

LOWER INDRA IRRIGATION PROJECT

Location		
1	Dam site	Near village Dargaon of Nuapada Dist.
2	Latitude	20 ^o -23'-30" N
3	Longitude	82 ^o -38'-45" E
4	Toposheet	64L/11
5	River	Indra
6	Basin	Mahanadi
7	Nearest Railway Station	Kantabanji
Hydrology		
1	Catchment area	1093 Sqkm.
2	75% dependable rainfall	1070 mm.
3	75% dependable runoff	288.21 Mcum.
4	75% dependable Annual runoff with 10% U/S Reservation	259.39 Mcum.
5	Maximum Annual rainfall	1638 mm.
6	Mean Annual rainfall	1116 mm.
7	Runoff factor	28.90%
8	Gross Utilization	325.53 Mcum.
9	Evaporation Losses	51.78 Mcum
10	Design Flood	6831 Cumecc.
Reservoir Capacity & Submergence		
1	Gross storage capacity at FRL	321.635 Mcum.
2	Dead storage capacity	7.383 Mcum.
3	Live storage capacity(betweenF.R.L & D.S.L)	314.252 Mcum.
4	Full Reservoir Level	R.L.265.00 M.
5	Maximum Water Level	R.L.265.00 M.
6	Dead Storage Level	R.L.251.00 M.
7	Submerged area at FRL	4766 Ha.
8	Deepest Bed Level	R.L.231.00 M.
9	T.B.L	R.L.268.50 M.
10	Free Board	3.50 M.
11	Population to be affected	6181 Nos.

12	No. of villages affected	30 Nos.
13	Road submerged	2.55 Km.
14	Tribal population affected	2224 Nos.
15	Forest area affected	1042 Ha.
16	Agriculture Land affected	888 Ha.
17	Length of Reservoir periphery	91.60 Km.
Main Dam		
1	Type	Earth fill
2	Length	3780 M.
3	Height (Max)	22 M.
4	Top width	6 M.
5	Total length of Dykes	2367 M.
6	Height of Dyke-1 Dyke-2 Dyke-3	16.50 M. 13.70 M. 11.00 M.
Spillway		
1	Type	Ogee type
2	Location	Centrally located
2	Length	159 M.
3	Crest level of spillway	R.L.256.00 M.
4	No. of ways	09 Nos.
5	Size of Gates	15 M x 9 M.
6	Type of gates	Radial
Distribution system		
1	GCA	37,389 Ha.
2	CCA	29,900 Ha.
3	Annual Intensity of Irrigation	130%
4	Intensity of Irrigation during Kharif	90%
5	Intensity of Irrigation during Rabi	40%
Estimated cost		
1	Cost of the project	Rs.1182.23 Crore.
2	BC Ratio	1.27

3	Internal Rate of Return	24