

ANDHRA PRADESH LEGISLATIVE ASSEMBLY
SESSION-VIII
NOTE ON SHORT DISCUSSION ON PROGRESS OF POLAVARAM PROJECT

INTRODUCTION

- Polavaram Irrigation project is a Multipurpose terminal reservoir project located 42 Km upstream of Sir Arthur Cotton Barrage at Dowlaiswaram on the river Godavari, near Ramayyapeta Village, Polavaram Mandal of West Godavari District.
- The project is strictly in accordance with the provision of Interstate agreement dt.02.04.1980 concluded among co-basin states and the GWDT Award 1980. All the requisite clearances have been obtained from various agencies of Government of India.
- The Government of India, recognising the importance of the Polavaram Irrigation Project, declared Polavaram Project as a National Project (Section-90(1) of AP Re-organisation Act,2014)
- The Ministry of Finance, Government of India vide their Office Memorandum dated.30.09.2016 communicated that, it will provide 100% funding of the remaining cost of the Irrigation component only of the project for the period starting from 01.04.2014.
- As per the recommendations of the Vice Chairman, NITI Ayog, that it will be appropriate for the State of Andhra Pradesh to execute this project (as it is an important project and the State Government is keen to complete it at the earliest), the Government of India has agreed to the State's request for the execution of the project by the State Government on behalf of the Government of India.
- The Government of India has constituted Polavaram Project Authority to monitor the progress of project works. The Polavaram Project Authority started functioning with effect from 9th July 2015.
- **PROJECT BENEFITS:**
 - Reservoir Gross Capacity 194.6 TMC & Utilization of water 322 TMC.
 - Irrigation Potential: 7.2 Lakh Acres new ayacut and Stabilization of 23.5 Lakh Acres in Godavari and Krishna Delta Systems.
 - Diversion of 80 TMC of Godavari water to Krishna River.
 - Hydro Power of 960 MW (12 Nos X 80 MW)
 - Domestic & Industrial Water Supply: 23.44 TMC of water to the habitations and industries in and around Vishakhapatnam City including Vizag steel plant.

- Drinking water facility to 540 villages enroute for a population of 28.5 Lakh.
- Utilization by other states: Odisha and Chhattisgarh can utilize 5 TMC and 1.5 TMC of water from backwaters of Polavaram.

• **PROJECT COST APPROVALS:**

- TAC Cleared the project for Rs.10,151.04 Cr at 2005-06 Price level in its 95th meeting held on Dt.20.01.2009.
- TAC Clearance accorded for the Revised Cost Estimate (RCE)-I for Rs.16,010.45 Cr at 2010-11 Price level in its 108th meeting held on 04.01.2011.
- TAC Clearance accorded for the Revised Cost Estimate (RCE)-II for Rs.55,548.87 Cr at 2017-18 Price level in its 141st meeting held on 11.02.2019.
- Further, the Revised Cost Committee (RCC) has recommended the cost of the project for an amount of Rs.47,725.74 Cr. (including 108 Cr cost towards PPA) vide Report No F.No.22/JS&FAWR/2020 Dt.17.03.2020.

Component	2010-11 PL	2013-14 PL	2017-18 PL	
	As per TAC	As Per RCC	As per CWC	As Per RCC
	(Rs. In Cr)	(Rs. In Cr)	(Rs. In Cr)	(Rs. In Cr)
Irrigation	9307.54	20398.61	51095.96	35950.16
Water Supply	2986.86	4068.43		7214.67
Power	3716.05	4560.91	4560.91	4560.91
Total	16010.45	29027.95	55656.87	47725.74

STATUS OF WORKS:

Description	Completed
Head Works	76.29%
Right Main Canal	92.57%
Left Main Canal	71.11%
LA and R&R	20.19%
Overall Project	43.94%

• **Present Status of Polavaram Irrigation Project :**

- The Polavaram Project works consists of Head Works (Main Dam and Connectivities), Left Main Canal, Right Main Canal and L.A. and R&R.

1. The component wise progress of Head works:

A.	Main Dam Package	
	Spillway	<p>Out of 18.43 L.Cum, 17.48 L.Cum of Spillway concreting is completed.</p> <p>Out of Rs. 637.71 Crs, work done amount is Rs. 629.658 Crs.</p>
	Radial Gates Erection	<p>Out of 48 Nos. of Spillway Gates, 42 Nos. are completed.</p> <p>Out of 19191 MT Steel, 17102.50 MT completed.</p>
	Coffer Dams	<p>Length of Up Stream (U/S) Coffer dam : 2340 M and Down Stream (D/S) Coffer dam : 1637 M</p> <p>U/S Cofferdam was completed.</p> <p>D/S Cofferdam - Earthwork / Embankment works is under progress.</p> <p>Out of 20.43 L.Cum, 12.40 L.Cum of Earthwork is completed.</p> <p>Out of 81.069 L.Cum, 75.718 L.Cum of Embankment is completed.</p> <p>Out of Rs.255.26 Cr for cofferdam earthwork / embankment work, work done Rs. 212.81 Crs.</p>
	Earth-cum-Rock Fill Dam: (ECRF) (Gap-I)	<p>Length of this dam is 564 m</p> <p>'D' wall work / Stone columns / Deep Soil mixing is completed.</p> <p>Preparatory works for Gap-I ECRF dam are in progress.</p>
	Earth-cum-Rock Fill Dam: (ECRF) (Gap-II)	<p>Length of this dam is 1750 m</p> <p>Out of 44.400 L.Cum, 33.332 L.Cum is completed.</p> <p>Out of Rs. 393.44 Cr, work done is Rs. 106.82 Cr.</p>
	NoF Dam (Gap-III)	<p>Gap-III concrete dam was completed.</p>
	Spill Channel	<p>Length of Spill Channel is 2920 m</p> <p>Out of 20.365 L.Cum of Embankment Filters of Spill</p>

		<p>Channel 7.340 L.Cum is completed.</p> <p>Out of 18.204 L.Cum of Concrete of Spill Channel 15.13 L.Cum is completed.</p> <p>Out of Rs. 1616.62Cr, work done is Rs.1425.46 Cr</p>
	Approach Channel	<p>: Length is 2300 m.</p> <p>Earthwork excavation is in progress.</p> <p>At present the works are halted due to diversion of flood through Spillway.</p> <p>Out of 154.551 L.Cum of Earthwork, 112.73 L.Cum is completed.</p> <p>Out of Rs. 200.21 Cr, work done is 102.37 Cr.</p>
	Pilot Channel	<p>: Length is 650 m.</p> <p>Out of 49.995 L.Cum of Earthwork, 16.197 is completed.</p> <p>Out of Rs. 41.30 Cr, work done is Rs. 14.12 Cr</p>
	Power House foundation excavation	<p>: Foundation excavation of 960 MW Power House is under progress.</p> <p>Out of 105.019 L.Cum Earthwork, 104.79 L.Cum is completed.</p> <p>Out of 10.053 L.Cum Embankment, 9.70 L.Cum is completed.</p> <p>Out of 1.585 L.Sqm Shotcreting, 0.96 L.Sqm is completed.</p> <p>Out of Rs. 281.47 Cr, work done is Rs. 275.18 Cr</p>
B.	Connectivities	<p>: Left side & Right side connectivities works are under progress.</p> <p>Out of 93.13 L.Cum Earthwork, 56.81 L.Cum is completed.</p> <p>Out of 35.31 L.Cum Embankment, 26.63 L.Cum is completed.</p> <p>Out of 5.47 L.Cum Concrete, 1.79 L.Cum is completed.</p> <p>Out of Rs. 848.40 Cr, work done is Rs. 451.36 Cr</p>

2. Component wise progress of Right Main Canal (RMC) :

A.	Main Dam Package		
	Earthwork	:	The total length of Right Main Canal is 178.812 Km and the Earth work excavation of RMC is completed.
	CC Lining	:	161.339 Km length of lining has been completed.
	Structures	:	Out of 255 Nos, 214 Nos. are completed and 41 Nos. are in progress.

3. Component wise progress of Left Main Canal (LMC) :

A.	Main Dam Package		
	Earthwork	:	The total length of LMC is 212.32 Km (including Aqueduct length) and the canal excavation completed is 172.154 Kms.
	CC Lining	:	131.65 Km length of lining has been completed.
	Structures	:	Out of 451 Nos, 172 Nos. are completed and 279 Nos. are in progress.

4. Land Acquisition and R&R :

	LA	:	Total extent of land required (works, land to land and R&R colonies) is 167339.13 Acs. Acquired is 112767.98 Acs. Out of 373 habitations, 27 habitations completed. Out of 20,946 Nos. of PDFs to be shifted upto +41.15m, 7,962 Nos. are shifted. Balance PDFs are 12984 Nos. out of 9756 PDFs opted for Govt construction
	R&R	:	Balance 346 habitation are programmed to be rehabilitated in a phased manner, so that the entire R&R activities of the project to complete, well before the actual date of impounding of water in the reservoir.

5. The following is the progress of work from May, 2019 to March, 2022

- Spillway of (Length 1118 Mts) has been completed.
- Erection of 42 Radial gates out of 48 Gates has been completed
- Erection of 10 Nos of River Sluice gates has been completed.
- Approach Channel works - 75% completed.
- Upstream Coffor Dam (2340 M) to a maximum level of +42.50 M completed.
- Downstream Coffor Dam (1637 M) to a Maximum level of +30.50 M completed except scoured portion.
- ECRF Dam Gap-III Concrete Dam (162 M) to a Maximum Level of +53 M completed.

- Godavari River flow diversion through approach channel, Spillway and through Spill channel completed to facilitate execution of ECRF Dam across the main river.

REASONS FOR DELAY IN COMPLETION OF POLAVARAM IRRIGATION PROJECT.

- As per the approved construction schedule, the Polavaram Irrigation Project is to be completed by April 2022, but it is not possible to complete the project by April 2022 due to the following reasons.
- Covid-19 Pandemic and imposition of nationwide Lockdown resulting shortage of labour due to migration of camp labour to their native places. This has caused delay in execution of both project works as well as R&R works.
- Delay in finalization of layout of Approach Channel model studies at CWPRS, leading to delay in design analysis and approval from competent authorities.
- A deep scouring has occurred in river bed in the Gap-I, Gap II reaches of main earth cum rock fill dam (ECRF) and in the alignment of D/S coffer Dam, due to partial construction of coffer dam. Proposals are still to be finalized with regard to the methodology and material for filling of these scours.
- Neither flying operations, for aerial survey nor the field survey activities during the years 2020 and 2021 for the distributary system of PIPLMC and PIPRMC could be carried out, as planned, due to COVID-19 pandemic and lockdown.
- Further preparatory works on ground could not be completed as planned due to restrictions on mobility and imposition and containment Zones in the areas of distributary system of PIPLMC & PIPRMC.
- The slow progress is due to imposition of component wise restriction, by GOI.
- The Overall expenditure incurred on Polavaram Irrigation Project since inception up to February 2022 is Rs. 19067.02 Cr. and the Project is proposed to complete by June 2023 subjected to Designs approval by Central Water Commission (Competent Authority) in the scoured area of ECRF Dam (Main Dam).

**Statement Showing the Expenditure incurred on Polavaram Irrigation Project
and fund released to State Government**

Sl. No.	Government	Period	Total Expenditure incurred on PIP	Amount reimbursed to the GoAP by PPA
1	Before National Project	Inception to 31-03-2014	4730.71	0
2	After National Project	01-04-2014 to 31-05-2019	11059.25	6727.26
3		01-06-2019 to 06-03-2022	3763.94	5475.90
		Total	19553.90	12203.16

▪ **REIMBURSEMENT OF EXPENDITURE:**

- Total expenditure incurred on Polavaram Project upto 15th March, 2022 : **Rs.19,553.90 Cr.**
- Expenditure incurred on the Project before National project. : Rs. 4,730.71 Cr.
- Expenditure incurred on Polavaram Project after declaration as National Project, upto 15th March 2022 : Rs. 14,823.19 Cr.
- Total Funds released to the State Government through Polavaram Project Authority. : Rs. 12,203.16 Cr.
- Amount recommended by PPA to Gol : Rs. 437.386 Cr.
- Balance Reimbursement to be made by GOI for the expenditure already made on the Project by the State of AP after declaring as National Project. : **Rs. 2,182.644 Cr.**

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