

IRRIGATION

Irrigation Abstract

SI No	Source	Ayacut in Lakh Acres
A. MAJOR IRRIGATION :		
	Sangam Delta	1.47
	Nellore Delta	0.90
	Kavali Canal	0.75
	Somasila :	
	North Feeder	0.30
	South Feeder	0.26
	Kandaleru (0.80) :	
	Tanks Stabilization	0.56
	Direct Ayacut	0.24
	Major Irrigation Total	4.48
B. MEDIUM IRRIGATION :		
	Kanupur Canal	0.33
	Gandipalem Project	0.16
	Swarnamukhi Barrage	0.10
	Medium Irrigation Total	0.59
C. MINOR IRRIGATION :		
	1726 Tanks (Rain fed)	3.00
	Minor Irrigation Total	3.00
	Grand Total	8.07

The Nellore Central Division looks after the Complete Delta System of River Pennar. This system is divided into two Anicuts namely the **SANGAM ANICUT & NELLORE ANICUT** Systems. The total Ayacut getting Irrigated under the Sangam Anicut system is of 1, 49,432 Acres and that of in Nellore Anicut system is 90,000 Acres.

During the Khariff 2010 - 11, water was released to 2,47,000 Acres in Penner Delta in Major Irrigation Sector, 33,000 Acres under Kanupur Canal system, the Medium Irrigation Sector in the Jurisdiction of this Division. The Khariff Irrigation is since completed and as per the resolutions passed by the Irrigation Advisory Board Meeting, held on 20.02.2011, it has been resolved to supply water to an extent of 1,75,269 Acres for Sangam Delta and 25,887 Acres to Nellore Delta for 2nd Crop (RABI) 2010 - 11 Fasli 1420. The Rabi Irrigation is completed and its harvest is also completed. Water is being released for Khariff 2011-12 from 10/2011.

As the Pennar Delta system is more than 100 year Old and keeping in view of the present condition of the Canals/Channels, the Government of Andhra Pradesh has decided to modernize the entire Penner Delta System, and brought this development under the concept of **JALAYAGNAM PROGRAMME**.

The following are the details of the Prioritized works taken up under the Jalayagnam Programme in the Jurisdiction of the Nellore Central Division, Nellore of Irrigation Circle, Nellore.

MODERNIZATION OF PENNAR DELTA SYSTEM UNDER MAJOR IRRIGATION:

The Government of Andhra Pradesh have accorded an Administrative approval for Rs.340.50 Cores for Modernization of Penner Delta system, and subsequently, Revised Administrative approval for Rs. 559.36 Cores, under GO.Ms.No. 24 dated 10.02.2009 to the following packages.

S.No.	Package No.	Agt.Value in Cores
1	Package No. 34	76.89
2	Package No.35	80.40
3	Package No. 39	34.45
4	Package No. 40	46.25
5	Package No. 1PD	321.37
TOTAL		559.36

MAJOR IRRIGATION SECTOR:

PACKAGE NO. 34:

This Package provides for Cement Concrete Paver Lining to the following Channels besides Improvements to Kanigiri Reservoir.

- ❖ Providing Cement Concrete Paver Lining to Eastern Channel from Km 0.000 to Km 30.578
- ❖ Providing Cement Concrete Paver Lining to Southern Channel from Km 0.000 to Km 28.881, including,
- ❖ Repairs/Reconstruction of the Existing Structures and Proposed New Constructions.
- ❖ Improvements to Kanigiri Reservoir Sytem including painting of Crest Gates and Hoist Bridge

This work has been awarded to M/s G.V.R. INFRA PROJECTS Limited Hyderabad under the EPC - Turnkey system and Agreement has been concluded vide Agt.No.13 SE/2008-09, dated 19.05.2008 for Rs. 76.89 Cores. Investigation besides preparation of Hydraulic Particulars on Southern Channel and Eastern Channel completed and submitted to the competent authority for an approval. A sum of Rs. 3.8445 cores is being advanced towards Mobilization Advance. The following works are in Progress. Work proposed for closing by the agency due to non declaration of complete crop holiday.

KANIGIRI RESERVOIR:

Improvements to Kanigiri Reservoir Bund is in progress.

Cumulative Expenditure Incurred to the end of 11/2011 = 5.2476 Crores.

The value of work done to the end of 11/2011 = 1.4031 Crores.

Rate of Progress = 1.82% (Over the Agt.Value),

PACKAGE NO. 35:

This Package provides for Cement Concrete Paver Lining to the following Channels besides Improvements to Survempalli Reservoir.

- ❖ Providing Cement Concrete Paver Lining to Survempalli Canal from Km 0.600 to Km 20.200
- ❖ Providing Cement Concrete Paver Lining to Krishnapatnam Channel from Km 0.000 to Km 13.030,
- ❖ Providing Cement Concrete Paver Lining to Vallur Channel from Km 0.000 to Km 9.020

- ❖ Providing Cement Concrete Paver Lining to Edagali Channel from Km 0.000 to Km 4.850 including,
- ❖ Repairs/Reconstruction of the Existing Structures and Proposed New Constructions.
- ❖ Improvements to Survepalli Reservoir,

This work has been awarded to M/s G.S.R.Constructions limited of Hyderabad and the Agreement has been concluded vide Agt.No.5 SE/2008-09, dated 25/04/2008 for Rs.80.40 Cores. The Works on Survepalli Reservoir, Survepalli Canal and Krishnapatnam Channel are in progress.

The total Expenditure incurred to the end of 11/2011 = 56.68 Crores.

The Value of Work Done during to the end of 11/2011= 56.68 Cores.

Rate of Progress % = 70.50% (Over the Agt.Value)

Encroachments in town limits of Survepalli Canal and Krishnapatnam Channels.

PRESENT STATUS:

The works are in Progress on Krishnapatnam Channel, Edagali Channel and Survepalli Channel. The 15 vents Regulator on Survepalli Reservoir is at the advanced stage of completion besides formation Chutes and toe drain.

Based on the recommendations of the State Level Standing Committee, Government have accorded permission for Manual lining in Bed and P C C Slab lining of sides of the Channels, besides Extension Of Time has been accorded to complete the balance works by 30.09.2012.

Package No. 39 :

The works covered under this package is lining to Duvvur Canal, D.R. Channel, Allur tank supply channel, Improvements to 19 Delta tanks, repairs and reconstruction of sluices and regulators. The work was taken up at an estimate cost of Rs. 34.44 crores and it was entrusted to M/s Engineering project India Ltd., vide Superintending Engineer, Irrigation Circle, Nellore Agreement No. 2 SE/2007-08 Dt. 15.05.2007 at a cost of 34.45 crores under EPC contract system. The expenditure incurred so far is Rs. 2.47 crores. It is programmed to complete the work by the year 2012-13. The work not resumed since 01.04.2009. Work done value 2.13 Crores as against the agreement value, % of work done 6.18%.

Package No. 40 :

The work covered under this package is lining to Jaffar Saheb canal, Gangapatnam canal, Varigonda canal & Improvements to 39 Nos. Delta tanks. The works was taken up at a cost of Rs. 46.25 crores and it was entrusted to M/s Engineering Project India Pvt. Ltd., vide Superintending Engineer, Irrigation Circle, Nellore Agreement No. 28 SE/2007-08 Dt. 04.02.2008 under EPC contract system. The expenditure incurred so far is Rs. 4.56 crores. It is programmed to complete the work by the year 2012-13. The work not resumed since 01.04.2010. Value of work done 4.11 Crores % of work done 8.89%.

PACKAGE NO. 1PD/2008-09:

This Package Provides lining in Cement Concrete to 124 Nos of Distributaries and Minors of Southern Channel and Eastern Channel, ATS Channel System, Jaffersaheb Canal System and Survepalli Canal System including Repairs/Reconstruction of Existing Structures and Proposed new Constructions.

This work is awarded to M/s APRCL - PVRPL (JV) Ltd., Hyderabad under EPC System, with an Agreement Value of Rs. 321.37 Cores and vide Superintending Engineers Agreement No 107 SE/2008-09, dated 09.03.2009. The Agency is doing the Investigation work, which is in progress. Mobilization Advance of Rs.16.07 Cores released to the Agency.

The total Expenditure incurred to the end of 11/2011 = 62.28 Cores.

The Value of Work done to the end of 11/2011 = 50.26 Cores

Rate of Progress = 15.64% (Over the Agt.Value)

Improvements to Kanupur Canal and its Distributary system come under this Medium Irrigation system. The total Ayacut contemplated under this system is 18,865 Acres and the Proposed Irrigation Potential after completion of the Project would be 44,000 acres of I.D.

The Government of Andhra Pradesh have accorded an Administrative approval for Rs 137.70 Cores vide G.O.Ms.No. 669 dated 02.06.2008.

This Medium Irrigation System consists of 3 Packages, namely

S.No.	Package No.	Agt.Value in Cores
1	Package No. 4	71.94
2	Package No.KCD1	29.50
3	Package No. KCD2	30.40
TOTAL		131.84

PACKAGE NO. 4/2007-08:-

This Package Provides for Cement Concrete Paver lining of Kanupur Canal from Km 0.000 to Km 55.350, including Repairs/Reconstruction of the Existing Structures and Proposed New Constructions. This work is awarded to M/s A.K.R. - COASTAL (JV) Ltd., Hyderabad vide Agreement No. 32 SE/2007-08 dated 10.03.2008 for Rs.71.94 Cores.

The total Expenditure incurred to the end of 11/2011 = 19.21 Cores.

The Value of work done to the end of 11/2011 = 16.92 Crores.

Rate of Progress = 23.50% (Over the Agt.Value)

Determination of work proposed.

PACKAGE NO. KCD 1:

This Package provides for Cement Concrete Paver Lining to the following Channels besides Improvements to 40 Nos. of System Tanks.

- ❖ Providing Cement Concrete Paver Lining to Thikkavarappadu Branch Channel from Km 0.000 to Km 17.490
- ❖ Providing Cement Concrete Paver Lining to Guruvindapudi Branch Channel from Km 0.000 to Km 1.500,
- ❖ Excavation of Balance Reaches of Guruvindapudi Branch Channel, Kantepalli Tank Supply Channel, Moddugunta Tank Link Channel,
- ❖ Repairs/Reconstruction of the Existing Structures and Proposed New Constructions on the above Channels,
- ❖ Reconstruction/ Repairs to the Surplus Weirs and Sluices on the 40 Nos. of System Tanks., and

This work has been awarded to M/s A.P.R.Constructions Limited, Hyderabad and the Agreement has been concluded vide Agt.No. 23 SE/2008-09 dated 09.06.2008 for Agt.Value of Rs.29.50 Cores. The work is in progress.

The total Expenditure incurred to the end of 11/2011 = 13.6321 Crores.

The Value of work done to the end of 11/2011 = 13.2193 Crores.

Rate of Progress = 44.00% (Over the Agt.Value)

Based on the Recommendations of the State Level Standing Committee, Government have accorded Extension Of Time for completion of the Balance works by 30.06.2012.

PACKAGE NO. KCD 2:

This Package provides for Cement Concrete Paver Lining to the following Channels besides Improvements to 40 Nos. of System Tanks.

- ❖ Providing Cement Concrete Paver Lining to Kommalapudi Branch Channel from Km 0.000 to Km 4.200
- ❖ Providing Cement Concrete Paver Lining to Muddamudi Branch Channel from Km 0.000 to Km 8.500,
- ❖ Providing Cement Concrete Paver Lining to Bandepalli Branch Channel from Km 0.000 to Km 13.220,
- ❖ Repairs/Reconstruction of the Existing Structures and Proposed New Constructions on the above Channels,
- ❖ Reconstruction/ Repairs to the Surplus Weirs and Sluices on the 40 Nos. of System Tanks., and

This work has been awarded to M/s A.P.R.Constructions Limited, Hyderabad and the Agreement has been concluded vide Agt.No. 24 SE/2008-09 dated 09.06.2008 for Agt.Value of Rs.30.40 Cores.

The total Expenditure incurred to the end of 11/2011 = 19.65 Crores.

The Value of Work done to the end of 11/2011 = 19.65 Crores.

Rate of Progress = 64% (Over the Agt.Value)

Based on the Recommendations of the State Level Standing Committee, Government have accorded Extension Of Time for completion of the Balance works by 30.06.2012.

FLOOD BANKS

KANDALERU FLOOD BANKS:

Improvements to the Flood Banks of River Kandaleru have been taken up. The estimate for the Surveying & Leveling Operations besides preparation of Detailed Project Reports has been entrusted to a Private agency as an out sourcing. The Government has accorded an administrative approval for Rs. 167.530 Cores vide G.O.Rt.No.549 dated 19.07.2008 under Irrigation & CAD (Maj.) Irr.VII (2) Department, for the following 4 Packages under Kandaleru Branch Channel and Kandaleru River Flood Banks.

PACKAGE NO. 3KND:

This Package provides for Improvements to Kandaleru River Right Side Flood Banks of Kandaleru River near Mogallagandi Anicut from Km 0.000 to Km 14.400 including formation of Flood Banks, Re-Construction of Structures and Proposed New Structures and formation of W B M Roads. This work is awarded to M/S

K.K.Reddy & Co., Hyderabad for an Agreement Value of Rs.27.61 Cores vide Agreement No. 1SE /2009-10, Dated 28.04.2009. The Investigation work is completed. HPs approved.

The total Expenditure incurred to the end of 06/2011 = 0.00 Cores.

Rate of Progress = 0% (Over the Agt.Value)

PACKAGE NO. 4 KND:

This Package provides for Improvements to Kandaleru River Left Side Flood Banks of Kandaleru River near Mogallagandi Anicut from Km 0.000 to Km 14.400 including formation of Flood Banks, Re-Construction of Structures and Proposed New Structures and formation of W B M Roads. This work is awarded to Sri V.Prabhakar Reddy., Hyderabad for an Agreement Value of Rs. 28.19 Cores vide Agreement No. 18SE /2009-10, Dated 07.09.2009. The Investigation work is completed. HPs approved.

The total Expenditure incurred to the end of 06/2011 = 0.00 Cores.

Rate of Progress = 0% (Over the Agt.Value)

PACKAGE NO. 2 KND:

This Package provides for formation of Right Side Flood Bank of Kandaleru Branch Channel near Mogallagandi Anicut from Km 0.000 to Km 16.900, in Nellore District. This work is awarded to Sri V.Prabhakar Reddy, Contractor, Hyderabad for an Agreement Value of Rs. 24.9327 Cores vide Agreement No. 17/2009-10, Dated 07.09.2009. The Investigation work is in Progress.

The total Expenditure incurred to the end of 06/2011 = 0.00 Cores.

Rate of Progress = 0% (Over the Agt.Value)

STATUS OF THE WORK:

The Investigation work is in progress for preparation of Modified Hydraulic Particulars besides Land Acquisition. During the Investigations, the Agency has encountered some problems consequent on fixing the Discharge at 45000 Cusecs and if it were to be the same as per Basic Project Parameter, it has got the Impact on Evacuation of Venkanna Palem village and some other factors have been brought to the kind notice of the Authorities concerned for clarification. This issue is referred to State Level Standing Committee for finalization of Basic Project Parameter, Whether 450 Cusecs or 45000 Cusecs.

PENNAF FLOOD BANKS

Improvements to the Flood Banks of River Penner and Kandaleru have been taken up. The estimate for the Surveying & Leveling Operations besides preparation of Detailed Project Reports has been entrusted to a Private agency as an out sourcing. The Government has accorded an administrative approval for Rs. 206.32 Cores vide G.O.Rt.No.556 dated 22.07.2008 under Irrigation & CAD (Maj.) Irr.VII (2) Department, for the following 12 Packages under Pennar River Flood Banks. The Packages are yet to be finalised.

There was no response for the tenders called for 4 times. In view of no response received for the repeated tender calls it was proposed by the Superintending Engineer, Irrigation Circle, Nellore to club the 12 Packages into Two Packages with Right Side Flood Bank and Left Side Flood Bank and the Government in their memo No. 21041/Maj.Irr.II/A2/2009-01, dated 22.08.2009, permitted the Chief Engineer, Flood Banks to club the 12 No of Packages in to Two Packages and requested to take steps to complete the work as early as possible. As per the Instructions of the Government the following Single Packages have been prepared and submitted to the Authorities concerned for finalization of I B M value and to call for the tenders.

- (1) Estimate for formation of Pennar Right Flood Bank from Km (-) 10.000 to Km 55.00 Est.Rs. 15157.00 Lakhs.
- (2) Estimate for formation of Pennar Left Flood Bank from Km (-) 3.550 to Km 58.900 Est.Rs. 18124.00 Lakhs.

Tsalla Kalava Package 1 :

The package provides improvements to Tsallakalava River Left side flood bank from Km 0/0 to 16.150 including formation of Flood Banks reconstruction / new construction of structures and formation of WBM roads etc., this work has been awarded to M/s Sri Sai Venkata Ramana Constructions Ltd., Nellore and Agreement concluded vide Agt. No. 98-SE/2008-09, Dt. 23.01.2009 for Rs. 25.92 Crores expenditure include Rs. 0.26 Crores. The work is programmed to be completed in 24 months. The investigation work completed and HPs are under finalization.

Tsalla Kalava Package 2 :

The package provides improvements to Tsallakalava River Right side flood bank from Km. 0/0 to 16.400 including formation of Flood Banks reconstruction / new construction of structures and formation of WBM roads etc., this work has been awarded to M/s Sri Sai Venkata Ramana Constructions Ltd., Nellore Agreement concluded vide Agt. No. 99-SE/2008-09, dt. 23.01.2009 for Rs. 18.99 crores. And Expenditure incurred is Rs. 0.19 crores. The work is programmed to be completed in 24 months. The investigation work completed and HPs are under finalization.

Swarnamukhi Flood Banks Package 1 :

The Package provides improvements to Swarnamukhi River Left side flood bank from Km. 1.200 to 16.260 including formation of Flood Banks reconstruction /new construction of structures and formation of WBM roads. Etc., this work has been awarded to M/s G. Doraiah & Co. Rajahmundry and Agreement concluded vide Agt. No. 104-SE/2008-09, dt. 03.03.2009 for Rs. 29.0077 crores. Expenditure incurred so far is Rs. 7.068 crores. The work is programmed to be completed in 24 months. Investigation work completed and the work is in progress. % of work done 20.40%.

Kalangi flood Banks Package 1 :

The package provides improvements to Kalangi River Left side flood bank from Km 0/0 to 26.150 including formation of Flood Banks reconstruction / New construction of structures and formation of WBM roads etc., this work has been awarded to M/s G.V.R. Infra Projects Ltd., Chennai and Agreement concluded vide Agt. No. 105-SE/2008-09, dt. 05.03.2009 for Rs. 25.436 crores. The work is programmed to be completed in 24 months. The investigation work completed and HPs are approved.

Kalangi Flood Banks Package 2 :

The package provides improvements to Kalangi River Right side flood bank from Km 0/0 to 27.050 including formation of Flood Banks reconstruction / New construction of structures and formation of WBM roads etc., this work has been awarded to M/s G.V.R. Infra Projects Ltd., Chennai and Agreement concluded vide Agt. No. 106-SE/2008-09, dt. 05.03.2009 for Rs. 30.24 crores. The work is programmed to be completed in 24 months. The investigation work completed and HPs are approved.

NON PACKAGE WORKS:

Providing Cement Concrete Lining to Koduru Canal and Improvements to Eduru - Koduru Tank in T.P.Gudur Mandal of Nellore district is in the Jurisdiction of this Division at Present. Previously this work was looked after by Drainage Division, Nellore. The Government of Andhra Pradesh have accorded Administrative approval for Rs 5.850 Cores vide G.O.Rt.No. 103 dated 11.07.2003 for Rs.5.850 Cores. This work is awarded to M/s Ratna Constructions, Hyderabad at an Agreement value of Rs 5.50 Cores vide Agt.No. 38 SE/2007-08, dated 11.07.2003. This work is in progress.

Pennuboina Chenchu Ramaiah (Gandipalem) Project:

This Medium Irrigation Project (Gandipalem Project) is located in the upland area in Udayagiri constituency of SPSR Nellore District. Against the contemplated ayacut of 16000 acres the present Irrigation is 11,100 acres. There is one Project Committee and 17 WUAs for water Management under PCR Project./

Modernization to PCR Project in Udayagiri Mandal was taken up at cost of Rs. 24.34 crores. The entire 16000 acres ayacut will get Irrigated after completion of this work. The value of work done so far is Rs. 4.114 crores.

Swarnamukhi Barrage:

This is a newly constructed Medium Irrigation Project across Swarnamukhi River in Vakadu (V) of Vakadu Mandal with an estimates cost of Rs. 41.46 crores. Against contemplated ayacut of 11,000 acres. and the work was completed with an irrigation potential at 9100 Ac.

MINOR IRRIGATION

There are 1753 Minor Irrigation sources irrigating 2,95,832 acres ayacut in the upland areas of SPSR Nellore District including the recently transferred Panchayat Raj tanks. The details of the M.I. tanks are as follows :

i.	Tanks with ayacut up to 100 acres :	984	36,358
ii.	Thanks with more than 100 acres : and other irrigation sources.	<u>769</u> <u>1753</u>	<u>2,59,474</u> <u>2,95,832</u>

The following are the works taken up under plan & other funds provided by the Government.

1. Improvements to Chakali Konda tank supply channel in Vinjamoor Mandal. The work at an estimate cost of Rs. 1.53 crores was taken up and it is in progress.
2. Improvements to Saipet tank in Kondapuram (M)
The work at an estimate cost of Rs. 1.03 crores was taken up and it is in progress.
3. Improvements to Yeruru tank in Chillakur (M)
The work was taken up at an estimate cost of Rs. 14.40 crores and it is in progress.
4. Improvements to Annampalli tank (Across Dunnapothula Vagu) in Udayagiri Mandal.
The above work was Administratively approved for Rs. 1.73 crores vide G.O. Rt. No. 53 dt. 09.01.2009 Technical sanction awaited.
5. Improvements to Bodibandla vagu supply channel in Udayagiri Mandal
The above work was administratively approved by the Government for Rs. 1.072 crores vide G.O. Rt. No. 297 dt. 25.02.2009. work is in progress.
6. Lining to Irrigation canal in Kavali Town :
The above work was administratively approved for Rs. 1.352 crores vide G.O. Rt. No. 164 dt. 03.02.2009. Work is in progress.

7. Improvements to flood flow (Drainage channel) canal of Annapagunta to Papireddigunta.

The above work was administratively approved for Rs. 2.50 crores vide G.O. Rt. No. 90 dt. 20.01.2009. the work is in progress.

8. Construction of concrete walls to storm water drain from J.B. College to Annapagunta in Kavali Town of Kavali (M) taken up at a cost of Rs. 4.50 crores and a work is in progress.

9. Improvements to Kaveri Vagu and Karnala Vagu tanks in Duttalur Mandal.

The above work was administratively approved for Rs. 2.247 crores & Tenders submitted for approval pending due to court case.

10. Construction of check dam across Swarnamukhi River.

The work was administratively approved for Rs. 3.659 crores. Revised Administrative approved 13.00 crores is awaited from the Govt. due to change of Design.

2011-12 Flood Damages :

Due to heavy rains in 2011-12 flood damages occurred to several Irrigation sources. The District Collector, Nellore was addressed for Administrative approval for 1125 works for Rs. 16.01 Crores for Temporary restoration.

RIAD :

Administrative approval was accorded for 5 works for Rs. 2.38 crores 5 works completed.

A.P. Community Based Tank Management Project :

Administrative approval for 124 tanks was received under 1st phase. Investigation is in progress for further works. Tenders were invited for 113 works, among which 45 works completed and the balance works are in progress. The expenditure incurred so far is Rs. 14.24 crores the target time for completion of this project is 5 years.

Drain Works :

Estimates for Rs. 21.42 crores were submitted to the Government for carrying out improvements to Allur swamp, Pyderu, Malidevi and Nakkala Kalva Drains. In addition to the above improvements to 5 Medium drains were proposed and administrative approval received from the Government for Rs. 4.38 Crores. Technical Sanction received from the ENC for 5 drains and tenders called for and agency settled for 4 works and agency to be settled for 1 work.