



Local initiatives for rehabilitating degraded communal grazing land

Nepal: क्षतिग्रस्त सामुदायिक चरण भूमि पुनर्उत्थानमा स्थानीय अग्रसरता

Supporting local initiatives and building local capacity for the rehabilitation of degraded communal land in the middle mountains of Nepal

The main aim of the People and Resource Dynamics Project's (PARDYP) land rehabilitation activities were to help watershed residents, local groups, and line agencies understand the key issues and to test options for the improved management of water, land, and forests in a participatory way. In Dhotra VDC (Kabhrepalanchok district) a local youth club (Ekantabasti Youth Club) had been trying to rehabilitate a 2.5 ha area of degraded communal land since May 2004. The club approached PARDYP for technical assistance. The area had been degraded by overgrazing with two big gullies formed and small landslips along the gullies affecting a trail and the adjoining agricultural land.

An unsuccessful attempt had been made to plant the area eight years previously. It had failed due to the difficulty of retaining soil moisture in the area's compacted red soils. A series of meetings were organised to plan future activities, to ensure community participation, and to share responsibilities among local users and PARDYP. The community was committed to rehabilitating the area and took the responsibility for planting, protection, and overall management of the planted species. PARDYP provided planting materials and technical help.

A needs assessment with the local people identified the most useful tree species. They entrusted the selection of appropriate grass and hedgerow species to the project's expertise. Project staff arrange for planting materials and logistical support, and showed villagers how to make eyebrow pits, plant hedgerows, and plug gullies. About 450 villagers participated in the rehabilitation activities with women contributing more than half of the labour. They worked four hours a day for 16 mornings.

A five-women strong user committee was formed to manage and protect the planted species and a five-man strong task force was set up to maintain regular links and coordination between the user committee, the youth club, and the villagers. The coordination committee, with guidance from the youth club, was responsible for facilitating and coordinating all the second season rehabilitation work in 2005.

Left: Land users preparing eyebrow pits with women actively involved (PARDYP)

Right: Land users sowing seeds of grass and hedgerow species (PARDYP)



WOCAT database reference: QA NEP13

Location: Dhotra village, Jhikhu Khola watershed, Kabhrepalanchok district, Nepal

Approach area: 0.025 km²

Land use: Extensive grazing

Climate: Humid subtropical

Related technology: Rehabilitation of degraded communal grazing land and gully plugging, QT NEP13 and QT NEP14

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The technology was documented using the WOCAT (www.wocat.org) tool.



Problem, objectives and constraints

Problem

- Lack of awareness about low cost soil and water conservation technologies that address farmers' needs
- Weak institutional collaboration for developing and implementing technologies

Objectives

- To demonstrate appropriate technologies for rehabilitating degraded land and evaluating their effectiveness
- To provide training on soil and water conservation (SWC) technologies for effectively implementing the rehabilitation activities and to build the capacity of the local community to carry out the work
- To organise and mobilise a local community for implementing, protecting and managing the planted areas and the physical structures

Constraints addressed

Major	Specification	Treatment
Technical	Limited knowledge of appropriate SWC technologies and limited technical know-how to implement them	On-site training and exchange visits organised to demonstration sites
Institutional	Weak institutional collaboration for technology development and demonstration	Collaboration with local youth club; formation of user committee and task force
Minor	Specification	Treatment
Financial	Government incentives lacking	Cost-effective technology demonstrated; planting materials and other logistic support provided

Participation and decision making

Target groups



Land users



Extension workers



Approach costs met by:

International donor funded project (PARDP)	90%
Community/local	10%
TOTAL	100%

Decisions on choice of the technology: Mainly national SWC specialist (PARDP experts) in consultation with land users and local youth club

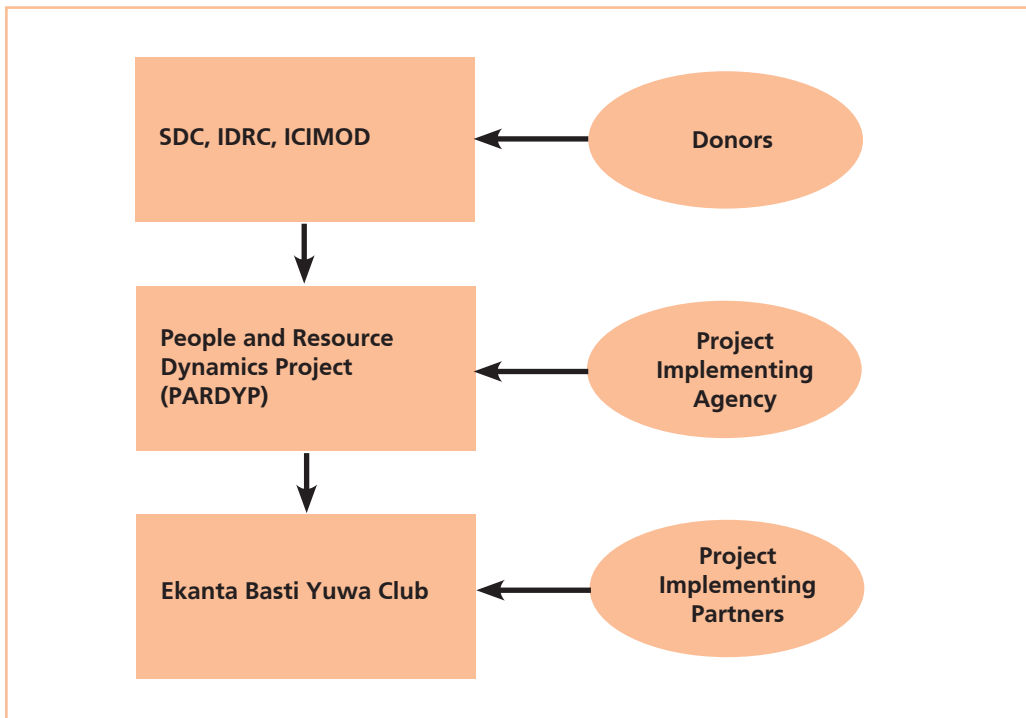
Decisions on method of implementing the technology: Mainly land users supported by national SWC specialists. Villagers took the responsibility for planting, protecting, and overall management of the planted species. PARDP arranged planting materials and technical support

Approach designed by: National specialist together with local youth club. Initiation and implementation by local youth club representing land users. Technical and logistics support by national specialists

Community involvement

Phase	Involvement	Activities
Initiation	Interactive	Local youth club approached PARDP for technical help during a meeting Public meetings organised to share responsibilities. Land users took responsibility for land preparation, planting, protection, grazing control, and overall management of planted species. Men and women performed planned activities together. Construction of eyebrow pits done mostly by men. Filling of cement bags with soil for check dams mostly done by women while check dams were built by men. PARDP provided planting materials and technical help. PRA tool used for selecting tree species
Planning	Interactive	
Implementation	Self-mobilisation	Self-mobilised group under leadership of youth club implemented the activities; technical guidance during implementing period provided by project
Monitoring/evaluation	Interactive	Survival of planted species, effect of eyebrow pits, performance of species and check dams were monitored/observed. Results shared in public meetings and reported to the project

Differences in participation of men and women: Women's participation was a little higher, they provided 56% of the labour.



PARDP project donors and implementing partners
 SDC: Swiss Agency for Development and Cooperation
 IDRC: International Development Research Centre
 ICIMOD: International Centre for Integrated Mountain Development

Extension and promotion

Training: On-site training sessions were organised for establishing the eyebrow pits, contour hedgerows, gully treatments, and check dams and their maintenance. The trainings have made land users capable of implementing the rehabilitation activities in other areas and maintaining the current site.

Extension: The key elements of the extension approach were on-site training, demonstration, exchange visits, and public meetings. After implementing the technology, a number of exchange and interaction, audio visual presentation, and monitoring programmes were carried out as a scaling up strategy. The involvement of multiple stakeholders in the programmes helped in evaluating the technology. This led to the land users planning to scale up the SWC activities in their community forest themselves and technicians being able to implement the technologies and approach in other areas. However, planners and decision makers had only limited involvement in the initiative.

Research: Research was not a major focus of the approach although the performance and survival rates of planted species, and performance of eyebrow pits and connecting drainage trenches were regularly observed.

Importance of land use rights: The land is owned by the state and prior to starting the work there was a conflict over where the boundaries lay. Adjacent private landowners illegally claimed a part of the land but withdrew their claims before the rehabilitation work started. The existing land ownership and land use rights hindered the implementation of the approach at the beginning.

Incentives

Labour: Land users involvement was fully voluntary; they worked together in a cooperative spirit to improve their common degraded land.

Inputs: The project provided grass seeds and seedlings free of charge from its seed bank. Trees were provided by the Department of Forests, and some trees were locally sourced.

Credit: No credit was provided.

Support of local institutions: Moderate, some technical training was provided to local youth club.

Long-term impact of incentives: The main incentive provided was training that has enabled the community to improve the degraded land under its own efforts by reducing soil loss and establishing a green cover over the area.

Monitoring and evaluation

Monitored aspects	Methods and indicators
Biophysical	ad hoc observations on soil type and texture
Technical	regular observations of performance of planted species and their survival rates
Socio-cultural	ad hoc observations on farmers' preferred tree species and on closing the area for grazing
Economic/production	ad hoc observations on seed and grass production
No. of land users involved	ad hoc observation of land users' participation in maintaining planted species and structures

Impacts of the approach

Changes as a result of monitoring and evaluation: The users increased the size of the eyebrow pits and dug new pits and extended the hedgerow lines to fill in gaps; but the overall approach was not changed

Improved soil and water management: An organised land users' group was formed and awareness of SWC increased

Adoption of the approach by other projects/land users: The approach adopted during rehabilitation activities is quite standard and is taken by many other land management and community development projects

Sustainability: Land users planned to upscale the technology and its related approach to rehabilitate the degraded areas of their community forest but it hasn't happened yet.

Concluding statements

Strengths and →how to sustain/improve

This is a bottom-up approach with the rehabilitation activities purely demand driven. Farmers' priorities for tree species to be planted were identified in a participatory way → Continue by including new priorities

The local youth club played a key role in rehabilitation activities – a key factor for sustainability and continuity → More local institutions should be identified and involved.

Among total participants, women's participation was higher. User committee was made up of just women → Continue this

Site visits and focus group discussion meetings were effective for disseminating and scaling up the approach → Continue these initiatives on a regular basis to strengthen land users' involvement in SWC activities

Suitable technologies were shared and valuable knowledge given during the rehabilitation work → Continue this incorporating new ideas

Community institution strengthened, and some money (US\$ 17) raised by selling grasses and grass seed within two years of rehabilitation. Money used for social activities → As above

Weaknesses and →how to overcome

Collaboration with government line agencies was lacking → Rehabilitation work should be carried out involving all main stakeholders

Research was not a main focus of the activity, and not enough options were explored → Explore and test more options

Key reference(s): ICIMOD (2007) *Good Practices in Watershed Management, Lessons Learned in the Mid Hills of Nepal*. Kathmandu: ICIMOD

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