



ETFRN NEWS 45/46: Forests, Water and Livelihoods

Organisations - Programmes

[Table of contents](#)
[News 45/46 homepage](#)

COMMUNITY BASED PLANNING AND ACTION FOR SUSTAINABLE PEAT SWAMP FOREST MANAGEMENT IN INDONESIA

By Jolanda van den Berg

Although local communities may pose a threat to peat swamp forests, they are also dependant on the swamp forest resources for their survival. Therefore, collaborating with local communities can provide an opportunity to learn about swamp forest management.

In 2002-2004 a project was implemented to promote the river basin and ecosystem approach for sustainable management of South-East Asian lowland peat swamp forests. It was conducted as part of the Netherlands ' Programme Water for Food and Ecosystems.

The project focused on the Air Hitam Laut river basin located in Jambi province, Sumatra , Indonesia . A large part of the river bisects the Berbak National Park that was established in 1997 to protect the peat swamp forest for its ecological and socio-economic functions, habitat and its biodiversity. Around two thirds of the total area of Berbak National Park consists of peat swamp (fresh water) forest. This type of forest is essential for the survival of local populations because it is a source of many forest products and it regulates flood and flow, preventing salt water intrusion in coastal agricultural areas and supplying fresh water for both domestic use and irrigation. However, the remaining peat swamp forests are threatened by the expansion of agricultural and settlement areas downstream of the Air Hitam Laut river and unsustainable exploitation of both wood and non wood forest resources in Berbak National Park. The article by Wösten (p. 81) describes the hydrological scenario development component of the project, indicating the real threats to people's livelihoods if forest destruction continues. The Agricultural Economics Research Institute of the Netherlands (LEI) and national partner organisations defined and implemented a socio-economic project component to deal with problems of uncontrolled forest exploitation. This component focused on facilitating exchange of lessons learned and best practices on peat swamp forest exploitation for local income and subsistence and on identifying and developing alternative income sources to reduce the pressure on wood and non-wood forest products.

The project organised trainings, workshops and study tours, involving all major stakeholder groups. It

conducted community based planning and action research in two pilot villages, to develop options for increased community involvement in the management of Air Hitam Laut river basin and Berbak National Park . Activities focused on identifying and developing non-forest based sources of income, including promoting sustainable farming practices, and on increasing awareness on the importance of peat swamp forest conservation among local communities. Prior to these activities a multidisciplinary team carried out a diagnostic study. By using rural rapid appraisals (RRA) methods, they collected information, identified and became acquainted with the stakeholders and started consultations with these stakeholders. The team consisted of researchers from Jambi University, staff of Berbak National Park, and representatives of pilot village communities and PINSE (Pinang Sebatang), the partner NGO working in the project area. LEI trained team members in using participatory research tools to initiate the process of diagnostic research.

Community based planning and action in practice

The implementing NGO, PINSE, organised village meetings to discuss the status of peat swamp forest in the region and the constraints to local development. In both pilot villages, PINSE assisted two community groups in preparing local development action plans, overseeing the implementation of activities and negotiating sharing agreements, including defining participating members, responsibilities and tasks. For each village, a community worker was recruited to support these community groups. The project included on-the-job training for community workers and staff members of PINSE in basic concepts of participatory approaches and participatory development planning at the community level.

In both villages, community groups identified and prioritized development opportunities to address their most important problems during a two-day planning workshop. They also developed concrete and realistic plans. At subsequent meetings, the groups reached a consensus, selecting chicken breeding and coconut farming as focal activities. They also developed detailed working schedules. Leaders of the community groups and PINSE staff signed five years agreements on mutual contributions to the implementation of development activities. Working capital to implement these activities was allocated to the community groups under the condition that they would allocate abandoned ('sleeping') agricultural land, 2 hectares per community group, for tree growing activities. The community groups received training on tree growing, seedling preparation and nursery development and management. The participants selected the tree species to be planted through consensus.

The project organised participatory monitoring workshops at the village level, to learn about the problems of community group members related to the implementation of the focal activities and to formulate actions to address these problems. Project work plans and budgets were revised accordingly.

The project also organised study tours for representatives of community groups to raise awareness on threats to peat swamp forests and to demonstrate good practices of peat land management. At the community level, hands-on trainings, for instance on water level management, promoted sustainable farming practices and facilitated exchange of information and experience between community members, project researchers and community organizers. During the workshops, representatives of the villages, researchers, and governmental and nongovernmental representatives discussed negative consequences of current land use and explored future options for sustainable development.

Lessons learned

- Community based planning and action highlighted local livelihood issues and encouraged the participation of local communities in peat swamp forest management. Preliminary observations also indicated that the approach empowered local communities by improving their problem-solving capacity and building knowledge, skills and organisational capacity. However, the process takes time.
- Working through community groups at the village level offers villagers an opportunity to communicate and learn from each other and from other stakeholders, including project researchers, technical experts, forest officers and NGO field staff. However, understanding the diversity within community groups in terms of gender, ethnicity and access to resources and decision-making is essential for the quality of project outcomes. For instance, landless people have probably not benefited from project activities because land contribution was a principal condition for participating in tree farming activities.
- The experience and capabilities of the community workers have a key influence on the direction and outcomes of the development activities. Careful selection, support and training are thus essential.
- Identification of sustainable alternative income opportunities is easier said than done in a context of poor infrastructure facilities and low agricultural production levels caused by acid sulphate soils. Local communities consider livestock production and tree farming, using species such as Durian (*Durio zibethinus*), Jelutung (*Dyera* spp./ *Dyera consulata*), and Pulai (*Alstonia pneumatophora*) as potential alternative income opportunities. Jelutung plantations, which are already commercially managed in the area, require no or minimal drainage and thus offer a key opportunity for achieving environmentally sustainable development.

Future actions

Continued external financial assistance will be needed with an emphasis on trust funds that enable community groups to compete for small grants or micro-credits to implement their own specific development action plans.

Key challenges to the future include:

- a. Access to markets should be improved. Development of successful marketing strategies and closer partnerships between community groups and commercial companies is important for developing agricultural, horticultural and forest products; this is indispensable for long-term success. Companies should be approached as they have easy access to markets, capital, skills and technologies.
- b. Enhanced cooperation between local and regional levels and non-governmental and governmental sectors is crucial for empowering communities in decision-making processes. This may be achieved by strengthening existing platforms in the field of water resources management or establishing new ones for integrated resource planning at the river basin level, giving particular attention to the representation of local communities.

For references and further reading, please visit: <http://www.waterfoodecosystems.nl>

For further information, please contact:

Ms Jolanda van den Berg (social economic research)

Agricultural Economics Research Institute (LEI)

P.O. Box 29703

2502 LS The Hague

The Netherlands

Phone: +31 70 3358165

E-mail: jolanda.vandenberg@wur.nl

Website: <http://www.lei.wur.nl>

[Top of page](#)