

ENVIRONMENTAL

Environmental

- ❖ Environmental impact assessments
- ❖ Environmental and Social Audits
- ❖ Resettlement Action Plans
- ❖ Solid waste management

Environmental and Social Impact Assessment

At Vex Engineers Ltd, we carry out Environmental and Social Impact Assessment (ESIA) for road and transport infrastructure identifies, predicts, and manages potential environmental and community effects prior to project approval. It evaluates physical, ecological, and socio-economic consequences across all project phases—from construction to active operation—to ensure sustainable development.

Key Environmental Impacts & Mitigation

- **Air and Noise Quality:** Heavy machinery and excavation create severe dust and noise. Mitigate via regular water-spraying, noise barriers, and enforced PPE usage.
- **Soil and Water Resources:** Construction causes soil erosion, land destabilization, and fuel runoff into local water bodies. Mitigate using silt traps, proper equipment maintenance, and drainage control.
- **Flora and Fauna:** Vegetation clearing fragments local habitats and wildlife corridors. Mitigate by restricting clearance zones and replanting native flora post-construction.

Key Social Impacts & Mitigation

- **Land Acquisition & Displacement:** Expanding rights-of-way forces physical or economic displacement. Mitigate through transparent valuation, fair resettlement action plans (RAP), and timely compensation.
- **Community Safety & Livelihoods:** Increased heavy traffic disrupts local business access, pedestrian safety, and traditional routines. Mitigate by building temporary bypasses, safe pedestrian footbridges, and maintaining local communication.
- **Public Participation:** Lack of stakeholder buy-in leads to social friction. Mitigate via continuous public consultation and transparent grievance-redress mechanisms.

Resettlement Action Plans

After carrying out environmental and social impact assessment, we develop a comprehensive Resettlement Action Plan (RAP) which outlines the specific procedures,

compensation measures, and livelihood restoration steps required when a development project causes physical or economic displacement.

Core Objectives

- Avoid or minimize forced displacement during project planning.
- Ensure fair and full replacement cost compensation for lost assets.
- Restore or improve the living standards of affected groups.

Key Components

- **Census and Inventory:** Counting affected people and listing lost property.
- **Cut-Off Date:** The final day to register eligible residents and assets in the project zone.
- **Entitlement Matrix:** Rules defining who gets paid and how much.
- **Grievance Redress:** Systems to handle complaints and disputes fairly.
- **Monitoring:** Tracking progress to make sure promises are met