

Ecological priorities remain hidden in the management of Indonesia's forested landscapes

It's still difficult to integrate ecological priorities into development processes, especially those related to the management of tropical forested landscapes. A recent comparative study of different forest landscapes in Indonesia proves the point, says Yves Laumonier



One of the heavily forested Tanimbar Islands. Photo: CIFOR/Yves Laumonier

A research team from the Centre for International Forestry Research employed a range of methods to study tropical forested-landscape management in four very different areas of Indonesia in order to better understand attitudes towards ecological issues, said Yves Laumonier, tropical ecologist, at the [6th Annual Ecosystem Services Partnership](#) conference in Bali, Indonesia, 26–30 August 2013.

First, the team identified who had an interest in the particular forested landscape being studied, such as the diverse interests represented by local residents and farmers, various local and regional government agencies, and small and large businesses. They then collected information about the soils, plants and animals of the area and the livelihoods and cultural practices of local people. Focus group discussions were held to draw out local ecological knowledge and perceptions of land-use planning and tenure issues. Drawing on this, it was possible to make a number of observations about attitudes to ecology in the areas studied, which are set out below.

The Tanimbar Islands, which are a group of about 65 islands in the south the Maluku province of Indonesia, have a fragile environment that is still up to 70% forested. They have unique biodiversity, harbouring the only intact monsoon forest left in Indonesia. The thin soils on top of the limestone islands are easily eroded. Most of the communities cling to the coast but depend on forested catchments for their water supply. Sago palm is the staple rather than paddy rice. Most land tenure is under customary title managed by clans, as is the system of natural resources management, known as 'sasi'.

There are efficient local rules. Logging companies have tried to establish themselves on the island but the locals resisted, even taking their case to the European parliament during the time

of former President Soeharto. But companies continue to put pressure on the communities to allow access to natural resources. Ecological principles are applied but are very weak when competing with economic opportunities. For example, a new road in the south of Yamdena (the main island) led to the removal of ebony wood from that part of the island.



Traditional culture is still practised on Seram Island. Photo: CIFOR/Yves Laumonier

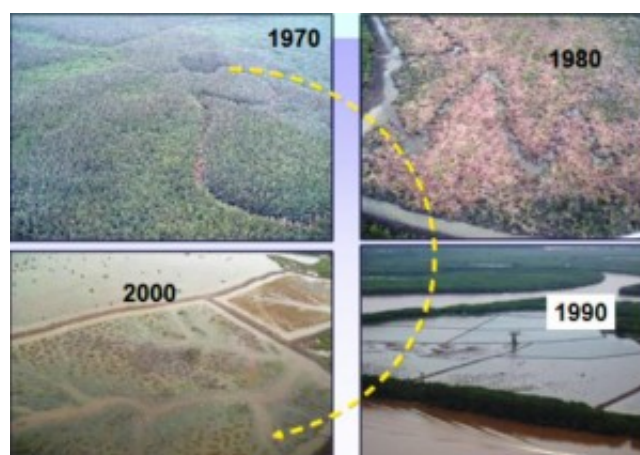
Seram Island, located 600 km to the north of the Tanimbars has a more mixed population that includes migrants from other parts of Indonesia. Influenced by the newcomers, some of the traditional community roles are disappearing even though the local government supports 'adat' or customary rules. Nonetheless, in the early 2000s, private companies began to cultivate oil palm on areas of grassland and swamp forests on the northern coast and displace traditional land uses. Conflict erupted in certain areas, mostly over disputed boundaries and forest resource ownership. boundaries, use and access, and forest resource ownership, resulted in conflict in some cases.

In a separate case, Kapuas Hulu district in the province of West Kalimantan still features important forests but is under pressure for development. There are two ecologically very significant national parks: one in the mountains and one in the wetlands. It is the last district in West Kalimantan that is still mostly forested, with a large river serving the capital, Pontianak.



Farmer on forest margin, Kapuas Hulu. Photo: CIFOR/Yves Laumonier

There has been considerable logging, which began in 2000, but is now banned. The communities that were involved with logging now find that their traditional way of life has been disturbed. Oil palm companies are now arriving and establishing plantations and smallholders are following suit, though uptake is not uniform across the district. There is some gold mining contributing to a generally increasingly high pressure on natural resources for extraction or conversion to large agribusiness projects. Adat exists but is often challenged legally and informally by the companies. Ecological principles are rarely respected.



Changes to the Mahakam River delta over time. Source: Yves Laumonier

The last study site was the Mahakam River delta. The Mahakam River is the largest river in East Kalimantan province, with a catchment area of approximately 77 100 km². The river originates in Cemaruru from where it flows for just under 1000 km to the Makassar Strait. The delta spreads like a broad fan, with a base of 65 km and a radius of about 30 km. In the 1970s, the area was 'wild', with mangroves and nipa palm. Oil exploration companies brought in migrant workers, who caught fish in the delta as a side business. By the 1980s, more migrants colonized the delta and by the 1990s the environment had degraded significantly, with shrimp-pond businesses taking over. In the 2000s, there was no land unoccupied nor vegetation remaining: the delta had become entirely occupied by ponds, which had begun to erode,

leading to their increasing destruction and the intrusion of sea water. The result has been a total failure of production, amongst other environmental problems.

The researchers concluded from observing the various sites that, overall, respect for ecology remained weak and ecological priorities were difficult to integrate into development and forestry management of any kind. There was a general disdain for traditional ecological knowledge and practices, plenty of antagonism between ecological and economic priorities and a mismatch between adat and modern governance systems.

To overcome these problems, the team recommended that integrated ecological assessment techniques should be included as a matter of course in planning decision-making; there should be a compensating focus on ecological functions and environmental services; supported integration of adat into official governance; creation of a new institution to build agreements among all; and more research on tenure security.

Edited by Robert Finlayson



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