

EXECUTIVE SUMMARY

MOHANPURA MAJOR PROJECT

INTRODUCTION:

Newaj sub basin forms the part of Chambal River basin and covers area in Sehore, Dewas, and Rajgarh district of Madhya Pradesh. The river rises in Tehsil- Ashta of Dewas district of Madhya Pradesh at an elevation of 518 m above mean sea level at Latitude 23° 67' 13" and Longitude 76° 71' 73". The river Newaj is among three major rivers of lower Chambal basin which forms upper reach of lower Chambal sub basin. The river is basically an interstate river, and its first 205km length right from its origin to the state boundary falls in the state of M.P. The river has two major tributaries which lies completely in the state of M.P. These are Dudhi river and Sukad river. The other major tributaries are Chhapi, Gharganga, Ghodapachhad, and Ajnar all of these tributaries are though originating within the state of M.P. but are meeting in the river Newaj after traversing through the state of Rajasthan. The river, after the junction of all these tributaries is then called river Parwan and finally meets into the river Newaj near Baran in the state of Rajasthan (Basin map of Rivers traversing in M.P. is enclosed). The Newaj finally joins river Chambal on upstream of the confluence point where the river Parbati meets river Chambal.

The Newaj sub basin supports a large area almost equally distributed on both of the banks. The GCA of the Newaj sub basin is 431000ha and out of which approx.288000ha area is under cultivation. Thus basically the basin is an agricultural predominant basin having very less forest cover. Owing to this cultivation intensity the basin also supports fairly dense human and live stock population.

NECESSITY OF THE PROJECT:

- a) The surface and Ground water of the Newaj River basin drain out very fast due to its Geomorphology which causes scarcity of water in the basin.
- b) No further development in the Agriculture, Industrial and other activities is possible without enriching the region with water.
- c) During dry summer, there is an acute problem of drinking water and in almost 70% of villages and towns; transportation of water is a common practice. Ground water level of area has gone below 40 m depth and the drinking water has excess fluoride causing health regards

in humans. The situation is so critical that almost in every alternate year even the drinking water supply after March is to be planned once in three days or once in a week in most of the towns situated in the Newaj sub basin.

- c) By constructing Major water storage the development of this presently backward area is possible.

SITE SELECTION CRITERIA:

a) Existing Infrastructure: The site is approachable from NH -3 which is 15 km far from site and the distance from NH-52 is 5 km. The site can also be approached from western railway section of Guna to Maksi from Biaora railway station, which is 26 km from the proposed dam site. The nearest air connection is available from Indore and Bhopal, which are only 177 km and 197 Km from the proposed site.

The complete project area is well connected by a Communication network of NH-52, NH-3 and state highway together with network of railway line.

b) Environmental consideration (within 10 Km radius from proposed site): No protected area under international conventions, national or local legislation for their ecological, landscape, cultural or other related value is falling.

No forest land is coming under submergence.

There is no densely polluted area or Industrial area coming under submergence. Also there is no critically or severely polluted area as per CPCB. Most of the land coming under submergence is barren & stony waste.

PROJECT IN BRIEF:

The project is proposed on river Newaj which is one of the major three rivers constituting this zone of lower Chambal sub basin. Under the scope of proposed project a barrier is proposed to be constructed on river Newaj near village Banskheddi of Rajgarh tehsil of district Rajgarh. The proposed dam site can be located at latitude 23°57'54" N & longitude 76°46'37" E on toposheet no.55A/13. Nearest Highway is NH -3 which is 15km far from site and NH-12 is 5 km. The project is designed as a high level storage dam taking into consideration the topographical limitation of the river and sub basin and in particular the gross surplus availability of water.

The project in its proposed form will provide irrigation on d/s of proposed Mohanpura dam on left and right flank of Newaj river in

181000 ha of GCA out of which 125000 ha of CCA is proposed. The irrigation benefits will include Rabi irrigation in 123000 ha, Kharif irrigation in 17000 ha and Perennial in 2000 ha besides supplies to industrial demand and fulfilment of drinking water 5 Mcum and 5 Mcum respectively. The proposed reservoir will also have provision for regulated water supply for d/s use and maintaining ecological balance @ 52 Mcum. By adopting micro-irrigation, the CCA would increase from 65000 ha vide environment clearance no. J-12011/41/2012/ IA-I dated 10.03.2014 to 1,25,000 Ha but the submergence will remain unaltered. The present proposal pertains to the additional 60,000 ha command area only.

The Present Proposal will comprise of following main components: -

- 1) Construction of complete piped canal system including main pipe line, gravity mains other pipe line right up to 30ha chak including construction of all in line canal structure required therein.
- 2) Provision of LBC Rising main about 40.00 km long is proposed to irrigate about CCA of 87000ha (including a Gravity Distributory pressure pipe Canal for GCA 126900ha) land, and about 13.00 km long Rising main is proposed for Extension of LBMC (Pachore Area) CCA 16000ha out of GCA 20250 ha, project shall provide irrigation in Rajgarh, Khilchipur, Sarangpur & Zeerapur tehsil of Rajgarh district.
- 3) Provision of RBC Rising main about 3 Km long is proposed to irrigate about CCA 22000 ha and GCA 33850 ha of land of Tanwarvad Area of Rajgarh tehsil of Rajgarh district.
- 4) It is proposed to provide lift irrigation for 126900 ha of GCA in the form of pressure irrigation by constructing intake well near the village Beerampura to lift water directly from the reservoir through a network of 2227 km long pressure irrigation system.
- 5) It is proposed to irrigate about 181000 ha GCA through RBMC and LBMC with about 48.925km (excluding minors) canal network.

COST OUTLAY OF PROJECT: The proposed financial outlay of the project as of today stands at Rs. 3866.34 crores.

Unit-I Headwork	Rs. 463.50 crores
Unit-II Canal	Rs. 2132.84 crores
Unit-III Solar Power 60 MW	Rs. 360.00 crores
B-Land : Headwork	Rs. 900.00 crores
B-Land : Canal	Rs. 10.00 crores
Total	Rs. 3866.34 crores

DETAIL OF SUBMERGENCE:

By adopting Micro- irrigation, the CCA is increased from 65000 ha to 125000 Ha but the submergence will remain unaltered. The reservoir created will involve a submergence of 7056 ha of land, out of which 1540.77 ha of government land, 5515.23 ha of private land and nil forest land. The private land falling under submergence is barren, stony waste and is under rain-fed cultivation.

The submergence zone has 36 villages coming under it of which 2 are getting fully submerged.

R&R PLAN: Resettlement and Rehabilitation of oustees is being done in accordance with GoI R & R Policy and Mohanpura Special package. The resettlement colonies being developed village-wise, to the extent possible, i.e., oustees from one village will be resettled at one site. R&R sites at Khimakhedi & Patan Road have been identified and are being developed. The land are suitable and the oustees have the choice for opting for urban or rural areas. A provision of Rs. 910.00 crores for Land acquisition and R-R is made in the project.

CAT & CAD PLAN: The Catchment of proposed site is 3825 sq km and it is 30 % barren and 56% cultivated. It is under rain-fed agriculture and vulnerable to erosion and weathering. The present rate of siltation in catchment is 0.75 MAF/year/sq km. By suitable measures it is expected to bring down rate of siltation by 50% such as construction of dykes, gully traps, farm bunding, check dams, slope stabilization, stone pitching, agronomical practices, crop rotation, and so on and so forth.

A provision of Rs. 40,245 per ha is proposed amounting to total Rs. 15.39 crores for Command area development and Water Management.

BIO DIVERSITY:

- (A) **In Pre Phase:** The submergence zone of Mohanpura Major Multipurpose project does not contain any endemic biodiversity. This is also corroborated in the detailed Work Plan of Rajgarh District (2005-2015), wherein the chapter on Biodiversity (page 67-68, Part 1, Work Plan of Rajgarh Forest Division, Department of Forest, Government of Madhya Pradesh), does not mention any sensitive flora or fauna species in the submergence zone and covers general

importance of biodiversity.

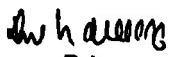
- (B) **In Post Phase:** After the completion of Mohanpura water development scheme, the natural corollary will be initiation of vegetal growth since presence of waterbody will lead to sustained humidity in soil-moisture zone. This will gradually help in the compaction of loose soil as well as increase the humus content in the top-soil, thereby providing more conducive ground situations for natural vegetal growth.

In the post- Mohanpura phase, the quantum of water present in the reservoir will increase the water table in the nearby areas in general and more specifically to the root-zones of existing flora.


THE PROJECT AFTER COMPLETION WILL GIVE THE FOLLOWING BENEFITS -

Annual Irrigation	:	142000 ha
Drinking Water	:	Mitigations of excess fluoride
Ground Water	:	Rise in ground water table
Flood Protection	:	Decreasing adverse impacts of floods
Fish production	:	Additional source of livelihood
Livestock Rearing	:	Supplementary source of income & assisting
		increase in agriculture production
Micro Enterprise	:	Regular source of income for landless mass
Labour opportunity	:	Regular income for the women and
		minimizing migration.
Industrialization	:	Prosperity and employment in area.
Beneficiaries	:	Resident of DPAP Tehsils

In the light of the above, Mohanpura Project is the best option for the overall development of the state in general and Rajgarh district in particular.


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