

GOVERNMENT OF CHHATTISHGARH

WATER RESOURCES DEPARTMENT

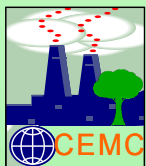
EXECUTIVE SUMMARY OF ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN FOR KUDARI BARRAGE PROJECT



JUNE-2021

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Prepared by :



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EXECUTIVE SUMMARY

1.0 BACKGROUND OF THE PROJECT:

The department of Water Resources, Government of Chhattisgarh constructed a Barrage across Hasdeo River near village Kudari of Baloda Tahsil, district Jangir-Champa in the state of Chhattisgarh during March 2016. The purpose of this barrage is to store 15.60 MCum water. The stored water is provided to the Chhattisgarh Power Generation Company, located in district Mandwa and to M/s Chhattisgarh Steel and Power Ltd. for industrial growth.

The project was submitted to SEIAA, Chhattisgarh for obtaining Environmental Clearance. The project was considered by the State Level Expert Appraisal Committee (SEAC) and declared the project as B1 Category and issued the ToR of River Valley project for Environment Clearance vide letter No. 2825 dated 28.09.2015 to the Executive Engineer, Dept. of Water Resources, Janjgir-Champa, Chhattisgarh.

The project was submitted to SEIAA, Chhattisgarh for obtaining Environmental Clearance through online on dated 18.01.2018. SEAC Chhattisgarh in its 249th meeting held on 19.07.2018 observed that the project was completed without the environmental clearance. Thus, violates EIA Notification-2006 (amended). The committee directs the Chhattisgarh Environment Conservation Board to take appropriate legal action as per environment (conservation) act 1986 against Project Proponent.

As the project relates to violation it is to be examined. Assessment of ecological damage with respect to air, water, land and other environmental attributes, preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to ecological damage assessed and economic benefits etc. are required to be done due to violation as per MoEF&CC, Govt. of India, New Delhi.

“The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of Remediation plan and Natural and Community Resources Augmentation Plan with Chhattisgarh Environment Conservation Board prior to the grant of EC. The quantum shall be recommended by the SEAC, Chhattisgarh and finalized by SEIAA Chhattisgarh. The bank guarantee shall be released after successful implementation of Remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation of the concerned regional office of the Ministry, the SEAC Chhattisgarh and approval of the SEIAA Chhattisgarh.”

In view of the violation it is hereby directed that ToR may be issued to submit the revised environmental impact assessment report and environmental management plan.

1.1 JUSTIFICATION FOR IMPLEMENTATION OF THE PROJECT:

Electricity is a major contributor to a nation's economic development so power sector is an indispensable infrastructure in any economy. It is the wheel that drives most aspects of everyday life in society. A nation is a compendium of activities and people whose progress is driven by the infrastructural components. Electricity is the source of fuel for so many sectors of an economy. It is essential for our industries; they all need electricity for them to power their engines. In countries with better electricity, good production and preservation are higher. In such environments, agricultural productivity is high because, the electricity can help in powering irrigation, food preservation, and seed preservations. Electricity improves the standard of living of the people in the country. This is very important for the economic advancement of a country. If the people live in better conditions it has ripple effects on every aspect of the country.

The demand for power in a developing country like India is enormous and is growing steadily. In spite of massive addition in generation, transmission and distribution capacity over last eleven Five-year plan periods, growth in demand in power has always exceeded the supply capacity augmentation.

Services sector has made significant contribution to the growth of our economy. Availability of quality supply of electricity is very crucial to sustained growth of this segment". The power sector is possibly the single biggest catalyst for inclusive growth whether it is in urban India or in rural India. It is a necessity not just for economic growth but also for social development. There is a strong linkage between per capita power consumption and if a country's power industry is weak, its economy progress slowly.

1. The proposed project partially fulfils the need of electricity towards growth of economy in the region.
2. Further, the project provides short term and long-term employment opportunity for people residing in the surrounding of the project area.
3. The proposed project certainly helped in creation of additional infrastructure, such as improvement of existing roads and provided the communication facility on top of the barrage to the both side communities of the river Hasdeo.

1.2 PROJECT LOCATION:

The Barrage is located across Hasdeo river near village Kudari on the right bank of river of Baloda Tahsil, district Janjgir-Champa in the state of Chhattisgarh. However, subsequently the name of the project was changed and popularly known as Kudari barrage.

Location of Kudari Barrage: Latitude – 22^o 03' 58" N

Longitude – 82^o 38' 22" E

Accessibility:

The Barrage is located at a distance of 5 km from National Highway NH-200 by all-weather road, approximately 4 km in northern direction from the nearest Town

Champa and 15 km from Janjgir town. The barrage is accessed throughout the year. The nearest railway station Champa which is located at about 10 km from barrage. Raipur is the nearest airport located about 190 km from barrage.

1.3 NEED & OBJECTIVE OF EIA STUDY:

Environmental Clearance is the permission required from the Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India for execution of certain projects, which may impact environment considerably. As it is a 'Category B' project, accordingly the project was submitted to SEIAA, Chhattisgarh for obtaining Environmental Clearance. The project was considered by the State Level Expert Appraisal Committee (SEAC) and declared the project as B1 Category and issued the ToR of River Valley project for Environment Clearance vide letter No. 2825 dated 28.09.2015 to the Executive Engineer, Dept. of Water Resources, Janjgir-Champa, Chhattisgarh.

1.4 SCOPE OF THE STUDY:

The scope of the work under the proposed EIA study has been finalized in the SEAC, Chhattisgarh meeting and the approved ToR was communicated to the project proponent vide letter No. 2825 dated 28.09.2015 in this regard.

The scope of the study includes the following issues:

- (i) Review of the project features
- (ii) Review of the Acts, Policies and regulatory frame work
- (iii) Baseline Assessment of Environmental and Social Components
- (iv) Public consultation through public hearing and compliance to public opinion
- (v) Analysis of alternatives
- (vi) Mitigation Measures and Management Plan
- (vii) Monitoring Mechanism
- (viii) Cost analysis and Budget

1.5 DESCRIPTION OF PROJECT:

The department of Water Resources, Government of Chhattisgarh constructed a Barrage across Hasdeo river near village Kudari of Baloda Tahsil, district Janjgir-Champa in the state of Chhattisgarh with the purpose to store 15.60 MCum water. The stored water is provided to the existing power plants for industrial growth of the state.

Earlier there was another proposal of anicut (Amjhar Anicut) in short distance in U/s of this constructed barrage. The site condition suggests to increase the height of Kudari Anicut from 3.0 m to 6.3 m, thus the water demand of Amjhar Anicut is satisfied by constructing Kudari barrage of height 6.3 m at present location.

1.5.1 Salient Features of Project:

The summary details of the project features in regard of its finalized location and structural components etc. are depicted below.

- | | |
|--|---|
| 1. Name of Project | : Kudari Barrage Project |
| 2. Purpose | : Water supply to power industry |
| | : Water supply to steel & power industry |
| 3. River/ Basin | : Hasdeo river |
| 4. Project area reference to toposheet | : 64J/12, 64K/9 |
| 5. Location | : Village-Kudari, Tahsil-Baloda,
: District-Janjgir-Champa |
| 6. Latitude | : 22 ⁰ 03' 58" N |
| 7. Longitude | : 82 ⁰ 38' 00" E |
| 8. Nearest town | : Janjgir-Champa 15 km |
| 9. Catchment Area of barrage | : 7795 Sq. km |
| 10. Design flood of the existing barrage | : 16259.91 cumec |
| 11. Annual yield at 75% dependability at barrage | : 882 MCM |
| 12. Barrage length | : 432.50 m. |
| 13. Length of both abutments | : 9.32 m +10.32 m =19.64 m |
| 14. Total length | : 432.50 m |
| 15. Height of barrage | : 6.30 m |
| 16. Top width of barrage | : 7.5 m. |
| 17. No. and size of gates | : 30 nos., gate size 12 m x 6 m |

1.6 STATUTORY CLEARANCES:

The following statutory clearances have been obtained or on the process of obtaining clearance as below.

1. From SEAC/SEIAA:

Terms of Reference (ToR) at the scoping stage has been approved by the SEAC, Chhattisgarh and approval communicated to the project proponent vide letter No. SEAC, CG/Water Resources/ Janjgir-Champa/1222 dated 01.12.2018 for preparation of the EIA Report and submission of the same for consideration of Environmental clearance.

2. From Ministry of Tribal Affairs, Govt. of India:

Clearance from Ministry of Tribal Affairs is not applicable as because no tribal population is likely to be displaced by this project.

3. Resettlement & Rehabilitation (R&R) clearance:

This project also does not require any R&R approvals as no R&R problem is anticipated due to implementation of the project. Only a few private plots were acquired and compensation has been paid.

4. Forest Clearance:

It also does not require any forest clearance from MOEF&CC as the project is so nicely planned; no forest land is involved in this barrage project.

This EIA report thus prepared was duly considered the Terms of Reference (ToR) communicated by SEAC for preparation and submission of EIA report as per the generic structure recommended by MoEF&CC.

1.7 POLICY & LEGAL SUPPORT FOR ENVIRONMENTAL MANAGEMENT PLAN:

In a broader perspective in preparation of Environmental Management Plan, all the action and activities must confirm to the National Environment Policies. The project authorities must acquaint and converse themselves with few important National Policies as well as some important Chhattisgarh State Policies while executing the project.

National Environment Policy & Act

1. Environment Protection Act - 1986
2. Environment Protection Rules - 1999
3. National Environmental Policy, 2006 and amended there after
4. Formation of Expert Appraisal Committee (EAC) at MoEF&CC for category "A" schedule project & formation of SEIAA for Category "B" schedule project.

For land acquisition & Rehabilitation National Policy 2013 along with State Policy of R&R Chhattisgarh need to be addressed to look after loss of land & rehabilitation if required.

All the Environment Management Plans prepared for this project have also been duly examined that all activities remains within the framework of the above policies.

1.8 BASELINE ASSESSMENT OF ENVIRONMENTAL COMPONENTS:

Baseline survey was carried out in the study area to establish the existing environmental and social status. This included the study of Physical, Biological and Socio-economic environment in and around the project study area. It also included collection of Secondary data such as Topography, Geology, Meteorology, Seismicity and Flora, Fauna status. In the process of Data collection and compilation, DoWR records were consulted, information obtained from concerned authorities.

1.8.1 The Study Area:

The study area covers project area i.e., where the dam will be constructed and the area of 10 km radius from the proposed dam site.

1.8.2 Summary of Baseline Data:

Some of the baseline information / data considered for environmental and social impact assessment are summarised below.

LAND ENVIRONMENT:		
1.	Physiography	The study area represents flat topography with regional slope towards South & East. A range of hill occurs in the western and NW part of the study area. The highest elevation seems to be 350 m and lowest part elevation is 240 m above MSL. The differential height is 110 m. The major river Hasdeo flows from north to south.
2.	Seismicity	The project area comes under zone-II. In zone-II, the probable seismic intensity is MSK VI or less. This zone is referred as low damage risk zone.
3.	Land use	The study area exhibits 62.65% agricultural land, 1.21% by Scrub Forest, 22.76% Settlement, 0.48% Plantation, 1.26% Hilly Area, 2.92% Industrial Area, 4.74% River/Water Body.
4.	Soil quality	Soil sampling was done at 5 locations, i.e. Kurda, Sarkhon, Uchchbithi, Tendu Bhata and Gowaband. The soil type is slightly acidic, pH varying from 6.78 to 7.16 with moisture content 7.6%-11.8%. The conductivity ranges between 184.6 to 224.2 micro mho/cm. The N, P, K contents remain at healthy standards. (The information is based on analysis of 3 sessions collective data)
5.	Land erosion	There is moderate to low land erosion observed.
6.	Meteorology	Rainfall: Normal Annual average Rainfall is 1131.1 mm. Temperature: The average temperature varies between 15.8°C and 40.4°C during study period. Relative humidity: The observed maximum relative humidity was 88% and the minimum is 20%.
7.	Hydrology	The hydrological studies of river Hasdeo have been carried out on the basis of observed discharge data of Kudarmal Gauge and Discharge (G & D) site located at Kudarmal maintained by SDDPC, Sub-division, Bilaspur, Water Resources Department, Government of Chhattisgarh for period 2001-02 to 2014-15 for a period of 15 years. The discharge data of Kudarmal site for Hasdeo river is available from 2001-02 to 2014-15 spanning 15 years. The 50% dependable year is 2011-12, 75% dependable

		<p>year is 2008-09 and 90% dependable year is 2010-11. 50%, 75% and 90% dependable yield is given below. 50% dependable year = 8th year – discharge -1790 MCM 75% dependable year = 12th year – discharge - 882 MCM 90% dependable year = 14th year – discharge - 635 MCM</p>
AIR QUALITY		
8.	<p>The ambient air quality of buffer zone of 10 km radius from Barrage of the study area was monitored with respect to PM10, PM2.5, SOx, NOx & CO at 5 locations during pre-monsoon from 12-March to 11-June-2019, 2019, and for winter from 1st December-2019 to 29th February-2020 continuously for 24 hours at each location twice a week.</p> <p>The analysis reveals that all the parameters are within the maximum permissible limit.</p>	
NOISE LEVEL		
9.	<p>Noise levels have been monitored at identified different five noise monitoring stations/points within the study area on 25.04.2019, 18.08.2019 and 08.01.2020 using a noise level meter.</p> <p>The observed noise levels are well within the prescribed ambient noise level standards.</p>	
WATER ENVIRONMENT		
10.	Surface Water quality	<p>Surface water samples were taken from 5 locations, i.e. from Basantapur, Pharaswani, Upstream Kudari barrage, Downstream Kudari barrage.</p> <p>Chemical analysis of surface water conducted for different parameters which are furnished in the main EIA report reveal that the water quality conforms to the tolerance limit under IS:2296.</p>
11.	Ground Water quality	<p>Ground water samples were taken from 5 locations, i.e. from Sivini, Champa, Kudari, Tendu bhata, Bajjalpur.</p> <p>Chemical analysis of groundwater was conducted for different parameters which is furnished in the main EIA document reveals that water quality conforms to IS:10500-2012 at desirable limit.</p>
12.	Groundwater level	<p>It is revealed from the observations that the depth to water level remains within 5-10 m bgl during pre-monsoon and that of post monsoon lies between 3-6 m bgl.</p>
13.	Sediment Quality	<p>To determine sources of heavy metals and pesticides in sediment sample was collected from the periphery of the proposed dam area and was analysed. The test results revealed that the sediments carry negligible amount of heavy metals and pesticides.</p>

14.	Drainage pattern	Basically two types of drainage patterns are seen in the study area such as Parallel & Dendritic Drainage Patterns. The Hasdeo River is the major Drainage in the area across which the barrage is constructed.
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1.9 EXPLANATIONS FOR MITIGATION OF ADVERSE EFFECTS:

Construction of Kudari barrage has been found to induce minimum environmental impacts. Most environmental impacts relate to construction phase activities, which are of minor to moderate category, short term and reversible in nature. Some potential impacts and proposed mitigation measures during the project cycle are briefed below.

1) Pre-construction phase (Planning and Design stage)

SL. NO.	ANTICIPATED IMPACTS	MITIGATION MEASURES	REMARKS
1.	Land Acquisition		
i	8.626 ha. of private land will be affected due to construction and submergence of barrage.	<ul style="list-style-type: none"> • Compensation against these lands was given to the concerned land owners. 	
ii	Planning and design of component structures of the project against adverse seismic impact.	<ul style="list-style-type: none"> • Appropriate seismic factors are known to have been taken into consideration. 	

2) Construction phase

SL NO	ANTICIPATED IMPACTS	MITIGATION MEASURES	REMARKS
i	Land contamination due to unscrupulous deposit of solid wastes, construction spoils and mucks.	The solid waste disposal plan includes, <ul style="list-style-type: none"> ▪ Intermittent clearance of debris from the worksite. ▪ Carriage of mucks by tarpaulin covered trucks and dumpers to the identified dumping sites. ▪ Proper drainage from the dumping yards will be ensured. 	<ul style="list-style-type: none"> • Work will be executed by contract agency under the supervision of the environmental officer.
ii	Impact due to soil erosion	<ul style="list-style-type: none"> • The river embankment should be properly 	<ul style="list-style-type: none"> • Need to be properly

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		<p>maintained to avoid soil erosion.</p> <ul style="list-style-type: none"> All excavated areas will be backfilled after the construction works are over. 	<p>supervised by the environmental officer.</p>
iii	<p>Contamination of water and land due to effluent flow containing fuel and lubricants and cement slurry etc</p>	<ul style="list-style-type: none"> Waste water generated from washings of machineries and equipment shall be prevented to spill on soils or to the nearest water body. The effluent waste should be initially drained to a treatment pond before releasing it to any water body to prevent water pollution. Water quality tests shall be carried out at regular intervals. 	<ul style="list-style-type: none"> Need to be properly supervised by the environmental officer.
iv	<p>Impact on air quality and noise level Air pollution Noise Pollution</p>	<ul style="list-style-type: none"> Ambient air quality may be disturbed for a short period during the construction phase. The following standard mitigation measures are suggested. <ul style="list-style-type: none"> To ensure dust suppression by water sprinkling at the worksite at regular intervals Ensure proper maintenance of vehicles, machines and equipments to prevent excess emissions. Workers at site shall use Personal Protective Equipments (PPE) to prevent health hazards. The air quality shall be monitored periodically 	<ul style="list-style-type: none"> Need to be properly supervised by the environmental officer.
v	<p>Impact due to noise pollution</p>	<ul style="list-style-type: none"> All transport vehicles carrying construction materials to site should be properly maintained against 	<ul style="list-style-type: none"> Proper supervision by the project engineer

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Kudari Barrage Project**

		<p>excess noise pollution.</p> <ul style="list-style-type: none"> • Avoid transport routes to run through populated localities. In case of unavoidable circumstances the carriage should be restricted during the daytime. The roads should be properly maintained with humps and signage to prevent health hazard and accidents. 	
vi	Safety against occupational health, accidents	<ul style="list-style-type: none"> • PPE will BE provided to all construction labourers. • A first-aid centre at the site will take care of minor accidents. • Provision of vehicles ambulance will be made for transport and treatment of accident victims requiring hospital care. • Periodic health check up will be ensured. • Notices and signages shall be displaced at site at all strategic locations 	<ul style="list-style-type: none"> • Proper supervision will be ensured by the environmental officer in charge

3) Operation phase:

SL. NO.	ANTICIPATED IMPACTS	MITIGATION MEASURES	REMARK
i	Monitoring of pollution parameters	<ul style="list-style-type: none"> • Periodic monitoring of pollution parameters i.e. air quality, water quality and noise level etc. will be monitored by the project authorities 	<ul style="list-style-type: none"> • The project Engineer will adhere to Standard Monitoring Action Plan
ii	Tree Survival	<ul style="list-style-type: none"> • Tree survival under plantation programme will be monitored through a designated agency to be deployed by the environmental officer. 	

1.10 ANALYSIS OF ALTERNATIVES:

Hasdeo River is an important left side tributary of the Mahanadi in Chhattisgarh state and it originates near Mendra village. The Hasdeo river flows to south and Korba is an industrial town in its bank. Further downstream Hasdeo river meets the Janjgir-Champa the district headquarters town in its bank. To meet the industrial need of Chhattisgarh Power Generation Company a barrage was required to be built upstream of Champa township. In a water resource project a reconnaissance survey was conducted. The Hasdeo river is a straight reach from village Kudri to Rampur and most ideal location as the Chhattisgarh Power Plant which is located in right bank upstream of village Kudri. As the river bed also confirms the geological strata in its bed for construction of a barrage as well as store 15.6 MCM water the location of Kudri barrage is most suitable location which is built in the present location. However, an alternative location was considered.

Earlier there was another proposal of anicut (Amjhar anicut) in short distance in upstream of this constructed barrage. The site condition suggests to increase the height of Kudari Anicut from 3.0 m to 6.3 m thus the water demand of Amjhar Anicut is satisfied by constructing the Kudari barrage of height of 6.3 m.

However, after consultation to meet the water need of industrial projects as well as to meet the domestic water requirement of Champa Township and also to confirm geological strata the present location is approved.

1.11 ENVIRONMENTAL MANAGEMENT PLAN [EMP]

The Environmental Management Plan [EMP] has been framed on the basis of baseline data, components of the project activities and relevant mitigation measures. While it emphasizes effectiveness of managing the recommended mitigative measures it was necessary to identify credible organizations/agencies which could be made responsible to implement them properly. Budgetary support has been made intrinsic with the management items. Adopted mitigation measures against some significant environmental issues have been broadly discussed in the chapters of the main EIA document.

1.12 ENVIRONMENTAL MONITORING PLAN [EMOP]

Monitoring being an effective tool for ensuring environmental quality in the project implementation, the EMP delineates Environmental & Social monitoring Plan [ESMoP] as essential requirement. Monitoring activities are proposed for (i) Construction phase and (ii) Operation phase till defect liability periods.

It is proposed to constitute one monitoring evaluation cell which would carry periodical monitoring of implementation of environmental safe guards. The cell will be headed by chief Engineer /Executive Engineer of implementing agency under whom the team leader an Environment Officer of PMC and EHS experts of the contractors will be working as the members of the cell. The contractor will be directly responsible for implementation of EMP at the site where as the PMC and the IA will be supervisory. However the Monitoring format may further be

improved, upgraded and modified by the Project Management Unit to suit the site specific requirements.

1.13 ENVIRONMENT GRIEVANCE REDRESSAL MECHANISM:

Effective environmental grievance redressal mechanism shall be developed to receive the grievances from the concern public or other stake holders at the site during construction and to address the issue raised by different agency. The proposed mechanism on grievance redressal on environmental issues is described in relevant Chapter of the main EIA document

1.14 PUBLIC CONSULTATION:

The MoEF&CC has given highest importance for Public consultation while considering in taking up a new project for execution. Public consultation is a process to involve project affected people as well as beneficiaries in decision making of all development project. The results of Environmental Impact Assessment study, particularly the negative impacts, its connected mitigation measures and proposed management plan etc as well as the projected benefits should be made transparent before the public. The public consultation procedure is therefore intended to obtain comments, suggestions and concurrence for project implementation. The public consultation normally involves two components, comprising of

- I. Holding Public Hearing at the project site or in its close proximity to understand concerns of all local affected persons and others who have plausible stake in the environmental impacts of the project and project activities.
- II. To obtain response from the participants and record environmental concerns comments; suggestions and concurrence in writing by the Regional Officer, Environmental Conservation Board Chhattisgarh so that the project proponent may make appropriate changes in the Draft EIA report.

The Public hearing meeting was organized at Chhattisgarh Environmental Conservation Circle, Paryabas Bhawan, North Block, Sector-19, New Raipur on 7th July 2017 and facilitated by Regional Officer, Environmental Conservation Board, Chhattisgarh. The meeting was presided by the Additional District Magistrate, Janjgir-Champa District.

- (a) The Additional District Magistrate had asked to the attended public to give their suggestions, objection, idea and comments in oral or writing.

The Public Hearing proceeding is attached in this report.

As the Public consultation had already been conducted two years back, the Project Proponent is requesting **SEAC** that this being a government project and the barrage has been constructed for the development of the state, so the same public hearing may kindly be considered along with new EIA/ EMP and assessment of ecological damage, remediation plan and natural and community

resource augmentation plan for issuance of Environment Clearance of the said project.

1.15 INSTITUTIONAL ARRANGEMENT FOR IMPLEMENTATION OF EMP:

The project will be implemented by robust organizational setup of the State comprising of the administrative authorities of State Water Resources Department (SWRD) and Technical experts – Chief Engineer and Engineers of Kudari Barrage Project.

1.16 BUDGETARY SUPPORT:

A cost estimate for amelioration of environment has been suggested with most approximate quantification and component wise expenditure. This estimate has also taken into consideration the probable expenditure on monitoring and capacity Building.

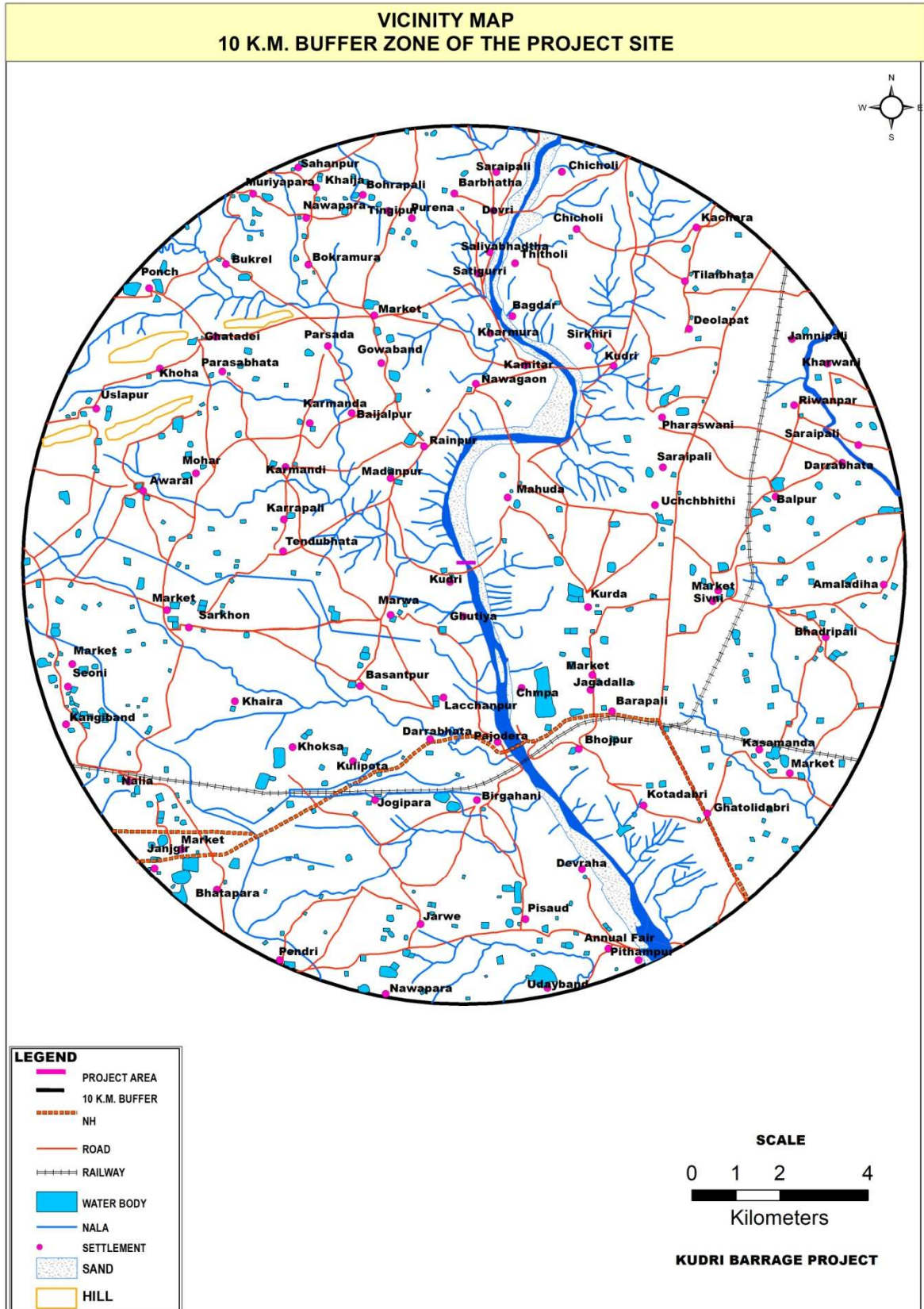
A budgetary provision of **Rs. 8,40,000 (Three Years)** has been made for implementation of environmental safeguards as stipulated in the EMP for different stages of the project.

1.17 CONCLUSION:

The project must have caused impacts in the construction phase due to various activities involved during the construction. However, these impacts were short term and confined to a very limited area that to mostly within the project site and along the approach road.

It is clear from the objectives of the Project that the likely shortfall of electricity of the state has been reduced due to construction of this project which supports for establishing Chhattisgarh Power Generation Company by providing the required quantity of water to the power plant which partially fulfils the need of electricity towards growth of economy in the region.

Thus it can be concluded that the proposed project is environmentally acceptable and will bring economic, social and environmental benefits to local community in the area. So on the basis of this appraisal document, the Regulatory Authorities (SEAC of Chhattisgarh) may consider to accord the Environmental Clearance to the proposal.



Location Map



ACCREDITATION AND EMPANELMENT

Centre for Envotech and Management Consultancy Pvt. Ltd.

An ISO : 9001: 2015 , OHSAS 18001: 2007 & ISO: 14001: 2015 Certified Company,

Empanelled with:

- State Pollution Control Board (SPCB), Odisha as Environment Consultant under category –'A'.
- Orissa Construction Corporation Limited (OCCL) as Associated Consultant for carrying out EIA, FDP, Preparation of Wildlife Management Plan, GIS map, Socioeconomic survey, DGPS & ETS survey.
- Orissa Space Application Centre (ORSAC) for carrying out DGPS & ETS survey.
- Office of the Principal Chief Conservator of Forest (Wildlife) & Chief Wildlife Warden [PCCF (Wildlife) & CWLW], Odisha for preparation of Site Specific Wildlife Management Plans.

Accredited by:

- NABET, QCI for EIA Studies as 'A' Category Consultant Organization.

Enlisted in:

- Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) for carrying out EIA, Waste Management & Audit, Turnkey solution of ETP & STP, Site Specific Wildlife Conservation Plan & Forest Diversion Proposals.

CEMC Environment Laboratory got recognition by MoEF&CC, Govt. of India, under Environment (Protection) Act, 1986 and also accredited by NABL.