ECONOMIC INFRASTRUCTURE

7 Chapter

Infrastructure Development is critical for economic growth and plays a significant role in setting an enabling platform for sustainable economic development. It includes services such as water, power and electricity, telecommunications, sewage and sanitation, gas, roads, railways, ports, airports which promote commercial activities, production and consumption. Further, financial services such as banking, industrial and commercial development, tourism and entertainment and other segments also contribute the growth process.

A fast growing economy warrants an even faster development of infrastructure. Besides governmental efforts in creating public infrastructure, the role of private sector in the provision of infrastructure through public-private partnerships (PPPs) and exclusive private sector in certain areas such as transport, communications, entertainment etc., hasten up the pace of infrastructure growth.

IRRIGATION

Irrigation development as well as its management is of utmost importance in the State. Andhra Pradesh is rightly called "A River State" as it is blessed with major river systems like the Godavari, Krishna, Pennar, Vamsadhara and 36 other rivulets. The state's share of dependable flows at 75% dependability from the river systems is estimated at 2764 TMC (Thousand Million Cubic Feet). This breaks up into 1480 TMC from the Godavari River system, 811 TMC (800 TMC + 11 TMC regeneration) from the Krishna, 98 TMC from the Pennar and the rest from other rivers.

The entire dependable water share of Krishna River is fully harnessed through construction of several reservoirs and barrages. The yield from Godavari River is being utilized to an extent of 720 TMC for existing projects with the surplus flows aggregating to an average of 4000 TMC flowing un-utilized into the sea. The total utilization of river yields only for the existing projects works out to 1765 TMC showing that there is a vast scope for tapping water resources and creation of irrigation potential.

During pre-plan period, construction of major anicuts on Krishna, Godavari and Pennar rivers and medium projects under irrigation sector had created ayacut of 66.77 lakh acres. The Details of these projects are shown in table 7.1.

Table 7.1 : Schemes & Ayacut - Pre plan period

Project	Schemes (Nos.)	Ayacut (lakh acres)
Major	11	30.96
Medium	45	1.93
Minor	12,351	33.88

Source: Irrigation & Command Area Developement Department.

Five year plans initiated since independence and increasing investment in irrigation sector has led to agricultural growth. Major Projects such as K.C. Canal, Kaddam, TBP HLC Stage-I & Rojalibanda Diversion Scheme and Godavari Barrage and Prakasam Barrage have been constructed in place of the age old anicuts on Godavari & Krishna Rivers. About 94 Major and Medium Irrigation projects were completed during the 1st to 11th plan and an amount of Rs.98,765.17 Crore spent from Plan I to up to October 2012.

Projects like Nagarjuna Sagar, Sriram Sagar, Telugu Ganga, Somasila, SRBC, SLBC, Vamsadhara along with medium and minor schemes that were also taken up during the plan period are at various stages of completion.

During 2004, the Government initiated measures for fully utilizing available yields of Godavari and other rivers and initiated a historical beginning named 'Jalayagnam' with the aim to complete ongoing and new projects in a record time and provide immediate irrigation to water starving segments on top priority by mobilizing funds from all possible sources.

Presently, 86 projects (44 Major + 30 Medium + 4 Flood Banks + 8 Modernisation) are being considered under Jalayagnam. The completion of the above projects, will create new irrigation potential of 97.069 lakh acres and stabilize 22.54 lakh acres. During 2004-05 to 2012-13

(up to Sep.12), 14 projects were completed and water released for 23 more projects creating partial irrigation potential. Remaining projects are programmed to be completed in a time bound and planned manner.

From 2004-05 to 2012-13, 21.43 lakh acres of irrigation potential (17.47 lakh acres new and 3.96 lakh acres stabilization) was created under Major and Medium irrigation projects. 8.25 lakh acres of irrigation potential was created under Minor irrigation sources and APSIDC irrigation projects.

29.68 lakh acres of new Irrigation potential created from 2004-05 to 2012-13 (up to September-2012) including 3.96 lakh acres stabilized under Major, Medium, Minor and APSIDC.

Financial assistance from World Bank, JBIC, NABARD and from Govt. of India under AIBP is being obtained and the works are in progress for the early completion of ongoing projects. Most of the sites suitable for gravity irrigation schemes have already been exhausted and upland areas which cannot be commanded by gravity flows are planned to be developed under Major Lift Irrigation schemes. In view of the above, the Government has programmed the following special lift irrigation schemes:

Dr. B.R. Ambedkar Pranahitha - Chevella Sujala Sravanthi, a mega Irrigation project was taken up with a cost of Rs.38,500 Crore for diverting 160 TMC of water from river Pranahitha, a tributary of river Godavari, and it is in progress. This will create a new ayacut of about 16.40 lakh acres in Adilabad, Karimnagar, Warangal, Nizamabad, Medak, Nalgonda and Ranga Reddy districts along with providing drinking water facilities for enroute villages and to the industrial needs of Hyderabad.

A. Mahatma Jyothi Rao Pule Dummugudem Nagarjuna Sagar Tail Pond is contemplated to lift 165 TMC of water from River Godavari during flood season from Dummugudem Anicut upstream and carry it to Nagarjuna sagar Project Tail Pond to supplement irrigation under Nagarjuna Sagar Project with a cost of Rs.19521.42 crore.

B. Chinthalapudi Lift Irrigation scheme has been taken up to irrigate 2 lakh acres in upland areas of West Godavari and Krishna districts with a cost of Rs.1701 Crore and is under progress.

C. Babu Jagjeevan Ram Uttarandhra Sujala Sravanthi Project is being taken up with a cost of Rs.7214 Crore to create an ayacut of 8 lakh acres in the upland areas of Srikakulam, Vijayanagaram and Visakhapatnam districts.

D. The Government accorded administrative approval to P.V. Narasimha Rao Kanthanapally Sujala Sravanthi, Phase-I at an estimated cost of Rs. 10,409 Crore for construction of barrage across River Godavari and lifting of 50 TMC of water and dropping it into existing Kakatiya Canal to supplement 7.50 lakh acres of SRSP Stage-I (tail end ayacut) and Stage-II in three districts viz., Warangal, Nalgonda and Khammam. The work is yet to be taken up.

Modernization of Delta Systems

Modernization of Delta Systems and other projects has been taken up with a cost of Rs. 15001.45 crore. The break up consists of modernization of Godavari Delta with Rs. 3361 Crore, Krishna Delta with Rs. 4573 Crore, Pennar Delta with Rs. 1001.73 Crore, Nagarjuna Sagar project with Rs. 4444.41 Crore, TBP HLC & LLC with Rs. 794.12 Crore, Nizam Sagar Project with Rs. 549.60 Crore, Yeleru Delta System with Rs. 138.00 Crore and Nagavali System with Rs. 139.59 Crore. In addition the above, improvements to Flood banks of Vamsadhara, Nagavali, Godavari, Krishna, Hundri, Penna, Kandaleru etc., were taken up with a cost of Rs. 231.76 Crore.

Accelerated Irrigation Benefit Programme

The Government of India initiated assistance under AIBP to complete ongoing Major and Medium Irrigation projects taken up with Central Water Commission and Planning Commission since 1996 – 97 to create Irrigation Potential at optimum cost, based on the guidelines issued from time to time. Since 1996-97, 33 Projects (17 Major and 16 Medium) were included under AIBP with a target of creating Irrigation potential of 14.786 lakh Ha. Out of the 33 Major and Medium Irrigation Projects covered under AIBP, 11 Projects were taken up before 2004-05 and 22 projects were taken up after 2004-05. Out of 22 Projects, 15 Projects are covered under Prime Ministers Relief Package (PMRP) and the balance 7 projects are covered under Normal AIBP. Out of the above, 12 Projects (7 Major and 5 Medium) were completed and one Project dropped and the balance of 20 Projects progressing under AIBP. An Irrigation Potential of 5.966 lakh ha was created up to Sep2012 under AIBP.

Minor Irrigation Sector

About 78,000 tanks are serving an ayacut of 46.50 lakh acres including the 66,000 tanks transferred from Panchayat Raj Department with an ayacut of 14.70 lakh

acres under Minor Irrigation. Rehabilitation of small tanks has been taken up at a cost of Rs.167 Crore.

Financial assistance from World Bank, JBIC, NABARD, AIBP and Normal State plan is being obtained for A.P Community based Tank Management Project. Proposals for creating additional ayacut of 3.00 lakh acres is having contemplated under various schemes in the coming 3 years.

The Government of India sanctioned 61 schemes at a cost of Rs. 168.72 Crore to create new ayacut of 56,640 acres in Tribal and Drought Prone Areas under AIBP with most of the scheme nearing completion. The Scheme involves funding of (2:1) from centre and state with a 90% central share grant component.

Rehabilitation of 260 Minor Irrigation (MI) schemes was taken up under RRR, phase I to stabilize 0.72 lakh acres of ayacut at a cost of Rs 45.1 crore. Under phase II of RRR 1029 tanks were sanctioned by Government of India for stabilizing 2.66 lakh acres of ayacut at a cost of Rs.340 crore

Rehabilitation of Minor Irrigation schemes sanctioned under World Bank assisted by Andhra Pradesh Community Based Tank Management Project (APCBTMP) are in progress. The scheme is intended to improve 2157 Tanks at a total project cost of Rs. 1044.00 Crore to stabilize 15.37 Lakh Ha of ayacut. The scheme is in progress and about 2100 works have been grounded and 1189 works completed.

Building up of Scientific Database for Hydrology

Hydrology Project Phase-I at a cost of Rs.21.03 crore was taken up for measurement validation, transfer and dissemination of Hydrological, Hydro meterological and Water Quality Data for formulation of Irrigation Projects, Drinking water, Industrial and Power Projects and to establish computerized data base network. Under this programme, 77 Gauge Discharge sites on various minor streams and 40 Digital water level recorders at various reservoirs were established. Further 208 Standard Rain Gauge stations, 80 Auto Graphic Standard Rain Gauge stations, 8 Full Climatic Stations, 15 Water Quality Level-I and Water Quality Level-II Labs were also established.

The World Bank has approved the Hydrology Project Phase-II under IBRD loan No.4749 in A.P as one of the implementing agencies among 13 States and 8 Central Departments in the Country this phase was commenced in April 2006. The project will expand development of a comprehensive Hydrological Information System and implement activities for improving planning and development of Water Resources. The cost of the project is Rs.7.0032 crore which was restricted to Rs.6.81 crore during Mid-Term Review by the World Bank. The project cost has been revised to Rs 8.83 crore by providing additional funds for upgrading existing networks with Real Time Telemetry System.

Hydrological Data Users Group

Hydrological Data User Groups (HDUG) at State Level and District Level were formed to assess Hydrological Information Needs (HIN) of Data Users. So far, 6 State Level HDUG meetings, 19 District Level HDUG meetings and 44 Awareness Raising Workshops were conducted to create awareness among data users and to asses the needs. Mass events like exhibitions, school visiting are also being conducted as part of the awareness programmes.

Trainings

Capacity building is being strengthened by imparting training to the staff of Hydrology Project in subjects like Hydrology, Procurement, GIS, and Computers etc.

Decision Support System

SRSP system in Middle Godavari Basin was chosen for development of Decision Support System (DSS) for SW planning as part of HP-II in AP. NIH, Roorkee, is the Nodal agency and DHI, Denmark is the consultant for development of DSS(P). A generic model developed by the consultant using Mike Basin software is being customized to the requirements of SRSP system.NIH is in the process of reviewing the work of consultants and final view is being established through DSS (P) in collaboration with SRSP officials and consultants.

Purpose Driven Studies

Purpose Driven Studies (PDS) in Reservoir Sedimentation Studies for SRSP, Kadem, Jurala and Nizam Sagar are being taken up through APERL, Hyderabad at a cost of Rs 60.50 Lakh. Sedimentation Analysis of Priyadarshani Jurala Project was completed and the report is under finalization.

Hydrological Design Aids

Hydrological Design Aids (HDA) are being developed under hydrology project to assist the preparation of detailed project reports by providing a set of tools that allows estimation of key hydrological values in gauged and un-gauged catchments. The Hydrological design Aids are useful for planning / designing of water resources projects. The development work of HDA software commenced in December 2009 and is being carried out through a consultant. The HAD (SW) has the following three major components.

- Assessment of water resources potential-availability/ yield assessment.
- Estimation of design flood ;and
- Sediment rate estimation

HDAs are being developed to overcome limitations of current design practices and to standardize these practices for uniform use all over the country. This software will incorporate all approaches currently being followed in India (Hydro-metrological statistics and regions) up-to date and also utilize internationally used methodologies. The following projects are executed in Command Area Development Authority to improve the capacity of Irrigation systems.

Andhra Pradesh Irrigation Livelihood Implementation Project

55 new minor irrigation Tanks in 48 surplus river basins with an estimation of Rs. 257.79 crore to create new irrigation potential of 0.42 lakh acres are proposed under the Andhra Pradesh Irrigation Livelihood Implementation Project (APILIP). Out of 55 minor irrigation tanks, 10 are completed 37 are in progress and remaining 8 are to be grounded. The expenditure incurred up to September, 2012 for creation of new infrastructure was Rs. 112.71 crore.

The development of Irrigation potential and its utilization is given in Annexure 7.1.

Minor Irrigation Census

As per the 4th Minor Irrigation Census, there were 23.06 lakh minor irrigation sources in Andhra Pradesh in 2006-07 as against 20.36 lakh sources as per 3rd Minor Irrigation Census 2000-01, registering an increase of 13.28%. The statement showing data on Minor Irrigation sources from 1986-87 to 2006-07 is given in Annexure-7.2.

GROUND WATER

Groundwater is one of the major sources of drinking water in both urban and rural areas. Besides, it is an important source of water for agricultural and industrial sector. Being an important and integral part of the hydrological cycle, its availability depends on rainfall and recharge conditions.

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 irrigation of 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 (1987) calls for controls on exploitation of groundwater through regulation and an integrated and coordinated development of surface-and groundwater.

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 improved network of piezometers with Automatic Water Level Recorders.
- Conjunctive use studies in selected major command areas
- Special studies for evaluating groundwater regime through modern tools like, aerial photographs, satellite imagery, Geographical Information System etc., in relation to development and management activities under various programs.

From 2009-10 onwards, the department shifted its focus

to management by adopting Community Based Ground Water Management (CBGWM).

Estimation of Groundwater Resources

The state has been divided into 1229 watersheds (which are also called groundwater basins or assessment units) for estimation of groundwater resources. The last estimation was done in 2010-11 with 2008-09 data base. Categorization of watersheds/ mandals/ villages is made based on stage of ground water development. Details of the categorization of ground water development are shown in table 7.2.

Table 7.2 : Ground Water Development

% of stage of development (extraction) of ground water	Category
More than 100%	Over Exploited
90% to 100%	Critical
70% to 90%	Semi-critical
Less than 70%	Safe

Source: Ground Water Department.

As per the estimation, ground water development is shown in Table 7.3.

Table 7.3 : Ground Water Development

Category	Watersheds	Mandals
Over Exploited	94	84
Critical	49	26
Semi-critical	102	93
Safe	984	905
Total	1229	1108

Source: Ground Water Department.

Further, 2123 villages have been identified as over exploited for the purpose of notification under Andhra Pradesh Water, Land and Trees Act (AP WALTA), where further exploitation of ground water is banned except for drinking water purpose.

In terms of quantity, the total groundwater availability in the state is 30,761 MCM out of which 14,145 MCM is utilized for various purposes leaving a balance of 16,616 MCM. The overall stage of ground water development is about 46%. The stage of ground water development in command areas which constitutes about 23% of the state's area is 30% and the stage of groundwater development in non-command areas is 57%. The groundwater resources for the base year 2010-11 have been re-estimated, submitted and awaiting approval from Government of India.

Groundwater 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. A break point will be reached where the number of wells will increase and the power consumed will also increase considerably even as groundwater exploitation and total area irrigated through groundwater remain constant. At present, on an average, about 1.2 hectares is irrigated per well and on an average a total of 50,000 wells are commissioned per year due to which the average unit area irrigated per well may decrease. The irrigation potential created under groundwater during 2010-11, is 22.84 lakh hectares. At present, the well population is more than 25 Lakh (mostly bore wells) with the area irrigated under groundwater for the year 2009-10 being 33.43 lakh hectares and 36.72 lakh hectares in 2010-11. If micro irrigation practices are adopted, irrigation potential through groundwater can reach to a level of 46 lakh hectares.

Investigations

The Ground Water Department investigated 17,045 sites under various programmes for selection of Well Sites, Lift Irrigation, and Artificial Recharge Structures etc during the year 2011-12. A total of about 13,124 beneficiaries were covered and about 15,414 hectares of land stabilized or new areas brought under irrigation. Out of the above, about 2962 Scheduled Castes and 1528 Scheduled Tribe beneficiaries were covered under Special Component Sub-plan and Tribal Sub-Plan programmes. An area of about 2429 hectares for Scheduled Castes and about 1704 hectares for Scheduled Tribes were either stabilized or new areas brought under irrigation. An area of about 10354 hectares was covered benefiting about 8291 farmers under CLDP and APWALTA.

Investigations were also carried out in 1006 sites for selection of well sites for Industries under environmental clearance and drinking water in addition to the above. About 1076 sites were investigated under Lift Irrigation and Artificial Recharge Structures.

During the year 2012-13 (up to November, 2012) the Ground Water Department investigated 11,863 sites under various programmes for selection of Well Sites, Lift Irrigation, Artificial Recharge Structures etc A total

of about 9,088 beneficiaries were covered and about 8,771 hectares of land was either stabilized or new areas brought under irrigation. Out of the above, about 1260 Scheduled Castes and 918 Scheduled Tribe beneficiaries were covered under Special Component Sub-plan and Tribal Sub-plan programmes. An area of about 1,213 hectares for Scheduled Castes and about 749 hectares for Scheduled Tribes were either stabilized or new areas were brought under irrigation. An area of about 6,557 hectares was covered benefiting about 5,921 farmers under CLDP and APWALTA.

In addition to the above, investigations were also carried out in 780 sites for selection of well sites for Industries under environmental clearance and for drinking water. 1,029 sites were investigated under Lift Irrigation and Artificial Recharge Structures.

Monitoring of Ground Water Levels

A net rise in the groundwater level to an extent of 3.99 m. was recorded in the State over the pre-monsoon (May, 2012) ground water level in 2012-13(up to November, 2012). Coastal Andhra region recorded a net rise of 4.35 m, Rayalaseema region recorded a net rise of 1.70 m. and the Telangana region recorded a net rise of 4.65 m. over May, 2012 ground water level.

There was a net rise in the level of ground water to an extent of 0.29 m. in the State against the same period in the previous year (November, 2011) groundwater level in November, 2012. Coastal Andhra region recorded a net rise of 1.50m. Rayalaseema region recorded a net fall of 2.42m and Telangana region recorded a net rise of 0.29m.

Monitoring of Water Quality

The department collects water samples during pre-monsoon [May] and post-monsoon [November] from all monitoring network wells and also wherever necessary during investigations. These water samples were analyzed in the 6 Chemical Laboratories of the department. The department analysed 10,525 water samples against the target of 8,106 during 2011-12. 9,124 water samples were analyzed against the target of 8,539 during 2012-13 (up to November, 2012).

Drilling

Out of the annual target of 302 bore/tube wells under drilling, 319 bore/tube wells were constructed in 2011-12. 187 wells under SCSP and 105 wells under TSP were constructed to provide irrigation to Scheduled Caste and Scheduled Tribe beneficiaries. Out of the annual target of 300 wells for 2012-13 under drilling, 245 wells have been constructed up to November, 2012.

Command Area Development

The Department takes up studies under five major project commands viz., Nagarjunasagar Right Canal Command, Nagarjunasagar Left Canal Command, Sriramsagar Project Command, Srisailaram Right Branch Canal Command, Tungabhadra Project Complex Command area to:

- Delineate areas already water logged and prone to water logging
- Recommend conjunctive use of both surface and ground water
- Suggest other suitable remedial measures to improve productivity

Dissemination of Data

Data is being disseminated to various Government organizations, Research institutes, Universities NGO's and above all to each and every village as per their need. The status on Groundwater level is being disseminated to District administration, as well as all water related departments for planning purpose.

Rain Water Harvesting for Artificial Recharge

Simple low cost methods are suggested to collect and store runoff water from roof tops of buildings, road surfaces, municipal parks, school play grounds, stadiums, air ports etc, in recharge pits for artificial recharge. Such measures help in reducing urban runoff, decrease pollution of groundwater and increase groundwater recharge augmenting yields of wells. Water spreading, recharge through pits, trenches, wells, shafts and directly diverting runoff water into the existing wells are few suggested methods for recharging.

World Bank Assisted Projects

Hydrology Project Phase– II: World Bank Assisted Hydrology Project Phase-II is a sequel to Hydrology Project-I, focused on building and expanding development of a comprehensive Hydrological Information System (HIS), for improving access and use by user departments, civil society and other data users

in the sector. This is proposed to intensify HIS and lead to effective and efficient water resources planning and management.

Andhra Pradesh Community Based Tank Management Project

Participatory Groundwater Management aims at empowering groundwater users in the tank influence zone to wisely manage dynamic groundwater resources. Participatory Groundwater Management comprises five major activities

- capacity building of stakeholders
- Participatory Hydrological Monitoring (PHM)
- Water audit and crop water budgeting
- Crop planning and
- Crop adoption

Under this component a total of 314 tanks were selected for Participatory Groundwater Management activities falling in 13 districts, covering 146 Mandals in 161 assessment units. The activities cover installation of PHM equipments including rain gauges, drilling of piezometers, trainings, data analysis and dissemination etc.

Andhra Pradesh Water Sector Improvement Project

There is a need to develop a new groundwater management model that recognizes limitations of existing management system by individuals and recommends an aquifer level groundwater management by the community.

Under the above project two pilot projects, a) User Centered Aquifer Level Groundwater Management Pilot and b) Conjunctive use of surface and groundwater pilot were undertaken by the department.

POWER

The Andhra Pradesh State Electricity Board (APSEB), was formed in 1959. The APSEB was restructured into two functionally distinct corporations viz., APGENCO & APTRANSCO in 1999. Distribution business was segregated from APTRANSCO by the formation of four distribution companies w.e.f. 01-04-2000. Trading activities were entrusted to four Dis-coms w.e.f. 09.06.2005 in compliance with Electricity Act, 2003. The installed capacity has increased from 213 Mega Watt (MW) in 1959 15895.30 MW in 2012-13 (upto September,2012); consumers served grew from 2.7 Lakh to 246.06 Lakh, and energy handled per annum increased from 686 MU to 41,165 MU (April'12 to Sep'12). The annual total revenue including non-tariff income from sale of power increased from Rs.5.50 crs to Rs.28188.55 crs. Details about APSEB / APTRANSCO over the last 53 years are shown in Table 7.4.

Table 7.4 : Power Development

Item	1959	2012 (upto Sep.)
Installed Capacity(MW)	213	15895.30
Peak Demand met (MW) (19-03-2012	146	11972
Consumers served (Lakh Nos)	2.7	246.06
Annual Energy Handled (MU)	686	41,165
Agricultural services (Lakh Nos)	0.18	31.07
Annual Revenue including Non-tariff income (Rs Crs.) (excluding subsidy / support from GOAP) (2010-11) actuals	5.50	28,188.55
Per-capita consumption (KWh) (2011-12)	11.5	1050

Source: AP TRANSCO

The Andhra Pradesh Electricity Regulatory Commission (APERC) constituted by Government of Andhra Pradesh, was functioning w.e.f 31st March 1999. APERC has issued annual / multi year Tariff Orders regularly from 2000-01 onwards.

The Government is particularly committed to the welfare of farmers by way of providing free power to all agriculture consumers including all services released.

The Government provided a Tariff subsidy of Rs.5358.67 Crore during the year 2012-13. The Tariff subsidy provided to agricultural sector was Rs 3621.98 Crore and cross subsidy to agricultural sector was Rs.3491.87 Crore.

As per modified policy, farmers having up to 3 connections in dry land and up to 2.5 Acres land holding in wet land are eligible for free power. 95% of the farmers out of 31.07 Lakh Agricultural Services, are

eligible for free power excluding farmers having more than 3 connections in dry land, more than 2.5 Acres land holding in wetland, IT assessees and corporate farmers.

The modified policy proposes incentives to promote energy saving measures. Incentivised tariff is proposed for those who adopt DSM measures viz., installation of capacitors & Frictionless foot valves by March 2006, ISI pumpsets and HDPE / RPVC pipes by March 2008.

It is programmed to release 1,50,000 new agricultural connections in 2012-13. So far, 45,151 agricultural services were released during 2012-13 up to 30.09.2012. There are four Major Lift Irrigation schemes, 710 medium Lift Irrigation schemes at 33kV and 11kV supply and 2,217 minor Lift Irrigation schemes at LT supply existing as on 31.12.2012.

Restructured-Accelerated Power Development and Reforms Programme

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.

Projects Under this Scheme

Part-A

This includes projects for establishing of baseline data and IT applications for energy accounting/ auditing & IT based consumer service centers. An amount of Rs.389 Crore was sanctioned to cover 113 towns within three years from the date of sanction of the project.

Progress of Works

- Data Center (DC) at Hyderabad and Disaster Recovery (DR) center at Tirupathi have been established with all servers and set up
- Differential Global Positioning System (DGPS) Survey of consumers/ asset mapping was approved for 101 towns out of 113 towns covering 54.49 lakh consumers out of a total 70.04 lakh consumers
- Customer care centres have been established in all the DISCOM head quarters and integrated with Data centre
- M/s TCS has developed the software for 14 modules. User Acceptance Test (UAT) was demonstrated to DISCOMs. Gaps identified by DISCOMs are being attended to by ITIA.
- Meter, Billing, Collection (MBC) application (for SPDCL and NPDCL only) is in advanced stage of development. DISCOMs have suggested certain requirements with regard to BBA ledger and Batch processing which are attended by ITIA. It is planned to be rolled out for Punganur town of SPDCL by 12.10.12 and for Jangaon town of NPDCL by 30.10.12.
- 35 towns (13 in EPDCL, 13 in SPDCL, 5 in APCPDCL, and 4 in NPDCL) were integrated with Data centre as on 8.6.2012.
- Meters and Modems were installed to DTRs, feeders and HT consumers in 88 out of 113 Towns.
- MDAS data ranging from 60% to 90% is being received under Meter data acquisition system. All steps are taken by DISCOMs and ITIA for resolving modem/meter and SIM/connectivity issues to improve data connectivity.
- System generated Energy Audit of 2 towns viz., Gooty and Uravakonda (CPDCL) were demonstrated to PFC officials on 31.7.12. Variation in DTR losses are analysed by ITIA, DISCOM and Modem manufacturer.
- Mapping of consumers is being re-verified at field level and end user training taken up. Enhanced modem firm ware is being loaded and all steps are taken by CPDCL for getting energy audit reports of 21 towns planned for Go-LIVE by 13.10.2012
- In EPDCL, the MRI dumps for Feeders and HT meters were furnished to M/s TCS for generating the Energy audit reports of 13 towns planned for Go-LIVE by 15.10.2012
- Government of Andhra Pradesh has requested the Ministry of Power for extension of time limit up to 31-05-2013 i.e 3 years from date of agreement.
- An expenditure of Rs 201.29 Crs has been incurred by the DISCOMs under part-A for IT, Bandwidth and ring fencing metering up to 30.9.2012.

The details of R-APDRP are shown in Table 7.5.

Table 7.5 Restructured-Accelerated Power Development and Reforms Programme

DISCOM	No. of Towns	Amount Sanctioned (Rs. Crs)	Amount Released (Rs. Crs)
EPDCL	29	61.45	18.20
SPDCL	32	107.83	32.35
CPDCL	30	175.03	52.53
NPDCL	22	44.50	13.35
Total	**113**	**388.81**	**116.43**

Source: AP TRANSCO

Part–B: This includes regular distribution strengthening projects such as renovation, modernization and strengthening of 11KV level Substations, Transformers/ Transformer centers, Re-conductoring 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 works of separation of agricultural feeders from domestic and industrial ones and of High Voltage Distribution System (11KV) will also be taken up in certain high-load density rural areas with significant loads.

- DISCOMs have been awarded for 40 out of 42 towns (including 10 towns >20% AT&C) for which the AT&C losses have been validated and approved. An amount of Rs. 1056.59 crore is sanctioned for part - B works in 42 towns of Andhra Pradesh.
- Third Party Independent Evaluation Agency (TPIEA) validated AT&C losses for 84 towns out of 113 towns are approved by PFC.
- Balance towns will be awarded after approval of AT&C loss by TPIEA/PFC

An amount of Rs. 116.81 crore was sanctioned for taking up SCADA/DMS in 5 towns of Andhra Pradesh.

Rajiv Gandhi Grameen Vidyutikaran Yojna

The Government of India introduced Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) programme in the year 2005 with an aim to provide access to electricity to all households in the country.

The State of Andhra Pradesh stood first in implementation of RGGVY with the electrification of 27.02 lakh BPL rural households (104.30%) against the target of 25.92 lakh BPL Rural House Holds (RHH). This contributes to 14.13% overall progress of 191.17 lakh BPL rural households electrified across the country.

Restructuring of RGGVY For 12th Plan

The Government of Andhra Pradesh has urged the Government of India to continue implementation of the restructured RGGVY programme in the 12th Plan with a similar funding pattern of 90:10 cost sharing between Central & State Governments which was adopted during 10th and 11th Plans. The scope of the scheme for restructured RGGVY for 12th Plan may be extended to cover productive loads of agriculture & non-agriculture in rural areas besides household electrification as priority has already been given for household electrification under RGGVY during 10th & 11th Plans.

APDISCOMs and RESCOs have submitted Detailed Project Reports(DPRs) to REC, New Delhi to arrange sanction for electrification of 14,309 habitations and 39,54,128 rural households in 22 districts (except Hyderabad urban district) at an estimated cost of Rs.898.81 crore under RGGVY programme with appropriate revisions as and when required.

The outlay of Rajiv Gandhi Grameena Vidyutikaran Yojana (RGGVY) is Rs.887.40 crore for four APDISCOMs and four RESCOs for electrification of 14,309 un-electrified habitations and 39,54,128 rural households including 25,92,140 BPL RHH.

Under RGGVY programme, 13,896 un-electrified habitations and 33,37,005 rural households including 27,02,652 BPL RHHs, were electrified up to the end of the Sep-2012.

DISCOMs and RESCOs have incurred an expenditure of Rs. 893.24 crore. REC has released an amount of Rs. 779.82 crore up to Sep, 2012 27,481 villages were identified for intensive electrification works, of which works have been completed in 25,629 villages up to the end of the September 2012 under RGGVY Programme.

Electrification of "INDIRAMMA" New Housing Colonies During 2011-12 & 2012-13.

Government of Andhra Pradesh has launched "INDIRAMMA" (Integrated Novel Development in Rural Areas and Model Municipal Areas) scheme from 1st April 2006 for achieving 100% saturation in Model

Villages in each district as identified by the District Administration.

Electrification of new housing colonies under INDIRAMMA housing programme, is being carried out based on the requirements furnished by the Housing Corporation as a part of layouts development and on payment of estimate costs by Andhra Pradesh State Housing Corporation Limited (APSHCL) through respective Project Directors (PD)/Housing at District Level.

Housing Corporation furnished the list of 2381 new housing colonies identified to be electrified in 2011-12 & 2012-13.

Detailed estimates of 2189 new housing colonies, have been prepared by DISCOMs in consultation with local officials of Housing Department and submitted to Project Director(Housing) for payment of estimated charges for an amount of Rs 8630.42 Lakh towards electrification up to Sep,2012.

Project Directors (Housing) have paid an amount of Rs. 4207.90 Lakh as development charges of 1194 new housing colonies up to Sep, 2012. Out of the above, 842 new housing colonies have already been electrified and works are under progress in 352 new housing colonies. Estimates are under preparation in 192 new housing colonies.

New housing colonies are being electrified on priority on payment of developmental charges by concerned Project Director (Housing)

High Voltage Distribution System

High Voltage Distribution System (HVDS) was introduced in the State to reduce loss through replacement of low voltage network with High Voltage and installation of large number of smaller capacity 11 kV / 400 V transformers viz., 25/16 kVA for supply to agricultural consumers.

The system loss reduction due to adoption of HVDS system is expected to be around 10% according to a sample study carried out in Andhra Pradesh.

The benefits on implementation of HVDS are:

- Loss Reduction
- Prevention of un-authorized agricultural Services
- Improvement in pump-set efficiency
- Reduction in Distribution Transformer (DTR) failure

HVDS was implemented in 7,13,852 agricultural services up to 31-03-2012 with a cost of Rs.2324.11 crore. In addition to the above, during the year 2012-13, HVDS was implemented to 10,879 agricultural services up to 30-09-2012 with a cost of Rs 45.37 crore, bringing the total number of agricultural services under HVDS to 7,24,731 with a total cost of Rs 2369.48 crore.

APRHVDSP – Implementation of HVDS under JICA funding

JICA loan assistance is to an extent of 85% of the project cost of Rs 988.80 Crore where the total project cost is Rs.1154.80 Crore, on ODA package at concession rate of interest of 0.65%. The repayment period is 40 years (including grace period of 10 years). Power Sector is one of the priority sectors for Japanese ODA Loans. The project implementation period is 5 years from 2011-12 to 2015-16.

Proposed Project activities

APRHVDS Project is to implement the HVDS scheme in 3 DISCOMs to cover 2,43,154 agricultural services in 16 districts of Andhra Pradesh.

The Project would be implemented through the following 3 DISCOMs in Andhra Pradesh

- Southern Power Distribution Company Ltd., (SPDCL), Tirupathi
- Central Power Distribution Company Ltd., (CPDCL), Hyderabad
- Northern Power Distribution Company Ltd., (NPDCL), Warangal

APTRANSCO will be the Monitoring Agency for the project.

Loan Repayment System

APSPDCL, APCPDCL and APNPDCL DISCOMs will repay the loan amount through the benefits accrued by implementation of this project.

APSPDCL, APCPDCL and APNPDCL DISCOMs 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.

Status

The final approval for the bid document was received from JICA in the month of July 2012. The process of engaging the Project Consultant as required under JICA funding, is under progress. The tendering process for works contract is under progress.

Generation Progress

A. Solar Photovoltaic Power Project at Jurala HEP(1MW)

This project was proposed under Jawaharlal Nehru National Solar Mission (JNNSM). The registration of the project with the programme administrator M/s IREDA was completed and confirmation for Generation Based Incentive (GBI) received and the project was commissioned on 10-01-2012.

B. Nagarjuna Sagar Tail Pond Dam Power House (2x25 MW)

The Construction of Power House, Tail Race Channel is completed. Works like Hydro mechanical works & River training walls are under progress. Two units are programmed for commissioning by Mar-13.

C. Lower Jurala HEP (6x40 MW)

Electrical & Mechanical works, BOP Works and Switch Yard works are under progress. Laying of earth mat was completed. 96% of civil works are completed. The 1st and 2nd units are sanctioned for commissioning by March-2013 and the balance four units in three months interval thereafter.

D. Pulichinthala HES (4x30 MW)

The works of laying of earth-mat for all four units, unloading bay and service bay were completed and erection of Pier nose & embedding of Penstock/ Spiral drain pipe in concrete was completed for all four units. Other Works like laying of top cover drain pipe, embedment of cooling water pipe and draft tube liner erection works are in progress.

Controlling of Commercial losses

A special ordinance amending the Electricity Laws as Indian Electricity (AP amendment) Ordinance, 2000 was promulgated and the bill was passed in the Legislative Assembly in September, 2000 and made effective from 31st July 2000 to bring down commercial losses due to theft and malpractice.

After enactment of the above Act, 12,74,480 cases were booked up to September 2012 and 12,144 persons arrested. Rs 145.33 crore was realized against a penal assessment of Rs.347.18 crore. Rs.119.08 crore were collected during the above period as compounding fees for first offence from 11,54,672 cases that were compounded.

Single phasing arrangement was provided to 9551 rural feeders to provide -

- Proper regulation of hours of supply to agriculture
- Improved voltages for electricity supply in rural areas.

Replacement of Meters

91.89 lakh sluggish / struck-up / burnt out electro mechanical meters were replaced with high quality electronic meters since 2004-05 to 2010-11. 6.70 Lakh defective meters have been replaced during 2012-13 (up to 9/12).

Billing and Collection

Spot billing using hand held computers was introduced covering all the areas i.e., Towns, Municipalities, Mandals and Villages. Monthly spot billing is introduced in all Municipalities.

On-line billing collection facility is available in Hyderabad city and in all towns through 300 e-Seva centers. On-line billing collection facility in rural areas is available through 1313 RSDPs (Rural Service Delivery Points) and also e-Kiosks and AP-online internet centers.

Electricity Consumer Meetings

Meetings with consumers are being held every month at circle and division level. Major issues raised are billing complaints and delay in replacement of DTRs in rural areas.

- Vidyut Adalats are held every week to resolve billing complaints at Mandal Head Quarters.
- Distribution Transformer replacement (DTR) centers increased from 85 to 226 for timely replacement.

IT Initiatives

Various Information Technology (IT) initiatives have been taken up in Distribution Companies (DISCOMs)

to improve performance and bring in transparency & accountability.

- CAT (Consumer Analysis Tool)
- MATS (Monitoring and Tracking System)
- TIMS (Transformer Information Management System)
- PMRS (Performance Monitoring and Reporting System)
- Book Consolidation Module
- Remote Meter Reading (RMR)

Enterprise Resource Planning (ERP) has been implemented in APTRANSCO and DISCOMs. E-Vaaradhi, an electronic method of reaching electricity consumers was introduced in EPDCL for passing messages relating to billing information, power shut down information etc., through SMS.

Management uses these tools very efficiently for improving accountability and productivity of employees and to enhanc transparency.

Awards conferred to APTRANSCO CRISIL Rating

1. As a testimony to the stupendous performance of the State Power Sector during post reform period, AP was rated best in the country for three years (2001-02, 2003-04,2004-05) and stood second, rated next to Delhi, (which covers Metropolitan area only) in 2002-03 by M/s CRISIL. Comfortable financial position, strong regulatory process, sound operating performance of thermal plants, strong support from state government through balance sheet restructuring, quantification of pension liabilities are few of the strengths pointed out by CRISIL.
2. APTRANSCO bagged the Gold Shield for the years 2005-06 & 2006-07 and Silver Shield for the year 2004-05 for Transmission System Availability in the country. The award is constituted by Ministry of Power, GOI.
3. APTRANSCO received the Power Line Magazine's "Experts Choice Award 2006" for "Most Admired Organization in State Sector".
4. APTRANSCO received the India Power Awards 2008 for over all utility performance. The award is constituted by Council of Power Utilities.
5. APTRANSCO secured 2nd prize in IEEMA Power Awards2009 under "Excellence in Power Transmission" category.
6. APTRANSCO received ENERTIA Award 2010 for "Overall Utility Performance".
7. APTRANSCO received India Power Award 2010 for "Overall Utility Performance".
8. APTRANSCO was adjudged Joint winner of prestigious Enertia Awards 2011 under Best Performing Utilities – State category.
9. Recognizing the best efforts of APTRANSCO, Central Electricity Authority (CEA), Ministry of Power (MoP), New Delhi conferred the award of "Gold Shield for the year 2010-11" in the category of "Early completion of Transmission Projects" for the fastest completion of Transmission Project of 400 KV Double Circuit (DC) line from Kothagudem Thermal Power Station (TPS) (Stage - VI) to Khammam Sub-Station in a record time of 17 months as against the CEA norm of 24 months.
10. APTRANSCO has been awarded "National Vigilance Excellence Award" for the year 2011 at all India level among various banks, PSUs and other Ministries for the vigilance activities under preventive vigilance.
11. APTRANSCO took various economic and efficiency measures which include financial closure for its transmission projects over Rs 6,300 crore, arranging direct payments from funding agencies like power finance corporation, rural electrification corporation and various other banks to suppliers and projects contractors and swapping of high interest loans with low interest rates at around 9.8 percent and others. The corporation also achieved record savings of around Rs 180 Crore by introducing cost control measures, optimal inventory control systems and accounting and timely completion of transmission schemes.

Current Scenario

The present installed capacity in the State by the end of September 2012 (including share from central sector) is 15,895.30 MW.

Details of Power Generation and Distribution are given in Annexure 7.3.

To meet the growing demand for power, the Government is constructing projects in the state sector and encouraging private sector to implement gas based and other projects. During 11th five-year plan, 3880.18 MW capacity was added to the system, of which 2164

MW was under State Sector, 261.85 MW under Central sector, 1128.10 MW under private sector and 326.25 MW belonged to Non-Conventional Energy and other projects. It is programmed to add 12,325 MW during 12th five year plan (i.e. 2012-13 to 2016-17), out of which 5490 MW under State sector, 1225 MW under Central sector, 5610 MW under Private Sector including Non-Conventional Energy Sources.

ROADS AND BUILDINGS BUILDINGS

The plinth area of Government Buildings (Both residential and non-residential) in the State increased from 22.80 lakh Sq.feet as on 1.4.1965 to 99.72 lakh Sq. feet as on 31.10.2012. Major works with an estimated cost of Rs.1481.00 Lakh were taken up and completed during 2011-12.

ROADS

Roads are one of the basic modes of transportation system and also an important priority sector of Infrastructure. Systematic development of road 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 trends, social integrity and well being of the society. The productivity and efficiency of Road transport is directly linked with 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 in the State is 70,879 Kms as on 31-10-2012. Of this, the National Highways constitute 4,730 Kms, the State Highways constitute 10,491 Kms and Major District Roads constitute 32,262 Kms and Rural Roads 23,396 Kms. The density with reference to R&B Road Network in the State is 0.23 Kms per one Square Kilometer and 0.86 Kms per 1,000 persons. Details of Surface wise Lane wise details are shown in Table 7.6

Table 7.6 : Status on R&B Roads

LANE WISE in Kms		SURFACE WISE in Kms	
Four Lane	2,880	Cement Concrete	1218
Double Lane	15,336	Black top	65,185
Intermediate Lane	3,769	Metalled	1,688
Single Lane	48, 894	Unmetalled	2,788
TOTAL	**70,879**		**70,879**

State Roads

The State Roads wing of the R&B department constructs and maintains Roads and Bridges to stipulated standard on all 54,095Kms Non- Core net roads and 12,054 Kms Core net roads are under its control, including those taken over from Panchayat Raj department or other Local Bodies. This is done by removing existing deficiencies in the road system such as improvements or widening existing pavements, construction of bridges on un-bridged crossings or construction of missing links and improvements to Geometrics on existing roads for improving road safety provision of all-weather roads and for maintenance of existing roads in good condition.

Repairs and Maintenance of Roads (Non-Plan)

The Roads wing maintains Road Network of 54,095 Km (Non- Core Net roads) out of a total 66,149 km State Roads using grants under non-plan (maintenance).

Ordinary Repairs (Maintenance)

Urgent repairs to roads are taken up under ordinary maintenance works such as patch work, sectioning of berms, jungle clearance, and maintenance of bridges or culverts/CD works. These are meant for routine maintenance of roads. 25% of the non- plan grant under SH and MDR is allocated to ordinary maintenance. The O.R grant is allocated to executive engineers based on the length of roads in their jurisdiction.

Special Repairs

Roads which are ripe for renewal within or beyond renewal cycle of 4 to 5 years are considered for renewal of top BT layers under special repairs program. Every year badly damaged roads which are ripe for renewal are identified and based on the budget allotted, the roads are taken up for special repairs.

Plan Works

Original works other than maintenance of nature works are taken up under Normal State Plan. Works, new road formations, construction of new bridges, widening or strengthening of the existing roads are taken up under this scheme. 329 works costing Rs.1183.80 crore during the year 2012-13, including 87 works towards Centenary celebrations in Chittoor District costing Rs.139.00 crore were sanctioned by the Government. Presently 196 works costing Rs.903.80 crore are in progress, 133 works costing Rs.280.00 crore are at Tender/Estimate Stage (Including 87 was sanctioned for Chittoor district).

Tribal Sub Plan Works

Government has sanctioned 43 works costing Rs. 172.19 crore under the Tribal Sub Plan(TSP). At present, 22 works costing Rs.48.83 crore were completed, 6 works costing Rs.56.62 crore are in progress, 9 works costing Rs.42.10 crore are at tender stage and 6 works costing Rs.24.64 crore are at estimate stage.

Scheduled Caste Sub Plan

The Government has sanctioned 87 works costing Rs. 87.29 Crore under Scheduled Caste Sub Plan. Presently, 38 works costing Rs.34.48 crore were completed, 41 works costing Rs.41.00 crore are in progress, 7 works costing Rs.7.81 Crore are at tender stage and one work costing Rs.1.00 crore is at estimate stage.

Road Safety Engineering Works Scheme

Apart from the above, Road Safety Engineering Works (RSEW) were also sanctioned. At present 57 works costing Rs.15.86 Crore are in progress.

Rural Development Fund

From 2008-09 onwards, Rural Development fund works are taken up in Roads and Buildings department with Agricultural Marketing committee funds to improve connectivity of rural areas and to transport agricultural produce to nearby market yards. Under this scheme improving non BT road to BT standard and construction of Bridge works are taken up.

So far, 822 works costing Rs. 949.74 Crore for a length of 3189 Km + 35 bridges were sanctioned under Rural Development Fund from 2008-09 to 2012-13 (Up to Sep. 2012), and 620 works costing Rs.647.62 Crore for a length of 2382 Km + 18 Bridge were completed. 139 works costing Rs.208.31 Crore are in progress for a length of 615 Km and 15 Bridges. 63 works for a length of 192 Km + 2 Bridge works costing Rs.93.81 crore are at tender /agreement stage.

The expenditure on the APRDF works from 2008-09 till date is Rs.679.10 crore.

Central Road Fund Scheme

A Central Road Fund for improvement of roads is being released by the Government of India as per "The Central Road Fund Act 2000, Act No. 54 of 2000". Under CRF act, Government of India introduced diesel and petrol cess at Rs.1.50 on sale of one litre of Petrol / Diesel. The fund so collected is meant for utilization of

- Development and maintenance of National Highways
- Development of Rural Roads
- Development and maintenance of other State Roads including roads of Inter State Connectivity (ISC) and economic importance (EI)
- Construction of Roads under (or) over Railways by means of a bridge and erection of safety works at unmanned rail – road crossings
- Distribution of such projects as may be prescribed
- Details of status report on CRF,ISC,EI schemes are shown in Table7.7

Table 7.7 : Status of CRF, ISC & EI Schemes

(Rs. in crore)

Works taken up (Nos)	791	1955.16
Works completed (Nos)	789	1951.16
Works in progress (Nos)	2	4.00

Source: Roads & Buildings department

The total expenditure incurred from 2000-01 to 2012-13 was Rs.2136.36 Crs, of which Rs.105.22 Crs was state share and remaining Rs.2031.14 Crs was admissible expenditure incurred. Rs.1562.52 Crs was reimbursed by Government of India and the balance amount of Rs.468.63 Crs. is to be reimbursed.

Railway Safety Works (ROBs/RUBs) Scheme

Road Over / Under Bridges (ROBs/RUBs) are constructed mainly in lieu of busy level crossings (manned) where Train Vehicular Units (TVUs) are more than 1.00 lakh. The constructions are taken up under cost sharing basis with Railways on 50:50 basis as per the norms. Proposals for ROBs/RUBs approved by the Railway Board. As on today 126 ROBs/RUBs under RSW Scheme were approved during the preceding years are at various stages of construction.

Further, as per public representations, 12 ROBs/RUBs are being taken up at LC's having less than 1.00 Lakh PCU's. These works are not shared by Railways and are taken up with100% share from Government of Andhra Pradesh. Details of 138 ROBs/RUBs are shown in Table 7.8

Table 7.8 : Progress under ROBs/RUBs

Description	Cost sharing (50:50)		100% State Share		Total	
Works completed	57	825.33	5	40.35	62	865.68
Works in progress	38	1082.25	3	61.00	41	1143.25
Works at tender stage	3	112.00	0	0	3	112.00
Admn. Sanction received, at estimate stage	3	93.00	4	100.50	7	193.50
Stage-1 sanction accorded by Accorded by State Govt.	19	48.45	0	0.00	19	48.45
Railway approved and stage 1 sanction yet to be received from state govt.	6	15.30	0	0.00	6	15.30
TOTAL	126	2398.53	12	201.85	138	2600.38

National Highways

As on December 2012, there were 17 National Highways in the State covering a length of 4730 Kms, of which four-lane and above are of 2045 Kms, two-lane are are of 2310 Kms and 375 Kms are of Single lanes. The density of National Highways is 6.20 Kms per lakh population (2011) in the State and in terms of area coverage, a length of 16.88 Kms is available for every 1,000 Sq. Kms in the state. The corresponding figures at all India level are 6.40 Kms and 19.95 Kms respectively.

National Highways Development Project Phase I & II, III and Port Connectivity

The National Highways No.5, 7 and part of 9 are taken up for development of four-lane roads in the State. The total length of the roads taken up for development by the NHAI is 2,508.12 Kms. Under NHDP Phase-I, the Golden Quadrilateral covering a length of 1062 Kms is completed. Under Phase-II 'North South Corridor' covering a length of 772 Kms is under progress and so far a length of 651.70 Kms was completed. Similarly, under Port connectivity, road length 12.5 Kms and other projects of road length 58 Kms were completed by NHAI. Under Phase-III, 519.50 Kms length of National Highways is proposed for widening into Four-Lane on the basis of Build, Operate and Transfer (BOT) model. 241.0 Kms length of Hyderabad-Vijayawada-Machilipatnam on NH-9, 192.5 Kms length on Kadapa-Mydakur-Kurnool section on NH-18, 30.0 Kms length of Hyderabad-Yadagirigutta section on NH-202 and 56.0 Kms of Tirupathi-Tiruthani-Chennai section on NH-205 are the road works proposed under this model. Road works on NH9, NH 18, NH202 and NH 205 have been entrusted and in progress.

Other Important Activities

A stretch of 31 Kms roadwork (from Kms 493/0 to 524/0) of NH-9 from Sangareddy to Hyderabad was widened to Four-lanes on BOT basis with an estimated cost of Rs. 99.00/144.00 Crore. The concession period of the BOT project is 11 years and 7 months (including the construction period of two years). Commercial operation of the project commenced from 29.12.2008 and the concession period is up to 17.8.2017.

Under NHDP IV A/B two laning with paved shoulders/ four laning on selected National Highways viz., two laning with paved shoulders of Kathipudi to Digamarru on NH 214 for a length of 140 km, Vijayawada to Bhadrachalam on NH 221 for a length of 169.7 Kms, Digamarru-Ongole Road, NH 221 for the entire length of 255 Kms, NH 222 Kalyan-Nirmal Road, four laning of NH 4 for the entire length of 84 Kms in A.P. and four laning of the entire length of 56 Kms of NH 63 is to be taken up in the State of A.P. on Public Private Partnership (PPP) basis. Preparation of feasibility reports are under progress for these stretches.

Under Left Wing Extremism (LWE) scheme, the MoRTH sanctioned six works on NHs, out of which five works entrusted to the agencies are in progress and Land acquisition for one major work of construction of bridge at Eturunagaram across Godavari on NH 202 is under progress. While two works were completed, remaining works are in progress.

A stretch of 6.60 Kms road work from Km.124/0 to km.130/6 of NH 202 was sanctioned and completed by MoRTH at a cost of Rs.2487 Lakh.

Construction of a road bridge across Vynatheya, a branch of Godavari on Kathipudi-Pamarru Road was sanctioned for an amount of Rs.7042.82 Lakh. Work on a road bridge across river Godavari on Nizamabad-Jagdalpur Road sanctioned for an amount of Rs.6101.88 Lakh is in progress.

The work on strengthening of Madanapalli-Krishnagiri road of NH 219 (New NH 42) for an amount of Rs.4808.69 Lakh is in progress.

Construction of paved shoulders (a) without strengthening existing 2 lane carriageway from km 144/150 to 152/4, 165/4 to 179/3 & with strengthening existing two lane carriageway with paved shoulders including strengthening from km 130/50 to 132/0 (c) Strengthening existing 4 lane carriageway from km 140/0 to 142/350 (except for bridge approaches for 200mm in km 142/0-2 (d) Strengthening existing carriageway of 2 lane with paved shoulders from km 143/5 to 144/150, 188/8 to 189/8 to NH 202 including reconstruction of 50 culverts and widening of existing narrow minor bridge at km 142/0-2 including improvement of approaches for amount of Rs.5057.18 Lakh is in progress.

HUDCO and 13th Finance Commission Works

Strengthening and widening of municipal and inter city roads in Andhra Pradesh was taken up with loan assistance of Rs 700.00 Crore from HUDCO during the year 2005-06. Under this scheme, 523 works covering a length of 1240 Km, costing Rs 717.67 Crore were sanctioned, out of which 517 works with a length of 1230 Km, costing Rs 686.18 Crore completed. 6 works for a length of 10 Km costing Rs.31.49 crore are in progress. 1760 Road safety interventions works at a cost of Rs 198.00 Crore were sanctioned under Road Safety interventions, out of which 1759 works costing of Rs 197.38 Crore were completed. The expenditure incurred so far on these HUDCO works is Rs 835.20 Crore.

The 13th Finance Commission allocated a grant of Rs 981.00 Crore for maintenance of Roads and Bridges in Andhra Pradesh during the period 2011-12 to 2014-15, out of which R&B was allocated a grant of Rs 616.16 Crore for 4 years i.e Rs.136.29 Crore for 20011-12, Rs.146.97 Crore for 2012-13, 158.91 Crore for 2013-14 and Rs.173.98 Crore for 2014-15. Action plans for the years 2011-12 & 2012-13 are approved by High level Committee. So far, 212 works for a length of 1812 Km costing Rs.232.27 Crore were sanctioned during 2011-12 and 2012-13 and 193 works for a length of 1645 Km costing Rs.213.40 crore completed. 18 works for 159 Km costing Rs.17.20 crore are in progress. 1 work for a length of 8 Km costing Rs.1.66 Crore is at tender Stage. The expenditure from 2011-12 till date is Rs.187.29 crore.

NABARD works - RIDF & RIAD

The Government of Andhra Pradesh has identified the urgent need to create adequate employment opportunities in rural areas through development of infrastructure. The State Government has taken up infrastructure development in rural areas through financial assistance of NABARD from 1995-96 with the funds provided under RIDF(Rural Infrastructure and Development Fund) & RIAD(Remote and interior area development).

Government of Andhra Pradesh has selected Roads and Buildings department for improving roads and construction of bridges in rural areas. Since the inception of NABARD funding to rural area infrastructure, nearly 13,200 Kms of rural roads have been brought to riding surface with BT and connected to nearby towns. Out of the 378 bridges 334 were completed.

So far 1804 Road works, 378 Bridge works totaling 2182 works in 18 tranches i.e. RIDF-II to RIDF XVIII (including RIAD Phase I to V) (1996-97 to 2012-13) for Rs.3001.00 crore were taken up. 2015 works were completed with a cost of Rs.2377.30 crore, and 96 works costing Rs.368.19 crore are in progress. 57 works costing Rs.234.50 crore are at tender stage.

Still nearly 1500 Kms of metalled and un-metalled surface in rural areas that has to be improved to bring to BT surface and connect rural areas to nearby towns.

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. 1400 Kms length of roads were improved in widening and strengthening component under capital improvement and 1734 Kms length of roads improved in Heavy Periodic Maintenance under the AP State Highway Project (APSHP) which was taken up with World Bank loan. These roads consisted of State Highways (SH) and Major District Roads (MDR). Other set of around 1818 Kms of roads were improved under AP Economic Restructuring Project to clear maintenance backlog on core network of arterial roads.

A.P. Road Sector Project (P 096021)

The Project was approved by the Government of India and World Bank for further strengthening the objectives set in the APSHP, to reduce transport cost and constraints. The cost of the project is estimated at Rs. 3165 Crore.

Major Component of the Project

A. Road Improvement Components

a. Up-gradation and Improvement component for 429 Kms: Cost Rs.1546.61 cr.

- 429 Kms (seven roads consisting of 9 packages) of road length is targeted for Widening and Strengthening in this component. Road work for Chittoor - Puttur road (package 1) and Jagityal – Peddapalli road (Package -6) works are in progress.
- Kandi – Shadnagar road (KS-05) Agreement was concluded on 09.08.2012 & the work commenced on 14.09.2012.
- Kurnool – Devanakonda road agreement was concluded on 29.11.2011 and work commenced on 12-01-2012.
- Mydukuru – Jammalamadugu Road consists of two packages ie. MJ-03 & MJ-04 and both works are in progress.
- Pedana- Nuzivedu – Vissannapeta Road consists of two packages (PNV-08& PNV-09) and work has commenced.
- Kakinada – Rajahmundry Road (KR -07): LOA was issued and agreement is to be concluded.

b. Long Term Performance Based Maintenance Contract (LTPBMC) 6241 kms: Cost Rs.1431.14 cr. (5 years duration)

In this Component, 6151 Kms of roads are targeted for maintenance under LTPBMC. Under Phase-I, 11 Packages were entrusted 2113Kms works are in progress. In Phase-II, 23 Packages were entrusted and works are in progress. In the remaining 3 Packages BER has been submitted to World Bank for No-objection.

c. Institutional Strengthening, Road Safety & PPP Facilitation Support: Cost Rs. 191.36 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 services commenced on 07.04.2011. The consultants submitted reports on APRDC organization structure, TNA, Scoping study of Master Plan, Road fund, Status of ISO certification program & project manual and conducted four workshops so far. Mid Term Status report on Institutional Strengthening cell & Working group have been formed with the officers of R&B & RDC Department for effective implementation of Institutional Strengthening Action Plan (ISAP).

- Road Financing Study (RFS): The study is to articulate the case for reforms of Road Financing in the State and recommend operating modalities and new financing arrangements to be adopted by the Government of Andhra Pradesh. The recommendations of the advisory Committee are furnished to Government for establishing the Road Fund.

- Road Safety Policy (RSP): Transport Department is the Nodal / Lead Department for implementation of Road Safety Action Plan. Principal Secretary Transport has been appointed as Nodal Officer. Three roads (Demonstration Corridors) are proposed for pilot study.

- The Government reconstituted the Road Safety Council for Andhra Pradesh for a period of two years from the date of issue of notification till the Road Safety Council is reconstituted, whichever is earlier.

- Road Safety Advisor and Assistant Advisor was appointed to assist the Transport Commissioner in

taking forward the road safety component under APRSP. The inception report submitted by them has been sent to World Bank for comments. Investment plans on the demo corridors are under finalization.

- Road Management System (RMS): It is proposed to establish Road Management System for optimum utilization of funds in prioritization of road improvement and maintenance. The duration of this system is projected for 6 years so as to address effectively various deficiencies in maintenance and management of State Roads. Consultants were appointed and work is in progress.

B. Widening of roads to four lanes & Bridge Works (Build, Operate and Transfer basis) under Public Private Partnership

Objectives

a) Construction of new roads

b) Relieve congestion

c) Improve commuter access and reduce travel time

d) Promotion of Private Participation in Infrastructure

e) Safe roads

f) Fuel efficiency

1. A second bridge across river Godavari near Rajahmundry including approaches connecting EGK road under (PPP) project was started at Rs.808 Cr. 80% of the work has been completed.

2. Construction work of HLB across river Musi from Km 6/6 to 7/2 of Miryalaguda - Kodada Road for Rs.12.56 Cr was completed. The Commercial Operation Date (COD) started from 19.02.2010

3. Work is in progress on the Hyderabad - Karimnagar - Ramagundam Road (Rajiv Rahadari) at Rs1358 Cr. Concession agreement was concluded on 20.08.2010. Financial closure was achieved by the concessionaire.

4. Concession agreement was concluded on 23.07.2010 Work is in progress on the Narketpally - Addanki - Medarametla Road (Rs.1197 Cr). Financial closure achieved by the concessionaire.

Annuity Works

A. Nine road works with a length of 154.79 Kms at a cost of Rs. 418.83 Cr were sanctioned, out of which seven works are completed and the balance two works for Rs. 143.66 Cr are nearing completion.

B. Core Network Roads Under Non-Plan

The Maintenance & Management of 12,048 Kms of High Density Corridors designated as Core Road Network is entrusted to APRDC with effect from 01.04.2007. An amount of Rs.387.80 Cr was allocated during 2012-13 for maintenance of Core network roads against which several works have been sanctioned as per necessity.

Works Sanctioned under Core Net Plan

Government allocated Rs. 300.00 Crore during the financial year 2012-13 for these works.

1. Work on two road works costing Rs. 93.50 Cr. (i.e., Nagasanipalli – Talupula Road & Nellore – Krishna Patnam Road) and one Bridge costing Rs. 35.00 Cr. (Bridge across river Thungabhadra @ Alampur) which were sanctioned earlier are in progress.

2. Contract was awarded and work is in progress for the up-gradation of Ananthapur – Tadipatri – Bhogasamudram Road at a cost of Rs.305.00 Cr.

3. 28 works comprising of widening of Corenet roads, construction of bridges etc., were sanctioned during 2012-13 and are in different stages of tender process.

Works Under C.E (R&B), PPP

Public Private Partnership Scheme: Public Private Partnership means an arrangement between Government / Statutory entity / Government owned entity on one side and a private sector entity on the other, for the provision of public assets and /or public services. PPP functions through investments being made and/ or management being undertaken by the private sector entity, for a specified period of time, where there is well defined allocation of risk between the private sector and the public entity. In PPP the private entity receives performance linked payments that conform (or are benchmarked) to specified and pre-determined performance standards, measurable by the public entity or its representative.

PPP Projects on State Roads (BOT-TOLL MODE)

PPP Works in progress. Two works were grounded in the year 2010 under PPP Scheme.

1. Hyderabad - Karimnagar - Ramagundam Road: Length of the Road is 207 km and Project cost is Rs.1466.24 Cr. Concession period of road is 25 Years and construction period is 2 ½ Yrs. Scheduled date of completion is 16-8-2013, however the progress achieved by October 2012 is only 38%.

2. Narkatpally–Addanki–Medarmetla Road: Length of the Road is 213 Km and Project cost Rs.1309.56 Cr. Concession Period of the road is 24 yrs. Construction period is 2 ½ Yrs. Scheduled date of completion is 18-07-2013, however the progress achieved up to October 12 is only 49.33%.

PPP Projects on State Roads in the Pipeline

Six road works with a total length of 678.6 Km and an estimated cost of Rs.4642.5 crore are in the pipeline.

Process of engaging consultants for the Detailed Feasibility Study for 12 roads is in progress.

PPP Project on National Highways

Six projects are under consideration. Alignment reports and draft feasibility reports are under finalization by the consultants.

LWE Works on State Roads

The Government of India sanctioned improvement of 23 State Roads in Khammam District under LWE – Phase I at a cost of Rs.626.96 crore covering a length of 490.076 Km. 21 works will be completed by March, 2013 and the balance 2 by March 2014.

PANCHAYAT RAJ ROADS

The total length of the rural roads under Panchayat Raj engineering department was 1,43,918 Kms in the State as on 01-04-2012. Out of this, Other District Roads consist of 5,448 Kms, Major District Roads 1,222 Kms and Village roads 1,37,248 Kms. The surface details of the road length are CC Roads 3,644 Kms; BT 38,518 Kms, WBM 27,032 Kms and Gravel 74,724 Kms.

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 had as on 30-11-2012, a registry of 133.89 lakh vehicles. About 72.22% of the vehicles on road are two wheelers, followed by cars, three wheelers, buses and trucks. The growth of vehicles in the State is around 14%. Details about registered motor vehicles on road are shown in Annexure 7.4.

The transport department collects revenues from the issue of driving licenses, registrations, permits and taxes.

The growth of revenue is shown in Table 7.9.

Table 7.9 : Revenue of transport department

Year	Total Revenue (Rs. Crs)
2001-02	950.92
2002-03	918.69
2003-04	1095.85
2004-05	1096.49
2005-06	1354.19
2006-07	1372.00
2007-08	1591.61
2008-09	1846.52
2009-10	2007.00
2010-11	2618.37
2011-12	2982.00
2012-13(upto Dec.12)	2271.42

Source: Transport Department

All services in the Transport Department are fully computerized and provide multiple accesses to services through the Internet, e-seva centers and Ap-online in addition to the department's offices with a view to increase transparency in the functioning of the department. Citizens can now make tax payments or book slots for learner licenses and driving licenses through e-Seva counters or through the internet or at transport offices.

Transport Department computerized 43 RTO offices and 42 Unit offices in the State. All transactions relating to Driving licences, registrations, permits and tax payments are being done through computers from 2000 and an entire database of driving licences and vehicles

are maintained and updated daily in the central server of Transport Commissioner's office through File Transfer Protocol (FTP) tool. The data available in the central server is being utilized as State Registers for Driving Licences and Registration Certificates.

The Department has re-engineered its existing application software, in the client-server architecture to 3-tier architecture (web enabled / Service Oriented architecture) at 14 offices in the State on pilot basis. Driving Licences and Registration Certificates are issued in SCOSTA (Smart Card Operating System for Transport Applications) compliant Smart Card form with computerized chip in 14 pilot offices. The software has enabled interoperability and integration with NIC software. The department has successfully implemented the KMS (Key Management System) for Driving Licences and Registration Certificate as per the standards set by NIC.

In view of the finalization of identification of new service provider, the roll-out of 3 tier project is being planned in remaining 19 districts within next 3 months in a phased manner.

The data structures of VAHAN and SARATHI were mapped with the existing software of the department. The complete data dump of DL and RC was provided to NIC for porting into National Register along with the document to map with data structure of AP database and NIC database. It has been informed by NIC that, so far more than 116 Lakh RC data has been ported to National Register. Incremental data of RC is being ported regularly to National Register by using automated scripts. So far 10 lakh data has been ported to National Register, and work is in progress and NIC informed that the work is likely to be completed by end of March, 2013 with regard to data porting of Driving Licence to National Register.

Enforcement

The Department has been making a conscious effort to enforce the provisions of the Motor vehicles Act by actively booking violation of vehicle registration and driving license conditions. Active enforcement enables better compliance of registration and licensing conditions by operators. In the year 2011-12, the department through active enforcement was able to mobilize revenue of Rs. 231.36 crore. During the year 2012-13, the enforcement revenue realized was Rs. 216.97 crore up December, 2012.

Vehicle Inspection & Certification Centre

At present Fitness Certification of Vehicles is done in the manual method. In order to improve the condition of motor vehicles Government of India has sanctioned a Computerized Fitness Testing Centre, (Inspection and Certificate Centre) to our State. The land of Ac.10.00 for the project is allotted by the State Government at Malkapur (V) Nalgonda District. Total cost of the project is Rs. 15.00 Crore is sanctioned by Government of India on successful implementation of this pilot project. Similar Inspection and Certification centers are proposed at Visakhapatnam, Vijayawada and Karimnagar,

A.P.Road Sector Project taken up with World Bank Assistance

In order to improve the Road Safety and to reduce growing number of road accidents in the State, Government have taken up a pilot project with the financial assistance of World Bank on two demo corridors on pilot basis. An amount of Rs. 91.00 crore is proposed to be spent on improvement of black spots on roads, better enforcement and awareness among road users and better trauma care for accident victims. On successful accomplishment of the pilot project, it is proposed to take up the implementation of the project in the entire State for better results.

Road Safety

The enormity of havoc created by road traffic accidents is generally not understood fully. Though each major accident is shocking, such accidents are generally seen as isolated, unconnected, and unavoidable fallout of modern-day living.

Government has realized the magnitude of the problem and all possible steps are being taken at the State level to reduce the number of accidents. Andhra Pradesh is the only State where Road Safety Council is chaired by the Hon'ble Chief Minister.

The Government is aware that Road Safety is a multi-dimensional and multi-sectoral problem and therefore needs a coordinated inter-disciplinary approach. The Transport Department has been made the nodal Department for effective coordination.

In view of the importance attached to road safety at the highest level all support that is required for achieving road safety in terms of policy, legislation, resources etc., will be provided.

The Transport Department has initiated a number of measures under the Road Safety Programme called SAFAR – Safety Always for All Roads to mitigate the number of road accidents in the state.

1. Streamlining Licensing system of drivers: The department has introduced computer based learner licence test to assess knowledge of drivers. In addition the department has introduced slot booking system through e-seva, RTO office counters and the internet for scheduling learner licence test and driving test.

2. Driving tests has been made rigorous through strict testing on driving tracks. All districts have a driving test track.

3. Heavy motor vehicle driving schools need to register all candidates undergoing training online. Only those registered with the department online are permitted to take a test for obtaining a heavy motor vehicle licence.

4. Enforcement by police and transport department has been made intensive to book violations under the MV act (with reference to driving and overloading of goods and passenger vehicles)

5. Contract carriages carrying commercial goods are being constantly monitored and checked for the safety of passengers.

6. Sub-inspectors of police have been authorized to check all visible offences.

7. Auto rickshaws are prohibited on national highways.

8. Driving licences of drivers involved in fatal and grievous accidents are being suspended.

9. District road safety committees have been reconstituted with District Collector as Chairman for effective monitoring and adoption of remedial measures.

10. Laser guns have been procured for detecting over speeding vehicles. Interceptor vehicles fitted with laser guns, breath analyzers and surveillance cameras and pollution testing equipment have been provided in Hyderabad, Rangareddy, Visakhapatnam, Vijayawada and Chittoor districts to check violations.

11. A number of gadgets such as laser guns for detecting speeding vehicles; breath analyzers for detecting drunken driving and mobile interceptors for detecting overloaded, speed and polluting vehicles have been procured and provided to the transport and police department.

12. Police Department has been provided with surveillance Cameras which have been erected at 11 identified junctions in the twin cities of Hyderabad and Secunderabad. E-challans are being generated by the police department for detected offences.

13. Six Heavy duty cranes have been supplied to the police departments to enable removal of stranded and accident vehicles on important national highways.

14. In addition to the immediate emergency assistance provided through 108, the health department is identifying a number of hospitals to serve as trauma care centers. This facility enables minimum delay in providing trauma care and saving of precious lives.

15. An Empowered Committee is constituted under the Chairmanship of Principal Secretary to Government (Transport) to implement Road Safety Action Plan (World Bank Scheme) involving all line Departments.

16. Road Safety Council under the Chairmanship of Hon'ble Chief Minister is constituted at state level for discharging such functions relating to Road Safety Programmes specified by the State Government. The first Road Safety council meeting was held on 23.08.2010 and action has been initiated on the deliberations of the meeting.

17. Accident prone areas are categorized in to AB and C on the roads of NHs, R&B and Panchayatraj etc., the line Departments concerned are involved for improvement on priority basis and to get high positive results with the Road Safety Measures being taken by the Government.

18. The Department has taken steps to control overload in goods vehicles in a systematic way. Action is being taken on companies which are giving overloads to truck operators. This is yielding good results and improving Road Safety.

While the Government of Andhra Pradesh is taking several measures for road safety, this is a matter that concerns every-one in the state.

New Initiatives

Transport department has initiated computerization for making services Citizen Friendly. The department plans to gradually migrate from client server architecture to web enabled architecture for greater data integrity and uniformity of operations across the state. This not only enhances transparency but reduces discretion at lower levels and cuts down transaction time. Some of the initiatives undertaken by the department are given as under:

- Slot booking on the internet or through e-Seva services or through RTA offices have been made mandatory for learner license and driving license.
- Any service / any counter introduced to expedite works of RTA offices, besides rationalizing the use of man power.
- Dispatch of all documents by speed post.
- Registration of non-transport vehicles can now be done in one day.
- Online payment of life tax by all vehicle dealers has been made mandatory from 1st June 2008.
- Bio-metric (finger print) authentication has been introduced for learner license test.
- Driving Licenses in smart card form are being issued in Hyderabad, Ranga Reddy, Vijayawada, Nandigama, Gudivada and Kadapa and will shortly be extended through out the State.
- Color coding of all categories of driving licenses has been introduced for better enforcement.
- 20,000 RTC buses and 100 setwin buses have been added to the transport data-base to expedite issue of permits and fitness certificates.
- Affixing retro reflected stickers on transport vehicles has been made mandatory.
- Fully functional website will enable citizens to access data about vehicles, application forms and services.

Pollution Control

The department has taken steps to upgrade and net work all the 530 Pollution-Testing stations that were licensed in the private sector to be compatible to new testing norms prescribed in the Central Motor Vehicles Rules 1989. 101 Pollution Testing Stations have been networked so far.

Goods vehicles and Stage Carriages of 15+ years have been prohibited from Hyderabad area to control vehicular pollution. Similarly, public service and private service vehicles of more than 15 year old are prohibited in Visakhapatnam area. Restrictions have been imposed on the number of three wheeled contract carriages (Auto-rickshaws) in Hyderabad, Vijayawada and Visakhapatnam. No new permits are issued to three wheeler contract carriages in these three cities. Replacement of auto rickshaws are being permitted only with LPG operated one.

Bharat Stage (BS) III vehicles are not permitted to be sold nor are they registered in GHMC area. Only BS IV compliant vehicles are permitted to be sold or registered in GHMC area. BS-III compliant vehicles are permitted to be sold and registered in the rest of the State.

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

The transport needs of the people in the state were first met by a wing of Nizam Railways in June, 1932 with 27 buses and 166 staff, mainly looking after the needs of passengers connected to Railway Stations. Later on, Road Transport Sector was under the department of Hyderabad State from 1st Nov.1951 and with the re-organization of States, a separate Corporation was initialized in Andhra Pradesh State w.e.f.11th January, 1958.

The 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.

The fact that APSRTC is the largest State Road Transport undertaking in the country was acknowledged both by Limca book of records (2000), and the Guinness Book of World Records (31st October, 1999). The Corporation achieved 99.60% fleet utilization in the year 2012-13(up to Sep,2012).

The corporation has 7 Zones, 23 Regions and 211 Depots with a total fleet strength of 22,604 buses and 1.23 Lakh employees on rolls as on September, 2012.

All the 211 depots having fleet operation were computerized and linked through a dial up network. It

recorded fuel efficiency of 5.12 per litre during 2012-13(up to Sep,2012). It operates on about 82.03 lakh kms and transports about 1.50 crore passengers daily. The average vehicle productivity per day of its fleet is 365 kms.

Product Achievements

The corporation has introduced trend setting improvements in the quality of travel in rural and urban areas by providing newly designed ordinary coaches `Pallevelugu' for rural passengers; `Garuda' , Garuda Plus, Indra AC & Vennela AC Sleeper for long distance passengers, `Seethala Hamsa', `Metro Deluxe' and `Metro Express' for urban passengers, and `Sapthagiri Ordinary' for ghat road passengers. JnNURM Buses were also introduced for urban passengers in major cities like Hyderabad, Secunderabad, Vijayawada, Visakhapatnam, and Tirupati. The Corporation has introduced On-line ticket booking system for the convenience of passengers.

Special Achievements

The Corporation bagged National Awards for;

1. Highest Tyre Performance

2. Fuel efficiency

3. Productivity

Among the STUs in India, APSRTC stands top in physical performance in vehicle productivity and resource utilization indicators like Vehicle Utilization, Fleet Utilization, average number of passengers transported, Fuel efficiency, Tyre life, break down rate and accident rate.

APSRTC is one of the largest employers in the state having 1.23 lakh employees. The staff ratio per bus has been under control at 5.99 during 2012-13(up to Sep 2012). Employee's productivity has registered 60 KMs during 2012-13(up to Sep, 2012). After a gap of several years, APSRTC took up direct recruitment of Management Trainees and Supervisory Trainees to energize and professionalize Executive and Supervisory cadres. Regular conduct of induction training and refresher courses for defaulting drivers has increased safety during both night and day time operations. APSRTC performance from 2005-06 to 2012-13(up to Sep, 2012) is given at Annexure 7.5.

AIRPORTS

Hyderabad International Airport

Hyderabad International Airport officially known as Rajiv Gandhi International Airport (RGIA) replaced the former international airport of the city, Begumpet Airport. GMR Hyderabad International Airport Limited (GHIAL) has the mandate to build, finance, operate and maintain the new airport under a public – private partnership initiative. The total investment for the airport construction in the first phase is Rs.2920 crore. GHIAL is a joint venture company promoted by GMR Group (63%) with Malaysia Airports Holding Berhad (MAHB) (11%), Government of Andhra Pradesh (13%) and the Airports Authority of India (13%) as the other consortium partners. As on 30th September, 2012 GHIAL employed 556 employees.

Airport Features

RGIA provides world-class facilities and infrastructure, in accordance with ICAO standards and practices, to handle large aircraft and international traffic. Its integrated domestic and international terminal is equipped with 12 contact boarding bridges, 30 remote stands, Common User Terminal Equipment (CUTE), self check-in kiosks (Common User Self Service – CUSS) and 46 immigration counters. It also incorporates modern IT systems including Flight Information Display Screens, Baggage Handling System (BHS), and Airport Operational Database technology (AODB) for the first time in India. RGIA is the first Indian airport to have the fully automated Airport Operations Control Centre which acts as the nerve centre for all coordination within the airport.

RGIA is designed to cater to 12 Million Passenger per annum (MPPA) which can be developed phase-wise to cater to an ultimate capacity of 40 MPPA. After completion it will consist of 2 runways, 2 integrated terminals, landside commercial zones, 2 SEZ's, community facilities and all necessary supporting infrastructures. The total land area of RGIA is 5495 acres.

Location

Located strategically at the geographical centre of India, Hyderabad is within two hour flying radius to all major cities in India and a four hours radius to all the major cities in Middle East and South East Asia. The city

therefore holds tremendous potential to emerge as one of the main air travel hubs in India and as the critical destination-and-transit point for travel between the East and the West. Currently, there are 12 foreign and 5 domestic airlines operating from Hyderabad which fly to over 43 destinations, in addition to Lufthansa Cargo and Blue Dart operate Cargo freighter services.

Connectivity

The Airport has two major access points:

- The National Highway NH-7 and Outer Ring Road (ORR) from the west side and
- Srisailam State Highways on the Eastern side.

The 1st phase of ORR effectively connects Cyberabad region to the Airport. First of its kind 11.8 km long elevated expressway (PV Narasimha Rao) enables passengers reach airport from the city centre through the NH-7 Highway, within 30 minutes. Besides this, Multi-Modal Transportation System (MMTS), Mono Rail Transport System (MRTS) and other alternative modes of transport are being actively explored in collaboration with the State Government.

Traffic Highlights

A. Air Traffic Movements

There was a growth of 23.14% year over year (YoY) in 2011-12 in Domestic ATMs, whereas International ATMs has grown by 2.11 %. ATMs have on the overall shown a growth of 19.65% YoY. In the year 2011-12 the airport handled 99658 ATMs.

There was a growth of 5.30% YoY in Domestic ATMs in 2012-13 (up to Sep,2012) whereas International ATMs has grown by 5.73%. Overall the ATMs have shown a growth of -3.71% YoY. The airport handled 46509 ATMs up to September, 2012.

B. Passenger Traffic

For the year 2011-12 Domestic passenger growth was around 16.43% YoY, whereas International passenger's traffic grew by 1.33 %. Overall the passenger traffic has shown growth of 12.72% YoY. In the year 2011-12 the airport handled 8.60 Million passengers.

Domestic passenger growth was -3.39% YoY, in 2012-13 (up to Sep, 2012) whereas International passengers traffic grew by 2.49%. Overall the passenger traffic has shown growth of -2.04% YoY. The airport handled 4.12 Million passengers up to September, 2012.

C. Freight Traffic

Domestic Cargo growth was around -5.27% YoY for the year 2011-12, whereas International cargo volume grew by 5.89 %. Overall the Cargo grew at 0.86% YoY. The airport handled 81474 tonnes of Cargo in the year 2011-12.

Domestic Cargo growth was -4.60% YoY, in 2012-13 (up to Sep,2012) whereas International cargo volume grew by 1.68%. Overall the cargo growth has been -0.95% YoY. The airport handled 41003 tonnes of cargo up to September, 2012.

New Developments at RGIA in 2012-13 (up to Sep.12)

- Air India commenced HYD-CCU (daily) & VTZ-HYD-DXB (daily) w.e.f. 25th Mar'12.Successfully launched SpiceJet Tirupati package on 25th March by Minister of Tourism, AP
- Cathay Pacific Freighter commenced operations from 17th May 2012 (twice weekly B747- 400F).
- Blue Dart increased the frequency from 10 ATMs/ week to 20 ATMs/week with a wide-body 757-200F in place of narrow-body 737-200F earlier
- Tiger Airways launched five times weekly service between Hyderabad and Singapore from 28th September'12
- IndiGo launched its new daily flight on the Hyderabad-Dubai sector on 8th August 2012, with an Airbus-320 aircraft
- Silk Air increase in HYD-SIN freq. by 2 (7 to 9) eff. 23rd Sep' 2012
- Cathay Pacific Airways announced the commencement of their Hyderabad to Hong Kong, 4 days a week direct flights from 1st of December, 2012
- On 9th February 2012, RGIA inaugurated its second runway successfully. The new runway designated as Rwy 09L/27R is 3707 mtrs long and is Code-E aircraft compliant subject to Day VFR (visibility 5000 mtrs or more) Operations. Necessary permission were obtained by GHIAL prior to the conversion

of the existing Taxiway to the Standby runway from DGCA, making it the first Greenfield airport in the region with two operational runways.

- Full scale Anti Hijack exercise held at RGIA as per National Civil Aviation Program
- The Indian Rotorcraft Helicopter assembly unit ground breaking ceremony was held on 14th March'12
- The MRO was inaugurated on 13th March 2012 by Shri Ajit Singh, Hon. Minister of Civil Aviation

Achievements

RGIA is well poised to establish the city of Hyderabad prominently on the global aviation map thereby contributing to prosperity, growth and economic development of the region. The achievements and awards given to RGAI from January 12 to September12 2012 are:

- Best performing domestic airport award in SATTE 2012 Travel awards
- GHIAL was awarded the prestigious "National Tourism Award 2010-'11" under the 'Best Airport' category. The airport has been adjudged as the best airport in India for actively promoting tourism, not only in Andhra Pradesh but also at pan India level.
- GHIAL was honoured with Project Management Institute award
- The Airport received the 1st Prize in Airport Landscape awarded by Dept. of Horticulture, GoAP for the second time in a row. Two 2nd Prizes for the best rotaries (traffic islands) and best ornamental gardens in residential townships (for Domus Township)
- GHIAL received the Certificate of Merit in the General Category Sector -The National Energy Conservation Award 2011
- GHIAL IT has been awarded the prestigious ISO 20000 Certification
- The Airport received the 3rd Best Airport in India award, 2012 at the SKYTRAX World Airport Awards.

Environment Friendly Initiatives

Environmental protection is considered an integral part of business at GMR Hyderabad International Airport Limited (GHIAL) as it is committed to conducting business in an environment-friendly and sustainable manner, in line with its Vision, Mission, Values, Beliefs and Corporate Policies. As part of this commitment, they have taken up the following green initiatives:-

A. Greening the Airport

A green belt has been developed in an area of 273 hectares with various plant species and 971 hectares of natural greenery left undisturbed to maintain ecological balance at Rajiv Gandhi International Airport (RGIA). RGIA received the best landscape award from the State Govt. in the years 2011 and 2012.

B. Energy Conservation

RGIA achieved energy saving of 3.397million kWh (kilowatt hour) in the last two years from various energy conservation practices, and reduced carbon footprint by about 3371 tons. It also received "Certificate of Merit" in National Energy Conservation Awards 2011 from Bureau of Energy Efficiency, Govt. of India for its achievements.

C. Green House Gas Inventory

The Greenhouse gas (GHG) emission inventory was conducted since 2009 and the same was verified and validated by a third party in line with ISO 14064: 2006 (Greenhouse Gas Emissions Quantification, Reporting and its Removal) requirements. RGIA has reduced scope 1 and scope 2 emissions over the years.

D. Green Buildings

The RGIA Passenger Terminal Building has 'Leadership in Energy and Environmental Design' (LEED) certification for its unique design, which allows maximum natural lighting, and other features that enable optimal use of energy and water.

E. Wastewater Reuse & Recycle

Wastewater is being treated in Sewage Treatment Plant (STP) at site and being reused for flushing and plantation. Sludge from STP is being used as manure.

Tirupathi Airport

This existing operational airport is in an area of 634.61 acres and belongs to Airports Authority of India (AAI). The AAI has proposed to upgrade the airport to

international standards. Government of A.P has agreed to provide 718 acres of land of which 690 acres were allotted in Phase I free of cost. State Government has handed over advance possession of 293 acres located in Renigunta Mandal. Foundation stone for development of airport according to international standards was laid by Hon'ble Prime Minister on Oct.2010. The Government has sanctioned an amount of Rs.100 crore towards land acquisition and shifting of utilities. Extension of the runway and new terminal building are planned by AAI and will be completed by December 2013.

Kadapa Airport

This is an existing non-operational airport. The AAI has requested additional land of 476.33 acres, of which 457.83 acres has already been handed over to AAI to take up works. The AAI has completed the runway works, Taxi way, Apron, compound and allied works. Works pertaining to construction of new prefabricated terminal building, fire station cum control tower and allied works are under progress.

Warangal Airport

This is an existing airport in 748.02 acres area. The Government has signed MoU with AAI for development of this Airport. The AAI has projected additional land requirement of 438 acres. Warangal Collector submitted proposals for Rs.22.16 crore towards 80% cost of land compensations. The AAI will carry out necessary development plans such as runway etc. in phased manner once additional land is handed over free of cost.

Vijayawada Airport

This Airport belongs to AAI and is under operation. Government of Andhra Pradesh signed an MoU with the Airports Authority of India (AAI) for up-gradation of this existing operating airport. Construction of the new terminal building and control tower are the proposed works that AAI will take up. The extended runway is in operation. Government has agreed in principle for acquisition of additional 491.92. Acres of land. The AAI is supposed to take up the expansion works.

Rajahmundry Airport

This is an existing operational airport in an area of 365.49 acres. Government of Andhra Pradesh signed an MoU with AAI for up gradation of the airport for operation of bigger aircrafts such as B 737 – 800 / A320 etc. New Domestic Passenger Terminal Building for 150 per hour capacity and new fire station cum Technical Block cum Control tower have been completed. The new terminal building is also opened for passengers. The District Collector, East Godavari has submitted proposals for Rs.102.85 Crore for land acquisition.

SEA PORTS

Andhra Pradesh has 974 Kms long coast line with a major Port at Visakhapatnam under Government of India control and 14 non-major ports under State Government. Recent trends show that India's trade is growing especially in dry bulk cargo traffic with China and Asian countries leading to a substantial increase in cargo in the East Coast.

Ports offer tremendous potential for development and for the growth of a wide spectrum of maritime activities such as international shipping, coastal shipping, ship repairs, fishing, captive ports for specific industries, all weather ports, tourism and sports etc.,

Gangavaram Port

This Port is located in Visakhapatnam district. It is being developed with private participation as a Multipurpose all weather port to become the deepest port (21m) with round the clock operations and state-of-art cargo handling equipment. All statutory clearances were obtained and 95% works have been completed. The operations of the port commenced in July, 2008. The total estimated cost was Rs.1,850 crore in phase-I, Rs.2,600 crore in phase-II and Rs.10,000 crore in phase-III. The handling capacity of Phase-I is 35 Million Tonnes, Phase-II is 75 Million Tons and phase-III is 200 Million Tonnes per annum.

During 2011-12, the Port handled 138.70 Lakh Tonnes of Cargo and realized revenue of Rs.504.80 Crore. The Government received Rs.9.45 Crore as Government share. The Port handled 62.40 lakh tonnes of Cargo and realized revenue of Rs.225.96 Crore in 2012-13 up to September, 2012.

Kakinada Anchorage Port

The Anchorage Port is a sheltered Port in 17 Kms length of Hope Island. Anchorage Port handles about 150 to 200 Sea going ships every year. There are about 100 private owned steel barges with a total capacity of 3,000 tonnes employing 2,000 persons. About 3,000 workers are working as shore labour and stevedoring labour in the ships.

The port handled 31.64 lakh tonnes cargo and realized Rs.24.17 crore of revenue on cargo in 2011-12. The Port handled 22.90 lakh tonnes of Cargo and realized revenue of Rs. 14.83 Crore in 2012-13 up to the end of September, 2012.

Kakinada Deep Water Port

The Deep Water berths developed by the Government were privatized in 1999 and handed over to M/s. International Sea Ports Ltd., for operation and maintenance for 50 years. A Special Purpose Vehicle (SPV) called M/s. Kakinada Seaports Limited (KSPL) was formed for operating and maintaining the Port.

The port handled 98.43 lakh tonnes of cargo and realized Rs.229.00 Crore revenue in 2011-12. The Government received Rs.50.38 Crore as government share. The port handled 62.86 lakh tonnes of Cargo and realized revenue of Rs. 125.30 Crore in 2012-13 up to the end of September, 2011.

Rawa Port

Rawa port is located in East Godavari District and has an off shore single buoy mooring system for collecting off shore oil tankers for transporting to other ports. The Single Buoy Mooring (SBM) at Rawa port was installed by M/s Cairn Energy (I) Ltd as Acceleration Company. The port handled 15.96 lakh tonnes of cargo and realized revenue of Rs.4.63 crore during 2011-12. The Port handled 6.71 lakh tonnes of Cargo and realized revenue of Rs.2.17 crore in 2012-13, up to the end of September 2012.

Krishnapatnam Port

This port is in Nellore District and is the first Greenfield port that is being developed by Krishnapatnam Port company Ltd., (KPCL) on Build, Operate, Share and Transfer (BOST) basis under PPP over a period of 30 years. Phase-I of the port is developed with an estimated investment of Rs.1,200 crore and will have five berths. The port started commercial operations from March, 2009.

The port handled 154.17 lakh tonnes of cargo and realized revenue of Rs.566.32 Crore in 2011-12. The Government received Rs.14.71 Crore as Government share. The Port handled 94.13 lakh tonnes of cargo and realized revenue of Rs.359.62 crore in 2012-13 up to the end of September 2012. The port is presently under operation with 7 berths. Construction of additional berths under Phase-II is in progress.

Vodarevu, Nizampatnam Port and Industrial Corridor- VANPIC Project

The Government of Andhra Pradesh proposed to develop Vodarevu port in Prakasam district and Nizampatnam Port in Guntur district under Public Private Participation Mode on Build Own, Operate and Transfer (BOOT) basis. The concession agreement (concession period being 33 years Expandable by 11Years + 11Years) was concluded with M/s Vanpic Ports Private Limited in July 2008.

Machilipatnam Port

The Government of Andhra Pradesh is developing the Machilipatnam port in Krishna District under PPP Mode on Build, Own, Operate and Transfer terms (BOOT) basis. The Revised Concession Agreement was concluded with M/s Machilipatnam Port Limited on 07-06-2010 with a concession period of 30 years (extendable by 10 years + 10 years). DPR for Machilipatnam Port is under examination.

COMMUNICATIONS

As on 31st March 2012, there were16,142 Post Offices in the State, of which 104 are Mukhya Dak Ghars/Head Post Offices, 2,335 Sub Post Offices and 13,703 Branch Post Offices. Similarly, the state has 416 customer service centers having Telegraph section, 4,263 Telephone Exchanges up to Sep.2012. Details about this are given in Annexure 7.6.

As per the TRAI report, there were 675.92 lakh Wireless connections and 22.89 lakh Wire line connections at the end of September, 2012 in the state.

BANKING

There were 9,313 scheduled bank offices at the end of December, 2012 in the State. The aggregate deposits amounted to Rs.3,74,730 crore and the total bank credit extended was to the order of Rs.4,47,438 crore upto December, 2012. The credit-deposit ratio of the banks in the state is 119.40% as against RBI norm of 60%.

The total priority sector advances to Net Bank Credit

(NBC) was Rs.1,98,665 crore (50.37%) against RBI norm of 40%. Agricultural advances to Net Bank Credit were Rs.1,16,927 crore (29.65%) against RBI norm of 18%. Non-Farm Sector Advances was Rs.33,395 crore. which accounted for 7.46% of NBC. Other priority sector advances are at Rs.48,343 crore forming 10.80% of NBC. Profile of banking institutions in A.P as on 31.12.2012 are given in Annexure 7.7.

TOURISM

Andhra Pradesh is recognized for its legendary dynasties, its most revered temples, lacquer toys and beautiful weaves, rich literature and vibrant arts of Kuchipudi dance. The is home to a number of holy pilgrim centres, attractive palaces, museums, ports, rivers, beaches and hill stations.

Andhra Pradesh with more then 600 tourist locations attracts the largest number of tourists in India. More than 7 million visitors visit the state every year. Andhra Pradesh tourism is known as Koh-i-noor of India.

Andhra Pradesh Tourism Development Corporation

APTDC the State Government undertaking was incorporated in 1976. It continues to register significant growth since 1999-2000 with focus on creation of tourism infrastructure and products.

APTDC continues to strive for promotion of new tourism products such as Eco-Tourism, Beach Tourism and Cruise Tourism. 6 new eco-tourism destinations have been promoted as novel initiative under community based eco-tourism. The River Cruise tourism to Pattiseema and Papikondalu on river Godavari, Nagarjunasagar to Srisailam on Krishna River have become immensely popular.

Currently, the corporation runs 53 hotels and other tourism facilities with 1049 rooms in prime locations fostering homely ambience packages and an impressive fleet of 126 buses that connect important tourism locations within and outside the state. The water fleet with 120 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 following:

- Tourism Infrastructure Development
- Hotels & Catering Units
- Guided & Package Tours
- Leisure Cruises & Pleasure Boating
- Sound & Light Shows
- Eco-Tourism

While the primary focus of APTDC remains aggressive development of 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.

The growth of A. P Tourism Development Corporation from 2004-05 to 2012-13 up to Sep.12 is shown in Table 7.10.

Table 7.10 : Tourists Inflow and Revenue

Year	Tourists (Nos. Lakh)	Revenue (Rs.crore)
2004-05	24.96	59.18
2005-06	43.83	76.46
2006-07	53.54	89.50
2007-08	62.47	100.89
2008-09	73.79	109.00
2009-10	77.48	116.70
2010-11	41.63	124.68
2011-12	42.22	137.03
2012-13 (up to Sep.12)	23.12	81.55

Source: Tourism Development Corporation

Tour Packages

APTDC has designed a number of Tourists packages to different destinations covering temples, hill resorts, beach resorts, heritage sites both in and outside the state.

A modern transport fleet of over 126 buses including Twin Deck Bus service for local sightseeing has been developed for this. APTDC is the first corporation in the country to introduce Volvo coaches that set a new level in tourism travel. The transport fleet is supported by a chain of central reservation offices in Hyderabad, Tirupathi, Visakhapatnam, Bengaluru, Chennai, Kolkatta and Shirdi 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, Shirdi, Tirupathi, Hyderabad, Coimbatore, Mangalore and Goa making South India a seamless travel destination.

Haritha Hotel Chain

The "Haritha Hotel Chain" with 54 hotels (1288 rooms) located in important tourist centers provide the right ambience and quality that tourists demand. All APTDC hotels provide a restaurant, AC and non AC accommodation and in major locations a swimming pool. APTDC has a strategic arrangement with Shanthigiri Ayurvedic Clinic of Kerala, which provides wellness ayurvedic treatment.

Few places where hotels & resorts are located include Hyderabad, Vijayawada, Visakhapatnam, Jungle Bells, Araku Valley, Rishikonda, Basara, Bhadrachalam, Warangal, Tirupati, Horesely Hills, Kuppam, Yadagirigutta, Kurnool, Dwaraka Tirumala, Srisailam, Nagarjuna Sagar and Dindi. In addition construction of new hotels is nearing completion at Gandikota and Ananthagiri, Ranga Reddy District.

Wayside Amenities

APTDC has taken up development of wayside amenities along highways to provide better facilities to highway travelers like Restaurant, Washrooms, Parking area, Souvenir shop and Children play area at Alankanpally, Suryapet, Pragnapur, Kamareddy, Lepakshi, Wyra, Sone and Srikalahasthi. Projects at Alankanapally, Pragnapur, Lepakshi, Srikalahasti and Suryapet have been completed and commissioned. Wayside amenities development at Wyra and Tallapaka has been taken up and works are in finishing stage.

Water Fleet

APTDC operates lake and river tourism at several places in the state. Wholesome entertainment and pleasure cruises are operated in the Hussainsagar lake in Hyderabad. Visiting tourists and local residents can view the Buddha on the rock of Gibralter or just dine through a pleasure cruise on the most popular cruise boats such as the Bhagirathi, Bhagmathi and the Khair-un-nissa. APTDC water fleet strength is 120 which includes FRP boats, Launches, Parasailing boat and large vessels. The Corporation operates 10 cruises in Godavari and Krishna rivers. New catamaran type boats and latest Speedboats were introduced at various water bodies to strengthen water fleet operation.

APTDC operates pleasure rides at Miralam tank, Durgam Cheruvu, Nagarjuna Sagar, Nellore, Srisailam, Vijayawada, Vishakhapatnam (Bay of Bengal), Karminagar (LMD), Tirupathi, Rajahmundry and Brahmasagaram. New boating units at suitable Jalayagnam sites were taken up by the corporation and about 17 new units are proposed to be established.

River Cruises

Most popular River Cruise on River Godavari between Pattiseema and Papikondalu is being operated that is attracting large number of tourists. The introduction of the river cruise on Godavari has motivated many a private entrepreneur to operate similar cruises on the river. The cruise offers a pleasurable experience of a four hours boat ride and brings the tourists back to Pattiseema in the evening. A two day package with night stay in tented camp along the banks of the Godavari near Kollur en-route to Papikondalu is also arranged for tourists. A package tour was introduced in River Krishna from Nagarjunasar to Srisailam. A Twin deck cruise (120 seater) (Haritha) with an air-conditioned lower Deck is presently operating in Godavari river in addition to FRP boats.

Houseboats

In addition to pleasure cruises, 5 air-conditioned house boats are being operated, which offer a experience similar to the backwaters of Kerala. The House boats are equipped with two bedrooms and a deck to laze through the day along the serene and picturesque Godavari in East Godavari district.

Ropeway

The Ropeway facility established and commissioned in January 2005 at Srisailam Pathalaganga gives good revenue of an average of about 10 to 12 Lakh per month to the corporation. This facility benefited many local people with direct and indirect employment. Boating revenue also increased as more tourists got down at

Pathalaganga to take the boat rides. Akkamahadevi Caves river cruise operation also increased with this ropeway. This has become a major attraction for Srisailam pilgrim tourists also.

Sound and Light Shows

Sound and Light shows organized at Golconda Fort, Hyderabad and Chandragiri palace near Tirupati to show case the historic and heritage monuments to tourists, are immensely popular. A multimedia show is under development at the Amravathi Interpretation Centre.

Mega destinations and Secondary Destinations

APTDC has focused development in and around the three primary destinations of Hyderabad, Visakhapatnam and Tirupathi. In addition, development is also centered around the 3 secondary destinations like Warangal, Kurnool and Vijayawada. 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. In the recent past, the corporation has revamped and improved tourist facilities. 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 famous lake project at Durgam Cheruvu, illumination of Ettipothala water falls 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), Ettipotla (Guntur District), Kambala Konda (Visakhapatnam 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).

Tourism Projects

A. Completed Projects

- Budget Hotel at Nellore at a cost of Rs.850 Lakh Budget Hotel at Kadapa
- Yogi Vemana Memorial Park at Katarpally, Ananthapur Distirct
- Adventure and Heritage Tourism Center at Gandikota in Kadapa District
- Development of Singur Dam
- Accommodation Block at Srikalahasthi, Mahanandi, Gandikota, Edupulapaya and Srisailam
- Development of Tourist facilities & amenities at Anantha Padmanabha Swamy Temple at Ananthagiri, Ranga Reddy district
- Development of Eco & Adventure tourism Resort at Ananthagiri, Ranga Reddy district
- Development of Eco-tourism centre at Bhimulavaripalem near Pulicat, Nellore district
- Development of Horsely Hills, Chittoor district
- Development of Laknavaram Lake in Warangal
- Development of Heritage Circuit Kadapa
- Development of Vizianagaram and Srikakulam Circuit
- Construction of Budget Hotel at Nizamabad
- Tourist facilities at Alampur, Mahaboobnagar district
- Development of Rural tourism project at Kuchipudi, Krishna districts
- 3D LCD Screens at Rajiv Gandhi International Airport
- Mobile Multimedia tour at Golconda

B) On-going projects

- Development of River Cruise Circuit on River Godavari & Krishna.

- Development of Adventure Tourism at Puligundu, Chittoor District.
- Development of Buddhist Circuit at Nagarjunasagar, Chandavaram and Undavalli.
- Development of Kolleru Lake in West Godavari
- Development of Eco-Park at Nellore Tank, Nellore
- Development of Jammulamma Reservoir at Jammiched Village, Gadwal, Mahaboobnagar district.
- Development of Ramayapatnam as Beach Destination Prakasam district.
- Development of Beach Destination at Baruva, Srikakulam district.
- Establishment of Institute of Hotel Management Catering Technology and Applied Nutrition Society at Tirupati.
- Development of Eco-tourism centre at Ananthagiri, Ranga Reddy district
- Placing Touch Screen Kiosk at important tourism infrastructure

INFORMATION TECHNOLOGY AND COMMUNICATIONS

Government of Andhra Pradesh aspires to transform the State into a Knowledge Society and make available the benefits of Information Technology (IT) to all citizens, especially those in rural areas.

Andhra Pradesh has emerged as a State that provides the right climate for the growth of IT business and is now one of the most preferred destinations in the country. Andhra Pradesh is at present, home to Indian IT majors such as TCS, Infosys, Wipro, HCL, Mahindra Satyam, Cognizant, Patni, Tech Mahindra, Sonata, Infotech, and others. Andhra Pradesh is also home to MNC IT giants and Fortune 500 companies like Microsoft, Google, IBM, Oracle, DELL, Motorola, Deloitte, Convergys, UBS, Bank of America, HSBC, Honeywell, Siemens, JP Morgan, UHG and so on.

IT sector in A.P as a growth engine, is making steady strides in ushering rapid socio-economic development of the State. While All India growth rate is 15.7%, AP recorded a growth rate of 16% in 2011-2012. The State of Andhra Pradesh contributes 12.4% to national IT exports and ranks 4th in IT performance in the country. IT sector contributes about 39% of total exports from all sectors in the State.

Information Technology (IT) sector in Andhra Pradesh reported a total exports of Rs.40,646 crore, besides providing additional employment to 39,186 IT professionals, taking the total IT employment to 3,18,624 in the year 2011-2012.

New companies like NCR, Free Scale Semiconductors, WNS, etc, have come forward to set up their operations and existing companies like TCS, Accenture, Infosys, IGate, HCL, Deloitte, Google, Value Labs, Intergraph, Sify, etc are significantly expanding their operations in recent years. IT companies have started & enhanced their annual recruitment plans proportionate to their human resource requirements.

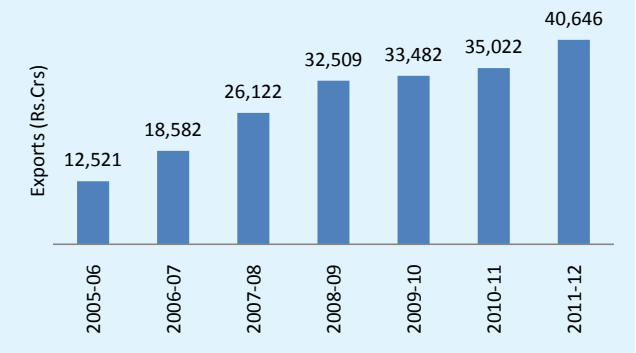
Details about the growth of IT sector in AP are shown in Table 7.11 and chart.

Table 7.11 Growth of Information Technology

Year	Exports (Rs. Crore)	No. of Employees (Cumulative)
1997-98	284	8700
1998-99	574	12000
1999-00	1,059	25,500
2000-01	1,917	48,700
2001-02	2,907	64,000
2002-03	3,668	71,445
2003-04	5,025	85,945
2004-05	8,270	1,26,920
2005-06	12,521	1,51,789
2006-07	18,582	1,87,450
2007-08	26,122	2,39,000
2008-09	32,509	2,51,786
2009-10	33,482	2,64,375
2010-11	35,022	2,79,438
2011-12	40,646	3,18,624

Source: Software Technology Parks of India, Hyd.

Chart 7.1 IT Exports



Source: Software Technology Parks of India, Hyd.

The growth of IT is normal and unhampered in tier II locations also. Details about Tier II locations for the year 2011-12 are shown in Table 7.12.

Table. 7.12 : Growth of IT in Tier II locations

Centre	Exports (Rs.crore)	Employment
Vizag	1200	16000
Vijayawada	95.6	2558
Kakinada	34.67	1379
Tirupati	4.25	157

Source: Software Technology Parks of India, Hyderabad.

IT Initiatives

A. Investor friendly ICT Policy 2010-2015

ICT Policy 2010-2015 was declared to achieve the objective of making Andhra Pradesh the most preferred IT destination and for enhancing the capacity for growth of IT sector in the State. The policy offers incentives, facilitation & thrust for the growth of Start ups, Small & Medium Enterprises and sun-rise areas like Engineering services, Product/R&D companies, Animation, Gaming etc.

B. Electronic Hardware Policy 2012-2017

Government of Andhra Pradesh initiated the Electronic Hardware Policy 2012-2017 w.e.f. from July 24th 2012 by recognizing the importance of Electronic Hardware Industry for the development of IT sector. AP is the first state in India to initiate such a policy.

Electronic Hardware Industry has the potential to the tune of US $ 1.75 Trillion worldwide and US $ 1 Billion in India. The new Electronic Hardware Policy 2012-2017 provides special facilitation and incentives for Electronic Hardware - in areas of Industrial Electronics, Communication & broadcast equipments, Computers & Peripherals, Strategic electronics & components (Semiconductors, Solar & Displays) etc. for attracting Electronic Hardware, to set up and grow their operations in the State.

C. Promotion of Tier II/III IT Hubs

Government of AP is promoting other Cities in the State, such as -Visakhapatnam, Tirupati, Vijayawada, Kakinada, Nalgonda, Warangal, etc, as Tier-II/III IT Hubs in the State with Hyderabad as a role model. Special incentives are offered to locate IT industry in Tier II/III cities to enable promotion and propagation of Information Technology applications to the last mile of the State not only for providing gainful employment but also for over all socio-economic development.

It has been decided to construct five IT Towers i.e. two in Visakhapatnam with 50,000 sq.ft each, one each at Warangal, Tirupati and Kakinada of 15,000 sq.ft each through APIIC to provide office facilities to IT companies to start their operations in plug & play mode during 2012.

D. Information Technology Investment Region

ITIR is envisaged as a self contained integrated knowledge Cluster dedicated to establishment and growth of Information Technology (IT), Information Technology Enabled Services (ITES) and Electronic Hardware Manufacturing (EHM) units. The Government of A.P. has taken a lead to identify & develop an ITIR in an area of about 202 Sq.Kms. in and around Hyderabad and Ranga Reddy districts based on the Policy resolution of the Government of India to promote Information Technology Investment Regions in the country. The High Powered Committee recommended in-principle approval to Andhra Pradesh ITIR Project. DPR of ITIR proposal is under preparation.

Benefits of ITIR

- Direct Revenues – Rs.310,849 crore
- IT Investment potential–Rs.219,440 crore
- IT Exports – Rs.235,000 crore
- Direct employment – nearly 15 Lakh
- Indirect employment – nearly 53 Lakh
- Increase in tax revenue to State – Rs.30,170 crore

Promotion of IT SEZs

Special Economic Zone (SEZ) Policy is promoted by Government of India. SEZ is a specifically delineated enclave treated as foreign territory for the purpose of industrial, service and trade operations, with relaxation in customs duties and more liberal regime regarding other levies, foreign investments and other transactions. SEZ can be set up in an area of 10 hectares with a minimum built up processing area of 1 lakh square meters and of which at least 50% of the area shall be earmarked for developing processing area.

There are 43 IT/ITES notified SEZs in the state. Out of which 18 SEZs are operational. The investment made in IT/ITES SEZs is Rs. 6277.56 crore (Hyderabad).

IT&C department future plans

To implement its vision the Government has envisaged in its ICT Policy 2010-2015 to achieve the following targets by 2015:

Exports of Rs.70,000 crore (US$15 billion)

Projected Annual Growth Rate of 17%

Generation of new direct IT employment to the tune of 1.25 Lakh+ (125,000)

Generation of new indirect IT employment * to the tune of 5 Lakh+ (500,000)

New Initiatives Proposed

Special Thrust for Animation and Gaming Sector

Gaming & Animation Sector has a potential of US $42 Billion Industry worldwide and US $900 million in India. Recognizing Animation and Gaming, Visual/Special Effects and Digital Entertainment as sunrise industry, the Government has contemplated the following initiatives for the growth of Animation and Gaming Sector in the State of Andhra Pradesh:

- 30 acres of APIIC land at Raidurg, Hyderabad, is allocated for Gaming and Animation Park.
- Gaming and Animation Park shall comprise of built up incubation space, Shared Studios, Processing Labs, Media Centre, Conference facilities, Transit Office/Business Centre., etc.
- Animation & Gaming Academy in collaboration with reputed Gaming & Animation Academy to prepare students suitable for employment in Gaming & Animation sector.

Creation of Electronic Hardware Manufacturing Clusters

The IT&C Department has taken steps to set up Electronic Hardware Manufacturing Clusters (EHMCs) in Hyderabad and Visakhapatnam as per the Policy Resolutions of the Government of India to augment growth of IT sector and to provide state-of-the-art IT/ Electronic Hardware physical infrastructure.

Organising the ICT Promotion event – "Advantage A.P. 2013" - to project the State as the most preferred IT destination:

It is proposed to hold ICT Promotion event in the month of March, 2013, under the name – "Advantage A.P. 2013 – The most preferred IT destination" at HICC, Hyderabad. The objectives of the "Advantage A.P. 2013 – The most preferred IT destination" are:

- Project AP as the most preferred destination for IT/ ITES sectors globally
- Create awareness about Trends/Opportunities in IT / ITES sectors for SMBs.
- Create a platform for interaction between IT/ITES companies and the customers

Promotion of participation of Women in the ICT Sector

Women employees constitute more than 30% of the total working IT population in the State. A vast majority of them work in call center jobs in ITeS/ BPO operations, which require them to work 24 X 7 X 365 days on shift or staggered timings. Government of Andhra Pradesh in its ICT Policy 2010 – 15 has identified the increasing role of women in ICT. It will be impressed upon the industry to meticulously adhere to the following policies as part of their Human Resources practices:-

- Follow fair practices with respect to recruitments, promotions, career opportunities, project allocations, and training opportunities, etc.
- Provide congenial conditions for smooth working

of women employees.

- Provide requisite safety and security to women employees at their work place during working hours and night shifts.
- Provide necessary escort services to women to enable them to reach their residences safely after work.
- Implement in letter and spirit the statutory provisions pertaining to women employees with regard to their various types of leave entitlement such as medical, maternity, earned leave and privilege leave, etc.
- Provide professional counseling arrangements to needy women employees for handling adverse situations related to gender.
- Provide a forum wherein women employees can represent their issues and mutually interact for improving their working conditions.
- Provide periodic training to women at all levels.

Human Resource Development – Jawahar Knowledge Centers

Jawahar Knowledge Centers (JKC) aim to improve the quality of education through imparting suitable skills and enable gainful employment to final year engineering graduates. JKCs are established in reputed engineering colleges across the State to increase the standards of higher education. An engineering college that has a JKC should provide a computer lab with a powerful server and 50 state of art high-end dedicated desktops, at the rate of one to each student who are connected by LAN. In JKC, the students are trained in technical skills, soft skills, project management skills and communication skills by employing accelerated learning strategies with a trainer. JKC provides the best human resource training in relevant skills required by the Industry. It bridges the gap between the student curriculum knowledge and Industry desired skills. JKC students are also serving about 70 Government Departments in terms of analysis, design, development and deployment of the IT applications required. They gain practical experience in facing real life scenarios like teamwork, time management, effective way of developing software applications, etc. JKC provides an opportunity to students to learn beyond their curriculum and text book theories through the mode of "Learning by doing", along with 'Learning by listening".

JKC has also initiated industry certification programs at subsidized / free price. This will enable the students to become proficient in the technology of their interest before passing out from the college and improve their employability.

Tailor made training programs are designed and offered to students based on industry requirement and existing conditions in the IT market. The training content includes generic skills like Soft skills, Aptitude, Reasoning, English grammar and communication skills and specific technical skills like Java programming, .NET, CAD, database, etc. IEG is organizing Industry visits and lectures from Industry experts to JKC registered students.

Jawahar Knowledge Centers for Engineering & MCA students

The concept of Jawahar Knowledge Centers was initiated to address the problem of bridging gap between academic competencies of students and industry expectations. JKC program in 30 Engineering & MCA colleges with an enrolment of 1500 was introduced in 2004, and currently has JKCs in 423 Engineering & MCA colleges with 49,725 enrolled candidates. The Program imparts training in 2 levels i.e. Employable skills and Industry ready skills.

Jawahar Knowledge Centers for Degree Students

JKC program was introduced in Degree colleges in 2006. Presently there are 179 JKCs in degree colleges across the State. 10,616 students were registered in 2012-13 (up to Sep,12). Training is imparted to students in English, Communication Skills, Aptitude and basic Computer Skills so as to enhance their employment opportunities in ITeS sector.

Tribal Development Program

- IEG is planning to start Tribal IT Programs in Tribal concentrated areas and Engineering and degree colleges.
- ST Youth information is being gathered from Tribal Welfare Department (TWD) and ITDA.
- District wise and ITDA wise Interactive Tribal Awareness Programs are being planned for Tribal students.
- It is proposed to admit all eligible Tribal candidates

into JKC/STP programs to enable them to get employment in IT/ITES sector.

The Institute of Electronic Governance serves as a Nodal Agency for the development of IT Solutions and operationalizes activities of governance applications, training. It offers technological solutions for developing and maintaining e-Governance standards, , initiates programs to promote availability of human resource and establishes emergency response teams linked to computer security as envisaged in the ICT Policy 2010-15. Special training programs for socially challenged sections of the society and registration of more technical colleges to cater to training needs of outgoing graduates are also planned for 2012-13.

Telugu Vijayam

To bring back the glory to telugu languge Goverment of Andhra Pradesh has started a project called "Telugu Vijayam". The key objective of the project is to keep all language resources at one place so that it will be easy for common people for accessing. The project started in September 2011 and achieved 6 out of 16 resolutions made during the 1st International Telugu Internet Conference in 2011.

The major achievements of the project up to Sep, 2012 are

- Developed 18 Unicode compliant fonts from earlier Telugu version which had only 3 Unicode fonts.
- Full Telugu spell checker- the first of its kind in Indian Languages with suggested words created
- Telugu – English – Telugu Digital Dictionary with more than 2 lakh words created
- Bi-lingual dictionary with more than 65,000 words in 5 major languages, Hindi, Tamil, Kannada, Marathi and Kashmiri generated
- Telugu Paryaya Padakosam, Telugu Satavadanam and Bala Vyakaranam

New G2G AP SWAN Network (AP Broad Band Network)

Government has implemented new G-2G SWAN connecting the State Capital to all District head quarters (DHQs) with, 8 Mbps bandwidth connecting all DHQs up to MHQs with 2 Mbps under AP Broad Band Network. The new Network is completely IP based and provides voice, data and video communications to all Government offices. 23 DHQs are connected with SHQ and 1085 MHQs are connected to respective DHQs and have been operational from 26.11.2010. TPA (Third Party Audit) has been completed. Migration to New SWAN for existing Government offices connected to Old SWAN has been completed. Service providers were selected through tender process for Horizontal Connectivity to SWAN. Agreements have been signed and orders issued for e-Seva, IGRS, RTA, revenue department connections to SWAN as per requirement projected by concerned departments. Horizontal Connectivity is under progress and 2100 horizontal links were completed up to Sep.2012. Video Conference System is connected with DHQs and SHQ, DTA, RTA, MA&UD, MROs, APGLI Departments are utilizing the network.

APNET/SAPNET

The Government of Andhra Pradesh as a part of its objective to harness IT potential established a Satellite based communications Network to be utilized in District Education, Tele Medicine, Agriculture Extension, E-Governance, creating Awareness in Self Help Groups and Human Resource Development.

An earth station has been functioning since 2002, utilizing INSAT-III B Satellite using Ku Band. SAPNET, an autonomous society is running the operations. The Earth Station has a capacity of 5 Video Channels and one data channel. A State of art digital studio is functional and utilization of live interactive channel has also increased. All MPDOs are equipped with Mana TV and receive only terminals and more than 10,000 remotes were deployed up to Sep.2012.

Presently 4 channels - such as Shared by School, Collegiate, Technical and Medical Education in channel 1 for live Interactive teaching of School, Collegiate, Technical and Medical Education are being used for transmission of educational programmes. In addition, the channel is also used by the Agriculture Department, Indira Kranthipatham and Police etc., for their interactive Video Conference in channel 2. Channel 3 is dedicated to HRD and Social Sector programs and Channel 4 is for Schools and JKCs Programs through IEG.

AP State Data Center

A. Government of AP built a State Data Center with approximately 8,900 S.Ft. in A.P. Financial District

at Manikonda village to cater to the Data Centre needs of all departments of the State Government. The construction of the building for the SDC was completed by APIIC.

B. The contract was signed with M/s. Wipro Ltd. on 24.09.2010. The present status of the contract is as follows

a. M/s Wipro has completed commissioning IT and Non-IT equipment.

b. APSDC is connected to APSWAN and APSCAN with STM-1 (155 Mbps) wired with redundant BSNL STM-1 (155 Mbps) link.

c. Dedicated Internet Bandwidth of 42 Mbps in redundant mode from M/s. Sify and M/s Tulip has been deployed at the APSDC.

d. A Composite Team for APSDC has been formed.

e. M/s. KPMG has been identified as the TPA and contract signed by APTS.

f. The Final Acceptance Test (FAT) is completed and 'Go-Live' declared on 16.08.2011. APSDC started on 26.08.2011.

g. APSWAN and APSDC are connected to National Knowledge Network (NKN) established by DIT, GoI. Most of the applications in APSDC have migrated to NKN Internet Bandwidth.

h. Phase-II enablement was initiated wherein provision for 24 racks space will be made available.

C Capacity Utilization

Out of the 28 racks provided in the Data Centre, 26 racks were utilized for installation of hardware of APSDC, DTA, State Audit, 'Mee Seva' Project, Registrations & Stamps, Aarogyasri, eSeva, SERP (Sthree Nidhi), IT&C Deptt., APTS (SAP), Civil Supplies Department and SSDG Project. About 36 TB of SAN storage has been allocated against the useable space of 37 TB and an additional 20 TB has been ordered. 100 TB of SAN storage has been installed and is in production for 'Mee Seva' Project.

D. Application Migration

The following applications have been migrated to APSDC:

a. All applications of Director of Treasuries and Accounts

b. Applications of AP State Audit Department

c. Applications of Works & Projects Department

d. Applications of IT Department (APIT, Gazette, GoIR Database)

e. 28 applications/web sites operating at APSCAN.

f. Servers and applications of Registration Department

g. Applications of 'Mee Seva' including Revenue & Registrations applications

h. Application of GHMC (Birth & Death) & DMA (Suvidha)

i. APTS – SAP is implemented

Civil Supplies Department and Aarogyasri (104) application migration and SERP (Sthree Nidhi) application migration are under progress

As part of security measures, application security audit is being done for web applications.SRDH implementation testing is under progress. SSDG hardware installation, Agriculture Department hardware installation, Civil supplies EPOS application installation and testing and Aarogya Sree Employees Healthcare Fund scheme hardware and application installation are in progress.

Mee Seva

"Mee Seva" is a technology rich e-governance initiative which utilizes the State IT infrastructure such as A.P State Wide Area Network, A.P. State Data Center, e-seva Centres, AP Online Centres, and common service centers together to harness benefits of e-governance for rural citizens of AP.

Initially 15 Revenue and Registration departments services were provide through Meeseva in November 2011 in Tirupati, It is now rolled out all over the state.

AP Information Technology (Electronic Delivery of Services) Rules 2011 were issued on 18th October 2011 to facilitate electronic delivery of legally valid certificates which enabled issue and delivery of Digitally Signed Certificates directly to citizens and obviate the need of citizens going to Government Offices. Presently more than 45 services to about 70,000 citizens with 2 lakh transactions at 4500 locations per day are rendered through Mee-seva.

Salient features of Mee Seva

- All services are available at all centers.
- Totally web based application
- Measurable and enforceable SLA (15 minutes)
- Multiple service delivery channels such as eSeva centers, RSDP centers Rajiv centers and CSC centers.

Project model

Selection of project funding and implementation model of PPP is one of the major factors of success. Looking at the fast changing technologies and the existing age old Government procedure and investment requirements, the PPP model was chosen for its delivery. This probably represents the first PPP project in the field of public services delivery in the country. Project components allocation between public and private and procurement method (BOOT) has also contributed to its success.

Service Delivery Channels and Expansion Stages

eSeva was initially started in 1999 with 2 centers in the State Head Quarters of Hyderabad with 3 services. It was extended to 33 Centers in the Twin cities in the year 2001. There are 55 centers functioning presently. Because of the success of the concept, it was further extended to all municipal towns in the state (262) in 2003.

Another service channel such as Rajiv Service Delivery Points (RSDP) centers were also started in 2005 to extend these services to semi-urban and rural areas. These are being further extended to villages by setting up 5468 service centers in villages under the project CSC.

Services Added to 45 Meeseva Centres

- Issuing of Electro Photo Identity Cards (Election Cards) for EPIC approved candidates. About 3,00,000 citizens have been served till date
- Booking of new gas connections at eSeva centers has been introduced. 45,000 citizens availed the facility as of date.
- Issuing of Birth and Death Certificates through all eSeva centers in GHMC area. 45,000 citizens availed the facility since its introduction in 2010.
- Booking time slot for learners license & Driving License and paying required fee.
- Issuing fresh and renewal of trade license certificates of GHMC area.
- Collecting bills of private telephone operators such as TATA DOCOMO.
- Collecting licensing and renewal fee of legal Metrology Department.
- Ration card changing service
- Airtel document collection service
- ING Vysya Premium payment service.
- Vodafone bill collection service.
- Aircel bill collection service.
- Pan Card service.
- Beam Telecom Pvt. Ltd. Collection of Internet Post paid pills through eSeva centers in Hyderabad & RR Dist.
- Hyderabad Revenue Service.
- Hathway Broadband Internet bills. Collection of payments from customers.
- AP Housing Board. Installment Collection from Hire purchase allottees.

APONLINE

APONLINE is an e-governance gateway for the Government of Andhra Pradesh that offers multiple services through a single window to citizens. It is a best-of-breed portal, developed and launched by Government of Andhra Pradesh in partnership with Tata Consultancy Services (TCS) as a Joint Venture. APONLINE is accessible through multiple delivery channels, at home and offices on anytime anywhere basis to deliver citizen services.

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 April to October,12 were Rs.580.37 crore through 1,74,85,728 transactions. Apart from the above, information pertaining to 33 Secretariat Departments and 258 Head of the Departments, Corporations and Agencies of Government of Andhra Pradesh, is hosted on AP Online and updated on regular basis.

e-Procurement

The key objectives of this innovation are demand aggregation, transparency, accountability, fiscal savings, standardization of procurement processes across government entities to enhance administrative efficiency. The eProcurement system offers a superior level of security with Secure Socket Layer (SSL) encryption, strong authentication with digital certificates and speed to conduct real time bidding over the internet.

e-Procurement has secured demonstrable benefits to the stake holders by providing transparency, cost and time savings, improved efficiency and decreased the scope for corrupt practices. The path breaking initiative has proved that transparency, fairness and equal opportunity to private entrepreneurs who bid for government contracts, sell products or expertise to government agencies will evolve a competitive market and contribute significantly to a vibrant economy. This pioneering implementation by the state government has set a national trend for eProcurement in India.

The platform is extensively used and 27 Departments, 41 PSU's & Corporations, 15 Universities and 128 Urban local bodies are presently using the eProcurement service and have successfully transacted 2,00,718 tenders with a value aggregating to Rs.1,05,711 Crore on the platform since its launch.

Achievements

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 to embark on eProcurement initiatives. It is actively sought to be replicated in other states.

Some of the important benefits accrued are – significant cost savings in print media advertisements cost due to abridged tender notices; elimination of supplier Cartels, and Syndicates due to remote bidding; empowerment of small & medium bidders as the entire content and bid submission is online; significant reduction in tender process time from 3 to 4 months to 35 days due to automatic work flows; and improved Institutional memory due to storage of electronic records etc.,

Awards

Golden Icon Award from GOI in the Year 2003 for Exemplary eGovernance Initiative; The PC Quest Award for Best IT implementation in India (2005);

Finalists for the Prime Minister's Award (2006) for excellence in Public Administration;

NASSCOM's Best IT user Award (2006) and United Nations Public Service Award (2007).