HATHIADEH MEDIUM IRRIGATION PROJECT

TEHSIL-KISHANGANJ

DISTRICT-BARAN

CALCULATION OF DIFFERENT ASPECT ON DECREASING HEIGHT OF DAM

Total project cost 23253 Lakh
Total CCA of project 6885 Ha
Capacity Gross 46.97 Mcum

Live 42.97 Mcum

S.no.	Contour Level (in m.)	Total area (In Ha.)					Live storage		Cost of	
		Dam Line		Submergence		Total Area	Capacity (In	CCA (in	Project (In	
		Forest	Non Forest	Forest	Non Forest	(In Ha.)	Mcum)	Ha.)	Lakh)	Remark
1	259.27	9.521	23.224	276.949	556.946	866.64	42.97	6885	23253	Full Tank Level
	250	9.521	23,224	236.28	527.225	796.25	31.12	4540	20500	
2	258	702713122		206.7	508.775	748.22	22.04	1715	17722	
3	257	9.521	23.224		-	639.35	14.01	809	13484	
4	256	9.521	23.224	153.77	452.835			100.00	9736	
5	255	9,521	23.224	102.42	388.655	523.82	7.48	204		
6	254	9.521	23.224	46.1	262.015	340.86	5.05	23	5491	

Note:-

The Hathiadeh Irrigation Project is proposed uptp FRL 259.27 m. at this level the construction cost is 23253 lakh, storage capacity 46.97 Mcum and CCA is 6885 Ha. Where if we go to at FRL 258 m and 257 m at these level the storage capacity will considerably reduced to 31.12 Mcum and 22.04 Mcum respectively which wil decrease the CCA to 4540 Ha. & 1715 Ha. respectively but construction cost reduce marginally by 2753 & 5531 Lacs respectively. Hence considering requirment of water and optimization of construction cost FRL at 259.27 is justified

In the top contours there is more storage in lesser height so that decrease of height rapidly decrease the storage.

Hence the height of storage adopted as per required storage.

Exexutive Engineer
Water Resources Division III
Baran