

THOTAPALLI BARRAGE PROJECT**SALIENT FEATURES****Location**

1.	Name of the project	:	Thotapalli Barrage Project
2.	Name of the river	:	Nagavali
3.	Location	:	Near Thotapalli village Garugubilli mandal Vizianagaram district Andhra Pradesh
4.	Longitude	:	83° – 29' – 24" E
5.	Latitude	:	18° – 47' – 30" N

Hydrology

1.	Catchment area – Orissa	:	3994 sq.km.
	Andhra Pradesh	:	461 sq.km.
	<i>Total</i>	:	4455 sq.km.
2.	Water availability (A.P. share)	:	16 TMC
3.	Designed flood	:	3234 cumec (1,14,420 cusec)
4.	Gross storage	:	3.003 TMC
5.	Dead storage	:	0.494 TMC
6.	Live storage	:	2.509 TMC

Head Works

1.	Deepest Bed Level of River	:	+ 93.30 m
2.	Sill Level of Sluices – Left side	:	+ 97.00 m
	- Right side – I	:	+ 97.00 m
	- Right side – II	:	+ 97.00 m
3.	FRL	:	+ 105.00 m
4.	MWL	:	+ 105.00 m
5.	TBL	:	+ 109.00 m
6.	Area of submergence at FRL	:	5,036 acre
7.	Evaporation losses	:	26.76 M.cum.

Dam

1.	Type	:	Earth dam
2.	Total length	:	8.20 km
3.	Maximum height	:	20.47 m
4.	Top width	:	6.00 m

Surplus Arrangements

1.	Length of Spillway	:	115 m
2.	Type	:	Ogee Type
3.	Crest level	:	+ 98.00 m
4.	No. of radial gates	:	8 Nos.
5.	Size of gates	:	12 m x 7 m

Conjunctive Use

		Barrage	Tanks	Ground water
1.	Irrigation	396.07 M.cum.	--	19.53 M.cum.
2.	Drinking water	9.06 M.cum.	9.06 M.cum.	10.20 M.cum.
3.	Industrial	18.13 M.cum.	--	--
4.	Evaporation	26.76 M.cum.	--	--
5.	Total	450.02 M.cum.	9.06 M.cum.	29.73 M.cum.

Canals

1.	Total No. of canals	:	3 Nos.
2.	Existing canals	:	2 Nos.
3.	New Canal	:	1 No.
4.	Right Main Canal (new) – Length	:	107.00 km
	- Bed level of RMC at head	:	+ 97.40 m
	- F.S. Depth at starting	:	2.45 m
	- Section of canal	:	18.50 m x 2.45 m
	- Ayacut	:	1,20,000 acre

Land Required For Acquisition

1.	Land required under submergence	:	5037.00 acre
2.	Land required for headworks	:	337.36 acre
3.	Land required for Main Canal	:	2557.94 acre
4.	Land required for distributary system	:	2165.43 acre
5.	Total	:	10097.73 acre

1.	B. C. Ratio at 10% interest	:	1.872 : 1
2.	Ayacut – Existing	:	64,000 acre (25,900 ha)
	- New	:	1,20,000 acre (48,563 ha)
3.	Benefitting mandals	:	12 mandals in Viziana-garam district 10 mandals in Srikakulam district