
NIZAM SAGAR PROJECT



Preamble

- (a) The Nizamsagar project was constructed by the Erstwhile Nizam Government during 1923 to 1931 across Manjira river with a storage capacity of 29.72 TMC to irrigate 2,75,000 Acres with a utilizable yield of 58 TMC. This is the first reservoir on Manjira River constructed with a dependable yield of 113.71 TMC.
- (b) During the period from 1931 to 1972, the reservoir has silted up drastically 10 times more than the anticipated rate of silting, due that the reservoir capacity is only 11.79 TMC against contemplated storage capacity of 29.72 TMC. The silt accumulation is worked out to 17.91 TMC.
- (c) As a remedial measure, modernisation of Nizamsagar Project system was taken up during 1970 and the full reservoir level (FRL) of Nizamsagar has been raised from 426.87 to 428.24 meters which resulted in, increase in the storage capacity of the reservoir from 11.8 to 17.8 thousand million cubic feet (TMC).
- (d) The total ayacut, contemplated as per the Project report is 2,75,000 Acres and is relocalized to 2,31,339 Acres on account of submergence of ayacut 28,085 Ac in foreshore of SRSP and the remaining comes under the command of SRSP which is on the downstream side of this Project.
- (e) To supplement the irrigation requirement of gap ayacut the Alisagar Lift Irrigation Scheme and ArgulaRajaramGuptha LI Scheme from foreshore of SRSP were constructed.

Location : Achampet (Village), Nizamsagar (Mandal).

It is Situated 57.96 Km from Kamareddy station on Secuderabad-Manmad line and also accessible from Hyderabad about 143.29 Km. via Sangareddy -Jogipet.

Latitude : 18° – 10 N

Longitude : 76° – 56 E

Components

Masonry Dam – Un-coursed rubble masonry in Surkhi mortar

Gated Spillway

Power House

EARTH DAM

Total length : 6,340M

Maximum height : 47.72M

Number of Spillways : 3Nos

Vents : 48Nos

Spillway length : 946M

Canal System :

Length of Main canal : 155KM

SCOPE

Originally in 1931, the Dam was built to height of 35m above the river bed and to store 25.60 TMC. This would be sufficient for the requirement of 2,75,000 Acres to rise wet crops and sugarcane. In addition, it may also develop by itself. But present the project envisages to provide irrigation facilities to anayacut of 2,31,339 Acres and for drinking water supply for Nizamabad

The cross drainage works are in leaky conditions are of 75 years old, which were constructed in CRS masonry with lime mortar and many structure are in dilapidated condition which require rehabilitation. To arrest the seepage losses and to modernize the canal system to achieve better water management modernization of Nizamsagar Project is proposed.

Salient features

| Sl. No | Particulars | |
|--------|----------------------------------|-------------------------------|
| 1 | River/Tributary | Godavari / Manjira |
| 2 | Catchment area | 8376 Sq. Miles 21,694 SqKm |
| 3 | Maximum flood Discharge | 5.25 lakh cusec |
| 4 | Reservoir Data | |
| | MWL | +1405.00Ft |
| | FRL | +1397.85Ft |
| | MDDL | +1376.00Ft |
| | Sill of Regulator | +1364.00Ft |
| | Top of Dam | +1412.00Ft |
| 5 | Capacity of the Reservoir | |
| | Grass Capacity | 29.72 TMC |
| | LiveCapacity | 25.60TMC |
| | PresentCapacity | 17.80 TMC |
| | PresentCapacity at MDDL | 0.78 TMC |
| 6 | Water Spreads | |
| | At MWL | 56.50 Sq. Miles |
| | At FRL | 49.99 Sq. Miles |

| | | |
|-----------|-------------------------------|----------------------------|
| 7 | Dam Details | |
| | Height of Dam above River Bed | 115.48Ft 34.65M |
| | Top Width of Dam | 14.00Ft 4.24M |
| | Length of Dam | 1.89 Miles |
| | i) Gravity | 1.88 Miles |
| | ii) Composte | 0.93 Miles |
| 8 | Over-flow Section | |
| | i) Regulator on L/F | 20Vents 39.99' X 19.48' |
| | ii) Weir No.3 & 4 | 28Vents 39.99' X 19.48' |
| 9 | Scouring Sluices | 11Vents 7.87' X 10.49' |
| 10 | Canal Details | |
| | Length of Main canal | 155 km |
| | Distributaries | 82 Nos |
| | Sub Distributaries | 283 Nos |

Hydrology:

| | | | |
|-------------------------|--|---------------|-----------|
| Source | RIVER: MANJIRA, WHICH IS A TRIBUTARY TO GODAVARI RIVER | Sub Basin | G10 |
| Catchment area | 21,694 SqKm | Gross storage | 17.80 TMC |
| Maximum Flood Discharge | 5.25 lakh cusec | | |

CANALS:

| Sl No | Maximum Designed Discharge | Discharge at head | Length of canal |
|-------|----------------------------|-------------------|-----------------|
| 1 | 6,25,000 cusecs | 3400 cusecs | 155 km |

District and Mandal Wise Irrigation Potential (in Acres)

| Sl. No. | Districts | Mandals | Ayacut in Acres | Mandals | Ayacut in Acres |
|----------|-----------|--------------|-----------------|-----------|-----------------|
| 1 | Nizamabad | Nizamsagar | 3,380 | Yedpally | 9,150 |
| | | Nizamabad | 15,600 | Kotgir | 24,500 |
| | | Banswada | 11,260 | Dichpally | 2,202 |
| | | Birkoor | 17,200 | Nandipet | 14,458 |
| | | Bodhan | 33,000 | Makloor | 21,900 |
| | | Varni | 12500 | Penjal | 18,785 |
| | | Jakran pally | 1,200 | Velpoor | 3,170 |

Year Wise Irrigation Potential Utilised (In acres):

| IP Utilised | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---------------|----------|----------|---------|---------|---------|---------|
| Kharif | 1,60,000 | 1,97,592 | 87455 | -- | -- | 65000 |
| Rabi | 1,20,152 | 1,39,915 | -- | -- | 112825 | 200876 |

Ayacut Map

MAP OF NIZAMABAD DISTRICT

INDEX EXISTING

| Sl. No. | Name of the Project | Nos. | Ayacu in Acres | Ref. |
|----------|------------------------------------|------|-----------------------|------|
| 1 | Nizamsagar Project | 1 | 231339 | |
| 2 | Srirama Sagar Project | 1 | 33131 | |
| 3 | Pocharam Project | 1 | 10500 | |
| 4 | Ramadugu Project | 1 | 5000 | |
| 5 | Koulasnala Project | 1 | 9000 | |
| 6 | Nallavagu Project | 1 | 730 | |
| 7 | M.I. Tanks (Irrign.) | 332 | 88813 | |
| 8 | M.I. Tanks (P.R.) | 2276 | 62435 | |
| On going | | | | |
| 1 | Ali Sagar LI Scheme | 1 | 53793 (Stabilisation) | |
| 2 | Argula Rajaram (Gutpa) LI Scheme | 1 | 38792 (Stabilisation) | |
| 3 | Chowpally Hanmanth Reddy LI Scheme | 1 | 11627 | |
| 4 | M.I. Tanks (Irrign.) | 5 | 1249 | |

MAHARASHTRA STATE

KARNATAKA STATE

