

Government of Madhya Pradesh Water Resources Department



Environmental Impact Assessment Project of Hiran Irrigation Project District Jabalpur (M.P.)

**Chief Engineer
Wain Ganga Basin
Water Resources Department
Seoni (M.P.)**

FORM 1**(1) Basic Information**

S. N.	Item	Details
01	Name of the Projects	Hiran Dam Project
02	S. N. in the schedule	
03	Proposed capacity/area/ tonnage to be handled/ command area/ lease area/number of wells to be drilled	Cultivable Command Area – 8125 ha
04	New/Expansion/Modernization	New
05	Existing Capacity/Area etc.	Not applicable
06	Category of Project i.e. "A" or "B"	"B"
07	Does it attract the general condition? If yes, please specify	No, it is a irrigation project of 8125 ha of cultivable command area.
08	Does it attract the specific condition? If yes, please specify	No
09	Location	Latitude 23°16'30" Longitude 80°21'43"
	Plot/Survey/Khasra No.	-
	Village	Baduwa
	Tehsil	Kundam
	District	Jabalpur
	State	Madhya Pradesh
10	Nearest Railway Station/Airport along with distance in kms.	Nearest Railway station and airport is Jabalpur with distance 68& 70 km
11	Nearest town, city, district headquarters along with distance in km.	Jabalpur, 68 km
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	1. Village - Baduwa 2. Tehsil Kundam 3. Janpad Panchayat Kundam 4. Zila Panchayat Jabalpur CEO (0761-2624860)
13	Name of the applicant	Water Resources Department Government of M.P.
14	Registered address	Water Resources Department Government of M.P., Vallabh Bhavan Bhopal Distt.-Bhopal (M.P.)
15	Address for correspondence:	Engineer- in- Chief

		Department of Water Resources Tulsi Nagar Bhopal (M.P.) 462003								
	Name	Shri M.G. Choubey								
	Designation (Owner/Partner/CEO)	Engineer- in- Chief								
	Address	Engineer- in- Chief Department of Water Resources Tulsi Nagar Bhopal (M.P.) 462003								
	Pin Code	462003								
	E-mail	eincwrbpl@mp.nic.in								
	Telephone No.	0755-2573522 , 2573523 , 2573526 2573525								
	Fax No.	0755-2573522								
16	Details of Alternative Sites Examined , if any Location of these sites should be shown on a topo sheet	<table border="1"> <thead> <tr> <th>Village</th> <th>District</th> <th>State</th> </tr> </thead> <tbody> <tr> <td>As marked on toposheet</td> <td>Jabalpur</td> <td>MP</td> </tr> </tbody> </table>			Village	District	State	As marked on toposheet	Jabalpur	MP
Village	District	State								
As marked on toposheet	Jabalpur	MP								
17	Interlinked Projects	No								
18	Whether separate application of interlinked project has been submitted	NA								
19	If yes , date of submission	-								
20	If no, reason	-								
21	Whether the proposal involves approval /clearance under: if yes, details of the same and their status to be given. a. The Forest (Conservation) Act, 1980 ? b. The Wildlife (Protection Act, 1972 ? c. The C.R.Z. Notification,1991?	Yes Nil Nil								
22	Whether there is any Government Order/ Policy relevant /relating to the site?	AA for Survey vide GoMP WRD Order No. 3441200/229/2015/ M/31/71 Bhopal dated 28.01.16								
23	Forest land involved (hectares)	100.00 ha								
24	Whether there is any litigation pending against the project and /or land in which the project is proposed to be set up? a. Name of the Court b. Case No. c. Orders/directions of the Court, if any and its relevance/with the proposed project.	No litigation pending against the project and/ or land in which the project is proposed to set up. N A N A N A								

(II) Activity

Construction operation or decommissioning of the project involving actions which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S. N.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	The submergence area at FRL is 239.0 ha. The present land in the submergence area is partly agricultural & barren, which will be converted into water body (reservoir). The C.C.A. is 8125 ha with 100% Irrigation Intensity.
1.2	Clearance of existing land, vegetation and building?	Yes	The submergence is 239.00 ha and the details are as below :- i. Forest 100.0 ha ii. Private land 113 ha iii. Govt land 26.0 ha
1.3	Creation of new land uses?	Yes	Land will be used for construction of Irrigation Project and submergence area will be converted in to water body.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Bore hole drilling, construction materials testing, soil sampling etc. have been completed as a part of investigation-activities.
1.5	Construction works?	Yes	The project comprises of the following :- Dam : Earthen dam, Spillway: Ogee type gated spillway, 2 Nos chute falls, 1 number 1.56 KM long tunnel for rising mains to cross the ridge, Maximum height of Hiran Dam is 39.0 m, Construction & development of civil work of pump house, electrical works and its substation, residential complex and offices.
1.6	Demolition works?	No	NA
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	About 2 ha land temporary housing of construction workers and construction activities have been reserved.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations.	Yes	Same as mentioned under 1.5
1.9	Underground works including mining or tunneling?	Yes	1.56 KM long Tunnel work is proposed and 1.5Mx3.0M Cut & Fill for Rising Main
1.10	Reclamation works?	No	

1.11	Dredging?	No	-
1.12	Offshore structures?	No	-
1.13	Production and manufacturing processes?	No	NA
1.14	Facilities for storage of goods or materials?	No	NA
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	No	NA
1.16	Facilities for long-term housing of operational workers?	Yes	A long term housing for operational & maintenance work is proposed as per DPR
1.17	New road, rails or sea traffic during construction or operation?	Yes	During construction stage, road traffic will increase due to transportation of construction material, equipment, machines and laborer. Due provisions have been made in DPR
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports, etc?	Yes	Approach road already exists for reaching dam site, which needs to be made repaired
1.19	Closure or diversion of existing transport infrastructure leading to changes in traffic movements?	Yes	Road coming under submergence will be diverted & connected to existing roads
1.20	New or diverted transmission lines or pipelines?	Yes	Transmission lines for villages will be shifted or given separately, if required, wherever the transmission lines are coming under submergence.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Yes	Impoundment and damming in the proposed project are on a perennial river. The anticipated adverse changes in the hydrology of water courses will try to be minimum whereas the release of environmental flows will ensure the beneficial changes in hydrology & ecology of the system.
1.22	Stream crossings?		The same shall be identified during the process of detailed investigation for approach roads.
1.23	Abstraction or transfers of water form ground or surface waters?	Yes	The proposed project will use water of river Hiran by constructing Hiran Dam to facilitate irrigation.

1.24	Changes in water bodies or the land surface affecting drainage or run-off?	Yes	The proposed project will change the water bodies on account of reservoir formation as a result of construction of dam. The land use will also change on account of increased water availability for irrigation. Green cover will improve on account of increased soil-moisture availability. The increased water availability could lead to increased water-logging in the nearby lands in a very small way as good natural drainage exists with piped canal system. This aspect will be covered in detail as a part of the CEIA study.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	The construction materials will be brought from the local sources in trucks/dumpers. The workers required for construction activities are available in the vicinity of the project area and will be using existing mode of communication i.e. bus two wheelers three wheelers, tempo, etc.
1.26	Long-term dismantling or decommissioning or restoration works?	No	N.A.
1.27	On-going activity during decommissioning which could have an impact on the environment?	No	N.A.
1.28	Influx of people to an area in either temporarily or permanently?	Yes	About 50 technical and 200 construction staff will be employed during construction phase. The workers required for construction activities are available in the vicinity of the project area. Technical staff shall stay in various camps or colonies close to the major construction sites.
1.29	Introduction of alien species?	No	NA
1.30	Loss of native species or genetic diversity?	Yes	The existing floral and fauna species in the specified zone will be affected. The nature, extent and magnitude of such losses will be covered in detail as a part of the CEIA study.
1.31	Any other actions?	No	Loss of flora and fauna, if found will be recovered

2. Use of Natural resources for construction or operation of the project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S. No.	Information/Checklist confirmation	Yes /No	Details there of (with approximate quantities/rates, wherever possible)
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			with source of information data
2.1	Land especially un-developed or agricultural land (ha)	Yes	Land will be acquired for construction of various project appurtenances including submergence area. The majority of land coming under submergence is forest land, government land and under-productive agricultural land. The details of the land to be acquired for project shall be assessed as a part the CEIA study.
2.2	Water (expected source & competing users) unit KLD	Yes	The quantity of water required during construction would be 35 kld During construction and operation phases, potable water for laborers and technical staff would be provided.
2.3	Minerals (MT)	No	NA
2.4	Construction material-stone, aggregates, and soil (expected source-MT)	Yes	The quantity of aggregate / rock required to be produced for the construction of Earthen dam and other structures of the project has been estimated to be around 2.0 MCM. Borrow areas and rock queries have been identified near the project vicinity to provide construction materials in the form of soil, coarse and fine aggregate the sand deposits and its tributaries in the close proximity of projects will also be used for construction purpose.
2.5	Forest and timber (source-MT)	Yes	Open degraded forest having min. timber value having a forest density of 0.2 to 0.3, which has little timber value 20 MT
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)		During construction the required power will be meet out by generator.
2.7	Any other natural resources (use appropriate standard units)	No.	NA

3. Use, storage, transport, handling or production of substance or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substance or materials, which are hazardous (as per MSIHC	No	N. A.

	rules) to human health or the environment (flora, fauna and water supplies)		
3.2	Changes in occurrence of affect disease vectors (e.g. insect or water borne disease)	Yes	Normally an irrigation project increases the incidence of water-borne diseases due to increased water availability, owing to stagnant pools of water in command area, canals, etc. However, in piped canal system it may result in preponderance of mosquitoes, leading to increased frequency and incidence of water-borne diseases, especially malaria, a bare minimum. This aspect will be studied as a part of CEIA and adequate measures to be implemented during project construction and operation phases.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	The details of various welfare schemes for locals shall be outlined as a part of area development activities and the details will be outlined in the CEIA report.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly, etc.	Yes	Use of substance or materials, hazardous to human health or the environment is not envisioned in this project. Still, such vulnerable groups/individuals will be identified and suitable protection measures will be taken to insulate them from any possible adverse effects.
3.5	Any other causes	Yes	Majority of people living in the proposed project area belong to Tribes & Below Poverty Line, whose primary livelihood is sustenance farming/ daily wagers. So relocation of these people on the adjoining government land will not be a problem and extra care will be taken for their rehabilitation.

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S. N.	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	Yes	In this project, it is proposed to collect the construction waste from various construction sites, and disposed at sites identified in consultation with the district administration. Various construction sites would be properly leveled. The leveling or reclamation of various construction sites, shall be made mandatory for the contractor, involved in the construction work. The details of the same shall be covered as a

			part of EMP to be presented as a part of the EIA report.
4.2	Municipal waste (domestic and or commercial wastes)	Yes	About 200 labour and 50 technical staff is likely to congregate in the area during construction phase, increasing temporary population by 2500. The average per capita solid waste generated is of the order of 210 gm/day/person. The solid waste likely to be generated from camps shall be of the order of 0.0525 ton/day. Adequate facilities for collection, conveyance and disposal of solid waste will be developed. For solid waste collection, number of masonry storage tanks will be constructed at appropriate locations in camps.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	No	No hazardous waste will be generated.
4.4	Other industrial process wastes	No	NA
4.5	Surplus product	No	NA
4.6	Sewage sludge or other sludge from effluent treatment	No	NA
4.7	Construction or demolition wastes	No	NA
4.8	Redundant machinery or equipment	YES	Redundant machinery equipments will be taken out from the project sites, after completion of construction activities.
4.9	Contaminated soils or other materials	No	No contamination of soil is foreseen in the project.
4.10	Agricultural wastes	YES	The proposed project envisages enhancement of irrigation intensity in the CCA of 8125 ha in Jabalpur & Katni district of Madhya Pradesh and which will increase agriculture-production, thereby increasing agricultural waste. Appropriate measures for the reuse and recycling of agricultural waste will be suggested as a part of the CEIA study.
4.11	Other solid wastes	No	NA

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S. N.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	YES	The major air-pollutant, emitting from diesel-combustion are SPM, SO ₂ and NOX. The SPM emission is minimum due to low ash content in diesel. The short-term increase in SO ₂ is expected to be quite low, even assuming all the equipments are operating at a common point. Thus no adverse impacts on ambient air quality are anticipated. Emission from labour camps, due to use of fuel wood, will also add to emissions.
5.2	Emissions from production processes	No	Production process of concrete/mortar and earthwork are mostly emission-free except feeble emissions from diesel operated machineries.
5.3	Emissions from materials handling including storage or transport	YES	During construction phase vehicular movement will increase. Construction materials will be brought and stored at various sites. Prevailing wind may carry these materials in the atmosphere, especially during dry environment. However, its scale is not expected to be significant.
5.4	Emissions from construction activities including plant and equipment	YES	The operation of various construction equipments requires combustion of fuels, commonly diesel. The major pollutant, emitting from diesel-combustion is SO ₂ . The SPM emission will be minimum due to low ash content in diesel. The short-term increase in SO ₂ is expected to be quite low, even assuming all the equipments are operating at a common point. Thus no adverse impacts on ambient air quality are anticipated.
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	YES	Dust will be generated additionally during excavation, blasting, drilling and construction works
5.6	Emissions from incineration of waste	No	No incinerator/s are planned to be installed in the project
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	No burning of any construction-waste is required.
5.8	Emissions from any other sources	No	-

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	The use of various construction equipments will generate noise. Detailed non-use modeling study will be conducted under CEIA to determine increase in noise level due to various construction activities (like operation of various construction equipments, increased vehicular traffic, etc).
6.2	From industrial or similar processes	No	At present there is no generation of noise and vibration, and emissions of light and heat but it may change after the availability of water through this project.
6.3	From construction or demolition	Yes	As per 6.1
6.4	From blasting or piling	Yes	80 to 90 DB (A)
6.5	From construction or operational traffic	Yes	During construction, there will be an increase in vehicular movement due to transportation of construction materials. Based on past experiences, impacts on ambient noise levels due the operation of construction equipment, and increased vehicular movement is not expected to be significant. Though this aspect is only temporary, it will be covered in detail as a part of the CEIA.
6.6	From lighting or cooling systems	Yes	For lightening purpose at the project sites, small units of silent DG sets will be installed. The project does not envisage involvement of any cooling systems.
6.7	From any other sources	No	NA

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, costal waters or the sea:

S. N.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	Hazardous waste like used oil, generated from the use of diesel in DG sets, will be handled as per the norms and specifications of MPPCB guidelines.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	Sewage generated from camp will be treated through aerated lagoons, secondary setting tank, and disposed on land or water (post treatment) at sites identified in consultation with the respective district administration.
7.3	By depositions of pollutants emitted to air	Yes	The solid waste generated from the camps shall be suitably collected, disposed by land

	into the land or into water		filling as mentioned earlier. The details of the solid waste disposal facilities will be covered as a part of the CEIA.
7.4	From any other sources	No	No pollutants are expected from any other sources.
7.5	Is there a risk of long-term build up of pollutants in the environment from these sources?	No	Since the gestation period is confined to 2-3 years, during which pollutants from make-shift arrangements will be disposed as per the prevailing rules and regulations. Hence, there is no potential risk of any long-term build up of pollutants in the environment.

8. Risk of accidents during construction or operation of the project, which could affect human health or the environment

S No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	Explosives will be used carefully by the experienced licensed persons. Blasting will be done in accordance with the existing provisions of Indian Explosives Act 1884, and all necessary precautions, will be taken as per aforesaid law. First-Aid centers/Health camps, with qualified medical professionals will be held from time to time.
8.2	From any other causes	No	All mandatory safety provisions for labour work-force, technical staff and villagers inhabiting nearby areas will be strictly enforced.
8.3	Could the project be affected by natural disasters causing environment damages (e.g. floods, earthquakes, landslides, cloudburst etc.)	Yes	The proposed project is located in ZONE III, as per Seismic Zoning Map of India (IS 1893:2002) and thereby falls in risk zone. There was earthquake, in the year 21 st May 1997 at place Kosamghat, which is 65 KM away from the dam site.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to the development of supporting facilities, ancillary development	YES	The development of supporting facilities, ancillary development or development stimulated by the project having impacts on the environment, will be a part of

	<p>or development stimulated by the project which could have impact on the environment e.g.:</p> <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other 		<p>Environment Management Plan, especially the issues of subsequent pollution from the use of chemicals in farming and salinity & water-logging due to increased irrigation.</p> <p>New sub-station and transmission lines will be installed for the piped canal system.</p>
9.2	Lead to after-use of the site, which could have an impact on the environment	-	Mostly make-shift arrangements will be made at the site during the construction phase which will be dismantled after completion of the project as per the prevailing norms and guidelines. Very little permanent creation will be done and that will be utilized for post-construction operation and management.
9.3	Set a precedent for later developments	Yes	<ol style="list-style-type: none"> 1. Increase in agriculture production 2. Improvement in livestock 3. Employment generation 4. Urbanization 5. Industrialization
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No such project is there which could lead to increase the cumulative environmental affect

(III) Environmental Sensitivity

S. No.	Areas	Name /Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	There are no sites in the proposed project under international conventions, national or local legislation for their ecological, landscape, cultural or other related value.
2	Areas which are	yes	100 Ha forest land will come under submergence

	important or sensitive for ecological reasons- Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	N A	The land area is not used by any important or sensitive flora or fauna species for breeding, nesting, foraging, resting, over wintering, migration. The list of floral and faunal species, commonly found in District Jabalpur and it clearly shows that the land area is not used by any important or sensitive floral or faunal species. Furthermore, The latest Red List of IUCN also does not include any of the flora and fauna species found within 15 km of Proposed project location boundary.
4	Inland, coastal, marine or underground waters	N A	There is no coastal or marine water body. Underground water table in the area specified exists at 20-30 meters depth. There are no natural lakes, springs or any other water bodies.
5	State, National boundaries	No	No state or national boundary exists within 15 km radius of proposed project location boundary. However, the boundary of the state of Chhattisgarh adjoins 85 km upstream of the proposed project location boundary.
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	Routes or facilities to recreation or other tourist, pilgrim areas do not fall within 15 km zone of the proposed project location boundary. Furthermore, the proposed creation of reservoir will not obstruct any routes or facilities even beyond 15 km zone of the proposed project location boundary.
7	Defence installations	No	There are no defense installations within 15 km zone of the proposed project location boundary.
8	Densely populated or built up area	No	There are no densely populated or built up areas, within 15 km zone of the proposed project location boundary.
9	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)	No	NA
10	Areas containing important, high quality or scarce resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries,</i>	No	<ul style="list-style-type: none"> • 100.0 ha of forest land is falling under submergence, • At present most of the agriculture in the proposed project area is rain-fed having very low per unit yield and poor agriculture-intensity. • At present, river Hiran is not perennial in nature. Creation of reservoir with assured release of

	<i>tourism, minerals)</i>		<p>environmental flows in non-flowing periods will maintain the river into perennial one. This will lead to development of fisheries as well as promotion of aquatic flora and fauna.</p> <ul style="list-style-type: none"> The proposed project does not have any tourism spot within 15 km of proposed project location boundary. The creation of a reservoir has potential to develop it as a tourism center.
11	Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>)	No	<p>The specified area of 15 km of proposed project location boundary does not have any polluted or environmentally damaged patch. Due to lack of water resources there is no major industry in the area, which is considered a 'backward' area. So no existing legal environmental standards are exceeded.</p> <p>The recurring droughts and famine pose a severe threat of spilling over excessive fluoride to other areas in the district. The creation of proposed project location boundary will effectively curb any such spread by further diluting the fluoride content in groundwater.</p>
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>)	No	<ol style="list-style-type: none"> The area falls in the 'Seismic Zone III'. Furthermore, the site-specific seismic investigations will be conducted and appropriate seismic safety measure will be incorporated in the project design There have been no recorded cases of subsidence in the area. Similarly, no landslides have been reported from the area in the past. The area is not susceptible to wind erosion. Lack of water has resulted in lack of erosion and weathering by water. The area is occasionally affected by floods during extra-ordinarily excessive monsoon. Creation of the project will provide as a buffer against the flooding.

(J.B.Mishra)
Executive Engineer
Hiran Water Resources Division
Jabalpur (MP)

IV Proposed Terms of Reference for EIA studies of Hiran Irrigation Project

- (1) The project envisages construction of a earthen dam having total length of 810 M, with maximum height 39.0 M and 110 M long gated spillway. Total live storage is 31.25 MCM & CCA is 8125 Ha.
- (2) Total 239.00 Ha land will be submerged (Forest land -100.0 Ha, Government land-26.0 Ha and private land-113.0 Ha)
 - The Forest Clearance case is under progress.
 - Award cases for private land are under process.
 - The case of transfer of revenue land is under process.
- (3) 1.06 MCM water is reserved for water supply purpose and 3.0 MCM water kept for environmental releases.
- (4) The complete piped canal system under pressure irrigation is about 55 km in length to achieve the optimum utilization of water.
- (5) The plan of catchment Area Treatment will be prepared and be submitted soon.
- (6) Flora and fauna studies will be taken up.
- (7) No inhabitant property is coming under submergence, however partial land of 6 Nos villages along with 3.5 KM long road and 1 No. bridge is coming under submergence and R/R plan is under preparation as per Right to Fair Compensation & Transparency in Land Acquisition and Resettlement Act 2013.
- (8) The standard ToR as published by MoEF shall be followed and any other specific condition in ToR communicated, shall be complied with.
- (9) Salient features of the project are enclosed

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost.

Date: -----

Place: -----

(J.B.Mishra)
Executive Engineer
Hiran Water Resources Division
Jabalpur (MP)