



## **CHAPTER 11: CONCLUSION**

SEB plans to construct and commission the 177 km Baleh – Mapai 500 kV Transmission Line Project (BMTLP) from Baleh HEP to Mapai Substation. The completion of this project will allow the evacuation of power from the Baleh HEP to the Sarawak Grid system to meet the growing energy demand from SCORE development.

From the Baleh HEP, the transmission line runs parallel along the northern banks of Btg. Baleh and Btg. Rajang on a southeast-northwest-west direction, cutting across mostly secondary forests, logged over mixed dipterocarp forest, tree plantations, agriculture land including shifting cultivation areas and various rivers and streams.

Right from the planning stage, the determination and selection of the transmission line route has been planned to avoid titled land lots, longhouses, town and bazaar, schools, community places, built up areas, cultural significance areas, gravesites and steep slopes. Relocation/ resettlement is considered as a last option. At the time of study, the Project does not involve any relocation or resettlement of people.

This ESIA study presents an assessment of the potential environmental, social and community health impacts associated with the construction, operation and maintenance of the proposed BMTLP. The ESIA have been conducted in accordance with the environmental and social regulations, guidelines and standards (State, National and International levels) of relevance and applicable to the proposed transmission line. This is to ensure that all impacts, direct and indirect, especially environmental and social impacts, associated with the project are identified, predicted, evaluated and that environmental management considerations are taken into account during the project lifecycle.

Baseline physical, biological, socio-economic and cultural data and information was collected from a variety of primary and secondary sources, including field surveys and sampling, review of relevant literature and online publications. The collected data was used to organize profiles of the physical, biological and socio-economic environments, likely to be affected by the project.

The physical characterization of soil, surface water, ambient air and noise along the transmission line route showed that the soil, surface water, ambient air and





noise were consistent across sampling stations and compared well with values recorded in previous reports, studies and monitoring data from NREB and JBALB.

Studies on biodiversity along the transmission line area and immediate environment showed that the transmission line ROW is located in areas which are not considered sensitive biologically. The area along Btg. Baleh is dominated by remnant secondary forest occasionally mixed with patches of grass and bushes whereas the area along Btg. Rajang primarily is a mix of the same depleted forest and various stages of shifting cultivation areas There are no protected areas or habitats such as National Parks, Nature Reserves and Wildlife Sanctuaries along the transmission line route.

Socio-economic studies of the potentially affected communities revealed that the Iban is the main ethnic group. Kapit and Song are among the districts with the highest concentration of Iban. In Kapit, Iban accounts for 83% of the total population, while in Song, Iban accounts for 89% of the population. The local communities were consulted through public consultation processes (stakeholder engagement and social surveys). These included men, women and institutional stakeholders. The aim of public consultation was to assure the quality, comprehensiveness and effectiveness of the ESIA as well as to ensure that the views and opinions of the local communities were adequately taken into account in the decision-making process.

The potential and associated impacts assessment of the proposed BMTLP indicated that the project would beneficially impact on the State's energy and power transmission and the overall economic and social benefits accruable from power supply. The use of clean and renewable energy will assist the State in eliminating the use of diesel-powered electricity and contribute to the State's agenda of sustainable development. It would also result in provision of direct and indirect employment opportunities to the local people especially during the 36 months construction period.

The potential adverse environmental and social impacts identified mostly take place during the construction phase. The majority of these impacts are temporal and mitigation measures have been recommended to reduce the adverse impacts to negligible limits. The potential impacts identified and assessed include: loss of land due to land acquisition; soil erosion from earthworks; impact on water quality due to soil erosion and wastes disposal; air and noise pollution; waste generation and management; traffic and transportation impact; impact on ecology and





habitat; social, community health and cultural heritage impact; and occupational safety and health impact.

A project-specific Environmental and Social Management Plan (ESMP) and monitoring program for assessing the effectiveness of the mitigation measures in controlling identified significant impacts has been recommended. Implementation of these measures will ensure a successful execution of the BMTLP in an environmentally safe and sustainable manner.

The ESIA has shown that with the implementation of the recommended mitigation measures and ESMP, the BMTLP could be executed and decommissioned with minimal adverse impacts on the environment.