## **Ethnoecology and monitoring of Siberut Biosphere Reserve mangroves** (Indonesie)

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## **Abstract**

Ecosystems and societies face major emerging challenges as climate change and ecological services degradation. Nowadays, linking local knowledge and global science in multi-scale assessments is at the heart of international debates.

Biosphere reserves (BR) have a potential role to effectively respond to these challenges by undertaking transdiciplinary and comparative research. BR can also promote long term monitoring of key *early warning ecosystems* through the involvement of local communities and the integration of local knowledge in the assessment and monitoring of their own environment.

Siberut is the largest and northernmost of the Mentawai Islands, lying 150 kilometers west of Sumatra. The Mentawai communities located on the south-east side of Siberut Island are highly dependent on the existing natural resources of the mangrove forest. The cumulative and complex bodies of knowledge of these local communities; know-how, practices and representations, has been developed through a long history of interactions and reliance on this ecosystem.

The main objective of this research is to study the interactions between the local communities and the mangrove forest of Siberut Biosphere Reserve and to consider an operational methodology that could allow to monitor and survey changes in the mangrove ecosystem linking the local and the scientific expertise.

## **Keywords**

ethnoecology, biosphere reserves, data management, long-term monitoring