

Title of the project:- Baseline data generation work of Flora Fauna studies for preparation of EIA EMP Report for the three opencast coal mining projects of M/S Northern Coalfields Limited, Singrauli, M.P.

Why this project:-

The present project work provides baseline data on flora and fauna studies conducted as part of the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for three open-cast coal mining projects of Northern Coalfields Limited (NCL) in Khadia Block of Singrauli, Madhya Pradesh. The State Forest Research Institute (SFRI), Jabalpur, conducted the study to assess the area's ecological status and biodiversity before further mining expansion.

Research Methodology:-

Data collection involved both primary and secondary methods. Vegetation surveys used standard ecological techniques, including plot-based sampling for trees, shrubs, and ground vegetation, while faunal surveys used line transects, point counts, opportunistic sampling and systematic sampling method integrating All India Tiger Estimation (AITE) data for mammal populations. The focus was on identifying species diversity, population densities, and any species of conservation concern.

Study Design:

Floral Diversity Assessment-

- Collection of primary & secondary data
- Assessment of tree, Shrub and Climbers and regeneration status.
- Assessment of ground vegetation

Faunal Diversity Assessment-

- Opportunistic-Sampling, Systematic-Sampling, Line-Transect-Method, Avian-Surveys, Analysis of AITE-2022-Data

Objectives of Research-

- To collect the baseline data generation work of flora fauna studies for preparation of EIA-EMP report for the three opencast coal mining projects.

Activities Undertaken-

- Collection of baseline data on existing flora of the area

Cost of the project- Rs. 8,44,880/-

Outcome of Research:

- Collection of baseline data on existing flora and fauna of the area
Following 03 final reports submitted to funding agency
1. Baseline Data Generation work of Flora, and Fauna Studies for Preparation of EIA-EMP Report for the Three Open Cast Coal Mining Projects of M/S Northern Coalfields Limited, **Block-B** Singrauli.

2. Base line Data Generation work of Flora, and Fauna Studies for Preparation of EIA-EMP Report for the Three Open Cast Coal Mining Projects of M/S Northern Coalfields Limited, **Bina Block**, Singrauli



3. Baseline Data Generation work of Flora, and Fauna Studies for Preparation of EIA-EMP Report for the Three Open Cast Coal Mining Projects of M/S Northern Coalfields Limited, **Khadia Singrauli**.



Plate1.- Inception meeting & Field survey work for Sampling of Flora and Fauna