

Title of the Project:- Environmental Impact Assessment on Flora, Fauna & Socio economic status of local communities and action to be taken to mitigate impact of Kopra Medium Project at Nauradehi Wildlife Sanctuary, Sagar District (M.P)

Why this project :-

This project lies on the western periphery of Nauradehi Wildlife Sanctuary. As part of this proposed dam and its submergence area falls under wildlife sanctuary area, so it is essential to study the impact of dam on the wildlife habitat and local communities. Executive Engineer Water Resources Department Sagar, Madhya Pradesh, vide letter no. 1051/karya Sagar, dated 16.03.2021 requested State Forest Research Institute to carry an Environmental Impact Assessment (EIA) study on the impact of Kopra Medium Project on wildlife habitat of Nauradehi Wildlife Sanctuary and its surrounding areas. The proposed study would create a base line information on flora, fauna and Socioeconomic status of local communities. Various environmental (Air, Sound and Water) parameters shall be also evaluated in addition to wildlife habitat parameters. Suitable mitigation measure can be developed after analysing all collected data. This study may help to develop long term suitable management strategy by Nauradehi Wildlife Sanctuary and also by water resource department Madhya Pradesh.

Research Methodology:

Environmental Impact Assessment (EIA) study is supposed to provide adequate baseline information, which is likely to have implication on project activities on various environmental components and their projections towards the improvement on existing and localized flora and fauna/wild life. Consequently, the study on EIA ultimately provides a set of recommendations to the policy planners and decision makers for safe operation of the projects. As per the guidelines of MoEF Govt. of India for EIA, the area covering 10 km radius from the project site is the study area for the project. The impact assessment have been conducted in the forest area within 10 km radius from the centre of the project site.

Study Design:

Experimental plots was laid to study tree cover, shrub and ground vegetation, regeneration study of forest, status of Rare, Endangered and Threatened (RET) species, Diversity Index

- Wildlife abundance have been assessed using occupancy method and camera trap method
- Environmental pollution have been assessed.
- Socio-Economic status of local communities have been studied through questionnaire survey
- Suitable mitigation measures developed and report have been generated

Objectives of Research :-

- To collect baseline data on existing flora, fauna and socio economic status of the area.
- To assess the probable impacts of the proposed activities on flora, fauna of the area and their habitat within the 10 km impact zone.
- To assess the impact of noise, air and water quality due to proposed activities.
- To suggest mitigation measures for conservation/protection and improvement of flora, fauna, habitats and social status of local communities.

Final Findings:-

- Identification of all potential environmental impacts due to proposed dam construction is an essential step of Environmental Impact Assessment.
- In case of dam construction projects, impacts on biodiversity, air pollution, water pollution and social issues are significant.
- Both direct and indirect environmental impacts have been studied on various environmental attributes due to proposed activity in the surrounding environment, during the operational phase.

- This study have been reveal how the activities being carried out will affect the flora, fauna, wildlife and socioeconomic attribute and mitigation measures have been suggested.
- Final report submitted to funding agency.

Cost of the project:- Rs.47.14 Lakhs

Outcome of Research –

- Identification of all potential environmental impacts due to proposed dam construction is an essential step of Environmental Impact Assessment. This study will reveal how the activities being carried out will affect the flora, fauna, wildlife and socioeconomic attribute and mitigation measures will be suggested.



Views of study sites during data collection on environment assessment



Installing Camera trap at suitable trails.



Collecting data from Camera trap through Micro SD card.



Views of survey work on Social Impact Assessment in Impact zone of proposed Kopra Medium Dam



Views of quadrat study and data collection