

## MAHANADI-CHITROTPALA ISLAND IRRIGATION PROJECT

<b>Location</b>		
1	Dam site	In Cuttack, Kendrapara & Jagatsinghpur district.
2	Latitude	20 <sup>0</sup> -24'-00" N
3	Longitude	86 <sup>0</sup> -57'-30" E
4	River	Mahanadi – Chitrotpala & Mahanadi - Paika
5	Ayacut Boundry	Between River Mahanadi-Chitrotpala and River Mahanadi-Paika.
6	Head Works	Mahanadi Barrage
<b>Hydrology</b>		
1	Mean Annual rainfall	119.80 mm.
2	Minimum Annual rainfall	950.70 mm.
3	Maximum Annual rainfall	2,447.50 mm.
<b>Distribution system</b>		
1	GCA	27,920 Ha.
2	CCA	19,542 Ha.
3	Mahanadi-Chitrotpala Doab	15,342 Ha.
4	Mahanadi-Paika Doab	4,200 Ha.
5	Intensity of Irrigation during Kharif	94%
6	Intensity of Irrigation during Rabi	70%
7	Annual intensity of Irrigation	164%
8	Head discharge capacity of Main Canal	26.9 Cumec.
9	Remodelling Length of existing Kendrapara Main Canal	10.435 Km.
10	Length of Link Canal from Barbodia to Harichandanpur	8.679 Km.
11	Length of CRB Canal	32.24 Km.
12	Length of Distributaries	1,24,155 Km.

<b>Canal Syphon</b>			
		Mahanadi Chitrotpala siphon cum bridge across river Chitrotpala	Mahanadi Paika siphon cum bridge across river Paika
1	Location	Harichandanpur	Krishnandapur
2	Discharge	26.90 Cumec.	5.80 Cumec.
3	U/S F.S.L	18.10 M.	13.26 M.
4	D/S F.S.L	16.75 M.	11.86 M.
5	H.F. Discharge	14,156 Cumec. (Chitrotpala)	3,567 Cumec. (Paika)
6	Angle of crossing	90 <sup>0</sup>	90 <sup>0</sup>
7	H.F.L	18.45 M.	11.60 M.
8	Water surface slope	1 in 3660	
9	Deepest Bed Level of River	9.81 M.	4.37 M.
10	Length of Syphon	833.60 M.	497.60 M.
11	No. of Barrels	01 No.	01 No.
12	Size of Barrels	3.50 M x 3.50 M.	2.0 M x 2.0 M.
13	Length of Bridge	780 M.	440 M.
<b>Estimated cost</b>			
1	Total Cost of the project	Rs.39545.53 Lakh.	
2	BC Ratio	1.554	
3	Internal rate of return	17.27%	
4	Year of commencement	1988-89	