

Brief Note on Palamuru-Rangareddy Lift Irrigation Scheme

1. Preamble:

The then Hon'ble Member of Parliament from Mahabubnagar Lok Sabha Constituency Sri D.Vittal Rao and other MLA's of Mahabubnagar along with a Preliminary investigation report on Palamuru-Rangareddy Lift Irrigation Scheme formulated by the Telangana Retired Engineers in the year 2009 have represented the then Hon'ble Chief Minister of erstwhile Andhra Pradesh and pleaded that the erstwhile Three Districts i.e., Mahabubnagar, Rangareddy and Nalgonda are totally lying in Krishna basin and more than 67% and 99% cultivable areas of Mahabubnagar and Rangareddy Districts respectively have no water facility even today, due to which the people of these areas are migrating to other places for their lively hood. To arrest the migration of these area people and to achieve some more Irrigation Potential development, the Palamuru-Rangareddy Lift Irrigation Scheme is proposed.

The then Government of Andhra Pradesh have issued Administrative approval vide G.O Ms.No.72, Dated 08.08.2013 to take up investigation of Palamuru-Rangareddy Lift Irrigation Scheme and to prepare a detailed project report to identify the ayacut of 10.00 Lakh Acres in erstwhile Mahabubnagar Rangareddy and Nalgonda Districts and supply of drinking water to enroute villages and water for industrial use.

Accordingly, investigation of Palamuru Rangareddy Lift Irrigation Scheme was taken up. The Hon'ble Prime Minister of India Sri Narendra Modi during his election campaign in 2014 have also promised to take up the Palamuru Rangareddy Lift Irrigation Scheme.

2. Introduction

Palamuru-Ranga Reddy Lift Irrigation Scheme envisaged to create irrigation potential in upland areas of Nagarkurnool, Mahabubnagar, Vikarabad, Narayanpet, Rangareddy and Nalgonda districts for an ayacut of 10.00 Lakh acres, (proposal for enhanced ayacut of 12.30 Lakh Acres is submitted to the Government) drinking water to enroute villages, GHMC and industrial use by lifting 1.50 TMC/Day for 60 days during flood season from foreshore of Srisailem Project on Krishna river near at Yellur (V), Kollapur (M) in Nagarkurnool District to K.P Laxmidevipally (V), Kondurg (M) near Shadnagar town which is the highest elevation in between erstwhile Mahabubnagar and Rangareddy districts with 5 stage lifting and then utilizing water by gravity. The scheme contemplates Irrigation under different reservoirs as per their commandability. There are five stages in the project starting from foreshore of Srisailem Reservoir and ending with K.P Laxmidevipally Reservoir.

The Government vide G.O Ms.No.105, I&CAD (Projects-I) Department Dated 10.06.2015 have accorded administrative approval to Palamuru-Rangareddy Lift Irrigation Scheme for Rs.35,200 Crores.

3. Details of Project:

The Palamuru-Rangareddy Lift Irrigation Scheme envisages to lift water in five stages through pumping from foreshore of Srisailem Reservoir near Yellur (V), Kollapur (M) of Nagarkurnool district of Srisailem Project (+240.00 M) to the proposed K.P Laxmidevipally Reservoir (+670.00 M) near K.P Laxmidevipally (V), Kondurg (M) near Shadnagar. The five stage pumping details are as follows.

1st Lift –An approach channel takes off from the foreshore of Srisailem Project near Yellur (V), Kollapur (M). The water is drawn through tunnel connected to the Pump house and lifted to fill the proposed Anjanagiri Reservoir at Narlapur Village.

2nd Lift –An approach channel takes off from Anjanagiri Reservoir. The water is drawn through the canal and tunnel connected to the pump house and lifted to fill the proposed Sri Veeranjaneya Reservoir at Yedula.

3rd Lift –An approach channel takes off from Sri Veeranjaneya Reservoir. The water is drawn through the canal and tunnel connected to the pump house and lifted to fill the proposed Venkatadri Reservoir at Vatterem village and Kurumurthyraya Reservoir at Karivena village by linking both reservoirs with gravity canal from Venkatadri Reservoir.

4th Lift –An approach channel takes off from Kurumurthyraya Reservoir. The water is drawn through the canal and tunnel connected to the pump house and lifted to fill the proposed Udandapur Reservoir.

5th Lift –An approach channel takes off from Udandapur Reservoir. The water is drawn through canal and tunnel connected to the pump house and lifted to fill the proposed K.P Lakshmidvipally reservoir.

4. Phases of Implementation:

The scheme is taken up in two phases consisting of following components

- 1) Phase-I: Drinking water component
- 2) Phase-II: Irrigation component

A. Phase – I:

Under drinking water component, the main conduit works from the foreshore of Srisaillam Reservoir to K.P Laxmidevipally Reservoir were divided into 21 Packages. The estimates were technically sanctioned upto Udandapur Reservoir for 18 Packages.

Tenders have been called for Packages 1 to 18 i.e., upto the Udandapur Reservoir and entrusted to the agencies and the works are in progress. The balance works of Main conduit for Packages 19 to 21 are ready for inviting tenders.

1. DETAILS OF LIFTS:

Sl. No.	Lift	Lift Height	Pumps & Ratings	Pump capacity
1	Lift-1	104 m	8 x 145 MW	85 Cumecs
2	Lift-2	124 m	9 X 145 MW	75 Cumecs
3	Lift-3	121 m	9 X 145 MW	75 Cumecs
4	Lift-4	122 m	5 X 145 MW	75 Cumecs
5	Lift-5	87.5 m	3 X 75 MW	55 Cumecs

2. DETAILS OF RESERVOIRS:

Sl. No.	Name of the Reservoir	Location (Village)	Length of Bund (Kms)	F.R.L (M)	Capacity (TMC)	
					Gross	Live
1	Anjanagiri	Narlapur	6.647	345	8.51	7.950
2	Veeranjaneya	Yedula	7.716	445	6.55	5.910
3	Venkatadri	Vattem	14.75	542	16.74	16.40
4	Kurumurthyraya	Karivena	13.185	531	17.34	16.825
5	Udandapur	Udandapur	15.875	629	16.03	15.76
6	K.P Lakshmidvipally	Lakshmidvipally	6.05	670	2.80	2.49
Total			64.223		67.97	65.335

The MoEF&CC (GOI) have issued the terms of references (ToR) vide No. J-12011/31/2017-IA-I (R), Dated 11.10.2017 to this Scheme valid till 10th October 2021. The project Proponent of PRLIS, I & CAD Dept, GoTS, awarded the work of EIA-EMP studies to M/s Voyants Solutions Pvt. Ltd, Gurugram for conducting the studies. The EIA/EMP Studies were conducted in six districts of project command area. Baseline monitoring process was conducted during monsoon and post monsoon 2019 and pre monsoon 2020. Public hearing process has been scheduled on 10th August, 2021 in six districts simultaneously. The Voyants Technologies prepared EMP plan for PRLIS for Rs.1744 Crore.

B. Phase – II:

Phase – II works consists of taking up of Irrigation component with Main canals from Reservoirs with distributory network to take water to fields.

5. Case of surplus water based projects of Telangana:

Based on the liberty granted by KWDT-I, erstwhile Andhra Pradesh has taken up several projects which includes PRLIS and KWDT-II has retained the liberty to use surplus waters to erstwhile AP. Subsequent to Andhra Pradesh Reorganization in 2014, the term of KWDT-II was extended to make project wise specific allocation and to make operation protocol during deficit flows vide section - 89 of APRA, 2014. Telangana is pleading to make a fair and equitable share of Krishna waters based on relevant basin parameters out of the enbloc allocation of 811 TMC out of which 512 TMC for AP and 299 TMC for TS. The water required of 90 TMC for PRLIS can be made out of this.

The Central Government has issued Gazette Notification Dated 15.07.2021 and as per Gazette notification, 36 projects in Krishna basin are proposed to be kept under control of KRMB and all unapproved projects shall be got approved within 6 months of this Notification. PRLIS comes under this category.

6. BUDGET, LOAN & EXPENDITURE DETAILS:

The Government vide G.O Ms. No.10, I&CAD (Project-II) Deptt., Dated 20.04.2019 has included PRLIS as an additional mandate of KIPCL. Also, the Govt. vide G.O Rt.No.321, I&CAD (Project-IV) Deptt., Dated 05.08.2019 has accorded approval for borrowing additional term loan of Rs.10,000 Crores from PFC including IDC. So far, PFC has disbursed a loan of Rs.4518.82 Crores. The expenditure incurred so far is Rs.15408.94 Crores.

(Rs in Crores)

Sl. No.	Description	Year wise Expenditure							Total
		2015-16	2016-17	2017- 18	2018- 19	2019- 20	2020-21	2021-22 upto May 2021	
1	Works	0.26	410.34	1587.40	2452.65	3065.18	3965.47	2181.49	13662.79
2	Lands including R & R	380.00	270.00	361.00	135.00	104.16	343.05	0	1593.21
3	Others	5.72	28.28	27.76	27.39	28.18	28.17	7.44	152.94
TOTAL		385.98	708.62	1976.16	2615.04	3197.52	4336.69	2188.93	15408.94