795	131923	151297

* Total Expenditure excludes public debt repayments, #From 2nd June 2014 to March 2015.

Source: Finance Department

Annexure 3.5: Composition of Total Debt (Rs Crores)					
Sl. No.	Item	2014-15	2015-16	2016-17	2017-18 RE
1.	Central Loans	9500	8958	9025	9283
2.	Market loans	78440	94926	112630	134551
3.	Small Saving Loans	15167	15924	14792	13580
4.	PF	14822	16075	13568	14164
5.	Others	30814	33575	51300	53657
Total*		148743	169458	201314	225234
Debt outstanding as percent of GSDP		28.25	27.78	28.79	28.40

The outstanding debt includes un-apportioned amount of Rs.23,483.20 crores as on 31-03-2017 between two States.

Source: Finance Department

Annexure 3.6: Deficits and Interest Payments (Rs. Crores)					
SN	Item	2014-15 #	2015-16	2016-17	2017-18 RE
1	Interest Payments	7903	9848	11697	14756
2	Revenue deficit	13777	7302	17193	4018
3	Fiscal Deficit	20746	21863	30908	27603

#From 2nd June 2014 to March 2015.

Source: Finance Department

A 4.1: Average daily retail prices of essential commodities

(in Rs)

Year	Rice (II sort)	Red gram Dal (II sort)	G.Nut Oil	Tamarind (without seed)	Dry Red Chillies (Gr.II)	Onions Gr-II
1	2	3	4	5	6	7
2004-05	10.22	27.18	53.79	40.69	30.66	5.52
2005-06	10.75	26.36	51.28	30.10	27.91	7.26
2006-07	11.28	28.00	57.77	40.88	54.46	6.91
2007-08	11.77	34.35	69.60	28.62	47.53	9.66
2008-09	14.68	40.43	69.59	34.99	55.98	10.21
2009-10	17.23	63.42	66.63	35.26	60.51	12.93
2010-11	17.73	58.47	80.13	54.43	62.74	16.66
2011-12	18.34	55.30	92.89	76.09	92.59	10.79
2012-13	21.55	59.21	115.52	57.24	63.90	13.14
2013-14	24.78	63.22	102.69	64.34	77.01	22.87
2014-15	25.84	70.31	92.73	72.36	83.80	19.36
2015-16	26.50	118.86	104.85	79.08	115.01	25.28
2016-17	27.96	109.85	117.45	88.87	131.35	12.58
Aprl to Dec, 2017	28.91	67.34	112.14	107.64	78.01	22.17

Source: Directorate of Economics and Statistics, AP

A 4.2 : Consumer price index numbers for rural, urban and combined

(Base: 2012=100)

Month	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Apr-17	137	131	135	133	129	131
May-17	138	132	135	133	129	131
Jun-17	139	133	137	134	130	132
Jul-17	142	134	139	136	132	134
Aug-17	141	134	139	138	133	135
Sep-17	141	134	138	138	132	135
Oct-17	143	136	140	138	134	136
Nov-17	146	137	143	140	135	138
Dec-17	146	137	143	140	134	137
Average	141	134	139	137	132	134

Source: Central Statistics Office, Government of India, New Delhi. & Directorate of Economics and Statistics, AP

A.4.3: Ration shops, Ration Cards and Deepam Connections up to December 2017 (units in Number)

Sl. No.	District	Ration Shops	Ration Cards			Distribution of Rice in Mts (White+ AAY)	LPG connections under Deepam Scheme
			White	Annapurna	AAY cards		
1	2	3	4	5	6	7	8
1	Srikakulam	2002	770817	975	49392	11871.204	293836
2	Vizianagaram	1401	615297	898	85600	11151.040	245161
3	Visakapatnam	2108	1118152	909	75268	17390.200	389298
4	East Godavari	2659	1529011	1434	84689	22734.282	692543
5	West Godavari	2208	1140975	1049	70202	17172.477	499862
6	Krishna	2290	1174389	505	65305	17300.269	465700
7	Guntur	2757	1355833	1077	74598	18562.229	420835
8	Prakasam	2141	897394	720	47230	12551.227	354555
9	S.P.S. Nellore	1896	806753	722	58862	11486.709	347902
10	Y.S.R	2426	704303	706	56612	11107.482	339120
11	Kurnool	2973	1095560	1043	56693	16823.592	528219
12	Anantapuramu	1739	1089931	826	104728	18190.897	299020
13	Chittoor	2862	1003460	929	86770	17020.454	563523
Total		29462	13301875	11793	915949	203362.062	5439574

Source: Civil Supplies Department, A.P

A 5.1 : Land utilisation particulars

(Area in Lakh Hectares)

Year	Forest	Barren & Uncultivable Land	Land put to Non Agricultural Uses	Permanent pastures and other Grazing Lands	Misc. Tree crops and Groves not included in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geo-graphical Area
1	2	3	4	5	6	7	8	9	10	11
2008-09	34.67	14.30	18.33	2.59	1.83	4.78	7.00	9.44	67.26	160.20
2009-10	34.67	14.25	18.47	2.58	1.80	4.76	8.19	14.23	61.25	160.20
2010-11	34.87	14.09	19.00	2.52	1.76	4.59	7.10	8.31	67.96	160.20
2011-12	34.87	14.07	19.21	2.50	1.75	4.49	7.32	10.37	65.62	160.20
2012-13	34.84	13.43	19.87	2.12	1.65	4.14	8.19	11.34	64.62	160.20
2013-14	34.93	13.41	19.82	2.12	1.60	3.92	7.92	10.87	65.61	160.20
2014-15	36.88	13.47	20.02	2.14	1.60	3.92	8.58	14.01	62.35	162.97
2015-16	36.88	13.47	20.32	2.12	1.57	4.11	8.32	14.10	62.08	162.97
2016-17	36.88	13.46	20.48	2.11	1.57	4.14	8.60	14.96	60.77	162.97

Source: Directorate of Economics and Statistics.

A 5.2 : District wise Land utilisation particulars 2016-17

(Area in Lakh Hectares)

District	Forest	Barren & Uncultivable Land	Land put to Non Agricultural Uses	Permanent pasture and other Grazing Lands	Misc. Tree crops and Groves not include in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geographical Area
1	2	3	4	5	6	7	8	9	10	11
Srikakulam	0.69	0.48	1.02	0.01	0.07	0.01	0.16	0.40	3.00	5.84
Vizianagaram	1.19	0.73	0.82	0.05	0.11	0.04	0.26	0.60	2.74	6.54
Visakapatnam	4.41	1.30	1.10	0.03	0.33	0.10	0.41	0.68	2.80	11.16
East Godavari	4.66	0.83	1.60	0.22	0.06	0.15	0.50	0.56	4.23	12.81
West Godavari	1.33	0.40	1.30	0.12	0.08	0.16	0.22	0.31	4.59	8.51
Krishna	0.76	0.37	1.55	0.11	0.09	0.23	0.30	0.64	4.68	8.73
Guntur	1.62	0.32	1.78	0.16	0.24	0.27	0.41	1.03	5.56	11.39
Prakasam	4.59	1.53	1.84	0.55	0.03	0.58	1.82	1.20	5.48	17.62
SPS Nellore	2.72	0.82	3.13	0.34	0.08	0.74	0.76	1.48	3.01	13.08
YSR	5.01	2.22	1.82	0.09	0.07	0.45	0.91	1.41	3.38	15.36
Kurnool	3.41	1.27	1.43	0.03	0.02	0.46	0.70	1.56	8.77	17.65
Anantapuramu	1.97	1.66	1.50	0.06	0.09	0.49	0.87	3.55	8.94	19.13
Chittoor	4.52	1.53	1.59	0.34	0.30	0.46	1.28	1.54	3.59	15.15
Total	36.88	13.46	20.48	2.11	1.57	4.14	8.60	14.96	60.77	162.97
% of total Geographical Area	22.63	8.26	12.57	1.29	0.96	2.54	5.28	9.18	37.29	100.00

Source: Directorate of Economics and Statistics.

A. 5.3: Category wise Soil types in the state

Sl No.	Soil Category	Area ('000 Ha)	Percentage
1	Gravelly clayey moderately deep Red soils	305	1.87
2	Gravelly clayey moderately deep desert soils	891	5.47
3	Gravelly clayey moderately deep grass land soils	166	1.02
4	Gravelly clayey shallow dark brown soils	872	5.35
5	Gravelly loam to gravelly clayey shallow dark brown soils	44	0.27
6	Gravelly loamy dark brown moderately deep soils	479	2.94
7	Gravelly loamy moderately deep grass land soils	420	2.58
8	Moderately deep black clayey soils	225	1.38
9	Moderately deep calcareous moist clayey soils	237	1.45
10	Moderately deep calcareous black soils	1559	9.57
11	Clayey moderately deep wet soils	22	0.13
12	Clayey to gravelly clayey moderately deep dark brown soils	3040	18.65
13	Dark grayish brown moderately deep moist stratified soils	31	0.19
14	Dark grayish brown moderately deep stratified loamy soils	42	0.26

Sl No.	Soil Category	Area ('000 Ha)	Percentage
15	Loamy to clayey skeletal deep Reddish brown soils	3328	20.42
16	Loamy to gravelly clay deep dark reddish brown soils	1219	7.48
17	Shallow gravelly Red soils	1696	10.41
18	Shallow loamy to gravelly clay Red soils	112	0.69
19	Deep black clayey soils	1250	7.67
20	Fine loamy gravelly clayey shallow Reddish brown soils	214	1.31
21	Light gray deep sandy soils	114	0.70
22	Very dark brown moderately deep wetsilty soils	31	0.19
Total		16297	100.00

Source: AP Space Application Centre

A 5.4 : Distribution of Land holdings by size classes, 2005-06 and 2010-11

Size Group	No. of Holdings (Lakh)		Percentage to Total		Area (Lakh Hect.)		Percentage to Total		Average Size of Holdings (Hect.)	
	2005-06	2010-11	2005-06	2010-11	2005-06	2010-11	2005-06	2010-11	2005-06	2010-11
1	2	3	4	5	6	7	8	9	10	11
Marginal	46.19	49.84	64.01	65.40	20.01	21.60	24.44	26.68	0.43	0.43
Small	14.92	15.91	20.68	20.88	21.11	22.51	25.78	27.80	1.41	1.41
Semi-medium	8.13	7.96	11.27	10.44	21.52	21.00	26.27	25.94	2.65	2.64
Medium	2.64	2.30	3.66	3.02	14.92	12.82	18.21	15.83	5.65	5.57
Large	0.28	0.20	0.39	0.26	4.34	3.04	5.30	3.75	15.50	15.20
Total	72.16	76.21	100.00	100.00	81.90	80.97	100.00	100.00	1.13	1.06

Source: Directorate of Economics and Statistics

A 5.5 : Distribution of Land holdings by size classes, 2010-11

(Holdings in Lakh Nos and Area in Lakh Hectares)

District	Marginal		Small		Semi Medium		Medium		Large		Total		Average size of Holdings (Ha)
	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	
1	2	3	4	5	6	7	8	9	10	11	12		14
Srikakulam	4.27	1.57	0.71	0.97	0.22	0.58	0.05	0.28	0.00	0.09	5.26	3.49	0.66
Vizianagaram	3.45	1.28	0.67	0.93	0.26	0.71	0.07	0.41	0.01	0.10	4.47	3.42	0.77
Visakapatnam	3.61	1.37	0.69	0.95	0.32	0.87	0.12	0.65	0.01	0.16	4.75	4.00	0.84
East Godavari	5.63	2.04	0.87	1.20	0.37	0.99	0.11	0.63	0.01	0.16	6.99	5.01	0.72
West Godavari	4.29	1.73	0.87	1.21	0.38	1.01	0.11	0.61	0.01	0.13	5.66	4.70	0.83
Krishna	3.96	1.73	0.98	1.36	0.44	1.19	0.13	0.70	0.01	0.10	5.52	5.08	0.92
Guntur	5.36	2.48	1.51	2.09	0.58	1.56	0.14	0.76	0.01	0.12	7.61	7.01	0.92
Prakasam	3.79	1.82	1.70	2.43	0.93	2.48	0.26	1.46	0.02	0.30	6.71	8.48	1.26
SPS Nellore	3.09	1.32	0.92	1.29	0.40	1.07	0.14	0.78	0.02	0.32	4.57	4.79	1.05

District	Marginal		Small		Semi Medium		Medium		Large		Total		Average size of Holdings (Ha)
	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	
1	2	3	4	5	6	7	8	9	10	11	12		14
Y.S.R	2.42	1.21	1.23	1.77	0.62	1.62	0.13	0.70	0.01	0.12	4.41	5.42	1.23
Kurnool	2.82	1.58	1.88	2.68	1.12	3.03	0.46	2.62	0.04	0.59	6.33	10.50	1.66
Ananthapuramu	2.59	1.47	2.44	3.59	1.75	4.47	0.46	2.58	0.04	0.67	7.28	12.78	1.76
Chittoor	4.55	1.99	1.44	2.03	0.55	1.42	0.12	0.64	0.01	0.18	6.67	6.26	0.94
Andhra Pradesh	49.84	21.60	15.91	22.51	7.96	21.00	2.30	12.82	0.20	3.04	76.21	80.97	1.06

Source: Directorate of Economics and Statistics

A.5.6 Season wise Rainfall

(in Mm)

	South west Monsoon (June to Sep)		North East Monsoon (Oct to Dec)		Winter period (Jan & Feb)		Hot weather period (Mar to May)		Total (June to May)	
Normal	556.0		296.0		15.7		98.3		966.0	
Year	Actual	% of deviation to normal	Actual	% of deviation to normal	Actual	% of deviation to normal	Actual	% of deviation to normal	Actual	% of deviation to normal
1	2	3	4	5	6	7	8	9	10	11
2008-09	567.5	2.1	241.6	-18.4	0.2	-98.7	61.3	-37.6	870.6	-9.9
2009-10	427.7	-23.1	228.5	-22.8	12.3	-21.7	148.4	51.0	816.9	-15.4
2010-11	755.6	35.9	456.1	54.1	15.8	0.6	90.7	-7.7	1318.2	36.5
2011-12	498.7	-10.3	174.3	-41.1	24.7	57.3	65.4	-33.5	763.1	-21.0
2012-13	586.0	5.4	356.8	20.5	33.4	112.7	60.7	-38.3	1036.9	7.3
2013-14	518.9	-6.7	359.0	21.3	1.2	-92.4	88.2	-10.3	967.3	0.1
2014-15	355.7	-36.0	170.0	-42.6	2.5	-84.1	77.9	-20.8	606.1	-37.3
2015-16	523.0	-5.9	287.2	-3.0	4.3	-72.6	98.0	-0.3	912.5	-5.5
2016-17	533.8	-4.0	85.3	-71.2	1.6	-89.8	56.5	-42.5	677.2	-29.9
2017-18	567.1	2.0	177.5	-40.0						

Source: Directorate of Economics & Statistics

A 5.7 : District wise Rainfall during South-West Monsoon and North-East Monsoon

(in mm.)

Sl. No.	District	South-West Monsoon (June to September 2017)			North-East Monsoon (October to December 2017)		
		Normal	Actual	% Deviation	Normal	Actual	% Deviation
1	2	3	4	5	6	7	8
1	Srikakulam	706.0	710.8	0.7	276.0	182.8	-33.8
2	Vizianagaram	692.7	721.7	4.2	245.8	182.3	-25.8
3	Visakapatnam	712.6	765.5	7.4	297.2	143.3	-51.8
4	East Godavari	768.0	703.8	-8.4	305.4	123.9	-59.4
5	West Godavari	791.9	722.0	-8.8	239.4	117.3	-51.0
6	Krishna	685.1	650.9	-5.0	249.4	110.1	-55.9
7	Guntur	525.8	545.3	3.7	228.9	82.7	-63.9
8	Prakasam	388.3	433.1	11.5	393.7	111.5	-71.7
9	SPS Nellore	331.3	441.1	33.1	661.4	327.3	-50.5
Coastal Andhra		622.4	632.7	1.7	321.9	153.5	-52.3
10	YSR	393.6	485.4	23.3	251.0	206.4	-17.8
11	Kurnool	455.1	475.3	4.4	149.6	155.3	3.8
12	Anantapuramu	338.4	365.4	8.0	155.3	194.4	25.2
13	Chittoor	439.4	517.7	17.8	395.4	354.7	-10.3
Rayalaseema		406.6	461.0	13.4	237.8	227.7	-4.3
Andhra Pradesh		556	567.1	2.0	296.0	177.5	-40.0

Source: Directorate of Economics and Statistics. (integrated rainfall)

A 5.8 : Area and production of foodgrains

Year	Area (in Lakh Hects.)	Production (in Lakh Tonnes)
1	2	3
2008-09	42.70	166.16
2009-10	39.93	141.81
2010-11	45.85	149.96
2011-12	41.80	147.73
2012-13	41.54	139.27
2013-14	42.81	156.94
2014-15	39.63	160.02
2015-16	41.36	143.78
2016-17	39.70	149.16
2017-18*	40.72	157.59

Source : Directorate of Economics and Statistics

*As per 2nd Advance Estimates (P)

A. 5.9 Season wise area under selected crops

Thousand Hectares

Sl. No.	Crop	Season	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18*
1	2	3	4	5	6	7	8	9	10
1	Paddy	Kharif	1710	1530	1706	1635	1399	1520	1477
		Rabi	636	679	877	759	762	585	675
		Total	2346	2209	2583	2394	2161	2105	2152
2	Jowar	Kharif	28	28	33	37	44	14	30
		Rabi	120	136	85	104	130	83	95
		Total	148	164	118	141	174	97	125
3	Bajra	Kharif	29	54	47	25	33	39	43
		Rabi	3	3	2	3	4	3	1
		Total	32	57	49	28	37	42	44
4	Maize	Kharif	82	91	110	100	75	85	107
		Rabi	190	218	242	203	158	165	220
		Total	272	309	352	303	233	250	327
5	Ragi	Kharif	35	34	37	29	27	27	27
		Rabi	5	5	5	5	4	5	5
		Total	40	39	42	34	31	32	32
6	Other Millets including Wheat	Kharif	27	36	26	18	47	24	18
		Rabi	2	2	2	2	4	7	3
		Total	29	38	28	20	51	31	21
7	Pulses	Kharif	230	246	230	198	361	444	363
		Rabi	1082	1092	878	844	1088	969	1008
		Total	1312	1338	1108	1042	1449	1413	1371
Total Food Grains		Kharif	2141	2018	2190	2041	1986	2153	2065
		Rabi	2039	2136	2091	1922	2150	1817	2007
		Total	4180	4154	4281	3963	4136	3970	4072
8	Groundnut	Kharif	1033	1042	1086	804	682	933	648
		Rabi	103	115	90	70	93	80	90
		Total	1136	1157	1176	874	775	1013	738
9	Castor	Kharif	151	105	48	46	49	32	31
10	Sesamum	Kharif	27	21	28	21	28	34	13
		Rabi	26	23	33	64	25	30	23
		Total	53	44	61	85	53	64	36
Total Oil Seeds		Kharif	1275	1236	1238	944	850	1096	785
		Rabi	271	253	199	188	147	134	129
		Total	1546	1489	1437	1132	997	1230	914

Source : Directorate of Economics and Statistics

*As per 2nd Advance Estimates (P)

A 5.10 : Season-wise production of selected crops

(Thousand Tonnes)

Sl. No.	Crop	Season	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18*
1	2	3	4	5	6	7	8	9	10
1	Paddy	Kharif	7803	6067	6535	7646	6159	7850	7645
		Rabi	3813	4227	5455	5037	5074	4153	4432
		Total	11616	10294	11990	12683	11233	12003	12077
2	Jowar	Kharif	61	73	57	55	49	20	28
		Rabi	291	339	209	290	308	178	232
		Total	352	412	266	345	357	198	260
3	Bajra	Kharif	45	95	78	32	59	68	82
		Rabi	7	4	4	7	6	4	2
		Total	52	99	82	39	65	72	84
4	Maize	Kharif	283	364	408	329	276	355	491
		Rabi	1480	1547	1805	1609	1135	1298	1652
		Total	1763	1911	2213	1938	1411	1653	2143
5	Ragi	Kharif	29	36	36	27	25	26	27
		Rabi	9	6	7	7	9	9	8
		Total	38	42	43	34	34	35	35
6	Other Millets incl. Wheat	Kharif	16	33	20	12	44	17	13
		Rabi	3	3	1	2	5	7	3
		Total	19	36	21	14	49	24	16
7	Pulses	Kharif	80	123	131	115	200	199	195
		Rabi	853	1010	948	834	1029	732	949
		Total	933	1133	1079	949	1229	931	1144
	Total Food Grains	Kharif	8317	6791	7265	8216	6812	8535	8481
		Rabi	6456	7136	8429	7786	7566	6381	7278
		Total	14773	13927	15694	16002	14378	14916	15759
8	Groundnut	Kharif	355	540	681	330	598	391	802
		Rabi	228	240	200	163	203	212	207
		Total	583	780	881	493	801	603	1009
9	Castor	Kharif	13	47	26	27	28	16	16
10	Sesamum	Kharif	6	5	13	6	5	8	3
		Rabi	7	8	8	22	9	9	7
		Total	13	13	21	28	14	17	10
	Total Oil Seeds	Kharif	1393	1668	1971	1677	1946	2251	2685
		Rabi	350	320	271	226	234	240	226
		Total	1743	1988	2242	1903	2180	2491	2911

Source : Directorate of Economics and Statistics

*As per 2nd Advance Estimates(P)

A 5.11 : Season-wise productivity of selected crops

(Kgs./Hectare)

Sl. No.	Crop	Season	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18*
1	2	3	4	5	6	7	8	9	10
1	Paddy	Kharif	4562	3965	3832	4677	4402	5166	5176
		Rabi	5995	6225	6214	6636	6660	7095	6566
		Total	4951	4660	4641	5298	5198	5702	5612
2	Jowar	Kharif	2151	2652	1747	1487	1110	1436	926
		Rabi	2430	2481	2438	2770	2369	2139	2439
		Total	2376	2509	2247	2435	2049	2036	2080
3	Bajra	Kharif	1573	1751	1654	1289	1767	1744	1899
		Rabi	2051	1504	1853	1924	1793	1394	1899
		Total	1620	1740	1663	1366	1769	1718	1899
4	Maize	Kharif	3467	4006	3711	3292	3682	4149	4587
		Rabi	7759	7086	7454	7910	7204	7878	7507
		Total	6473	6182	6286	6390	6068	6604	6554
5	Ragi	Kharif	825	1044	983	952	955	953	1014
		Rabi	1767	1451	1555	1500	1876	1724	1521
		Total	944	1091	1045	1029	1090	1077	1094
6	Groundnut	Kharif	344	518	627	410	876	419	1238
		Rabi	2219	2082	2218	2325	2190	2664	2296
		Total	513	674	749	564	1033	595	1367
7	Castor	Kharif	83	454	522	578	564	471	518
8	Sesamum	Kharif	226	232	449	272	183	228	246
		Rabi	279	337	261	347	364	290	319
		Total	252	287	347	328	268	257	278

Source: Directorate of Economics and Statistics

*As per 2nd Advance Estimates (P)

A 5.12 : Source-wise Gross area irrigated

(Area in lakh hectares)

Sl. No.	Year	Canals	Tanks	Wells	Others	Total
1	2	3	4	5	6	7
1	2009-10	16.96	3.03	15.01	1.33	36.33
2	2010-11	19.99	4.50	15.61	1.43	41.53
3	2011-12	17.84	3.94	15.99	1.44	39.21
4	2012-13	15.63	3.79	16.34	1.35	37.11
5	2013-14	19.56	3.77	16.23	1.40	40.96
6	2014-15	18.82	3.27	15.32	1.45	38.86
7	2015-16	13.93	3.86	16.43	1.25	35.47
8	2016-17	16.01	2.51	16.16	1.14	35.82

Source: Directorate of Economics and Statistics

A 5.12A : Source -wise, district wise gross area irrigated 2016-17

(Area in lakh hectares)

District	Canals	Tanks	Wells	Others	Total
Srikakulam	1.14	0.59	0.30	0.06	2.09
Vizianagaram	0.47	0.78	0.62	0.02	1.89
Visakahapatnam	0.50	0.29	0.40	0.27	1.46
East Godavari	3.37	0.18	1.17	0.08	4.80
West Godavari	2.99	0.13	2.94	0.13	6.19
Krishna	1.78	0.15	1.17	0.10	3.20
Guntur	2.45	0.04	1.47	0.18	4.14
Prakasham	0.34	0.03	1.04	0.03	1.44
SPS Nellore	1.52	0.10	1.02	0.02	2.66
YSR	0.18	0.01	1.44	0.02	1.65
Kurnool	1.17	0.12	1.33	0.22	2.84
Ananthapuramu	0.09	0.01	1.47	0.01	1.58
Chittoor	0.01	0.08	1.79	0.00	1.88
Andhra Pradesh	16.01	2.51	16.16	1.14	35.82

Source: Directorate of Economics and Statistics

A 5.13 : Source-wise net area irrigated

(Area in lakh hectares)

Sl. No.	Year	Canals	Tanks	Wells	Others	Total
1	2	3	4	5	6	7
1	2009-10	13.08	2.75	10.24	1.15	27.22
2	2010-11	14.31	4.12	10.66	1.21	30.30
3	2011-12	14.92	3.67	11.22	1.24	31.05
4	2012-13	11.75	3.46	11.58	1.22	28.01
5	2013-14	14.30	3.39	11.21	1.24	30.14
6	2014-15	14.29	2.93	10.80	1.25	29.27
7	2015-16	10.81	3.63	11.93	1.06	27.43
8	2016-17	12.25	2.36	11.62	0.96	27.19

Source: Directorate of Economics and Statistics

A 5.13A : Source –wise, district wise net area irrigated 2016-17

(Area in lakh hectares)

District	Canals	Tanks	Wells	Others	Total
Srikakulam	1.12	0.57	0.12	0.05	1.86
Vizianagaram	0.42	0.73	0.40	0.02	1.57
Visakahapatnam	0.45	0.26	0.26	0.25	1.22
East Godavari	1.90	0.16	0.66	0.04	2.76
West Godavari	1.61	0.12	1.76	0.07	3.56
Krishna	1.77	0.15	0.73	0.08	2.73

District	Canals	Tanks	Wells	Others	Total
Guntur	2.43	0.04	0.97	0.18	3.62
Prakasham	0.32	0.03	1.02	0.03	1.40
SPS Nellore	1.00	0.09	0.89	0.02	2.00
YSR	0.18	0.01	1.25	0.02	1.46
Kurnool	0.95	0.11	0.98	0.19	2.23
Ananthapuramu	0.09	0.01	1.21	0.01	1.32
Chittoor	0.01	0.08	1.37	0.00	1.46
Andhra Pradesh	12.25	2.36	11.62	0.96	27.19

Source: Directorate of Economics and Statistics

A 5.14 : Consumption of fertilizers

(Lakh MTs.)

Product	2016-17		2017-18	
	Allotment	Consumption	Allotment	Consumption
Urea	4.67	14.82	15.50	6.30
DAP	11.73	3.72	3.75	1.67
MOP	15.03	2.61	2.41	1.39
Complex	3.07	11.48	11.50	4.40
SSP	2.48	1.93	2.10	0.93
Others	1.13	0.74	0.70	0.30
Total	38.11	35.31	35.96	14.98

Source: Agriculture Department

A 5.15 : Consumption of fertilizers in terms of Nutrients

(Lakh MTs.)

S. No	Year	N	P	K	Total
1	2005-06	8.75	4.24	2.24	15.23
2	2006-07	8.50	4.27	2.04	14.81
3	2007-08	8.98	4.34	2.64	15.96
4	2008-09	9.86	5.25	3.06	18.17
5	2009-10	10.21	5.62	3.09	18.92
6	2010-11	10.82	6.28	3.06	20.16
7	2011-12	11.11	6.18	2.15	19.44
8	2012-13	9.93	4.40	1.71	16.04
9	2013-14	11.35	4.61	1.84	17.80
10	2014-15	10.76	4.44	2.19	17.39
11	2015-16	10.23	4.90	1.85	16.98
12	2016-17	9.82	4.80	2.24	16.86
13	2017-18(Kharif)	3.24	0.91	0.83	5.00

Source: Agriculture Department

A.5.16: Details of Crop Insurance

(Nos. in lakhs& Rs.in lakhs)

Sl. No.	Year	Season	Farmers Covered	Area Covered in Ha.	Sum Insured	Full Premium	Premium Subsidy	Claim	No. of farmers benefited
1	2	3							
1	2010-11	NAIS(K)	16.36	24.72	440584	13559	846	75984	7.51
		WBCIS(K)	0.11	0.08	5981	647	323	66	0.01
		NAIS(R)	2.85	3.77	66725	1356	76	6265	0.45
		WBCIS(R)	0.0016	0.0032	236	28	14	44	0.00
		MNAIS(R)	0.31	0.43	12596	771	367	44	0.00
2	2011-12	NAIS(K)	9.87	12.43	293519.81	8244.66	618.04	13972.73	1.72
		WBCIS(K)	7.70	13.56	272770.35	27260.46	117624.26	15873.00	5.69
		MNAIS(K)	0.22	0.30	10785.08	578.01	250.66	20.91	0.01
		NAIS(R)	2.09	3.30	74959.14	1525.07	88.65	8335.00	0.56
		WBCIS(R)	0.09	0.079	6381.45	733.90	366.95	974.75	0.07
		MNAIS(R)	0.46	0.69	18048.71	1106.40	416.72	670.67	0.10
3	2012-13	NAIS(K)	5.31	7.27	187109.22	5599.42	448.02	4714.67	0.60
		WBCIS(K)	7.74	13.51	330195.00	33004.95	21329.86	28407.00	5.26
		MNAIS(K)	4.93	4.93	200816.24	15925.84	7847.10	42455.40	2.77
		NAIS(R)	1.79	2.67	86963.56	1748.80	107.72	14938.54	0.46
		WBCIS(R)	0.09	0.78	5496.72	633.77	316.88	884.23	0.07
		MNAIS(R)	0.26	0.32	13772.57	680.78	279.92	257.42	0.04
4	2013-14	MNAIS(K)	4.75	4.79	2154.72	24227.38	14033.60	32877.35	2.60
		WBCIS(K)	7.13	12.39	331499.94	33141.95	21480.10	25102.90	5.06
		NAIS(K)	3.95	3.90	137090.00	4112.31	826.36	5748.02	0.70
		NAIS (R)	0.91	1.15	41684.47	815.09		106.10	280.23
		MNAIS (R)	0.13	0.16	7912.55	402.29	169.00	280.21	0.02
		WBCIS (R)	0.07	0.09	4646.89	535.67	268.00	445.00	0.05
5	2014-15	MNAIS (K)	1.68	1.86	78680.70	9338.18	5613.18	1127.21	0.16
		WBCIS (K)	0.93	1.68	45459.14	4543.59	2271.79	4514.17	0.78
		MNAIS (R)	0.99	1.13	59744.00	2479.98	1062.98	1375.72	0.07
		NAIS (R)	0.92	1.68	31669.00	699.79	45.69	1069.52	0.12
		WBCIS (R)	0.03	0.04	3117.00	358.95	179.47	178.00	0.03
6	2015-16	MNAIS (K)	3.56	3.32	156277.00	20430.00	12461.00	60.00	0.70
		NAIS(K)	4.31	4.17	201927.00	8447.00	669.00	Under process	
		WBCIS (K)	7.04	12.08	312966.66	32484.00	15646.04	137.62	2.68
		Rabi	1.73	2.90	96250.00	3836.00	1310.00	Under process	
7	2016-17	PMFBY(K)	8.61	6.59	507713.00	38847.00	31746.00	8918.00	0.37
		WBCIS (K)	7.62	11.86	466991.00	38847.00	28466.00	56338.00	7.52
		PMFBY(R)	1.38	2.37	103923.00	1396.00	1238.00	26400.00	1.00
		WBCIS (R)	0.05	0.03	4401.00	1126.00	804.00	Under process	

Source: Agriculture Department

A 5.17 : Disbursement of Agriculture Credit as on 30th September 2017

(Amount in Rs Crore.)

Sl. No.	District	Short term production loans	Agricultural term loans Including Infrastructure and Ancillary Activities	Total Agriculture loans disbursed	% of Achievement
1	2	3	4	5	6
1	Srikakulam	1606.05	355.69	1961.74	55.22
2	Vizianagaram	1169.68	241.28	1410.96	57.35
3	Visakhapatanm	1438.14	743.34	2181.48	60.95
4	East Godavari	4216.00	1770.49	5986.49	53.81
5	West Godavari	3349.18	869.96	4219.14	48.59
6	Krishna	3614.55	1442.55	5057.10	61.73
7	Guntur	4907.32	950.53	5857.85	51.69
8	Prakasam	3339.70	963.45	4303.15	57.33
9	SPS Nellore	1887.06	787.39	2674.45	42.99
10	Y.S.R	2739.72	522.20	3261.92	57.15
11	Kurnool	2963.65	479.09	3442.74	55.42
12	Ananthapuramu	4768.29	357.24	5125.53	82.45
13	Chittoor	2894.25	678.01	3572.26	53.47
Total		38893.59	10161.22	49054.81	56.08

e: Finance (Institutional Finance) Department

A.5.18 : Loan and Other Eligibility Cards issued and credit extended to licensed cultivators during 2017-18 (upto December 2017)

Sl. No	District	No. of LECs issued			No.of licensed cultivators sanctioned crop loans	
		Renewal of old LECs	New LECs	Total	Cultivators	Amount (Rs in Cr)
1	Srikakulam	12682	3891	16573	838	1.84
2	Vizianagaram	3162	4905	8067	935	3.16
3	Visakhapatnam	5726	1349	7075	512	1.75
4	East Godavari	72471	36446	108917	64118	165.12
5	West Godavari	177510	69793	247303	107636	261.93
6	Krishna	8910	25518	34428	5662	28.62
7	Guntur	1851	37821	39672	5654	19.96
8	Prakasam	1971	1514	3485	2021	14.23
9	SPS.Nellore	7481	4472	11953	3045	17.44
12	YSR	2693	2768	5461	456	2.98
10	Kurnool	5214	14243	19457	564	1.59
11	Anantapuramu	1738	4981	6719	408	1.55
13	Chitoor	1417	797	2214	940	4.10
Total		302826	208498	511324	192789	524.27

Source: Agriculture Department

A.5.19 District wise Eligible farmers under debt redemption scheme

S. No	District Name	1st installment (2014-15 &2015-16)		2nd Installment (2016-17)		Horticulture (2016-17)		3rd Installment	
		No of loan Accounts	Amount (Rs.cr.)	No of loan Accounts	Amount with 10% interest (Rs.cr.)	No of loan accounts	Amount (Rs.cr.)	No of loan accounts	Amount with 10% interest (Rs.cr.)
1	Srikakulam	296510	410.86	146709	113.38	7751	14.88	106846	101.33
2	Vizianagaram	215719	316.97	91059	69.16	4424	9.27	62740	58.81
3	Visakhapatnam	216712	325.03	100583	87.21	10506	14.02	64577	69.16
4	East Godavari	461701	626.08	249712	192.75	31507	39.97	160357	158.92
5	West Godavari	493121	640.22	335456	288.56	14239	23.63	223388	253.01
6	Krishna	444985	580.44	296324	255.32	8608	15.60	216000	243.22
7	Guntur	667243	931.18	522321	535.12	19918	24.05	368127	507.00
8	Prakasam	459385	602.55	367888	378.11	2691	6.98	260088	365.18
9	SPS Nellore	282472	398.02	193003	170.12	17349	36.16	122169	140.43
10	Kurnool	430830	687.81	270110	277.13	2295	5.20	200161	261.40
11	Anantapuramu	806722	1063.47	545759	458.34	7436	17.56	452244	462.9
12	YSR	352060	465.14	254317	226.26	37591	68.22	197566	219.91
13	Chittoor	370682	516.92	266312	251.35	58265	108.93	189058	228.51
Total		5498142	7564.69	3639553	3302.81	222580	384.47	2623321	3069.83

Source:Agriculture Department

A 5.20 Component wise physical Target and achievements under ATMA

S.No.	Components	2016-17		2017-18 (up to Nov,2017)	
		Target	Achievement	Target	Achievement
1	State level activities (Trgs. to Extn. functionaries)	20	5	22	1
2	District level activities				
a)	Trainings to Farmers	2189	2333	2298	1486
b)	Demos	8172	10041	8580	2145
c)	Exposure visits	364	514	382	63
d)	Capacity building of FIGs	1000	468	1050	135
e)	Farmer Awards	170	0	-	-
f)	Kisan Melas	26	76	27	25
g)	Farmer Scientist Interaction	26	27	27	16
h)	Field Days	340	199	357	33
i)	Farm schools	170	61	170	47
j)	Other activities	541	-	3760	1562
Total		13018	13724	12958	5512

Source:Agriculture Department

A 5.21 : Area and production of major Horticulture crops

(Area in Hectares & Production in Tonnes)

Sl. No	Name of the Crop	2016-17 (Final Estimates)		2017-18 (1st AE)	
		Area in Ha	Production MTs	Area in Ha	Production MTs
A	Fresh Fruits	609376	13988258	648696	14181082
	Banana	88165	4672745	86265	4572045
	Mango	336956	4043472	374049	4488588
	Lime/lemon	34395	550320	35333	357947
	Sweet Orange	81947	2048675	81876	1965024
	Custard Apple	1387	11096	1715	15298
	Grapes	768	15360	780	15594
	Guava	7425	288022	6489	253071
	Papaya	14855	1485500	15362	1513157
	Pomegranate	7947	119142	8940	134100
	Sapota	10590	137670	10934	148918
	Pineapple	4294	64410	4295	68639
	Jackfruit	181	6154	474	16590
	Ber	1552	27936	1385	29080
	Aonl/Amla	671	13420	683	12764
	Watermelon	8682	264352	9131	274665
	Muskmelon	6883	206490	8373	281646
	Others	2678	33494	2612	33956
B	Vegetables	234644	8093232	273604	8775664
	Beans	14024	182312	12560	163280
	Bitterguard	5883	105894	4260	76680
	Bhendi	15768	268056	13769	234073
	Bottlegourd	2307	47723	2207	46436
	Brinjal	15287	382175	13804	345100
	Cabbage	3250	60054	2221	47862
	Capsicum	151	4983	132	4316
	Carrot	1903	38060	1215	25552
	Cauliflower	2701	40009	2893	50563
	Cucumber	4062	99672	3507	89319
	Parwal/Pointed Guard	50	1850	1794	69635
	Radish	781	13977	622	12239
	Pumpkin	394	8209	284	6427
	Elephant Foot Yam	3872	23232	4174	25044
	Onion	41656	916432	43869	965118
	Garlic	5	20	26	1792
	Peas	462	17476	33	210

Sl. No	Name of the Crop	2016-17 (Final Estimates)		2017-18 (1st AE)	
		Area in Ha	Production MTs	Area in Ha	Production MTs
	Potato	2853	49110	2782	47592
	Sweet Potato	609	12789	650	13775
	Tapioca	8580	130290	12728	193581
	Tomato	55632	4643655	62084	5587560
	Chillies Green	17663	459238	16167	420342
	Others	36751	588016	71823	349168
C	Flowers	19029	266131	22204	393966
	Chrysanthemum	3432	142998	4921	249133
	Jasmine	3090	20275	3579	22982
	Marigold	5971	61356	8507	92337
	Rose (lakh Nos)	568	3395	647	3579
	Tube Rose	1664	19032	1342	16104
	Crossandera	2690	9204	2748	9330
	Others	1614	13266	460	4080
D	Plantation Crops	457596	3127231	465485	3216186
	Arecanut	1505	2781	1541	3082
	Cashewnut	112799	119288	113243	124567
	Cocoa	20904	17126	22715	19181
	Coconut (Lakh nuts)	102548	14152	104647	14127
	Oilpalm	156625	2975868	160124	3042356
	Coffee	63215	12168	63215	27000
E	Spices	269243	1381147	225486	1579778
	Ajwan	6446	60761	6446	60761
	Chillies(Dried)	199503	968934	150325	1007337
	Coriander	13357	25717	13112	26224
	Ginger	2236	19600	1945	17505
	Pepper	11074	1212	17250	86250
	Tamarind	6129	67011	5200	67600
	Betelvine	2869	48921	2832	56640
	Turmeric	24398	166326	25545	237596
	Other Spices	3231	22665	2831	19865
F	Medicinal & Aromatic Plants	2471	1178	7741	15531
	Palm Rosa	25	3	25	3
	Lemon Grass	25	5	12	2
	Aswagandha	2329	1165	2343	1165
	Other Medicinal Plants	92	5	5361	14361
Grand Total		1592359	26857177	1643216	28162207

Source: Horticulture Department

Note: Total Production excludes Coconut &flowers.

A.5.22 District wise productivity of Growth engine crops

units Mts per Ha.

District	Productivity of crops								
	Mango	Banana	Pappaya	Sweet Orange	Coconut (No. of nuts per Ha.)	Oil Plam	Cashew	Dry chillies	Tomato
Srikakulam	-	-	-	-	11870	-	1	-	-
Vizianagaram	12	35	-	-	10500	-	0.8	-	-
Visakhapatnam	-	-	-	-	17876	-	0.6	-	-
East Godavari	-	40	100	-	14599	19	1.5	-	-
West Godavari	-	45	100	-	13195	11.9	1.0	-	-
Krishna	9.7	-	-	-	-	-	-	5	-
Guntur	-	-	-	-	-	-	-	5.47	-
Prakasam	9.6	-	-	14	-	-	-	3	-
SPS Nellore	-	-	-	-	-	-	-	3	-
YSR	9	65	-	20	-	-	-	5	42
Kurnool	15	50	-	-	-	-	-	7.5	50
Anantapuramu	9.5	67	92	18	-	-	-	3	45
Chittoor	9.8	-	130	-	-	-	-	-	45
Productivity	12	53	100	20	0.138	19	1	5	44

Source: Horticulture Department

A 5.23 : Livestock population as per 2012 census

Sl. No.	District	Cattle	Buffaloes	Sheep	Goat	Pig	Poultry
1	2	3	4	5	6	7	8
1	Srikakulam	790026	126328	575046	212300	4725	2726062
2	Vizianagaram	385119	133056	423123	173751	10151	3537927
3	Visakhapatanm	504947	306265	252610	324024	7938	5714589
4	East Godavari	375247	642208	246722	292201	32153	13987741
5	West Godavari	215112	622578	443717	204016	10184	17407080
6	Krishna	79420	696118	508061	151118	10187	11752181
7	Guntur	110071	1007942	621122	213249	9222	6975964
8	Prakasam	74845	970366	1406578	406239	10076	1237873
9	SPS Nellore	115968	624664	1051938	351426	5364	1491193
10	Y.S.R	139141	412812	1504671	506173	17787	1201514
11	Kurnool	408623	84368	1250077	428721	8285	12600955
12	Ananthapuramu	617270	371127	3879840	785210	21777	1589288
13	Chittoor	926865	466933	1403224	457896	9309	1562509
Total		4742654	6464765	13566729	4506324	157158	81784876

Source: Animal Husbandry Department

A 5.24 : Production estimates@ of Milk, Eggs and Meat

Sl. No.	Year	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2	3	4	5
1	2008-09	6640.02	310.45	108925
2	2009-10	7237.82	349.43	113932
3	2010-11	7734.39	383.65	116383
4	2011-12	8402.04	440.06	122440
5	2012-13	8810.00	477.65	128740
6	2013-14	9082.73	488.75	127269
7	2014-15	9656.02	527.66	130958
8	2015-16	10816.95	566.13	141743
9	2016-17	12177.94	632.51	158275
10	2017-18 (upto Dec,2017)	10651.45	545.08	134226

Source: Animal Husbandry Department

@ Estimates based on sample surveys; Eggs includes both commercial and desi and Meat includes chicken meat

A 5.25 : Production estimates@ of Milk, Meat and Eggs during 2017-18 (upto Dec,2017)

Sl. No.	District	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2			
1	Srikakulam	490.24	16.87	1378
2	Vizianagaram	514.01	24.55	3430
3	Visakhapatanm	592.95	36.37	9578
4	East Godavari	933.81	44.06	40938
5	West Godavari	933.31	34.63	25834
6	Krishna	1270.72	68.09	22092
7	Guntur	1061.36	45.24	12524
8	Prakasam	1120.78	61.02	1981
9	SPS Nellore	607.52	22.76	1912
10	Y.S.R	405.80	25.12	1350
11	Kurnool	844.53	65.14	1290
12	Ananthapuramu	622.98	41.42	1952
13	Chittoor	1253.44	59.81	9967
Total		10651.45	545.08	134226

Source: Animal Husbandry Department

Estimates based on sample surveys; Eggs includes both commercial and desi and Meat includes chicken meat

A 5.26: District wise Animal Husbandry institutions in the year 207-18

Sl No	District	Veterinary Policlinic	Super Specialty Veterinary Hospital	Veterinary Hospital	Veterinary Dispensaries	Rural Live Stock Units	Total	Gopalamitras
1	2	3	4	5	6	7	8	9
1	Srikakulam	1	0	19	98	79	197	160
2	Vizianagaram	1	0	16	82	55	154	145
3	Visakhapatnam	0	0	20	106	40	166	168
4	East Godavari	1	0	31	155	59	246	241
5	West Godavari	1	0	23	105	78	207	181
6	Krishna	1	1	26	126	168	322	190
7	Guntur	1	0	27	142	114	284	212
8	Prakasam	1	0	26	127	77	231	161
9	SPS Nellore	1	0	23	116	82	222	91
10	YSR	1	1	24	112	109	247	76
11	Kurnool	1	0	29	140	175	345	198
12	Ananthapuramu	1	0	27	121	37	186	368
13	Chittoor	1	0	32	146	144	323	412
Total		12	2	323	1576	1217	3130	2603

Source: Directorate of Animal Husbandry

A 5.27 : Fish and Prawn production

(Mts)

Sl. No.	District	2016-17				2017-18 (upto December 2017)			
		Marine fish & shrimp	Inland fish&fresh water prawn	Brakish water shrimp	Total production	Marine fish	Inland fish	Brakish water	Total production
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	59775	27398	2666	89839	43368	25584	3156	72108
2	Vizianagaram	19546	17258	1521	38325	14539	15975	1140	31654
3	Visakhapatnam	125613	24879	4090	154582	87733	20619	3652	112004
4	East Godavari	124932	80434	46144	251510	85916	91817	46424	224157
5	West Godavari	12676	783349	31201	827226	11411	826514	28836	866761
6	Krishna	48689	712844	102856	864389	32943	740287	116768	889998
7	Guntur	47152	31163	38905	117220	42271	38602	42506	123379
8	Prakasam	46443	19974	31336	97753	34982	30519	34098	99599
9	SPS Nellore	95417	128969	58551	282937	74634	148005	70372	293011
10	YSR	0	27990	0	27990	0	25685	0	25685
11	Kurnool	0	4060	0	4060	0	3906	0	3906
12	Ananthapuramu	0	6450	0	6450	0	3054	0	3054
13	Chittoor	0	3912	0	3912	0	4008	0	4008
Total		580243	1868680	317270	2766193	427797	1974575	346952	2749324

Source: Commissioner of Fisheries

A.5.28:District-wise Forest area

(Sq.Kms)

Sl. No	District	Very Dense Forest	Moderate Dense Forest	Open Forest	Scrub Forest	Non Forest	Water Bodies	Total
1	Srikakulam	0.00	11.51	214.23	313.28	178.98	3.72	721.72
2	Vizianagaram	0.05	509.08	380.73	91.74	66.98	3.15	1051.73
3	Visaakhapatnam	104.66	2239.61	1317.35	764.51	368.90	3.89	4798.92
4	East Godavari	190.51	2995.41	875.32	182.82	311.32	154.29	4709.66
5	West Godavari	91.91	876.53	87.01	138.62	52.66	0.88	1247.61
6	Krishna	0.00	2.99	368.68	174.16	46.83	51.85	644.52
7	Guntur	1.21	129.14	345.19	1179.28	130.59	40.80	1826.21
8	Prakasam	29.34	664.99	2006.30	1682.64	68.27	10.25	4461.80
9	SPS Nellore	50.79	486.73	478.43	1071.61	280.21	30.06	2397.83
10	YSR	104.52	1057.28	2218.41	1455.65	210.16	6.87	5052.89
11	Kurnool	6.32	973.38	830.59	739.77	942.69	62.04	3554.79
12	Ananthapuramu	0.00	5.84	72.71	990.81	872.21	4.03	1945.60
13	Chittoor	70.50	1839.69	1736.05	670.34	178.26	1.25	4496.09
Total		649.79	11792.18	10931.01	9455.24	3708.07	373.08	36909.38

Source: Forest Department

A 5.29: Revenue achieved from forest produce (Rs.Lakh)

Sl No.	Description	2014-15	2015-16	2016-17	2017-18 (upto Nov,17)
1	Timber	247.528	438.204	371.154	309.046
2	Bamboo	1274.539	1418.839	696.216	707.724
3	Firewood & Charcoal	27.398	4.218	1.296	5.063
4	Other Forest Produce	28.768	11.153	0.450	3.160
5	Beedi Leaves	5.156	13.930	19.290	83.418
6	Teak Plants	1208.053	1440.420	805.218	527.340
7	Cashew Plants	32.717	39.000	1.770	7.106
8	Other Plantations	265.457	204.292	21.744	35.862
9	Red Sanders	0.000	0.000	0.000	142.000
10	Thinnings	49.370	1.560	17.560	70.843
	Departmental extractions	3138.986	3571.615	1934.698	1891.562

Source: Forest Department

5.30 : Protected areas of the forest department in the State

Sl.No	Protected Area	District	Sanctuary Area in Sq.Kms.
1	Coringa WLS	East Godavari	235.70
2	Kolleru WLS	West Godavari & Krishna	308.55
3	Krishna WLS	Krishna	194.81
4	Rajiv Gandhi WLS (Tiger Reserve)	Kurnool, Prakasam & Guntur	2131.31
5	Rollapadu WLS	Kurnool	6.14
6	GundlaBrahmeswara WLS (Extended Core)	Kurnool &Prakasam	1194.00
7	Sri Lankamalleswara WLS	YSR & SPS Nellore	464.42
8	Nelapattu WLS	SPS Nellore	4.58
9	Pulicat WLS	SPS Nellore	600.00
10	Koundinya WLS	Chittoor	357.60
11	Sri Venkateshwara WLS & Sri Venkateshwara NP (Part of S.V.WLS)	Chittoor	525.97
12	Kambalakonda WLS	Visakhapatnam	70.70
13	Sri PenusilaNarasimha WLS	SPSR Nellore & YSR	1030.90
14	Rajiv Gandhi NP	YSR	2.30
15	Papikonda NP	East Godavari & West Godavari	1012.90
Total			8139.89

Source: Forest Department

A.5.31 :Progress on compensatory afforestation under forest (conservation) Act 1980

Sl. No.	Item	2015-16	2016-17	2017-18
1	Area Diverted in Ha	26317.056	26757.419	19.864
2	C.A. Stipulation in Ha			
	In Forest Land in Ha	4187.86	4003.624	5.0
	In Non Forest Land in Ha	28812.185	23457.206	8.30
	Total	33000.045	27460.83	13.300
3	Addl C.A. Penal C.A. & Safety Zone in Ha	2336.379	2253.708	1.940
4	Financial amount required to be deposited by user agency (Rs in La.)	45950.158	49368.339	43.950
5	Fund made available by user agency (Rs in Lakhs.)	46448.993	49517.499	43.950
6	Implementation of stipulation Area afforested in Ha	994.05		
	On Forest Land in Ha	5844.925	5793.116	
	On Non Forest land in Ha	24364.413	19264.984	
	Total	30209.338	25058.10	
7	Amount spent (Rs in Lakhs)	18226.583	19049.645	142.96
8	Balance area to be afforested in Ha			
	On Forest Land in Ha	725.600	659.659	319.38
	On Non Forest land in Ha	4484.482	4089.782	3817.56
Total		5210.082	4749.441	4136.94

Source:- Forest Department

A.5.32 :District-wise achievements made under Sericulture sector (Nov- 2017)

Sl. No.	District	Employment Generation (Nos)	Mulberry (cumulative area in acres)	DFLs Brushing BV & CB) (in lakh)	Cocoon Production (BV & CB) (in MTs.)	Raw Silk Production (BV & CB) (in MTs.)	Sericulture Farmers (Number)
1	2	3	4	5	6	7	8
1	Srikakulam	13125	2735	1.06	63.50	9.33	1527
2	Vizianagaram	4710	1042	1.05	70.57	10.40	443
3	Visakhapatnam	3990	903	0.76	44.08	6.48	480
4	East Godavari	7000	1760	8.17	624.37	90.81	637
5	West Godavari	7836	1890	5.32	357.11	50.43	895
6	Krishna	3228	864	3.05	199.54	28.57	343
7	Guntur	2498	659	2.58	196.51	28.18	331
8	Prakasham	2735	1018	11.30	741.07	106.48	362
9	SPS Nellore	2290	531	1.16	60.51	9.57	360
10	YSR	13745	3059	9.70	621.98	87.59	1747
11	Kurnool	9060	2156	11.57	640.05	92.09	1428
12	Anatapuramu	175539	37410	227.98	14199.27	1999.44	28644
13	Chittoor	168688	36362	202.28	13809.74	1947.21	29745
Total		414444	90389	485.98	31628.3	4466.58	66942

Source: Sericulture Department

A.5.33 :District wise collection of Market fee

(Amount Rs. in lakhs)

Sl. No	District	2014-15	2015-16	2016-17	2017-18 (up to Oct. 2017)
1	2	3	4	5	6
1	Srikakulam	1826.83	2197.86	2132.90	583.70
2	Vizianagaram	1153.11	954.61	1438.41	1158.88
3	Visakhapatnam	1138.95	962.04	1182.43	787.36
4	East Godavari	5215.85	6790.82	5806.54	3608.56
5	West Godavari	5847.46	7096.20	7740.44	2645.17
6	Krishna	4866.05	5021.90	5315.80	2236.36
7	Guntur	10756.09	11216.85	11285.45	4910.37
8	Prakasam	2740.16	2092.11	2116.72	1050.31
9	SPS Nellore	1639.17	1925.96	2402.55	1083.32
10	YSR	1341.37	1259.32	1406.24	720.53
11	Kurnool	4393.18	4187.82	3515.37	1600.58
12	Ananthapuramu	1194.36	1417.13	1021.22	538.08
13	Chittoor	1641.31	1883.01	2320.15	1434.08
Total		43753.89	47005.63	47684.22	22357.30

Source: Commissioner, Agricultural Marketing

A.5.34 : District wise Godowns in Agriculture Market Committees

Sl. No	Name of the District	Existing Godowns		Godowns under utilisation	
		No.of Godowns	Capacity (MTs)	No.of Godowns	Utilization (MTs)
1	Srikakulam	56	46300	50	42500
2	Vizianagaram	45	30020	41	26660
3	Visakhapatnam	19	11322	18	11322
4	East Godavari	51	44855	49	41855
5	West Godavari	103	84810	87	69330
6	Krishna	173	169710	129	137060
7	Guntur	171	149480	144	110750
8	Prakasam	72	64135	41	34960
9	SPS Nellore	56	50680	40	39800
10	Kurnool	75	75140	65	66606
11	Anantapuramu	77	47470	63	38880
12	YSR	47	35150	42	32890
13	Chittoor	46	35600	41	32400
Andhra Pradesh		991	844672	810	685013

Source: Commissioner, Agricultural Marketing

A 6.1 : Large & Mega Industrial Projects gone in to production

District	Up to March, 2017			During 2017-18 (upto Dec 2017)			Total		
	Units (No.)	Investment (Rs. Crore)	Employment (No.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Units	Investment (Rs. Crore)	Employment (Nos.)
1	2	3	4	5	6	7	8	9	10
Srikakulam	48	6843	18609	14	1240	4810	62	8083	23419
Vizianagaram	100	6189	29314	2	66	240	102	6255	29554
Visakhapatnam	155	11065	33486	1	250	30	156	11315	33516
East Godavari	206	17691	76777	7	1051	2622	213	18742	79399
West Godavari	175	6932	40245	2	56	300	177	6988	40545
Krishna	195	7581	40885	3	207	1250	198	7788	42135
Guntur	226	14087	51303	0	0.0	0	226	14087	51303
Prakasam	161	5937	41988	5	421	280	166	6358	42268
SPS Nellore	104	2936	20057	2	49	160	106	2985	20217
YSR	171	2519	28552	2	315	400	173	2834	28952
Kurnool	212	6516	45096	2	642	1670	214	7158	46766
Ananthapuramu	110	2704	26026	0	0.00	0	110	2704	26026
Chittoor	76	6235	44778	0	0.00	0	76	6235	44778
Andhra Pradesh	1939	97235	497116	40	4297	11762	1979	101532	508878

Source: Industries Department

A 6.2 : Micro Small and Medium Enterprises established

District	Upto 2016-17			2017-18(upto Dec, 2017)			Total		
	Units (No.)	Investment (Rs. Crore)	Employment (No.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Units (No.)	Investment (Rs. Crore)	Employment (Nos.)
1	2	3	4	5	6	7	8	9	10
Srikakulam	4635	1239	31100	318	158	4018	4953	1397	35118
Vizianagaram	4515	846	44536	222	88	2284	4737	934	46820
Visakhapatnam	7479	3202	106096	317	81	2642	7796	3282	108738
East Godavari	7842	1799	74697	417	229	5806	8259	2028	80503
West Godavari	9973	3528	101804	708	246	6307	10681	3774	108111
Krishna	7737	2574	86834	562	310	6512	8299	2884	93346
Guntur	7607	2232	87955	476	143	5443	8083	2375	93398
Prakasam	4340	1748	38956	294	150	3195	4634	1898	42151
SPS Nellore	5197	1510	54065	641	262	5696	5838	1772	59761
YSR	2706	757	19047	298	113	2732	3004	870	21779
Kurnool	4155	1062	31545	958	330	7724	5113	1392	39269
Ananthapuramu	4273	2110	36734	348	161	3832	4621	2271	40566
Chittoor	3873	1499	51428	361	112	2912	4234	1611	54340
Andhra Pradesh	74332	24106	764797	5920	2383	59103	80252	26489	823900

Source: Industries Department.

A 6.3 : Prime Minister's Employment Generation Programme

Sl. No.	District	2016-17			2017-18 (upto December 2017)		
		Units (No.)	Margine money assisted (Rs.lakhs)	Employment (No.)	Units (No.)	Margine money assisted (Rs.lakhs)	Employment (No.)
1	2	3	4	5	6	7	8
1	Srikakulam	36	120	481	32	124	495
2	Vizianagaram	31	89	354	34	117	468
3	Visakhapatnam	10	43	171	14	54	217
4	East Godavari	23	72	290	53	92	368
5	West Godavari	24	49	197	20	38	153
6	Krishna	38	162	650	21	88	351
7	Guntur	6	10	39	24	100	398
8	Prakasam	2	8	33	13	22	88
9	SPS Nellore	13	17	67	21	31	125
10	YSR	32	71	283	42	54	216
11	Kurnool	5	11	42	4	6	23
12	Ananthapuramu	30	47	189	36	64	257
13	Chittoor	33	103	412	25	89	357
Total		283	802	3208	339	879	3516

Source: Industries Department.

A 6.4 : Incentives sanctioned to Industries during the year 2017-18 9upto December 2017)

Sl. No.	District	Micro Small and Medium Enterprises		Large & Mega Projects	
		No. of claims	Amount (Rs.Cr)	No. of claims	Amount (Rs.Cr)
1	2	3	4	5	6
1	Srikakulam	251	11	5	6
2	Vizianagaram	112	5	2	4
3	Visakhapatnam	249	19	73	40
4	East Godavari	293	31	13	12
5	West Godavari	642	31	93	78
6	Krishna	553	30	166	155
7	Guntur	118	5	432	212
8	Prakasam	881	57	78	70
9	SPS Nellore	216	13	56	177
10	YSR	234	15	45	176
11	Kurnool	267	14	25	149
12	Ananthapuramu	788	29	14	24
13	Chittoor	485	20	47	82
Total		5089	280	1049	1185

Source: Industries Department.

A.6.5: Status of Special Economic Zones as on 30.06.2017

Sl No.	District	SEZs (No.)	Employment generated (No.)	Production including mg. deemed exports & DTA sales. (Rs. in Cr)	Investment made including FDI (By Developer & units) (Rs. in Cr)	Exports made (including deemed Exports) (Rs. in Cr)	Imports including Capital goods & Raw material (Rs. in Cr)
1	Srikakulam	1	2,161	36.62	1168.49	36.62	15.17
2	Vizianagaram	-	-	-	-	-	-
3	Visakhapatnam including VSEZ, GoI, SEZ	7	43,086	2027.56	10,738.85	2367.30	2,888.56
4	East Godavari	3	2069	671.88	1651.95	679.89	220.86
5	West Godavari	-	-	-	-	-	-
6	Krishna	1	172	0.41	79.81	0.41	0
7	Guntur	-	-	-	-	-	-
8	Prakasam	1	1625	150.54	395.18	150.54	34.47
9	SPSR Nellore	5	13547	131.19	1717.91	305.57	180.59
10	YSR Kadapa	-	-	-	-	-	-
11	Kurnool	-	-	-	-	-	-
12	Ananthapuramu	-	-	-	-	-	-
13	Chittoor	1	11168	196.3	1825.11	196.3	108.18
	Total	19	73,828	3,214.50	17,577.30	3,736.63	3,447.83

Source: AP Industries Infrastructure Corporation

A 6.6 : Index of Industrial Production(Base Year = 2011-12)

Sl. No	Industry Code	Industry Group	Weight	2015-16	2016-17	April-Dec 2016	April-Dec 2017	% of Growth over April-Dec2016
1	2	3	4	7	8	9	10	11
1	10	Food Products	89.6	163.1	146.7	147.0	157.2	6.9
2	11	Beverages	11.8	219.2	196.3	161.3	128.8	-20.2
3	12	Tobacco products.	29.0	22.7	54.1	50.9	49.4	-3.0
4	13	Textiles.	31.3	174.7	173.3	180.1	177.5	-1.4
5	14	Wearing Apparel,	3.1	329.4	382.4	331.0	402.9	21.7
6	15	Leather & Related Products	1.3	328.1	332.1	287.8	240.8	-16.3
7	16	Wood and Wood Products & Cork except furniture	1.1	67.7	59.3	33.4	38.6	15.6
8	17	Paper & Paper Products	8.7	127.1	127.0	118.0	111.4	-5.6
9	18	Printing, & Reproduction of recorded Media	0.3	104.5	103.8	106.4	102.3	-3.9
10	19	Coke and Refined Petrolium products	14.8	120.2	128.6	102.3	111.0	8.6
11	20	Chemicals & Chemical products	60.7	171.3	131.9	156.6	177.1	13.1
12	21	Pharmaceuticals, medicinal chemical ,botanical products	54.5	152.0	214.6	154.7	171.9	11.1
13	22	Rubber & Plastic Products.	5.0	136.1	125.4	119.4	118.1	-1.1
14	23	Other Non-Metallic Mineral Products.	109.7	112.0	117.5	90.9	91.5	0.7
15	24	Basic Metals	155.4	119.9	129.2	111.1	115.6	4.1
16	25	Fabricated Metal Products, except Machinery & Equipment	4.4	145.9	139.9	158.5	141.7	-10.6
17	26	Computer electronic, optical products	0.8	554.0	656.5	318.1	504.5	58.6
18	27	Electrical equipment	29.1	78.9	92.0	50.1	50.1	0.0
19	28	Machinery and equipment n.e.c	5.7	88.4	89.0	89.1	91.8	3.0
20	29	Motar vehicles trailers and semi trailers	2.5	97.2	131.8	79.0	153.0	93.8
21	30	Other Transport Equipment	4.4	78.6	63.8	44.9	53.3	18.8
22	31	Furniture	0.3	416.5	209.0	163.1	210.0	28.8
23	32	Other manufacturing	5.5	52.7	36.3	53.3	35.0	-34.2
I		Mining & Quarrying	194.3	149.8	125.2	82.0	90.7	10.7
II		Manufacturing	629.0	131.8	136.2	120.2	126.3	5.1
III		Electricity	176.7	144.9	153.1	135.8	148.1	9.1
General Index.			1000	137.6	137.1	115.5	123.2	6.7

Source : Directorate of Economics & Statistics

A.6.7:Annual Survey of Industries

Sl. No.	Item	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	CSO Data	
								2013-14	2014-15
1	2	3	4	5	6	7	8	9	10
1	Factories	No.	9742 (-2.31)	10358 (6.32)	11195 (8.08)	12549 (12.09)	12658 (0.87)	12941 (3.50)	12905 (-0.28)
2	Fixed Capital	Rs. Crores	90087.59 (101.63)	104194.94 (15.66)	185818.93 (78.34)	135942.23 (-26.84)	144996.95 (6.66)	148626.43 (13.61)	148244.39 (-0.26)
3	Working Capital	Rs. Crores	9456.18 (-15.21)	4364.89 (-53.84)	16077.87 (268.35)	16383.94 (1.90)	28782.04 (75.67)	22224.32 (12.06)	5681.38 (-74.44)
4	Outstanding Loans	Rs. Crores	24399.47 (12.70)	34128.63 (39.87)	33970.17 (-0.46)	52312.89 (53.99)	62184.02 (18.87)	72703.80 (15.24)	52758.11 (-27.43)
5	All Workers	No.	354628 (-0.96)	488432 (37.73)	369554 (-24.33)	405564 (9.74)	414747 (2.26)	415127 (2.24)	424075 (2.16)
6	All Employees	No.	439780 (-2.15)	609827 (38.67)	455007 (-25.39)	500799 (10.06)	515736 (2.98)	522057 (3.66)	528417 (1.22)
7	Wages to workers	Rs. crores	2586.85 (19.48)	3284.18 (26.96)	3744.71 (14.02)	4442.75 (18.64)	5949.61 (33.92)	5219.45 (22.78)	5917.30 (13.37)
`8	Total Emolument	Rs. crores	4416.16 (22.02)	5203.02 (17.82)	6695.52 (28.69)	7629.16 (13.94)	9617.09 (26.06)	8903.74 (23.93)	10291.48 (15.59)
9	Fuel etc. consumed	Rs. Crores	7423.31 (24.79)	7099.43 (-4.36)	8828.53 (24.36)	12806.87 (45.06)	13351.36 (4.25)	14415.77 (10.42)	15164.16 (5.19)
10	Material consumed	Rs. Crores	85131.89 (-10.20)	102645.64 (20.57)	132228.67 (28.82)	141083.94 (6.70)	178715.15 (26.67)	180968.99 (36.55)	163531.23 (-9.64)
11	Total Input	Rs. Crores	105922.45 (-6.25)	126565.34 (19.49)	167855.77 (32.62)	183526.99 (9.33)	231604.66 (26.20)	235587.37 (34.00)	216898.21 (-7.93)
12	Products & by Products	Rs. Crores	120669.95 (-1.76)	151704.72 (25.72)	184554.29 (21.65)	185564.97 (0.54)	221440.21 (19.33)	224839.96 (26.81)	219572.13 -(2.34)
13	Total Output.	Rs. Crores	131721.23 (-0.09)	165084.48 (25.33)	206118.86 (24.86)	215029.62 (4.32)	258539.18 (20.23)	262683.82 (26.82)	251918.8 (-4.10)
14	Depreciation	Rs. Crores	7249.62 (137.52)	6358.19 (-12.30)	6677.51 (5.02)	7893.05 (18.20)	8193.69 (3.81)	8468.64 (12.96)	6939.46 (-18.06)
15	Net Value Added	Rs. Crores	18549.15 (17.39)	32160.95 (73.38)	31585.58 (-1.79)	23609.58(-25.25)	18740.83(-20.62)	18627.80 (-21.81)	28081.14 (50.75)
16	Gross Value Added	Rs. Crores	25798.77 (36.84)	38519.14 (49.31)	38263.09 (-0.66)	31502.63(-17.67)	26934.52(-14.50)	27096.45 (-13.48)	35020.59 (29.24)

Figures in brackets indicate percentage of increase / decrease over the previous year

The above data from 2009-10 to 2013-14 is Pooled Data of Central & State sample survey of ASI results & for 2014-15 CSO data only.

Growth rate of 2014-15 is arrived by considering CSO data of 2013-14.

A 6.8 : Production of Crude Oil, Natural Gas and Limestone

Sl. No.	Year	Crude Oil (Tonnes)	Growth Rate (%)	Natural Gas (mcm)	Growth Rate (%)	Limestone (000 Tonnes)	Growth Rate (%)
1	2	3	4	5	6	7	8
1	2011-12	303584	--	1353	--	65036	--
2	2012-13	295329	-2.72	1228	-9.24	61367	-5.64
3	2013-14	274030	-7.21	1143	-6.92	61471	0.17
4	2014-15	256662	-6.33*	514	55.03*	31925	48.06**
5	2015-16	294792	15	555	8	30965	-3**
6	2016-17	261605	-11	853	54	34917	13
7	2017-18 up to Dec,2017	248000	---	689	--	28583	---

Source: Directorate of Mines and Geology, Hyderabad.

(*) Due to Nagaram blow out, ONGC has closed 40 oil/gas wells. Hence the production decreased.

(**) Due to lack of market, the Cement Industries are running with 50% working capacity. Hence, Limestone production decreased.

A 6.9 : Mineral Revenue

(Rs.lakh)

Sl. No	District	2014-15	2015-16	2016-17	2017-18 (up to Dec, 17)
1	2	3	4	5	6
1	Srikakulam	4359	5738	8994	5340
2	Vizianagaram	2164	2344	2989	2112
3	Visakhapatnam	4109	5226	7302	4889
4	East Godavari	4538	5136	6417	33474
5	West Godavari	1797	2515	3610	2073
6	Krishna	7414	8585	12389	29462
7	Guntur	7032	11264	14370	9470
8	Prakasam	13359	17615	23154	16379
9	SPS Nellore	2967	3817	7549	5261
10	YSR	10841	18501	20312	9984
11	Kurnool	13881	14148	9287	12041
12	Ananthapuramu	4688	5999	18422	6602
13	Chittoor	6292	7665	10209	6525
Sub Total		83441	108553	145004	143612
Oil and Gas		11870	29544	25066	12592
Cess on others		1301	1507	0	0
Grand Total		96611	139605	170070	156204

Source: Directorate of Mines and Geology

A 7.1 : Irrigation Potential Created upto October 2017

(lakh Acres)

Sl No	District	Major Irrigation	Medium Irrigation	Total	Minor Irrigation	APSIDC	Total
1	2	3	4	5	6	7	8
1	Srikakulam	3.89	0.30	4.19	2.75	0.26	7.20
2	Vijayanagaram	0.62	0.93	1.55	2.21	0.10	3.86
3	Visakhapatnam	0.35	0.39	0.74	2.31	0.06	3.11
4	East Godavari	7.36	0.93	8.29	1.30	0.31	9.90
5	West Godavari	7.62	0.53	8.15	1.13	0.56	9.84
6	Krishna	10.27	0.16	10.43	1.04	1.14	12.61
7	Guntur	11.87	0	11.87	0.32	2.22	14.40
8	Prakasam	5.76	0.48	6.24	1.40	1.46	9.11
9	SPS Nellore	5.94	0.20	6.14	2.83	0.15	9.11
10	YSR	3.52	0.60	4.12	1.08	0.15	5.34
11	Kurnool	6.05	0.37	6.42	0.80	1.06	8.28
12	Anantapuramu	1.74	0.41	2.15	1.42	0.07	3.65
13	Chittoor	0.23	0.22	0.45	3.00	0.02	3.48
Anicuts and open head channels in Minor Irrigation					4.02		4.02
Total		65.22	5.52	70.74	25.60	7.56	103.91

Source: Water Resources Department

A 7.2 : Minor Irrigation Census

Sl. No	Name of Scheme	1st Census (1986-87)	2nd Census (1993-94)	3rd census (2000-01)	4th census (2006-07)	5th census 2013-14	% variation of 2nd over 1st census	% variation of 3rd over 2nd census	% variation of 4th over 3rd census	% variation of 5th over 4th census
1	2	3	4	5	6	7	8	9	10	11
1	Dug wells	385569	454602	449946	376617	212030	17.90	-1.02	-16.30	-43.70
2	Shallow Tube Wells	98664	172983	232741	321203	185255	75.33	34.55	38.01	-42.32
3	Medium Tube Wells					212950				
4	Deep Tube Wells	12666	29987	83013	218801	377950	136.75	176.83	163.57	72.74
Total Ground Water Schemes		496899	657572	765700	916621	988185	32.34	16.44	19.71	7.81
5	Surface Flow Irrigation Schemes	46020	45297	44292	45204	51368	-1.57	-2.22	2.06	13.64
6	Surface Lift Irrigation Schemes	6362	7168	8994	10671	14803	12.67	25.47	18.65	38.72
Total Surface Irrigation Schemes		52382	52465	53286	55875	66171	0.16	1.56	4.86	18.43
Total Minor Irrigation Schemes		549281	710037	818986	972496	1054356	29.27	15.34	18.74	8.42

Source: Directorate of Economics and Statistics

A.7. 3 Ground water Level Ranges in (percentage)

Sl No	District	Depth to Water Level Ranges					
		During January-2017 (%)			During January-2018 (%)		
		0 – 3m	3 – 8m	>8m	0 – 3m	3 – 8m	>8m
1	2	3	4	5	6	7	8
1	Srikakulam	58	29	13	34	53	13
2	Vijayanagaram	59	33	8	20	60	20
3	Visakhapatnam	38	31	30	14	46	40
4	East Godavari	45	28	25	31	47	22
5	West Godavari	18	28	53	8	27	65
6	Krishna	33	27	38	21	36	43
7	Guntur	39	33	27	35	36	29
8	Prakasam	3	25	72	7	25	68
9	SPS Nellore	14	39	46	28	33	39
10	YSR	11	30	58	13	34	54
11	Kurnool	21	45	32	8	41	52
12	Anantapuramu	1	8	90	5	20	75
13	Chittoor	8	27	65	30	41	25
Total		23	29	48	19	37	44

Source: Ground water Department

A 7.4 : Power Generation and Distribution

Sl. No.	ITEM	Unit	AP as on 31-3-2017	During 2017-18	As on 30-11-2017 (Prov)
1	2	3	4	5	6
1	Installed Capacity				
a)	A.P. GENCO	MW	5674.87	538.16*	6213.03
1	Thermal	"	2348.15	461.85	2810.00
2	Hydel	"	1721.29	76.31	1797.60
3	Wind	"	0.00		0.00
4	Solar	"	5.43		5.43
	AP Power Development Corp. Ltd.	"	1600.00		1600.00
*Due to power regulation by AP to TS and TSGENCO to APDISCOMS the power is not being scheduled to APDISCOMS from TSGENCO with effect from 11/6/2017					
b)	Joint Sector				
	Gas (A.P.G.P.C.L.)58.8x58.32%	"	34.29		34.29
c)	Private Sector	"	9192.5	688.56	9881.07
1	IPPS	"	2849.49	400.00	3249.49
2	Small Hydro	"	87.44	0.00	87.44
3	Wind	"	3801.09	103.60	3904.69
4	Bagasse, Bio-mass Co-Generation & Bio-mass Projects	"	430.34	0.00	430.34
5	Mini Power Plants	"	82.00	-28.00	54.00
6	Solar		1874.95	240.00	2114.95

Sl. No.	ITEM	Unit	AP as on 31-3-2017	During 2017-18	As on 30-11-2017 (Prov)
1	2	3	4	5	6
7	Others (Iso.Gas Wells+Waste Heat+ +Municipal Waste)	"	67.20	-27.04	40.160
d)	Share from Central Sector	"	1750.85	500.39	251.24
1	NTPC Ramagundam (1-6)	3*200 +3*500	306.11	154.42	460.53
2	NTPC Ramagundam (7)	1*500	76.73	37.67	114.40
3	NTPC Talcher Stage II (Units3,4,5&6)	4*500	193.43	48.60	242.03
4	Simhadri TPS (NTPC StageI)	2*500	461.11	0.00	461.11
5	Simhadri TPS (NTPC StageII)	2*500	212..00	63.93	275.93
6	Neyveli (Tamilnadu) Stage I	630	50.04	-2.75	47.29
7	Neyveli (Tamilnadu) Stage II	840	90.06	-3.67	86.39
8	Vallur Stage I &II &III	3*500	92.58	-5.50	87.08
9	Tuticorin, Tamilnadu Unit I	1*500	128.05	-5.50	122.55
10	M.A.P.P.(Tamilnadu)	440	19.15	-0.84	18.31
11	Kaiga Nuclear Power Plant – I& II	2*220	58.95	-3.05	55.90
12	Kaiga Nuclear Power Plant – III& IV	2*220	62.64	-3.04	59.60
13	KudamKulam Unit I	1*1000	0.00	0.00	0.00
14	NTPC (Kudgi)	1*800	0.00	145.12	145.12
15	Western region bundled power		0.00	75.00	75.00
	Total (A.P.GENCO + Private + Central)	MW	16652.52	1727.11	18379.63
2	Energy Generated (Cumulative)				
1	Thermal	MU	24720.38		12943.07
2	Hydel	"	2312.42		1449.05
	TOTAL	"	27032.80		14392.12
3	Energy purchased and imported	MU	28127.49		23792.59
4	Energy available for use (2+3)	MU	55160.29		38184.71
5	Maximum Demand during the year (At Generation Terminal)	MW	7965 (23-08-2016)		8166 (20-11-2017)
6	Max. Grid Consumption during the year	MU	178.15 (23-08-2016)		176 (16-05-2017)
7	Per capita consumption	Kwh	987 (2015-16)		1085(2016-17)
8	Transmission of Lines				
	APTRANSCO Lines		24246.91	1729.08	25975.99
a)	400 kV	Ckm	3606.79*	914.58	4521.37
b)	220 kV	"	10548.69*	503.77	11052.46
c)	132 kV	"	10091.43*	310.73	10402.16
	DISCOM's Lines		563073.19	9976.61	573049.8
d)	33 kV	km	24803.48	294.63	25098.11
e)	11 kV	"	217700.67	5252.01	222952.68

Sl. No.	ITEM	Unit	AP as on 31-3-2017	During 2017-18	As on 30-11-2017 (Prov)
1	2	3	4	5	6
f)	LT	"	320569.04	4429.97	324999.01
	Total		587320.10	11705.69	599025.79
9	APTRANSCO Sub Stations				
a)	400 kV	No.	10	0	10
b)	220 kV	No.	87	3	90
c)	132 kV	No.	192*	4	196
	DISCOM's				
d)	33 kV	No.	2766	78	2844
	Total		3055	85	3140
10	Distribution Transformers (including RESCO upto Oct.2017)	No.	769642	33781	803423
11	Electrification of Towns, Villages, Hamlets etc.				
	a) Towns	No.	112	0	112
	b) Villages	No.	16449	0	16449
	c) Hamlets 24001	No.	23475	0	23475
	d)Tribal Hamlets\Habitations 6079	No.	5807	5	5812
	d) Dalitwadas 37402	No.	36312	0	36312
	e) Weaker Section Colonies 22378	No.	21725	0	21725
12	Consumers Served				
	a) Domestic	Lakh Nos.	138.86	3.11	141.97
	b) Non-domestic	"	12.55	0.59	13.14
	c) Industrial	"	1.44	0.06	1.50
	d) Cottage Industries	"	0.17	0	0.17
	e) Agriculture Services (including RESCOs)	"	16.57	0.40	16.97
	f) Public Lighting / Local Bodies	"	1.00	0.03	1.03
	g) General Purpose	"	1.12	0.06	1.18
	h)Temporary	Nos.	2769	89	2858
	L.T.Total	Lakh Nos.	171.73	4.27	176.00
	H.T.Total	Lakh Nos.	0.09	0.00	0.09
Grand Total		Lakh Nos.	171.82	4.27	176.09

Source: A.P. TRANSCO

* Provisional

A 7.5 : Registered Motor Vehicles

(Numbers)

Sl. No.	Class of Vehicle	As on March 2014	As on March 2015	As on Mar, 2016	As on Mar, 2017	As on Nov 2017
1	2	3	4	5	6	7
1	Auto Rickshaws	351396	397126	444132	490242	509581
2	Contract Carriage Vehicles	2737	3022	3222	3667	3816
3	Educational Institute Buses	19248	20471	21910	23633	25076
4	Goods Carriage	461866	499408	542550	601845	626722
5	Maxi Cabs	18601	20087	20790	22430	22993
6	Motor Cycles	5431832	6147523	6826237	7671213	8143995
7	Motor Cars	434516	486307	540627	599988	637461
8	Motor Cabs	50580	53237	56797	59992	61884
9	Private Service Vehicles	1633	1735	1785	1979	2065
10	Stage Carriage Vehicles	12225	13041	13912	15923	16598
11	Tractor And Trailers	200144	220017	239043	264910	276817
12	Others (transport & non transport)	17365	20288	23700	28990	30544
Total		7002143	7882262	8734705	9784812	10357552

Source: Transport Department

A.7.5A: District wise Revenue

Rs. in crores

Sl. No	District	Upto January		% of Growth
		2016-17	2017-18	
1	2	3	4	5
1	Srikakulam	72.37	96.15	32.86
2	Vizianagaram	56.68	72.77	28.39
3	Visakhapatnam	259.54	319.91	23.26
4	East Godavari	200.27	252.84	26.25
5	West Godavari	159.66	204.32	27.97
6	Krishna	295.84	362.59	22.56
7	Guntur	203.15	266.40	31.13
8	Prakasam	112.73	135.95	20.60
9	SPSR Nellore	141.37	168.32	19.06
10	YSR	94.50	127.61	35.04
11	Kurnool	129.28	166.53	28.81
12	Ananthapuramu	121.71	158.87	30.53
13	Chittoor	173.36	224.81	29.68
14	State Transport Authority	49.35	56.69	14.87
Total		2069.81	2613.76	26.28

Source Transport department

A 7.6 : APSRTC Performance

Sl. No.	Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 (upto Oct, 2017
1	2	3	4	5	6	7	8	9	10
1	Buses on Road (Held as on last day)	No.	12471	12281	12235	12229	12256	11835	11867
2	Avg. Buses operated	No.	12079	12229	10147	12023	11931	12086	11659
3	Scheduled Buses (As on last day)	No.	11635	11513	11337	11193	11283	10983	10929
4	Kms. Operated	Kms.	170	172	138	165	162.38	165.8	92.43
5	Seat / Kms.	No.	8299	8341	6665	7885	7775	7912	4411
6	Passenger / Kms.	No.	5842	5597	5617	5294	5594	5386	3263
7	Passengers Carried	Crs.	218	216	182	232	229	240	213
8	Occupation Ratio	%	70	69	67	70	69.48	68.05	73.98
9	Accidents	No.	1583	1532	1080	1320	1108	1108	749
10	Accident Rate (Per lakh kms.)	No.	0.09	0.09	0.08	0.08	0.08	0.08	0.09
11	HSD oil Km.Pl	Kms.	5.21	5.22	5.21	5.23	5.19	5.20	5.19
12	LUB oil Km Pl	Kms.	3566	5351	5407	5183	5390	5542	6968
13	Employees		64639	64127	63141	61806	59372	56592	55049
14	Staff per Bus	No.	5.77	5.76	5.62	5.54	5.41	5.42	5.35

Source: Andhra Pradesh State Road Transport Corporation.

A 7.7 : Post Offices in the State as on 31st December, 2017

Sl. No.	District	Head Post Offices	Mukhya Dak Ghars	Sub Post Offices	Branch Post Offices	Total
1	2	3		5	6	7
1	Srikakulam	3	0	65	426	494
2	Vizianagaram	3	0	72	657	732
3	Visakhapatanm	4	1	108	670	783
4	East Godavari	6	2	154	753	915
5	West Godavari	7	1	143	625	776
6	Krishna	6	0	159	653	818
7	Guntur	6	2	156	691	855
8	Prakasam	5	0	123	782	910
9	SPS Nellore	3	0	100	676	779
10	Y.S.R	4	0	102	720	826
11	Kurnool	3	1	107	653	764
12	Ananthapuramu	4	0	119	820	943
13	Chittoor	5	1	120	768	894
Total		59	8	1528	8894	10489

Source: Chief Postmaster General

A 7.8 : Status of Telephone Connections 2017-18 (up to Dec,2017)

Sl. No.	District	Telephone Exchanges (LL+WLL)	Land Line Connections	Public Telephones (Local+STD)	Wireless Subsribers (prepaid & postpaid)	Wireless Subsribers (WLL)(fixed & mobile)
1	2	3	4	5	6	7
1	Srikakulam	123	15846	240	344846	759
2	Vizianagaram	116	17586	205	348445	649
3	Visakhapatanm	170	83857	932	807609	1723
4	East Godavari	208	77560	1139	866327	1911
5	West Godavari	204	73069	1967	563045	801
6	Krishna	232	97350	2187	627599	464
7	Guntur	223	76928	937	634454	437
8	Prakasam	187	23697	344	287852	462
9	SPS Nellore	188	35440	439	520637	1050
10	Y.S.R	124	17259	228	313618	868
11	Kurnool	207	31660	611	424482	86
12	Ananthapuramu	168	30865	633	512047	213
13	Chittoor	226	42556	367	494466	573
Total		2376	623673	10229	6745427	9996

Source: CGM, Telecom, BSNL

A 7.9 : District wise No of Bank branches, Deposits, Advances as on 30th September 2017

Sl No	District.	No. of Branches	Deposits (Rs.Crore)	Advances (Rs.Crore)	Credit-Deposit Ratio
1	2	3	4	5	6
1	Srikakulam	327	9349.56	7454.40	79.73
2	Vizianagaram	321	7958.00	6372.11	80.07
3	Visakhapatanm	769	41068.42	36064.87	87.82
4	East Godavari	826	25795.67	29843.17	115.69
5	West Godavari	568	18915.68	26099.31	137.98
6	Krishna	785	39414.51	38310.16	97.20
7	Guntur	808	25291.14	33768.25	133.52
8	Prakasam	469	12031.50	18018.59	149.76
9	SPS Nellore	403	14388.64	17073.08	118.66
10	Y.S.R	373	12929.69	13398.18	103.62
11	Kurnool	452	14398.55	15753.39	109.41
12	Ananthapuramu	476	17708.42	16618.13	93.84
13	Chittoor	590	32488.10	19583.75	60.28
Total		7167	271737.88	278357.39	102.44

Source: Finance (Institutional Finance) Department

A 8.1 : Population

Sl. No.	District	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8
1	Srikakulam	1555369	1769968	1959352	2321126	2537593	2703114
2	Vizianagaram	1411055	1589558	1804196	2110943	2249254	2344474
3	Visakhapatnam	1665213	2035831	2576474	3285092	3832336	4290589
4	East Godavari	2608375	3087262	3701040	4541222	5021502	5285824
5	West Godavari	1978257	2374306	2873958	3517568	3857768	3995742
6	Krishna	2076956	2493574	3048463	3698833	4187841	4517398
7	Guntur	2327246	2844488	3434724	4106999	4465144	4887813
8	Prakasam	1671726	1919995	2329571	2759166	3059423	3397448
9	SPS Nellore	1408891	1627740	2014879	2392260	2668564	2963557
10	Y.S.R	1342015	1577267	1933304	2270720	2601797	2882469
11	Kurnool	1570955	1982090	2407299	2973024	3529494	4053463
12	Ananthapuramu	1767464	2115321	2548012	3180863	3640478	4081148
13	Chittoor	1905344	2267413	2737316	3261118	3745875	4174064
ANDHRA PRADESH		23288866	27684813	33368588	40418934	45397069	49577103
INDIA		439234771	548159652	683329097	846421039	1028610328	1210854977

Source: Census of India, Government of India

*Data merged from Khammam villages

A 8.2 : Percentage Decadal Variation of Population and Sex Ratio

Sl. No.	District	Percent Decadal Variation					Sex Ratio (No. of Females per 1000 Males)					
		1961-71	1971-81	1981-91	1991-01	2001-11*	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Srikakulam	13.80	10.70	18.46	9.33	6.52	1,047	1,033	1,023	1,012	1,014	1,015
2	Vizianagaram	12.65	13.50	17.00	6.55	4.23	1,017	1,009	1,006	1,000	1,009	1,019
3	Visakhapatnam	22.26	26.56	27.50	16.66	11.96	1,000	992	981	975	985	1,006
4	East Godavari	18.36	19.88	22.70	7.93	5.26	999	996	993	998	993	1,007
5	West Godavari	20.02	21.04	22.39	8.13	3.58	992	994	991	994	991	1,004
6	Krishna	20.06	22.25	21.33	13.22	7.87	962	964	971	969	978	992
7	Guntur	22.23	20.75	19.57	8.72	9.47	976	974	973	970	984	1,003
8	Prakasam	14.85	21.33	18.44	10.88	11.05	991	987	978	970	971	981
9	SPS Nellore	15.53	23.78	18.73	11.55	11.05	989	986	978	980	984	985
10	Y.S.R	17.52	22.59	17.47	14.78	10.79	957	958	959	955	974	985
11	Kurnool	26.17	21.45	23.50	18.72	14.85	977	969	962	953	965	988
12	Ananthapuramu	19.68	20.44	24.81	14.34	12.10	946	947	946	946	958	977
13	Chittoor	19.00	20.72	19.14	14.86	11.43	957	960	966	966	982	997
ANDHRA PRADESH		18.88	20.53	21.13	11.89	9.21	984	981	978	976	983	997
INDIA		24.80	24.66	23.85	21.54	17.70	941	930	934	927	933	943

Source: Census of India, Government of India

*Data merged from Khammam villages

A 8.3 : Percentage of Urban Population to Total Population and Density of Population

Sl. No.	District	Percent of Urban Population to Total Population					Density of Population (Persons per Sq. Km.)					
		1971	1981	1991	2001*	2011*	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Srikakulam	10.65	10.89	12.50	10.98	16.16	266	303	336	398	435	463
2	Vizianagaram	-	15.94	17.22	18.33	20.94	216	243	276	323	344	359
3	Visakhapatnam	22.30	31.28	39.83	39.95	47.45	149	182	231	294	343	384
4	East Godavari	19.23	22.21	23.80	22.94	24.85	241	286	342	420	392	413
5	West Godavari	17.71	20.77	20.71	19.46	20.24	256	307	371	454	453	470
6	Krishna	27.25	32.54	35.82	32.08	40.81	238	286	349	424	480	518
7	Guntur	24.98	27.53	28.89	28.80	33.81	204	250	302	361	392	429
8	Prakasam	11.07	14.99	16.45	15.28	19.56	95	109	132	157	174	193
9	SPS Nellore	15.77	20.76	23.79	22.45	28.94	108	123	154	183	204	227
10	Y.S.R	14.18	19.37	24.03	22.59	33.97	87	103	126	148	169	188
11	Kurnool	20.30	24.49	25.84	23.16	28.35	89	112	136	168	200	230
12	Ananthapuramu	17.77	20.84	23.50	25.26	28.07	92	111	133	166	190	213
13	Chittoor	13.45	16.88	19.80	21.65	29.50	126	151	181	215	247	275
ANDHRA PRADESH		18.35	22.14	24.77	24.13	29.47	145	173	208	252	279	304
INDIA		17.98	19.51	22.87	25.49	31.14	144	177	216	273	325	382

Source: Census of India, Government of India

*Data merged from Khammam villages

A 8.4 : Literacy Rates (Percentage of Literates to Population ages 7 years and above)

Sl. No.	District	1991			2001*			2011*		
		Males	Fe-males	Total	Males	Fe-males	Total	Males	Fe-males	Total
1	2	3	4	5	6	7	8	9	10	11
1	Srikakulam	49.14	23.52	36.22	67.19	43.68	55.31	71.61	52.08	61.74
2	Vizianagaram	45.92	22.47	34.19	62.37	39.91	51.07	68.15	49.87	58.89
3	Visakhapatnam	56.13	34.60	45.51	69.68	50.12	59.96	74.56	59.34	66.91
4	East Godavari	55.32	42.26	48.79	69.54	60.30	64.93	74.10	66.95	70.50
5	West Godavari	59.75	46.98	53.38	77.68	68.55	73.13	77.65	71.01	74.32
6	Krishna	60.55	45.54	53.16	74.39	63.19	68.85	78.30	69.18	73.74
7	Guntur	56.54	35.85	46.35	71.24	53.74	62.54	74.79	60.09	67.40
8	Prakasam	53.14	27.06	40.30	69.35	45.08	57.38	72.92	53.11	63.08
9	SPS Nellore	58.40	36.99	47.76	73.67	56.38	65.08	75.74	61.99	68.90
10	Y.S.R	63.14	32.35	48.12	75.83	49.54	62.83	77.78	56.77	67.30
11	Kurnool	53.24	26.04	39.97	65.96	40.03	53.22	70.10	49.78	59.97
12	Ananthapuramu	55.92	27.61	42.18	68.38	43.34	56.13	73.02	53.97	63.57
13	Chittoor	62.61	36.44	49.75	77.62	55.78	66.77	79.83	63.28	71.53
ANDHRA PRADESH		56.53	34.92	45.86	71.28	52.72	62.07	74.77	59.96	67.35
INDIA		64.10	39.30	52.20	75.26	53.67	64.84	80.90	64.60	72.98

Source: Census of India, Government of India

*Data with merged villages from Khammam District

A 8.5 : Enrolment of Children in Schools

Sl. No	Year	Pre Primary	I-V Classes	VI-VIII Classes	IX-X Classes	XI-XII Classes	Total
1	2	3	4	5	6	7	8
1	2000-01	122747	5159190	1150000	1066508	2717	7501162
2	2001-02	239959	4888813	1261983	1159476	2659	7552890
3	2002-03	236448	4645175	1378157	1263455	2523	7525758
4	2003-04	157497	4286794	1382624	1395761	2666	7225342
5	2004-05	36199	2039848	665865	709635	1242	3452789
6	2005-06	154391	3955616	1387230	1598020	3443	7098700
7	2006-07	285781	3920406	1387937	1639163	3569	7236856
8	2007-08	267712	3814748	1376052	1670370	2785	7131667
9	2008-09	281988	3775763	1341770	1708002	6139	7113662
10	2009-10	162415	3808746	1323400	1728719	9765	7033045
11	2010-11	158537	3827465	1355780	1709061	11487	7062330
12	2011-12	23416	786908	279710	332618	7245	1429897
13	2012-13	168192	3810085	1417557	1783305	18771	7197910
14	2013-14	163138	3851333	2097833	1195459	29504	7337267
15	2014-15	87309	3747680	2098400	1263420	35962	7232771
16	2015-16	NA	3548246	2072730	1281701	NA	6902677
17	2016-17	NA	3475771	2084949	1286577	NA	6847297
18	2017-18	NA	3549450	2099863	1311745	NA	6961058

Source: Directorate of School Education (Provisional data of U-DISE 2017-18)

A 8.6 : School Dropout Rates

Year	Class I – V			Class I – VIII			Class I – X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2001-02	27.31	29.46	28.36	52.42	60.46	56.30	NA	NA	NA
2002-03	26.33	25.58	25.97	47.05	53.64	50.29	68.34	74.23	71.16
2003-04	29.51	30.34	29.92	47.65	53.45	50.53	64.92	71.13	67.91
2004-05	21.84	22.79	22.31	45.91	50.39	48.12	61.91	67.35	64.55
2005-06	17.09	17.59	17.36	42.45	46.20	44.31	60.85	66.18	63.48
2006-07	19.05	19.15	19.11	37.22	40.54	38.87	60.78	65.18	62.96
2007-08	11.85	11.64	11.75	29.66	32.85	31.25	59.21	62.72	60.95
2008-09	8.10	7.26	7.69	29.24	30.43	29.83	54.97	57.75	56.35
2009-10	9.27	8.58	8.93	20.69	21.38	21.03	49.31	51.08	50.18
2010-11	10.56	9.33	9.95	15.35	15.99	15.66	42.95	45.44	44.19
2011-12	7.51	7.40	7.45	14.94	14.96	14.95	41.23	42.75	41.98
2012-13	5.83	6.34	6.08	20.33	20.42	20.38	32.84	34.00	33.41
2013-14	3.16	3.25	3.20	19.37	18.95	19.16	26.20	27.48	26.83
2014-15	4.88	4.30	4.60	14.91	16.59	15.74	24.54	25.93	25.23
2015-16	8.57	8.97	8.76	18.42	10.96	14.75	23.12	24.64	23.87
2016-17	2.18	2.13	2.15	1.47	1.65	1.55	0.78	1.84	1.29
2017-18	0	0	0	0	0	0	3.56	3.04	3.30

Source: Directorate of School Education(Provisional data of U-DISE 2017-18)

Annual average dropout rate has been taken in place of dropout rate from 2016-17 calculated for all the stages

A 8.7 : Performance in SSC Examinations

Year	Number Appeared			Number Passed			Pass Percentage		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2000-01	174757	127726	302483	111233	82107	193340	63.65	64.28	63.92
2001-02	183514	138698	322212	122201	91380	213581	66.59	65.88	66.29
2002-03	193433	148901	342334	141232	108858	250090	73.01	73.11	73.05
2003-04	214246	168937	383183	167131	131088	298219	78.01	77.60	77.83
2005-06	236549	193610	430159	166777	137064	303841	70.50	70.79	70.63
2006-07	261978	231124	493102	188119	165477	353596	71.81	71.60	71.71
2007-08	265305	237482	502787	203398	181870	385268	76.67	76.58	76.63
2008-09	273666	249858	523524	214909	196248	411157	78.53	78.54	78.54
2009-10	279757	260708	540463	227018	211017	438030	81.15	80.94	81.05
2010-11	278864	263042	541906	232721	218535	451256	83.45	83.08	83.27
2011-12	282479	266004	548483	248083	235776	483859	87.82	88.64	88.22
2012-13	287170	267540	554710	258624	242509	501133	90.06	90.64	90.34
2013-14	290016	272297	562313	263423	249167	512590	90.08	91.50	91.20
2014-15	310958	295617	606575	283433	271103	554536	91.15	91.71	91.42
2015-16	316965	300065	617030	298884	284382	583266	94.30	94.77	94.53
2016-17	314471	295031	609502	288909	271344	560253	91.87	91.97	91.92

Source: Directorate of School Education(Provisional data of U-DISE 2017-18)

A 8.8 : Category- wise and District-wise Junior Colleges in the State 2017-18

District	Government including voc	Govt Model	Private Aided	Composite	Private Unaided	Vocational	Incentive	APRJC	Govt of India	Social Welfare	Tribal Welfare	Disabled Welfare	Co-operative	Railway	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Srikakulam	43	14	0	0	82	11	0		0	11	4	0	2	0	167
Vizianagaram	22	16	2	2	62	32	0	1	0	10	6	0	0	0	153
Visakhapatnam	36	5	8	3	143	50	1	0	1	11	8	0	3	0	269
East Godavari	43	2	13	0	132	81	2	0	0	15	6	0	4	0	298
West Godavari	32	0	10	1	86	58	0	0	0	9	3	0	8	0	207
Krishna	25	2	14	4	176	32	8	1	1	13	1	0	9	1	287
Guntur	22	13	23	8	149	34	8	2	1	10	0	1	4	0	275
Prakasam	30	10	11	3	87	20	2	0	0	14	1	0	3	0	181
S.P.S.Nellore	26	7	7	5	108	12	5	1	0	12	1	0	1	0	185
Y.S.R.	26	9	22	0	82	18	5	0	0	17	0	0	1	0	180
Kurnool	42	32	9	2	100	21	8	2	1	14	3	0	3	0	237
Anantapuramu	42	25	6	1	99	8	12	1	1	15	1	0	1	1	213
Chittoor	60	16	3	1	139	23	11	1	1	11	1	0	0	0	267
ANDHRA PRADESH	449	151	128	30	1445	400	62	9	6	162	35	1	39	2	2919

Source: Intermediate Education

A 8.9 : District-wise General and Vocational courses results in Junior Colleges IPE'2017

Sl. No	District	General			Vocational		
		Appeared	Pass	%	Appeared	Pass	%
1	2	3	4	5	6	7	8
1	Srikakulam	25586	18548	72	1535	1270	82
2	Vizianagaram	20232	14770	73	2090	1652	79
3	Vishakhapatnam	44966	35145	78	3514	2458	69
4	East Godavari	38963	28435	72	4936	2627	53
5	West Godavari	29298	22914	78	3167	2045	64
6	Krishna	59630	51492	86	1441	1100	76
7	Guntur	43268	34200	79	1011	744	73
8	Prakasam	23064	16430	71	891	508	57
9	SPS Nellore	26745	21526	80	1158	941	81
10	YSR	19691	13090	66	1107	778	70
11	Kurnool	30694	23164	75	1990	1460	73
12	Anantapuramu	28230	19747	69	2310	1560	67
13	Chittoor	39219	31525	80	2745	2227	81
Andhra Pradesh		429586	330986	77	27895	19370	69

Source: Intermediate Education

A.8.10 : Category Wise Enrolment of Students in Govt Degree Colleges 2017-18

SL No	District	Govt. Degree Colleges	Men	Women	Total	SC	ST	BC	OC
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	12	3252	3626	6878	1252	894	4195	537
2	Vizianagaram	5	899	886	1785	184	399	1114	88
3	Visakhapatnam	12	3659	4269	7928	974	2507	3274	1173
4	East-Godavari	16	5631	5503	11134	2803	996	4491	2844
5	West-Godavari	15	2973	2222	5195	1897	311	1638	1349
6	Krishna	9	2783	1810	4593	1800	214	1782	797
7	Guntur	6	944	2426	3370	860	187	964	1359
8	Prakasam	8	748	1050	1798	802	105	538	353
9	SPS Nellore	9	1331	1461	2792	1330	164	994	304
10	YSR	12	3182	2888	6070	1699	165	2171	2035
11	Kurnool	14	4915	3948	8863	3074	452	3620	1717
12	Anantapuramu	13	9723	6145	15868	4286	979	8308	2295
13	Chittoor	16	4727	3916	8643	3428	480	3492	1243
Andhra Pradesh		147	44767	40150	84917	24389	7853	36581	16094

Source: Commissioner, Collegiate Education

A.8.11: Category Wise Enrolment of Students in Private Aided Degree Colleges 2017-18

SL No	District	Pvt.Aided Colleges	Men	Women	Total	SC	ST	BC	OC
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	1	190	107	297	21	80	178	18
2	Vizianagaram	5	5179	3654	8833	1132	752	6221	728
3	Visakhapatnam	8	3836	4643	8479	960	330	4928	2261
4	East-Godavari	11	6593	4551	11144	2605	317	4521	3701
5	West-Godavari	14	8086	9908	17994	3813	300	8348	5533
6	Krishna	24	12842	13555	26397	4750	565	9200	11882
7	Guntur	32	15026	7062	22088	5965	1024	6135	8964
8	Prakasam	9	2149	383	2532	708	119	983	722
9	SPS Nellore	9	2734	2052	4786	1835	239	1324	1388
10	YSR	9	3984	2898	6882	1310	135	2369	3068
11	Kurnool	9	7595	3844	11439	2469	197	5019	3754
12	Anantapuramu	4	2861	2027	4888	515	129	2408	1836
13	Chittoor	6	716	278	994	311	96	454	133
Andhra Pradesh		141	71791	54962	126753	26394	4283	52088	43988

Source: Commissioner, Collegiate Education

A 8.12 : Family Welfare Program

(Nos. Lakh)

Item	2013-14	2014-15	2015-16	2016-17	2017-18 (upto Oct, 2017)
1	2	3	4	5	6
IUD	1.85	1.91	1.72	1.60	0.80
Oral Pill Users	1.26	1.40	1.50	20.36	1.65
Contraceptive Condoms Users	2.04	2.13	2.36	44.75	2.64
Vasectomies	0.02	0.03	0.18	0.21	0.00
Tubectomies	2.94	2.89	2.49	2.32	1.23
Total Sterilization	2.96	2.92	2.51	2.34	1.24
Medical Termination of Pregnancy	0.015	0.021	0.024	0.03	0.018
Deliveries conducted by 24 hours PHC	0.49	0.54	0.45	0.41	0.24
Beneficiaries under Janani Suraksha Yojana	2.43	2.62	2.64	2.23	1.10
TT (Pregnant Women)	9.34	8.69	8.19	8.20	4.61
DPT	8.08	8.13	4.61	8.10	3.70
Polio	8.09	8.11	7.91	7.69	4.33
BCG	8.29	798	7.69	4.40	4.40
Measles	7.81	7.98	8.06	7.93	3.84
Full Immunisation	7.79	7.96	8.06	7.92	3.95
Hepatitis -B	8.08	8.10	3.81	5.73	3.72
Vitamin - A	7.74	8.52	7.99	8.09	3.42
Pentavalent			4.22	7.65	4.33
Emergency cases transported	5.96	5.99	5.73	5.52	3.50

Source: Commissioner, Family Welfare

A 8.13 : Health Camps conducted under NTR Vaidya Seva Scheme 2017-18 (from April to October, 2017)

Sl. No	District	Cards covered (lakhs)	Camps Conducted	Patient Screened	Patient Reffered	Out - patient	In - patient	Thereapies preauthed
1	2	3	4	5	6	7	8	9
1	Srikakulam	8.59	35	6265	15	5181	16722	16080
2	Vizianagaram	7.39	50	15185	40	9439	15539	14869
3	Visakhapatnam	12.56	45	9206	32	6949	22072	20892
4	East Godavari	16.81	28	7841	42	16924	33913	32038
5	West Godavari	12.75	35	5088	12	13724	23777	22955
6	Krishna	13.07	0	0	0	16854	23940	23525
7	Guntur	15.06	7	1532	8	30848	31058	29938
8	Prakasam	9.96	44	9848	15	25203	20875	20084
9	SPS Nellore	9.18	33	11251	0	14849	22289	21476
10	Y.S.R.	8.01	21	4035	11	21070	19296	18122
11	Kurnool	12.08	14	1509	0	5445	21361	19991
12	Ananthapuramu	12.48	0	0	0	8407	19234	17931
13	Chittoor	11.40	29	7832	115	22968	22745	21572
Andhra Pradesh		149.34	341	79592	290	197861	292821	279473

Source: Dr. NTR Vaidya seva Trust

8.14 Details of average reporting % of Syndromic (S) Presumptive (P) Confirmed (L) 2017

District	Syndromic (S) cases			Presumptive (P) cases			Laboratory Confirmed (L) cases		
	Reporting units	Avg	%	Reporting units	Avg	%	Reporting units	Avg	%
Srikakulam	481	481	100%	88	88	100%	80	80	100%
Vizianagaram	435	435	100%	101	101	100%	76	76	100%
Visakhapatnam	583	583	100%	120	120	100%	120	120	100%
East Godavari	839	826	98%	150	148	99%	126	125	99%
West Godavari	638	632	99%	97	97	100%	97	97	100%
Krishna	584	583	100%	94	94	100%	94	94	100%
Guntur	677	677	100%	129	129	100%	111	111	100%
Prakasam	544	542	100%	108	107	99%	108	108	100%
SPS Nellore	477	477	100%	107	107	100%	80	80	100%
YSR	475	475	100%	91	91	100%	82	82	100%
Kurnool	542	542	100%	122	122	100%	105	105	100%
Anantapuramu	585	585	100%	100	100	100%	100	100	100%
Chittoor	644	643	100%	114	114	100%	110	110	100%
Total	7505	7480	100%	1421	1418	100%	1289	1288	100%

Source: Director of Public Health and Family Welfare

A.8.15 Details of National Programme for Prevention and Control of Fluorosis

Surveys conducted	November 2017	Cumulative data
No of Villages surveyed	13	117
School survey		
No. of schools covered	17	159
No. of children surveyed	923	6970
No. of Children with suspected Dental Fluorosis	43	424
No. of urinary tests carried out in school children with suspected Dental Fluorosis	27	339
No. of Children with confirmed Dental Fluorosis	15	154
Percentage children with confirmed Dental Fluorosis.	4.30	24.20
Community Survey		
No. of Households surveyed	406	3801
No. of Persons examined	1623	14730
No. of suspected cases of Dental Fluorosis	48	585
No. of suspected cases of Skeletal Fluorosis (with or without Dental Fluorosis)	14	46
Water Analysis		
No. of samples tested	23	377
Samples found above 1ppm	9	130
Urinary Analysis		
Total samples analyzed	27	339
No. above prescribed limit	15	154
Percentage samples above limit.	150.0	418.23

Source: Director of Public Health and Family Welfare

A.8. 16 : SACS Key establishments and service facilities during 2017-18 upto Oct,2017

Sl No	Name of the service center	Centers
1a	Integrated Counselling & Testing Centers(Stand alone ICTC)	213
1b	Facility Integrated ICTCs (in PHCs i.e. FI-ICTCs)	1131
1c	ICTCs in (PPP Model) Private Hospitals	177
1d	Mobile ICTCs	13
1	Total ICTCs	1534
2	Anti-Retroviral Therapy (ART) Centers	40
3	Link ART Centers	114
4	Link ART Centers(+)	43
5	Blood Banks	140
6	Blood storage centres	57
7	Designated STI/RTI Centers (Suraksha Clinics)	55
8	Targeted Interventions	87
9	No. of districts in which LWS is implemented(except Guntur)	12
10	Government supported Community Care Centers	12
11	Adolescent Education programmes in secondary schools	7554
12	Red Ribbon Clubs in degree colleges	1327
13	SRL	7

Source: Aids Control Society

A.8.17 :ICTC Program performance of Non Ante Natal Clients & Ante Natal Clients in 2017-18 (upto Oct.2017)

Sl. No.	District	Non ANC			ANC		
		Tested	Positives	Percentage (%)	Tested	Positives	Percentage (%)
1	Srikakulam	41728	460	1.1	34507	18	0.05
2	Vizianagaram	42833	386	0.9	31020	18	0.06
3	Visakhapatnam	58428	1165	2.0	38614	43	0.11
4	East Godavari	54944	1847	3.4	43622	46	0.11
5	West Godavari	49618	1321	2.7	34931	40	0.11
6	Krishna	61269	1345	2.2	35964	40	0.11
7	Guntur	62119	2007	3.2	36410	45	0.12
8	Prakasam	52249	1239	2.4	28648	29	0.10
9	SPS Nellore	44773	757	1.7	31337	25	0.08
10	YSR	47982	614	1.3	28715	17	0.06
11	Kurnool	50887	801	1.6	42648	44	0.10
12	Anantapuramu	60310	690	1.1	47730	36	0.08
13	Chittoor	51473	1070	2.1	38492	41	0.11
	Grand Total	678613	13702	2.0	472638	442	0.09

Source: Aids Control Society

A.8.18: Ante Retroviral Therapy Program performance

S. No	District	Pre ART		Alive on ART	
		2016-17	2017-18 (up to Oct,2017)	2016-17	2017-18 (up to Oct,2017)
1	2	3	4	5	6
1	Srikakulam	13265	13728	6031	6545
2	Vizianagaram	11486	11796	5624	6017
3	Visakhapatnam	29986	30946	12679	14241
4	East Godavari	55645	57680	25170	27654
5	West Godavari	36759	38132	15794	17296
6	Krishna	40278	41222	16020	18073
7	Guntur	46658	48233	19381	21852
8	Prakasam	30195	31198	11892	12982
9	SPS Nellore	17247	17476	7704	7713
10	YSR	14520	15088	6092	7018
11	Kurnool	17443	18311	7680	8916
12	Anantapuramu	20745	22123	11268	12474
13	Chittoor	18631	19426	8292	9251
	Grand Total	352858	365359	153627	170032

Source: Aids Control Society

A 8.19 : Houses Completed under Weaker Sections Housing Programme

Sl. No.	District	2016-17			2017-18 (upto Dec 2017)			Total
		Rural	Urban	Total	Rural	Urban	NTR Spl. housing (Hud-hud)	
1	2	3	4	5	6	7	8	9
1	Srikakulam	3309	1079	4388	12389	0	1070	13459
2	Vizianagaram	2765	665	3430	10260	2473	344	13077
3	Visakhapatnam	5246	1686	6932	17211	5137	2178	24526
4	East Godavari	2718	265	2983	29888	572		30460
5	West Godavari	7647	73	7720	22442	606		23048
6	Krishna	2677	92	2769	15285	586		15871
7	Guntur	3456	118	3574	16798	1768		18566
8	Prakasam	2740	40	2780	12665	424		13089
9	SPS Nellore	4798	163	4961	12554	1139		13693
10	YSR	2341	157	2498	9593	1014		10607
11	Kurnool	3420	194	3614	17264	291		17555
12	Anantapur amu	4094	107	4201	13141	2319		15460
13	Chittoor	2640	377	3017	13877	1203		15080
		47851	5016	52867	203367	17532	3592	224491

Source: Housing Corporation

A.8.20 Houses Sanctioned and Completed under AHP - PMAY as on 15-02-2018

Sl. No	District	Houses sanctioned			Houses completed		
		2015-16	2017-18	Total	2016-17	2017-18	Total
1	2	3	4	5	6	7	8
1	Srikakulam	2176	7598	9774	636	260	896
2	Vizianagaram	4712	7677	12389	436	116	552
3	Vishakapatnam	9118	52719	61837	1133	2033	3166
4	East Godavari	19242	12982	32224		96	96
5	West Godavari	22395	22222	44617			
6	Krishna	3312	57178	60490			
7	Guntur	12768	34280	47048			
8	Prakasam	3957	23792	27749			
9	SPS Nellore	14441	43794	58235		32	32
10	YSR	4092	15140	19232			
11	Kurnool	17968	18595	36563			
12	Anantapuramu	3009	47905	50914			
13	Chittoor	2916	17765	20681			
Total		120106	361647	481753	2205	2537	4742

Source: Andhra Pradesh Township & Infrastructure Development Corporation (APTIDCO)

A. 8.21. Component wise progress under IWMP and activities taken up under Natural Resource Management

Sl. No.	Name of the Structure	No. of activities	Expenditure (Rs. Crores)	No. of Beneficiaries
1	Check Dam/ Check Wall (No.)	7857		
2	Percolation Tanks (PTs) / Mini Percolation Tanks (MPTs) (No.)	3890		
3	Repairs to Existing Structures (No.)	5776		
4	Trenches (Kms)	3052		
5	Horticulture (Ha.)	27100		1,41,773
6	Greening of Hillocks (Ha.)	1623		
7	SMC Works (No.)	20252		
8	Threshing floors (No.)	760		
9	Others (No.)	55,313		
Total		125,623	553.59	1,41,773

Source: Rural Development department

A. 8.22 Details of RIGP Primary Sector based Producer Groups-Organisations

S.No	District Name	APRIGP Mandals	Farmer Producer Organizations	Total Villages	Total Producer Groups	Total Members	Total no of Bank Accounts
1	2	3	4	5	6	7	8
1	Srikakulam	11	10	297	1444	16544	1097
1	Vizianagaram	12	13	360	1686	19400	1233
3	Visakhapatnam	14	14	758	1960	24060	1216
4	East Godavari	10	15	380	1265	17089	970
5	West Godavari	8	8	148	920	10192	818
6	Krishna	8	7	127	895	10402	761
7	Guntur	10	11	210	1378	15007	961
8	Prakasam	15	17	372	2044	23631	1399
9	SPS.Nellore	11	10	274	1204	13915	977
10	YSR	10	11	193	1309	14303	834
11	Kurnool	17	17	304	2095	23109	1554
12	Anantapuramu	12	15	309	1962	22368	1391
13	Chittoor	12	13	329	1618	18337	1453
Total		150	161	4061	19780	228357	14664

Source: SERP - Rural Development department

A 8.23 : NTR Bharosa - Category wise Pensions distributed up to Oct 2017

(Number)

S. No	District	Old Age	Weavers	Disabled (>80)	Disabled (<80)	Widow	Toddy Tappers	ART Pensions	Grand Total
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	144596	4517	8424	24252	108979	784	2101	293653
2	Vizianagaram	123220	2624	15449	22267	102288	1237	2154	269239
3	Visakhapatnam	154209	2589	13244	27570	143548	1264	3115	345539
4	East Godavari	232390	9395	25498	38659	192698	3953	4744	507337
5	West Godavari	188773	3783	26417	21442	124040	2479	3220	370154
6	Krishna	150065	5606	24208	26653	149115	3169	2825	361641
7	Guntur	188913	7418	20649	24179	145894	1067	4477	392597
8	Prakasam	160205	7216	14139	21261	111451	190	3480	317942
9	SPS Nellore	115073	4974	9414	22149	105301	1182	2265	260358
11	YSR	127386	10083	11515	22314	91188	131	1116	263733
13	Kurnool	146431	3914	22156	21012	138537	220	182	332452
12	Ananthapuramu	202666	15530	17564	40822	133938	268	2910	413698
10	Chittoor	204373	6633	18575	31147	148062	455	2090	411335
Total		2138300	84282	227252	343727	1695039	16399	34679	4539678

Source: SERP - Rural Development department

A 9.1 : Poverty in Andhra Pradesh** and All India

Year	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Percentage of People below Poverty Line						
1973-74#	48.41	50.61	48.86	56.44	49.01	54.88
1977-78#	38.11	42.55	39.31	53.07	45.24	51.32
1983#	26.53	36.30	28.91	45.65	40.79	44.48
1987-88#	20.92	40.11	25.86	39.09	38.20	38.86
1993-94#	15.92	38.33	22.19	37.27	32.36	35.97
2004-05#	11.20	28.00	15.80	23.30	25.70	27.50
1993-94*	48.10	35.20	44.60	50.10	31.80	45.30
2004-05*	32.30	23.40	29.90	41.80	25.70	37.20
2009-10*	22.80	17.70	21.10	33.80	20.90	29.80
2011-12*	10.96	5.81	9.20	25.70	13.70	21.92

Year	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Number of People below Poverty Line						(Lakh)
1973-74#	178.21	47.48	225.69	2612.90	600.46	3213.36
1977-78#	149.13	48.41	197.54	2642.47	646.48	3288.95
1983#	114.34	50.24	164.58	2519.57	709.40	3228.97
1987-88#	96.38	64.05	160.43	2318.80	751.69	3070.49
1993-94#	79.49	74.47	153.97	2440.31	763.37	3203.68
2004-05*	187.07	51.33	238.80	3266.63	807.59	4076.10
2009-10*	127.90	48.70	176.60	2782.10	764.70	3546.80
2011-12*	61.80	16.98	78.78	2166.58	531.25	2697.83

Source: Planning Commission, Government of India.

Note: * As per Tendulkar Committee report #As per Lakadawala Methodology Report

**For united Andhra Pradesh

A 9.2 : Labour Force Participation Rates per 1000 Population

(Current daily status)

Year	Andhra Pradesh			All India		
	Males	Females	Persons	Males	Females	Persons
1	2	3	4	5	6	7
Rural						
1999-2000	582	387	484	515	220	370
2004-05	586	399	492	531	237	387
2009-10	578	376	477	536	197	371
2011-12	584	375	477	534	180	361
Urban						
1999-2000	517	158	341	528	123	335
2004-05	567	210	388	561	150	364
2009-10	545	170	363	550	129	350
2011-12	567	166	368	555	136	354

Source: National Sample Survey Office, Government of India.

A 9.3 : Work Force Participation Rates per 1000 Population

(Current daily status)

Year	Andhra Pradesh			All India		
	Males	Females	Persons	Males	Females	Persons
1	2	3	4	5	6	7
Rural						
1999-2000	535	355	445	478	204	344
2004-05	528	350	439	488	216	355
2009-10	536	347	441	501	182	346
2011-12	555	354	452	504	169	340
Urban						
1999-2000	480	144	315	490	111	309
2004-05	523	192	358	519	133	334
2009-10	522	154	343	522	117	329
2011-12	536	150	345	528	125	335

Source: National Sample Survey Office, Government of India.

A 9.4 : Unemployment Rates* on usual Principal and Subsidiary status

NSSO Round	Andhra Pradesh		All India	
	Rural	Urban	Rural	Urban
1	2	3	4	5
50th Round (1993-94)	4	30	12	45
55th Round (1999-2000)	8	39	15	47
61st Round (2004-2005)	7	36	17	45
66th Round (2009-2010)	12	31	16	34
68th Round (2011-12)	12	43	17	34

Source: National Sample Survey Office Reports

Note: Unemployment rate is number of unemployed based on Principal Status + Subsidiary Status (PS+SS) per 1000 population of labour force

A 9.5 : Employment Registrations and Live Register at the end of December, 2017

Sl.No.	Employment Exchanges	Live registrations
1	2	3
1	Srikakulam	60,476
2	Vizianagaram	62,774
3	Visakhapatnam	1,52,497
4	East Godavari	80,399
5	West Godavari	80,117
6	Krishna	73,686
7	Guntur	56,047
8	Prakasam	54,065
9	SPS Nellore	52,299
10	YSR	74,228
11	Kurnool	92,092
12	Anantapuramu	48,970
13	Chittoor	1,02,299
Total		9,89,949

Source: Employment and Training Department