

## **Irrigation Development in Andhra Pradesh**

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Andhra Pradesh has a heritage of irrigated agriculture dating back to several centuries. In the past, during the periods of Kakatiya and Vijayanagar Kingdoms, several tanks and diversion systems were constructed and wells dug which are still operating and productive. During the pre-independence period, the Godavari Delta, the Krishna Delta, the Pennar Delta, the Kurnool-Cuddapah Canal, Khanapur, Mahaboob Nehar, Pocharam and Nizamsagar irrigation systems were constructed by the then rulers. After independence, high priority was given to irrigation development. The principal projects providing irrigation are the new barrages to replace the old anicuts on the rivers Godavari, Krishna, Tungabhadra and the Penna, and the new dams/reservoirs and canal systems of Nagarjunasagar, Tungabhadra High and Low Level Canals, Sriramsagar, Somasila, Vamsadhara and Yeleru. On the Godavari, the original anicut built between 1844 and 1851 in four sections has been replaced by barrages at the same places, Dowlaiswaram, Ralli, Maddur and Vijjeswaram providing a potential of 5.02 lakh ha in East and West Godavari and Krishna districts.

The Prakasam barrage at Vijayawada was the first project taken up after the Andhra State came into being in 1953; this replaced the hundred year old anicut and serves 4.96 lakh ha in Krishna, Guntur, Prakasam and West Godavari districts. The Kurnool Cuddapah Canal (KC Canal) carrying the Tungabhadra water from the anicut at Sunkesula to fields in Kurnool and Cuddapah districts since 1866 has been improved and strengthened to provide water to 1.21 lakh ha. The Nellore and Sangam anicuts also of the last century irrigate 0.79 lakh ha in Nellore district. The Tungabhadra project, (High and Low Level Canals) taken up prior to Independence carries water to 1.05 lakh ha in drought prone Anantapur, Cuddapah and Kurnool districts. Vamsadhara and Yeleru serve 1.18 lakh ha in Srikakulam and East Godavari districts. The Kadam project, built between 1949 and 1965, irrigates 0.26 lakh ha in Adilabad. The Rajolibanda Diversion Scheme, consisting of an anicut across the Tungabhadra, upstream of the Sunkesula anicut/barrage, was constructed between 1953 and 1958 to carry water to 0.35 lakh ha in the drought prone Mahaboobnagar district. The Nizamsagar project built between 1924 and 1931, and modernized fifty years later, benefits 0.97 lakh ha in Nizamabad district.

The Sriramsagar Stage-I, work on which started in 1963 to create a potential of 3.92 lakh ha, has been partially completed to supply water to 2.87 lakh ha and irrigates 1.28 lakh ha in the less developed districts of Adilabad, Nizamabad, Karimnagar, Warangal and Khammam. The largest of the works nearly completed is Nagarjunasagar, with a potential of 8.95 lakh ha, most of which is already created, and currently provides water to 8.10 lakh ha. The Tungabhadra High level Canal Stage-II and the Pulivendula Branch canal initiated in 1967 and 1973 respectively to add a potential of 1.14 lakh ha, have generated a capacity of 0.64 lakh ha and have been irrigating 55,000 ha in the last few years. Somasila reservoir across the Penna upstream of the Nellore and Sangam anicuts was started in 1975 to stabilise the flow to 1.04 lakh ha and to create a fresh potential of 38,000 ha. It has stabilized supply to about one lakh ha and covered an additional area of 6,000 ha, in the Nellore delta.

Telugu Ganga Project was started in 1983 with a commitment to supply 15 TMC of water to Chennai city for drinking and to provide irrigation to 5.75 lakh acres in the drought affected areas of Kurnool, Cuddapah, Chittoor and Nellore districts. The project is in advance stage of implementation. Construction of the Srisaïlam Right Branch Canal in Kurnool district, Srisaïlam Left Bank Canal, renamed as A Madhava Reddy Canal in Nalgonda district, the Tungabhadra High Level Canal Stage-II in Anantapur district, the Somasila Stage-II in Nellore district and the Priyadarshini Jurala Project in Mahaboobnagar district are also in good progress.

The existing medium irrigation projects irrigate 2.75 lakh ha, those under construction are designed to irrigate 2.06 lakh ha and those on the drawing boards 2.30 lakh. There are over 12 thousand minor irrigation tanks with an ayacut of less than 2000 ha in the State some of them built a thousand years ago. There are 22 lakh dug wells and bore wells, of which nearly 1 lakh have oil engines and 20.78 lakhs have electric motors. The IP created under the Plan schemes and under those taken up prior to the Plan period (excluding the area covered by the on-going schemes) is as follows:

| S.No. | Description                  | No. of schemes | IP created (in hectares) |
|-------|------------------------------|----------------|--------------------------|
| 1     | Major Irrigation Projects    | 11             | 12,53,080                |
| 2     | Pre-plan schemes             | 7              | 3,07,000                 |
| 1     | Plan Schemes                 | 18             | 15,60,080                |
| 2     | Total                        | 45             | 78,250                   |
|       | Medium Irrigation projects   | 59             | 1,86,336                 |
| 1     | Pre-plan Schemes             | 104            | 2,64,586                 |
| 2     | Plan Schemes                 | 12351          | 13,71,000                |
|       | Total                        | ...            | 5,27,894                 |
|       | C. Minor Irrigation Projects | 12351          | 18,98,894                |
|       | Pre-plan schemes )           |                |                          |
|       | Plan schemes )               |                |                          |
|       | Total                        |                |                          |
|       | Grand Total                  | 12473          | 37,23,560                |

Investment in irrigation sector has led not only to a substantial increase in agricultural growth, incomes and development, but also to an increase in the gross National product. This has been achieved through major public expenditure. Since the formation of A.P. in 1953, plan outlays on major, medium and minor irrigation projects totaled to Rs. 7,153 crores till the end of the VIII plan. The proposed outlay for the IX plan period on irrigation schemes is Rs. 6030.30 crores, which was approved by the working group. The amount spent on major, medium and minor irrigation schemes plan-wise is given below.

**Table Showing Plan Investment in Irrigation Sector:**

| Sl.No | Period                     | Amount spent (Rs.in crores)   |                       |         |
|-------|----------------------------|-------------------------------|-----------------------|---------|
|       |                            | Major<br>Medium<br>Irrigation | & Minor<br>Irrigation | Total   |
| 1     | I – Plan (1951-56)         | 37.47                         | 3.52                  | 40.99   |
| 2     | II– Plan (1956-61)         | 57.43                         | 4.38                  | 61.81   |
| 3     | III–Plan (1961-66)         | 91.52                         | 18.60                 | 110.12  |
| 4     | 3 Annual Plans (1966-69)   | 60.87                         | 10.81                 | 71.68   |
| 5     | IV–Plan (1969-74)          | 118.71                        | 18.15                 | 136.86  |
| 6     | V– Plan (1974-78)          | 269.11                        | 38.82                 | 307.93  |
| 7     | Two Annual Plans (1978-80) | 257.69                        | 23.79                 | 281.48  |
| 8     | VI–Plan (1980-85)          | 729.59                        | 50.73                 | 780.32  |
| 9     | VII- Plan ( 1985-90)       | 1306.40                       | 131.40                | 1437.80 |
| 10.   | Annual Plan(1990-91)       | 282.75                        | 63.23                 | 345.98  |
| 11.   | Annual Plan(1991-92)       | 333.92                        | 57.93                 | 391.85  |
| 12.   | VIII– Plan (1992-97)       | 2754.35                       | 431.56                | 3185.91 |
|       | Total                      | 6299.81                       | 852.92                | 7152.73 |
| 13.   | 1997-98                    | 662.77                        | 121.57                | 784.34  |
| 14.   | 1998-99                    | 642.26                        | 194.45                | 836.71  |
| 15    | 1999-2000                  | 962.99                        | 170.61                | 1133.60 |

### **Priority to Irrigation Development**

About 40% of the State's gross cropped area is irrigated, and irrigation's contribution to State agricultural production is about 60%. It is in irrigated areas where the bulk of agricultural growth has occurred. Rehabilitation and sustained development of irrigation infrastructure and its expansion in the backward and drought prone regions of the State are thus, of paramount importance to Andhra Pradesh. Irrigation has also resulted in alleviation of poverty in upland and backward areas, by providing sustained income to

farmers, increase in wage employment and availability of water for human and cattle consumption and industrial activities. The Government have, therefore, given highest priority for the completion of on-going irrigation projects and to secure clearances of the pending projects. For the purpose, Government have in the year 1996, evolved a three fold strategy namely; (i) to achieve maximum irrigation by completing on-going irrigation projects; (ii) to rehabilitate and modernize existing irrigation schemes to bridge the gap ayacut in tail-end area; and (iii) to hand over the management and maintenance of all irrigation schemes in the State to farmers' organizations to ensure reliable and timely supply of water. Significant achievements made in the development of irrigation infrastructure during the four years (1997-2000) are described below:

### **Ongoing Projects:**

- a. Priyadarshini Jurala Project, Sriramsagar Project Stage-I, (below Km.234), the Kalyanivagu and Singeetham schemes under the Nizamsagar and the Telugu Ganga Project have been commissioned in the major sector by incurring an expenditure of Rs. 1020 crores during the last 4 years and created a new irrigation in 1.57 lakh acres.
- b. A Madhava Reddy Canal Project (SLBC) has been given a major thrust for its early completion. An amount of Rs.273 crores has been spent on the scheme during the last four years.
- c. A loan assistance of Rs. 555 crores is secured from the Overseas Economic Cooperation Fund (OECF), Japan, for the modernisation of Kurnool-Cuddapah Canal (KC Canal), which would benefit irrigation in more than 52,000 acres in the tail-end areas of Cuddapah district.
- d. Modernisation of Tungabhadra High Level Canal in Anantapur district of the Rayalaseema region is taken up with an estimate cost of Rs. 45 crores with the loan assistance of NABARD.
- e. On Telugu Ganga Project, Government have spent Rs.450 crores in the last four years, and achieved new irrigation in an extent of 1.20 lakh acres in Rayalaseema and uplands of Nellore districts. Works on Sri Pothuluri Veerabrahmamgari Mattam Reservoir are being accelerated to release water in that reservoir early.
- f. The Government have taken up detailed investigation of both Galeru Nagari and Handri Niva schemes and decided to go ahead with their execution under a phased programme. Handri Niva scheme is now planned to be executed, in the first phase to provide drinking water of 5.5 TMC to the three districts of Anantapur, Chittoor and Kurnool. Similarly, Galeru Nagari is now planned in Phase-I to irrigate 68,000 acres in Cuddapah district.
- g. Improvement works on drainage and flood protection are taken up in six coastal districts and in Khammam and Warangal districts at a cost of Rs.123.80 crores, to save an ayacut of 25.43 lakh acres from submersion.
- h. Government secured a loan assistance of Rs.1298.56 crores from the World Bank under APERP for O&M and minimum rehabilitation of irrigation systems under major, medium and minor irrigation sectors. Under the Project, a massive financial assistance of

Rs.364 crores already provided to the water users associations to, undertake rehabilitation works on the canals and the distributory systems. With these efforts 10.12 lakh acres of land additionally been brought under assured irrigation in tail-end areas upto the end of Khariff, 1999 season.

i. Improvement works relating to flood banks, upland drains, groynes etc., in different river systems in the State are sanctioned at a cost of Rs.67.75 crores to provide relief to a total ayacut of 3 lakh acres.

j. Rs.85 crores have also been sanctioned for restoration of breached minor irrigation sources to benefit about 3.79 lakh acres across the State. Government have also proposed to rehabilitate 2934 minor irrigation tanks in all the districts at an estimated cost of Rs.136.00 crores. The above actions represent a major commitment on the part of the present Government to revive the irrigation sector.

k. Under AP.III Irrigation Project, the World Bank have sanctioned a loan assistance of 939.85 crores to complete the SRBC Project to create an irrigation potential of 1,90,000 acres in Kurnool and Cuddapah districts. Ongoing canal works to a length of 114 kms costing Rs.390 crores have been completed. The Project is planned to be commissioned by August,2001.

l. Under the Accelerated Irrigation Benefit Programme (AIBP) funded by Government of India, six projects, viz, Sriramsagar Project Stage-I, Nagarjunasagar Project, Somasila, Priyadarsini Jurala Project and the Cheyyeru and Madduvalasa medium irrigation projects have been sanctioned for priority completion. An amount of Rs.1095 crores has been sanctioned under this programme to create a total irrigation potential of 7.30 lakh acres by July,2001. Works on all these projects are in brisk progress.

m. Balance works of Vamsadhara Project Stage-I at an estimated cost of Rs. 56.82 crores have been taken up to create an irrigation potential of 20,000 acres by July,2000. These works are in advance stage of completion. Under Phase-I of Stage-II of this Project, a further loan of Rs.30 crores has been sanctioned to create an additional ayacut of 20,000 acres by July,2001.

n. Balance works of Chitravati Balancing Reservoir have been taken up in Cuddapah district for priority completion to stabilize the ayacut under the Pulivendula Branch Canal and to provide drinking water in more than 130 villages in Anantapur district. An amount of Rs.78 crores has been sanctioned for these works.

o. Construction of aqueduct-cum-road bridge across river Vynatheyam near Gannavaram (v) in East Godavari District has been taken up with an estimated cost of Rs.34.80 crores to replace the century-old Gannavaram aqueduct to stabilize irrigation in 45,020 acres in Nagaram island.

p. Chagalnadu Lift Irrigation Scheme has been sanctioned at a cost of Rs.61.23 crores to benefit an ayacut of 35,000 acres in East Godavari District. Works for the works are in brisk progress.

q. With a view to serve the tail-end ayacut of 30,000 acres under the RDS, a link canal connecting the Jurala Project Right Branch canal at a cost of 18.89 crores has been sanctioned.

r. The Tarakarama Krishnaveni Lift Irrigation Scheme has been taken for implementation to stabilize the NS Left Canal ayacut by utilization return water of Vijayawada Thermal Power Station in Krishna district. The Scheme is estimated to cost Rs. 62.50 crores and benefit an ayacut of 56,000 acres. The Scheme is proposed to be funded under Rural Infrastructure Development Fund for its early completion.

### **Medium Projects:**

a) 10 long pending projects have been completed in the medium sector by incurring an expenditure of Rs. 276 crores and creating a new ayacut of 1,12,000 acres (Vattivagu-I, Satnala, Kaulasnala, Taliperu, Andra, Cheyyeru, Vengalarayasagar, Chalamalavagu, Buggavanka and Yogi Vemana Reservoirs).

b) 16 medium irrigation projects are currently under construction at a cost of Rs. 764.86 crores to benefit an extent of 2.63 lakh acres. These schemes are Madduvalasa, Janjhavathi, Pedderu, Maddigedda, Subbareddysagar, Surampalem, Yerrakalva, Vijayarai, Kanupur Canal, Cheyyeru, Veligallu, Gundlavagu, Vattivagu Stage-II, Yerravagu, Suddavagu and Kovvadakalva.

c) 11 old medium projects are rehabilitated to standards at a cost of Rs 63.40 crores to benefit 24,000 acres gap ayacut in tail end areas. These projects are Pakal Lake, Kotipallivagu, Koilsagar, Dindi, Swarna, Ramadugu, Bollaram Mathadi, Rallapadu, and Lower and Upper Sagileru.

d) The following schemes involving an outlay of Rs. 782.55 crores are being formulated to benefit 2.19 lakhs acres. These are Peddagedda, Tarakarama Theertha Sagarm, Thotapalli Regulator, Bhupathpalem, Palemvagu, Gollavagu, and Peddavagu Ada.

### **Minor Irrigation Schemes:**

a) Minor irrigation plays an important role in the development of agricultural production and ensure food security in drought prone areas and in areas outside the command of major projects. Government, have therefore, given high priority to the completion of on-going minor irrigation schemes in the State and to take up new schemes wherever feasible. During the last 4 years, 260 minor irrigation schemes have been completed by incurring an expenditure of Rs. 158.70 crores to benefit an ayacut of 45,850 acres. 198 minor irrigation schemes are currently under execution at a cost of Rs. 131.00 crores to benefit 64,415 acres.

b) Simultaneously a major program has been initiated to rehabilitate old minor irrigation schemes under a phased program. Out of a total of 12,264 schemes in the State, 2,934 schemes have been taken up for minimum rehabilitation at a cost of Rs. 136.18 crores under the APERP Program. Additional 3,000 schemes are proposed to be taken up at an estimated cost of Rs. 172 crores by utilising the savings under the AP.III Irrigation Project.

c) In order to prepare a master plan for the development of new minor irrigation sources in upland areas of the State, Government have now sanctioned a special Division for all the 23 districts in the State to fully utilise the surface water potential.

#### **New Projects:**

With a view to fully harness water resources, Government have now decided to take up execution of several new schemes. These include:

- a. Phase-I of Godavari Lift Scheme to fully stabilise the Nizamsagar ayacut in Nizamabad district;
- b. Peddagedda, Thotapalli Regulator and Tarakarama Theerthasagar scheme in Vizianagaram district.
- c. Jurala, Rajolibanda Diversion Scheme link Canal in Mahaboobnagar district;
- d. New Projects such as Somasila-Swarnamukhi link canal, Swarnamukhi barrage and Sri Guru Raghavendra Swamy Scheme are sanctioned to extensively benefit drought affected areas in Rayalaseema region.

#### **Priority Schemes:**

In the case of the following priority projects, Government have taken steps to implement them under a phased programme:

- a. Under Flood Flow Canal, under phase-I, Government accorded administrative approval to construct 140 km length of flood flow canal and the Mid Manair Dam at a cost of Rs. 859 crores to irrigate 68,000 acres;
- b. Sanction also accorded to execute Gandikota reservoir under Phase-I of the Galerunagari Project to irrigate 70,000 acres land in Cuddapah district;
- c. Construction work of Nallamalaisagar Reservoir is being taken up at Gottipadia and Sunkesula Gaps at a cost of Rs. 137 crores;
- d. Sanction also accorded to take up detailed investigation and execution of Nettampadu and Kalwakurthy Lift Schemes in Mahaboobnagar district and of Suddavagu and Yerravagu medium projects in Adilabad district and of Surampalem reservoir in East Godavari district.

#### **Priority Programmes**

##### **Utilisation Of River Godavari Waters**

With a view to ensure fuller utilisation of the waters of river Godavari for the development of backward areas of Telangana and North Andhra regions, Government have set up Godavari Waters Utilisation Authority (GWUA) on 12.4.1999. The Authority held wide ranging discussions with the leaders of all Political Parties and

senior technical experts in the State and the following major projects have been identified for implementation:

**Inchampally & Polavaram Projects:** With a view to expeditiously resolve pending inter-State, forest, resettlement & rehabilitation and environment related issues pertaining to these projects, Central Government have constituted a “High Level Committee” of technical experts under the Chairmanship of the Member, Central Water Commission on 6.7.2000. The Committee in its first meeting held on 11.8.2000 at Delhi, constituted a “Task Force” with the Chief Engineers of three co-basin States viz., Andhra Pradesh, Maharashtra and Chattisgarh to evolve a commonly agreed design of the said projects with reference to the area of foreshore submergence at various levels of its dam height. The Task Force has already met on 22.12.2000. Simultaneously, the environmental Protection Training & Research Institute (EPTRI) has initiated studies to work out environment implications of constructing Inchampally at alternative sites feasible, to evaluate the impact of such construction on the environment and forests. The Central Water Commission ( CWC ) has undertaken the designing of the Inchampally Dam for its execution to an initial height of +95 M, with a provision to increase the height to +112.77 M in the final phase.

In respect of Polavaram, backwater studies, 1.0M contour maps and resettlement and rehabilitation plans in respect of areas liable for submergence in the States of Orissa and Chattisgarh have been furnished to the Central Water Commission on 11.8.2000, to enable those States to examine the submergence aspects of the project in the respective States and to give concurrence for the implementation of the project.

Pending clearance of the Polavaram Project, Government have decided to prepare a detailed project report for lifting 5 TMC of Godavari water directly to Yeleru Left Main Canal to supplement irrigation under the existing minor irrigation sources in the districts of East Godavari and Visakhapatnam beyond Yeleru reservoir.

**Dummugudem Project:** Detailed investigation has revealed a potential of generating 350 MW of hydel power at the project site, apart from irrigation benefits to Khammam district. The APGENCO has been advised to prepare a detailed feasibility report in respect of this project within a period of next 4 months for its execution in private/ joint sector.

**Yellampally Project:** Yellampalli is one of the important projects identified to utilize nearly 50 TMC of Godavari river water to augment irrigation supplies to SRSP Stage –II and also to provide an alternative source of water supply to NTPC, to save corresponding water for supplementing irrigation under Kakatiya canal in Warangal District.

**Nizamsagar Lift Scheme:** On account of acute shortage of water in the Nizamsagar, nearly one lakh acres of land below Alisagar is not getting water for irrigation in time. To supplement the shortfall, Government have decided to take up a lift Scheme on river Godavari to directly pump water in Alisagar and Gutpa tanks. Detailed Project Report of the scheme is under finalisation for obtaining financial assistance from the Govt. of India under the Accelerated Irrigation Benefit Programme (AIBP).



Lendi & Penganga Projects: The inter-State issues have been agreed to, at the official level meetings between the States of Maharashtra and Andhra Pradesh. Agreements in respect of these projects are being drafted for concluding inter-State Agreements.

SRSP Flood Flow Canal and Stage-II: Detailed investigation and environmental clearance of the Flood Flow Canal project has been delayed on account of objections raised by the farmers demanding high rate of compensation for the lands affected. Efforts are being made to settle the land compensation rates by setting up of Lok Adalats at the district level. In respect of SRSP Stage-II Project, proposals are being finalised to obtain financial assistance from Government of India to implement Phase -I of the Project, viz, execution of the main canal of this project from Km 284.00 to Km 347.00.

Medium Projects: Five long pending medium irrigation projects in Godavari basin have been completed by incurring an expenditure of Rs 258 crores to provide new irrigation to 88,200 acres. These are Kaulasanala, Satnala, Chelamalavagu, Vattivagu, and Taliperu. Loan sanctions of Rs 151 crores have further been received for the construction of Suddavagu, Yerravagu, Surampalem medium irrigation projects to irrigate 41,000 acres and the construction work has been commenced. In respect of Kovvadakalva and Peddavagu (Ada) schemes, CWC clearance has been obtained. The following medium projects have further been taken up for detailed investigation and finalisation of project reports for implementation:

Bhupatipalem; Peddavagu near Barkagudem; Peddavagu near Dasnapur ; Peddavagu near Nilwai; Peddavagu near Jagnathpur; Musurumalli; Modikuntavagu; Murreduvagu; Gollavagu; Mathadivagu; and Rallivagu.

Minor Irrigation Schemes: In the 7 districts falling under the Godavari basin, 166 minor irrigation schemes have been executed in the last four years by incurring an expenditure of Rs 31.57 crores, creating new irrigation potential in 26,600 acres. Additionally, 147 new schemes have been identified to provide further irrigation to 24,310 acres at a cost of Rs 45 crores. These schemes are planned for completion in next three years.

## Major Projects

|    |   |    |   |
|----|---|----|---|
| 1  | Alisagar Lift Irrigation Scheme                           | 21 | S.L.B.C. (A M R) Project                |
| 2  | Chagalnadu Lift Irrigation Scheme                         | 22 | S.R.S.P (Flood Flow Canal)              |
| 3  | Dummugudem Hydro Electric Project                         | 23 | Sangam Banda (PART OF BHEEMALI) PROJECT |
| 4  | Galeru-Nagari Sujala Sravanthi Project                    | 24 | Singoor Project                         |
| 5  | Gundlakamma Project                                       | 25 | Somasila Project                        |
| 6  | Guru Raghavendra Lift Irrigation Scheme                   | 26 | Somasila-Swarnamukhi Link Canal         |
| 7  | H N S D W S PROJECT                                       | 27 | Sri Padha Sagar (Yellampally Project)   |
| 8  | Handri Niva Sujala Sravanthi Drinking Water Supply Scheme | 28 | Sriramsagar Project Stage-I             |
| 9  | K.C. Canal Modernisation                                  | 29 | Sriramsagar Project Stage-II            |
| 10 | Lendi Project   | 30 | Srisailam Right Branch Canal Scheme     |
| 11 | Lower Penganga Project – R.B.                             | 31 | Tadipudi I Lift Irrigation Scheme       |

|    |  |    |   |
|----|--|----|---|
|    | Canal  |    |   |
| 12 | Mahathma Gandhi (Kalwakurthy) Lift Irrigation Scheme | 32 | Tarakarama L I Scheme                   |
| 13 | Nagarjunasagar Project                               | 33 | TBP. HLC.Stage-II Project               |
| 14 | Polavaram (Indira Sagar) Project                     | 34 | Telugu Ganga Project                    |
| 15 | Pranahitha PROJECT                                   | 35 | Thotapally Barrage Scheme               |
| 16 | Priyadarshini Jurala Project                         | 36 | Vamsadhara Project Phase-II of Stage-II |
| 17 | Pulichintala Project                                 | 37 | Vamsadhara Project Stage I              |
| 18 | Pushkaram Lift Irrigation Scheme                     | 38 | Vamsadhara Phase I of Stage II (RMC)    |
| 19 | Rajiv (Bhima) Lift Irrigation Scheme                 | 39 | Velogonda Project                       |
| 20 | Rajiv Sagar (Dhummu Gudem) Lift Irrigation Project   | 40 | Yeleru Reservoir Project                |

### Medium Projects

|    |                                  |    |  |
|----|----------------------------------|----|--|
| 1  | Bhupathipalem Reservoir Scheme   | 13 | Musurumilli Reservoir Scheme               |
| 2  | Gollavagu Reservoir Project      | 14 | Palemvagu Project                          |
| 3  | Gundlavagu Project               | 15 | Paleru Reservoir Scheme                    |
| 4  | Jalimudi Diversion Scheme        | 16 | Pampa Reservoir Project                    |
| 5  | Janjhavathi Reservoir Project    | 17 | Peddagavagu (NEELWAI)                      |
| 6  | Jerrikona Project                | 18 | Peddagedda Reservoir                       |
| 7  | Kanupur Canal                    | 19 | Peddavagu Diversion Scheme (JAGANNATHAPUR) |
| 8  | Kolisagar Lift Irrigation Scheme | 20 | Peddavagu Project(DASNAPUR)                |
| 9  | Komaram Bheem Project            | 21 | Peddavagu Project(BARKAGUDEM)              |
| 10 | Mathadivagu Reservoir            | 22 | Railvagu Reservoir Project                 |
| 11 | Modikuntavagu Project            | 23 | Tarakarama Thirtha Sagaram                 |
| 12 | Murreduvagu Project              | 24 | Veligallu Reservoir Project                |

### Budget allocation for development of irrigation projects

| Sl.No | Plan Year | Allocation<br>(Rs in crores) | Expenditure<br>(Rs in crores) |
|-------|-----------|------------------------------|-------------------------------|
| 1     | 2006-07   | 10,040                       |                               |
| 2     | 2005-06   | 6,374                        | 6,661                         |
| 3     | 2004-05   | 4,200                        | 3,331                         |

### Region wise

| Area               | 2004-05 | 2005-06 | 2006-07 | Total<br>Expenditure<br>(%) |
|--------------------|---------|---------|---------|-----------------------------|
| <b>Telangana</b>   | 1788.19 | 3469.12 | 1343.80 | 6601.11(64.84)              |
| <b>Kosthandra</b>  | 754.24  | 1874.57 | 302.85  | 2931.66(24.38)              |
| <b>Rayalaseema</b> | 788.61  | 1225.52 | 275.73  | 2289.88(19.02)              |

The author is highly indebted to the Department of Irrigation Government of A.P for the information.

**Reference:** <http://www.jalayagnam.org.in>