BRIEF SUMMARY OF THE PROJECT

PALAMURU-RANGAREDDY LIFT IRRIGATION SCHEME

1. SCOPE OF THE PROJECT:

Palamuru - Ranga Reddy Lift Irrigation Scheme envisages to irrigate upland areas of erstwhile Mahabubnagar, Rangareddy and Nalgonda districts for an ayacut of 4,04,858 ha, drinking water to villages enroute and Hyderabad city and water to industrial use in Mahabubnagar, Rangareddy and Nalgonda districts, by lifting 90 TMC of flood water in 60 days (i.e., 1.50 TMC per day) during flood season from foreshore of Srisailam reservoir located at Yellur (V), Kollapur (M) in Mahabubnagar district to K.P. Laxmidevipally (V), Kondurg (M) in Mahabubnagar District which is the highest elevation in Mahabubnagar and Rangareddy districts with 5 stage lifting and then utilizing water by gravity. The scheme contemplates enroute Irrigation under different reservoirs as per their commandability. There are five stages in the project starting from foreshore of Srisailam Reservoir and ending with K.P.Laxmidevipally Reservoir.

2. SCHEME OF THE PROJECT:

The Palamuru-Rangareddy Lift Irrigation Scheme envisages to lift water in five stages through pumping from foreshore of **Srisailam Project (+240 M CBL)** near Yellur (V), Kollapur (M) of Mahabubnagar district to the proposed **K.P. Laxmidevipally Reservoir (+670 M)** near K.P. Laxmidevipally(V), Kondurg(M), Mahabubnagar District. The five stage pumping details are as fallows.

1st Lift –An approach channel takes off from the foreshore of Srisailam Project near yellur (V), Kollapur (M). The water is drawn through tunnel connected to it 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 it and lifted to fill the proposed Sri Veera Anjaneya Reservoir at Yedula.

3rd Lift –An approach channel takes off from Sri Veera Anjaneya Reservoir. The water is drawn through the canal and tunnel connected to it and lifted to fill the proposed Venkatadri Reservoir at Vattem village and Kurumarthyraya Reservoir at Karvena village by linking both reservoirs with gravity canal from Venkatadri Reservoir.

4th Lift –An approach channel takes off from Kurumarthyraya Reservoir. The water is drawn through the canal and tunnel connected to it 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 it and lifted to fill the proposed K.P.Lakshmidevipally reservoir.

3. AYACUT UNDER THE PROJECT:

It is proposed to irrigate 4,04,858 ha from three districts of Mahabubnagar, Rangareddy, and Nalgonda of Telangana state.

The district wise mandals, villages and ayacut covered under the scheme are as follows:

SI No	District	No of Mandals covered, Nos.	No of villages covered, Nos	Total Ayacut covered, ha
1	Mahabubnagar	37	718	2,83,400
2	Rangareddy	24	400	1,09,312
3	Nalgonda	5	13	12,146
Total:		66	1131	4, 04, 858

4. DRINKING WATER & INDUSTRIAL SUPPLY:

In addition to the irrigation benefits the project envisages to provide drinking water to villages enroute and Hyderabad city and water to industrial use in erstwhile Mahabubnagar, Rangareddy and Nalgonda districts.

5. SUBMERGENCE & LAND REQUIRED:

20 Nos Hamlets and **3** villages will be coming under submergence. Approximately **2481** households and **11025** population will be effected due to submergence.

An area of **23778.96 ha.** of non-forest land and **229.04 ha.** of Forest land shall be used for different components of the project.

- Submergence area under Reservoirs **9664 ha.** (23,870 Ac.)
- Conduit Area **2,198 ha.** (5,429 Ac.)
- Canal distribution Network area **12,146 ha.** (30,000 Ac.)

6. POWER REQUIRED:

The total power requirement of the project is **2944 MW** and the total energy consumption of the project is **4366 Million units per annum**. Total Power will be supplied by DISCOMS of the Telangana state.

7. COST AND DURATION OF THE PROJECT:

The Government in G.O.Ms.No.105 Irrigation and CAD (Projects-I) Department Dated: 10-06-2015 have accorded administrative approval to this project for **Rs.35,200 Crores**.

8. **B.C RATIO**:

Considering all the benefits and Costs incurred on all components of the project the B.C. Ratio works out to 1.23.