# STUDY OF PRANAHITA-CHEVELLA AND JURALA LIFT IRRIGATION SCHEMES





# Proposed Pranahita Chevella Lift Irrigation Project



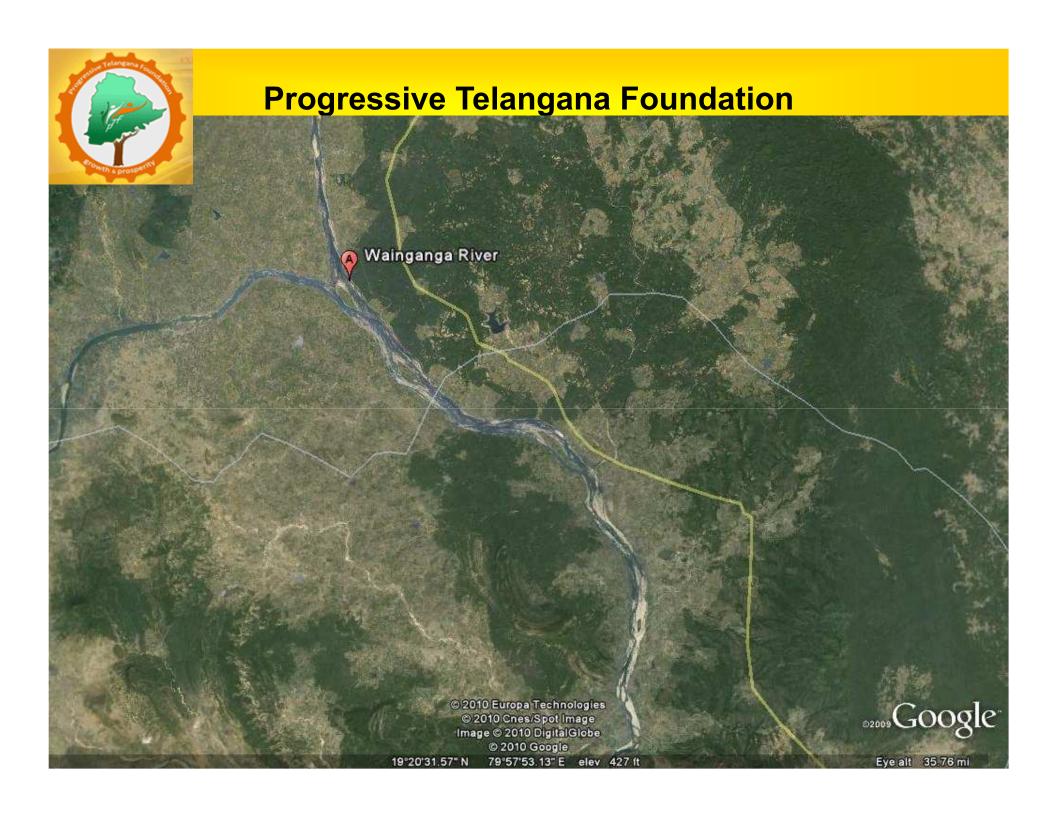
### Project announcement Wednesday, January 31, 2007

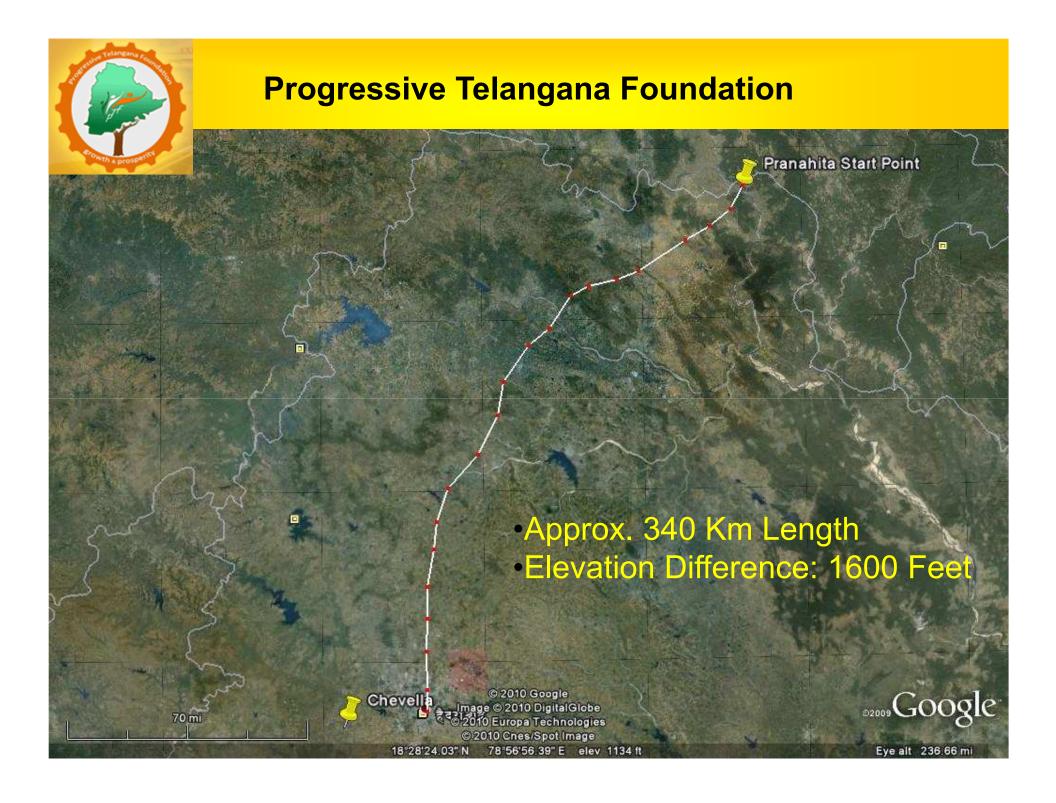
- YSR Announced the plan to commence the Pranahita- Chevella Project as a gift to the Telangana Region and more specifically to the farmers of Chevella RR Dist and Medak Region.
- The plan involves lifting water from Godavari-Pranahita and pumping it to Chevella providing water to water starved farmers in Chevella and farmers along the route in Medak District



### **Project Highlights**

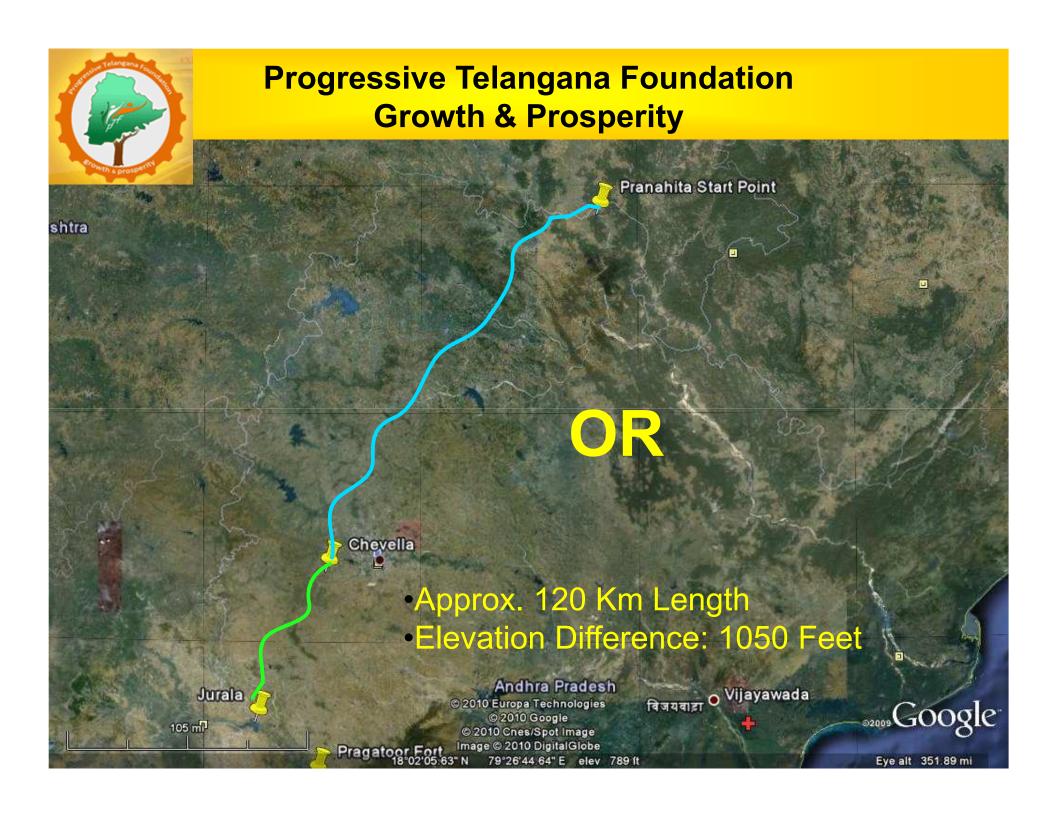
- Investment/Estimated Cost: Rs. 38,500.00
   Crores / USD 9,625.00 Million
- Objective: Irrigation of 16 Lakhs acres in Telangana- Chevella RR, Medak..
- 160 tmcft of water will be carried from Thummadi Patti Village Adilabad Dist to Chevella
- Monday, December 31, 2012 Completion by

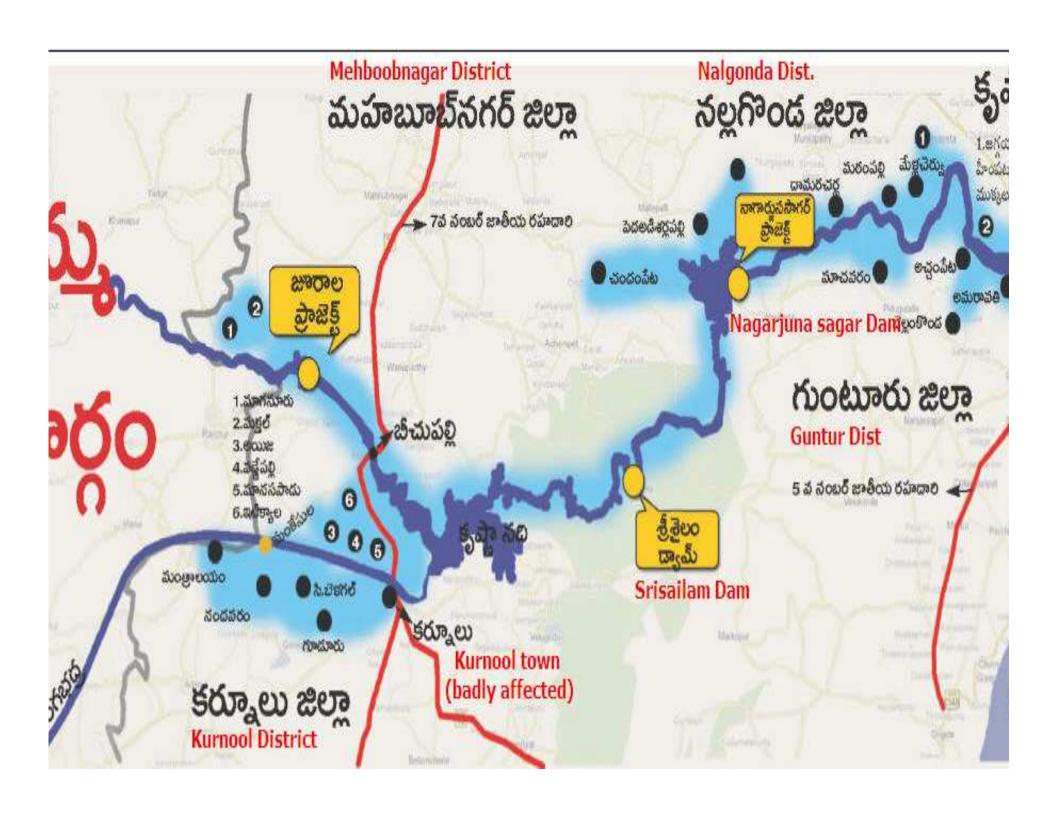


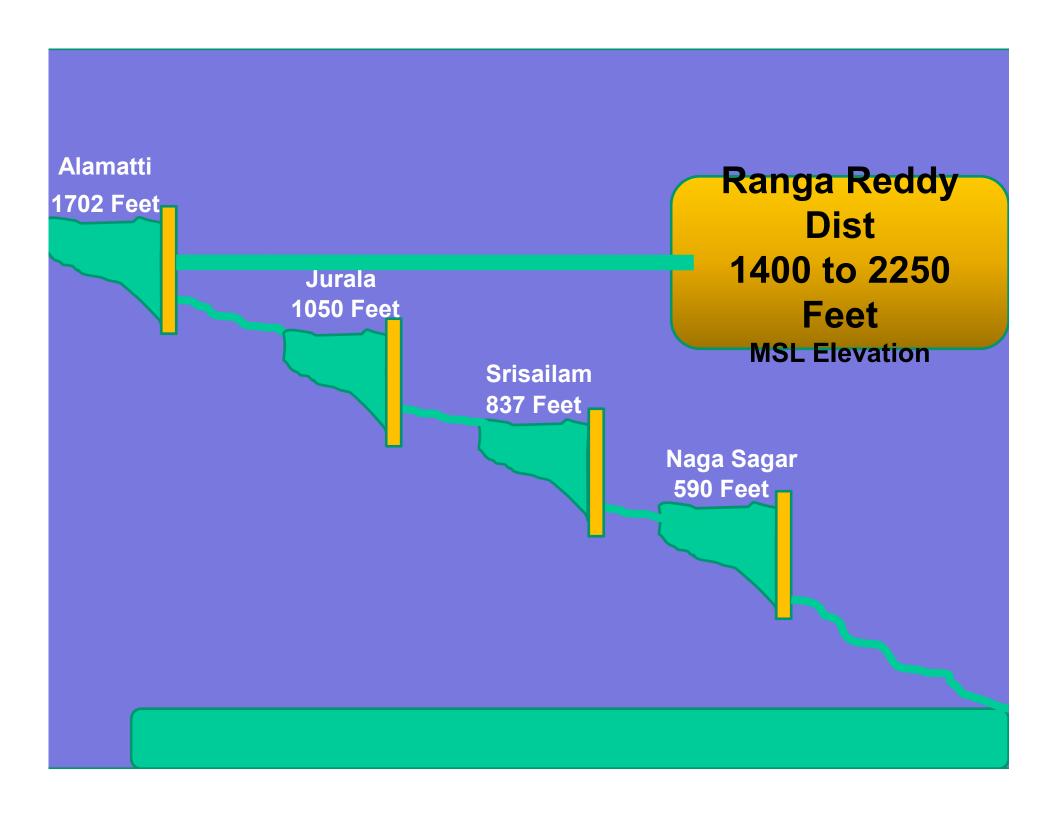


### **Progressive Telangana Foundation** Hyderabadyn Chevella Approx. 120 Km LengthElevation Difference: 1050 Feet Jurala Google Google © 2010 Google Image @ 2010 DigitalGlobe 35.4 ml © 2010 Europa Technologies © 2010 Cnes/Spot Image • Kalenur Eye alt 121.51 mi











### Suggestion:

 From Jurala the Pumps need to lift lesser height to Ranga Reddy District

 From Almatti to some parts of Ranga Reddy water can even flow by Gravity...



#### Comparison Statement

Description Pranahita/Chevalle Jurala

Amount of Water 160TMC 70TMC

Command Area 16.4 Lakh Acres 10.0Lakh Acres

Gravity Flow canal 849 Kms 130 Kms

Tunnel 206 Kms 26.5 Kms

Total Lift Height 1600 Ft 1050 Ft

Number Of Lifts 19 4

Power 3300 MW/8250 M units ? 2350 MW / 1974/ 56 M Units/day

Cost @ Rs 2.36 1947 Cr 494 Crs

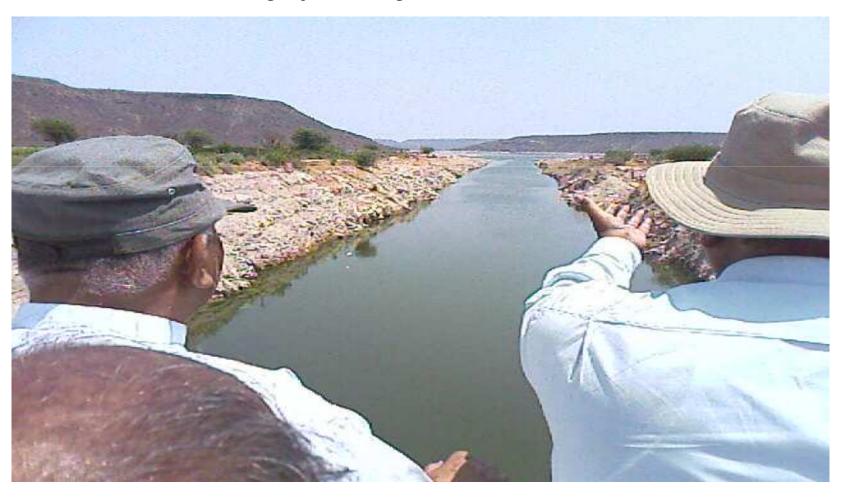
Total Cost of project 38, 500 Crs 9,000 Crs

Irrigation in RR Dist 2,46,704 Acres 2,70,000 Acres

Cost /Acre Rs 49,713 / 23,743 Rs 4935/-

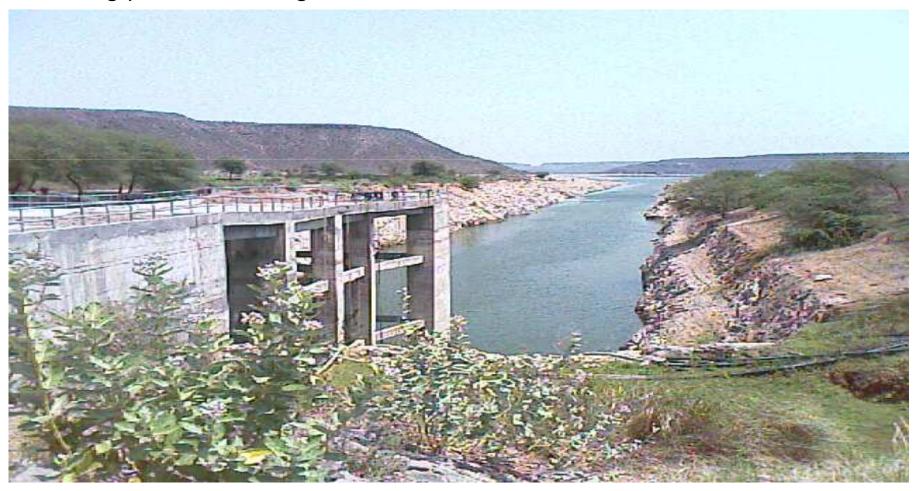


Feeder Canal From Nagarjuna Sagar Back waters --- AMRLIP





### Starting point of Underground canal





Ending point of Underground canal – entry into surge pool





Surge pool from which the water is pumped -- 70,000 cum







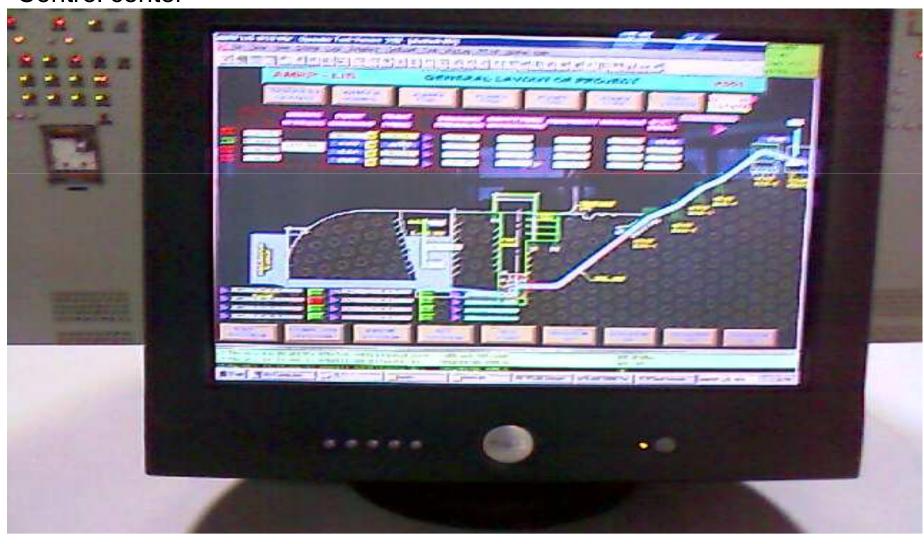


Four Motors Pumps of 8 MW each provision of one more pump available





#### Control center





Control panels





### 4 -- Delivery Lines length 655 mts





4 delivery lines before pouring water into reservoir





Discharge Point into 1.5 tmc\* 4 = 6.0 tmc per month



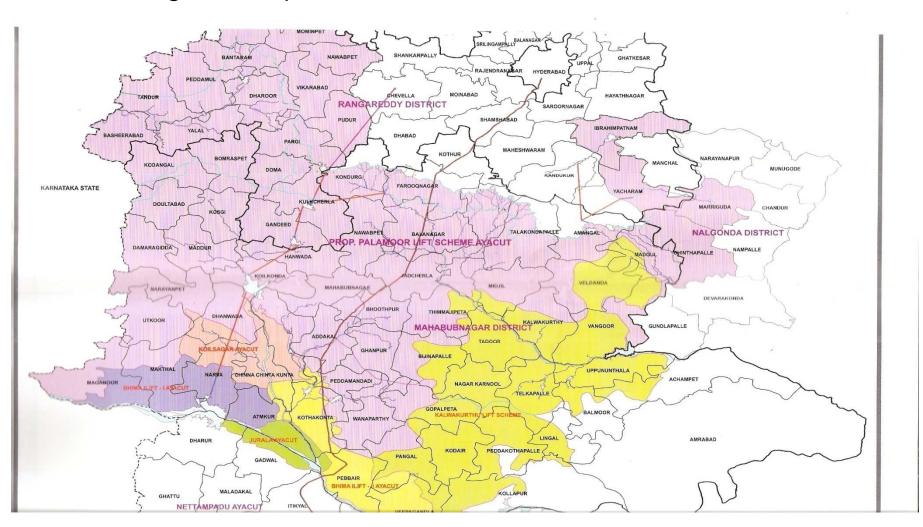


Akkampally Balancing Reservoir – Length of link canal 9 kms



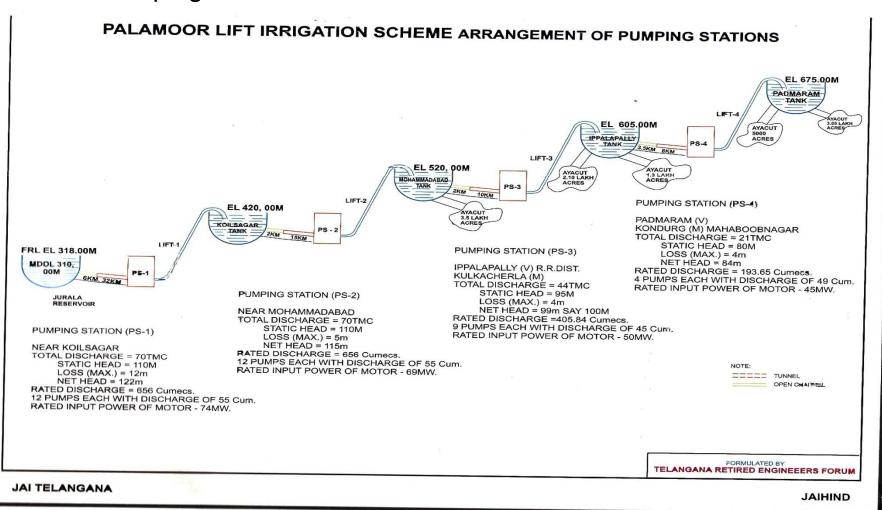


#### Jurala Lift Irrigation Map





#### JLIS – Pumping station





#### JLIS – Salient features

#### SALIENT FEATURES OF PALAMOOR LIFT IRRIGATION SCHEME 1.0 Catchment area of Krishna river in Telangana districts (Mahaboobnagar, Rangareddy and Nalgonda districts Right to utilize the quantity of water Quantity of water allotted

- Source of water for the scheme
- Quantity of water proposed to be drawn 6.0 Proposed No. of days of water drawls
- Proposed ayacut in
  - Mahaboobnagar district
  - ii) Ranga Reddy district
  - iii) Nalgonda district
- 8.0 Total ayacut
- 9.0 Proposed no. of lifts
  - i) LIFT-1
  - (For pumping water from Jurala fore shore to Koilsagar reservoir)

  - (For pumping water from Koilsagar to Mohammadabad)

  - (For pumping water from Mohammadabad to Ippalapally)

  - (For pumping water from Ippalapally to Padmaram / Kusuma Samudram)
- 10.0 Length of open channels and tunnels in the system.
  - Lift -1: Jurala to Koilsagar
  - Lift -2: Koilsagar to Mohammadabad
  - Lift -3: Mohammadabad to Ippalapally
  - Lift -4: Ippalapally to Padmaram
  - Total length
- 11.0 Capital Cost of Project
  - 1. Pumping stations

  - 3. Open channels
  - 4. Reservoirs for storing 70 TMC water
- 12.0 Total Cost of Project
- 13.0 Requirement of Power for all lifts of scheme
- 14.0 Annual energy consumption
- 15.0 Energy charges / year / 10 Lakh acres
- 16.0 Energy charges / acre

- : 68%
- 68%
- 34.73%
- Flood water from foreshore of Jurala Reservoir
- 70 TMC @2 TMC /day
- 35 days during flood season
- 7.00 Lakh acres
- 2.70 Lakh acres
- 0.30 Lakh acres 10.00 Lakh acres
- From EL+310.0m to EL.+420.0 m
- From EL+410.0m to EL.+520.0 m
- From EL+510.0m to EL.+605.0 m
- From EL+595.0m to EL,+675.0 m

#### Open Channel Tunnel 6.0 Km 32.0 Km 2.0 Km 15.0 Km 10.0 Km

2.0 Km 3.5 Km 8.0 Km 13.5 Km 65.0 Km = 13614-4

Rs. in Crores 4,500.00

- 1,000.00
- 500.00 3,000.00
- Rs. 9,000.00 Crores
- 2350 MW.
- 1974 MU / year or 56.4 MU /day.
- Rs.49350 Lakhs @ Rs.2.50 /unit.
- : Rs.4935 per acre @ Rs.2.50 /unit.

#### THE MANDALS THAT ARE BENEFITTED WITH THIS SCHEME

#### I. MAHABOOBNAGAR DT.

Kodangal
Bomraspet
Doultabad

- Kosgi
- Damaragidda

2

- Maddur
- Hanwada
- Koilkonda Narayanpet
- 10 Dhanwada
- 11 Utkoor
- Makthal
- Maganoor 13
- Devarakadra
- 15 Addakal Ghanpur
- 17 Peddamandadi
- Kothakota
- Wanaparthy

#### II. RANGA REDDY DT.

- Peddemul Marpally
- Tandur 1 Doma
- 5 Gandiveed
- Dharur
- Yalal
- Bashirabad
- Pargi 10 Kulakacherla
- 11 Bantaram
- 12 Yacharam
- 13 Ibrahimpatnam
- Mominpet 14
- Nawabpet 15
- 16 Vikarabad
- 17 Pudur

- Pangal 21 Gopalpet
- Thimmajipet Mahaboobnagar
- Nawabpet
- 25 Jadcherla
- Bijnapally
- Balanagar
- Farooqnagar 29 Midjil
- Kalwakurthy
- 31 Veldanda
- Keshampet
- Talakondapalle
- 34 Amangal
- Madgul
- 35 36 Kondurg
- 37 Boothpur Vangur

#### III. NALGONDA DT.

Chintapally Marriguda



### **Progressive Telangana Foundation**

Thank you for the opportunity.

### Look forward for all round Telangana development to achieve its destiny as the Heart of India!

Glad to provide any further assistance along with Telangana Retired Engineers Forum

#### **Progressive Telangana Foundation**

35, Sai Enclave, Road No12, Banjara Hills,

Hyderabad- 500034, AP, INDIA,

Phone No: +91- 9491440555

Emall: info@progressivetelangana.com