

SAILENT- FEATURES

CHAPTER -IV

4.0 TECHNICAL DETAILS

4.1 MAIN DAM

S.NO.	PARTICULARS	M.K.S	F.P.S
1	Location (a) Latitude		
	(b) Longitude		
2	Gross catchment area	25°17'	
	Catchment area of M.P.	76°43'	
	Catchment of Rajasthan	269.31 Sqkm	105.2 SqMile
	TOTAL	66.56 Sqkm	26.0 SqMile
3	Intercepted catchment area	202.75 Sqkm	79.2 SqMile
4	Free catchment area	269.31 Sqkm	105.2 SqMile
5	Type of catchment as per classification of N.L. strange.	NIL	NIL
6	Maximum weighted rain fall (Annual) in the catchment	269.31 Sqkm	105.2 SqMile
7	Expected Monsoon yield as per regression analysis of khatoli gauge site at 75% dependability	Good	Good
8	Gross storage capacity	1284.33 mm	50.56 Inch.
9	Dead storage at sluice sill level	48.83 Mcum	
10	Live storage capacity	46.972 Mcum	
11	Total Length of Bund (including diversion Dam)	4.00 Mcum	
12	Length of over flow (ogee) and By wash	42.972 Cum	
13	Length of earth Dam section.	9.21 Km.	
14	Full tank level	450 M.	
15	Maximum water level	8.63 Km.	
16	Top Bund level	259.270 m	
17	Dead storage level	261.14 m	
18	Maximum flood discharge	264.14 m	
19	Flood lift	253.50 m	
20	Free Board	2121.76 Cumecs	
21	Top width of Earthen Dam	1.87 m	
22	Type of overflow spillway section	3.00 m	
23	Sluice and sill level	6.00 m	
24	U/S slope of Earthen Dam	Ogee & By wash	
25	D/S slope of Earthen Dam	253.50 m	
26	Gross command area	3:1	
27	Culturable command area	2.25:1	
28	Dependability	10091.00 ha.	
		6885.00 ha.	
		75%	

29	Duty of Irrigation	143 Ha/Mcum
30	Expected Annual bed cultivation	82 Ha.
31	Maximum height of dam at deepest portion.	19.91
32	Lift of reservoir	50 years
33	Irrigation area	6126 Ha.
34	Intensity of Irrigation	89%
	(i) Rabi	61%
	(ii) Kharif	28%

HATHIADH IRRIGATION PROJECT

TEHSIL : KISHNGANJ

DISTRICT : BARAN

4.2 CANAL

(A) RIGHT MAIN CANAL

S.NO.	PARTICULARS	M.K.S	F.P.S
1	Length of canal	12.96 km.	8.1 Miles
2	Discharge of Head	1.2444 Cumec	43.94 Cusecs
3	Type of canal section	Mehboob	Mehboob
4	F.S.D.	1.2 m	3.9369 ft.
5	Bed slope	1 in 4,000	1 in 4,000
6	C.B.L. at Head	253.50 m	-
7	Side slope	Mehboob	(1:1)
8	G.C.A.	3223 Hect.	7961 Acres.
9	C.C.A.	2181 Hect.	5387 Acres.
10	Intensity of Irrigation	89%	89%
	(i) Rabi	61%	
	(ii) Kharif	28%	
11	Proposed Irrigation	1941 Hect.	5120 Acres.
12	Duty of Irrigation for design of canal	1430 Hect.	100 Acre/cusec.

HATHIADH IRRIGATION PROJECT

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(B) LEFT MAIN CANAL

S.NO.	PARTICULARS	M.K.S	F.P.S
1	Length of canal	19.32 km.	12.07 Miles
2	Discharge of Head	2.6649 Cumec	94.11 Cusecs
3	Type of canal section	Mehboob	Mehboob
4	F.S.D.	1.50 m	4.92 ft.
5	Bed slope	in 4,000	
6	C.B.L. at Head	253.500 m	831.68 ft.
7	Side slope	Mehboob section	(1:1)

8	G.C.A.	6868 Hect.	16964 Acres.
9	C.C.A.	4704 Hect.	11619 Acres.
10	Intensity of Irrigation	89%	
	(i) Rabi	61%	
	(ii) Kharif	28%	
11	Proposed Irrigation	4187 Hect.	11042 Acres.
12	Duty of Irrigation for design of canal	1430 Hect. Cumec.	100 Acre/cusec.

HATHIADH IRRIGATION PROJECT

TEHSIL : KISHNGANJ

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(C) DISTRIBUTARY OF L.M.C.

S.NO.	PARTICULARS	M.K.S	F.P.S
1	Length of canal	13.05 km.	8.16 Miles
2	Discharge of Head	1.23 Cumec	43.43 Cusecs
3	Type of canal section	Mehboob	-
4	F.S.D.	1.2 m	3.93 ft.
5	Bed slope	in 4,000	
6	C.B.L. at Head	246.640 m	809.7 ft.
7	Side slope	Mehboob section	(1:1)
8	G.C.A.		
9	C.C.A.	2144 Hect.	5295.68 Acres.
10	Intensity of Irrigation	89%	
	(i) Rabi	61%	
	(ii) Kharif	28%	
11	Proposed Irrigation	1908 Hect.	5033 Acres.
12	Duty of Irrigation for design of canal	1430 Hect. Cumec.	100 Acre/cusec.

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