


Sr. No.	Particulars	Alternate - I (Proposed)	Alternate - II	Alternate - III
I	General			
	Name of Project	Sangatha dam	Sangatha dam	Sangatha dam
	Type Of Project	Irrigation	Irrigation	Irrigation
	Location	Near Rajor (Mahuakheda)	Near Rajor (Mahuakheda)	Near Rajor (Mahuakheda)
	River Basin	Sindh basin	Sindh basin	Sindh basin
	Located on River	Aer River	Aer River	Aer River
	Tehsil	Pichhore	Pichhore	Pichhore
	District	Shivpuri	Shivpuri	Shivpuri
	State	M.P.	M.P.	M.P.
II	Hydrology			
	Catchment Area (Sqkm)	381	380	379
	Intercepted catchment area (Sqkm)	141.08	141.08	141.08
	Net Cathment area (Sqkm)	239.92	238.92	237.92
	Available Annual Yield atDam site	0.121	0.121	0.121
	Live Storage Capacity(MCM)	21.81	19.64	17.19
IV	Desing Iggigation (Ha)	4630	4200	3990
V	Submergence Details			
	Total Submergence(ha)	350	358	366
	Private Land(ha)	5	7	9
	Govt. Land(ha)	0	0	0
	Forest Area(ha)	345	351	357
	Habitation	Nil	Nil	Nil
	Properties	Nil	Nil	Nil
	Submergence Ratio	7.56	8.52	9.17
	Total Cost(Lakh)	16825.24	17638.25	17842.11
	Cost per Ha. (Rs. In Lakhs)	3.63	4.20	4.47
	Techno Economic feasibility	Feasible	Not feasible due to high cost per ha.	Not feasible due to high cost per ha.


 Executive Engineer
 Water Resources Division
 Shivpuri (M.P.)

Surveyed 1967-68

MADHYA PRADESH

Magnetic Variation from True North about $\frac{3}{4}^{\circ}$ West in 1965
(Increasing by about 1' annually).

No. 54 $\frac{G}{16}$

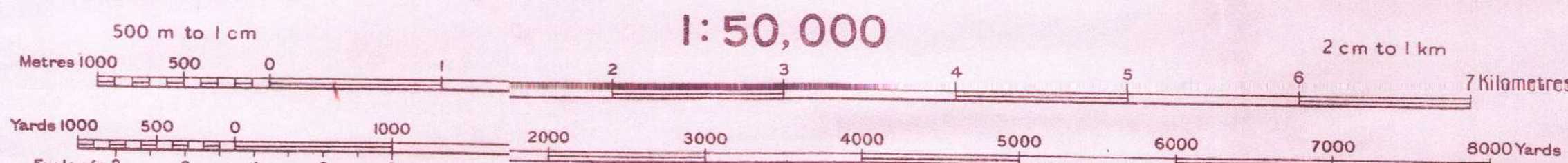
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Published under the direction of Dr. Hari Narain, M.Sc., D.Phil., Ph.D., Surveyor General of India.
1972

1:50,000



HEIGHTS & CONTOURS IN METRES

Water features are shown in blue where they generally contain water.
Cultivated areas are coloured yellow.
The exterior boundaries of areas of Reserved or Protected Forests are shown by green ribands.

Distance stones are in miles.

Administrative Index

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REFER TO THIS MAP AS :- 1:50,000
SHEET 54 G/16 FIRST EDITION


INDIA

Three Alternate Dam site

Dam line 1:- As we proposed dam line 1 in this project. The catchment area will occur sufficient to have that capacity which serves the potential of 4630 ha of irrigation. The whole body of dam structure or component is in private land & in forest land. Hence the optimum storage gain with minimum forest land area .Hence this dam line is suitable for construct a Dam

Dam line 2:- If we consider dam line 2 as a proposed site the catchment area will reduce 0.3% results the storage will reduced upto 10% hence the irrigation of 4630 ha will not achieve. The whole body of dam structure and its component are in forest land & in private land. Hence the forest land area of submergence increase.


Dam line 3:- If we consider the dam line 3 as a proposed site the catchment area will reduce 0.55% results the storage will reduced upto 21% hence the irrigation of 4630 ha will not achieve. The whole body of dam structure and its component are in forest land & in private land. Hence the forest land area of submergence increase. Hence the best suitable site is dam line 1.


Executive Engineer
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**OFFICE OF EXECUTIVE ENGINEER WATER RESOURCE
DIVISION SHIVPURI(M.P)**

Justification Note

A note containing justification for location of the project named Sangatha medium Project .It consist of earthen dam near village Rajor (Mahuakheda) on aer river which has total catchment area of 381 Sqkm and irrigation served as 4630 ha. A Total station survey has been carried out to achieve min submergence area and optimum project cost. For this purpose a detailed study of alternate dam line done and finally decided this site. If we shift dam line that either decrease in capacity or unavailability of banks or higher the submergence area will occur. Therefore present proposal is well suitable site with minimum submergence area and maximum capacity.


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