

HOW WILL REDD+ SATISFY BIODIVERSITY CONSERVATION AND LOCAL BENEFIT? -- A CASE STUDY IN EAST KALIMANTAN, INDONESIA --

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UNFCCC COP16 at Cancun in December 2010 referred to the ‘safeguards’ in its Annex I, such as transparent and effective national forest governance, respect for the knowledge and rights of indigenous peoples and members of local communities, full and effective participation of relevant stakeholders, and consistency with the conservation of natural forests and biological diversity. It is, however, unclear how those provisions will be effectively operationalized. In order to ensure the safeguard substantially, principal stakeholders such as governments and project initiators/ managers are required to know the reality of the local peoples’ livelihoods and land use systems in terms of their preference in the near future as well as the status quo.

The authors selected Indonesia for the study, because of having the most developed REDD legislation among the initial nine member countries of UN-REDD as well as being one of the countries experiencing a large forest loss between 2000 and 2010. The province of East Kalimantan was selected for the research sites because the province is the center of timber production and forest cover in Indonesia.

The objective of the study is to explore local people’s near-future preferences in terms of income source and land use, and to get policy implications for feasible implementation of REDD+ policy. Four villages resided by different ethnic groups, such as the Bahau, the Kenyah, the Benuaq, and the Tonyooi accounting for the majority of the indigenous people, known generally as the ‘Dayak’, in West Kutai district were selected as research sites.

The authors presented 13 income options to respondents and asked them to choose the most, second-most, and third-most important ones for the year 2013: (1) Sale of timber: Meranti (*Shorea* spp.), Kapur (*Dryobalanops* spp.), Ulin (*Eusideroxylon zwageri*), Sengon (*Albizia* spp.), and other species, (2) sale of NTFPs: rattan, aloes-wood, Damar resin, deer, wild boars, birds, monkey gallstones, swallow nests, and honey, (3) sale of gold dust and white sand, (4) oil palm plantations, (5) other perennial crops: rubber, coffee, and cacao, (6) rice, etc.

The authors also presented 11 land-use options in accordance with present land-use categories: (1) swidden agriculture, (2) traditional rubber gardens, (3) commercialised rubber plantations, (4) rattan gardens, (5) orchards, (6) oil palm plantations, etc.

In forestlands, the questionnaire survey revealed that people still somewhat prefer the income generated from selling timber and NTFPs such as swallow nests, aloes-wood, resin, and forest game. This finding implies that it is possible for them to use these resources as livelihood assets, even though forestlands are usually far from their residences. At the same time, they do not expect opportunities for work of logging and planting trees in the concession areas held by private companies. In addition to the group management of plantation forests (*Hutan Tanaman Rakyat: HTR*), we recommend incorporating the management of timber and NTFPs by local people into the programs approved as REDD-plus activities.

In non-forestlands, the questionnaire survey reveals that the continuation of swidden agriculture, developing and extending traditional rubber gardens and modern rubber plantations, and developing cacao gardens will constitute an important basis for their livelihood in the near future. Furthermore, the fact that people have a preference for rattan gardens and orchards, which look like forests, implies the importance and effectiveness for landscape conservation of sustainably managing non-forestland resources. It is recommended that Indonesia introduce programs to support, as REDD+ activities, the sustainable management of remaining forest and forest-like land uses such as orchards, rattan gardens, and traditional rubber gardens.

Fortunately, Indonesia has a national program called “Forest and Land Rehabilitation” (*Rehabilitasi Hutan dan Lahan: RHL*), which is, however, not formally connected to REDD-plus activities. The program supports various activities initiated by local people: (1) reforestation activity on protected forestland, (2) re-greening activities on non-forestland including “individual forestry”; “individual agroforestry” in which trees are intercropped with rice, maize, or other crops; “forest-related activities”, including the management of NTFPs such as rattan, aloes-wood, and sugar palm; and “individual gardens” of rubber and cacao. Actually some people in West Kutai district have received government support to start such activities, and their approval as REDD+ activities by the government even on non-forestland might provide an excellent incentive for local people to contribute to carbon sequestration as well as to biodiversity conservation.

In order to satisfy the biodiversity conservation and local benefit, we should not confine our perspective on the REDD+ policy framework determined by the government, but evaluate it by checking actual conditions in the field, especially grassroots preferences in terms of income sources and land-use type.