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Integrating water and forest management in Nepal



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Managing natural resources effectively is crucial for the poor people who depend on them. However, it is often difficult to successfully integrate the management of different resources.

There is agreement amongst Nepal's national policymakers that an integrated approach is required for water and forest resources. However, management is often segregated into different sectors, which create conflicting policies.

Research from the Comprehensive Assessment, a project conducted by the Consultative Group on Integrated Agricultural Research, examines the integration of forest management and irrigation management in the hills of Nepal. The research focuses on the 580 hectare Begnas Irrigation Project and the 40 hectare Bhanu Shera Irrigation Project.

An important development is the decentralisation of natural resource management into Water Users Groups (WUGs) and Forest Users Groups (FUGs). In the cases studied, agriculture is the main activity and more than 50 percent of the cultivated land is irrigated. Over 25 percent of the land is forested. The majority of households are poor, with small land-holdings, and therefore dependent on the natural resources managed by local WUGs and FUGs.

Key findings include:

- Water and forest resources are managed separately. This is because the location of the resources and people involved overlap but do not coincide exactly. Also, the problems for each resource are different and the government supports the groups differently.
- Each resource has independent decision-making processes, but there is informal interaction between the two management groups.
- The increased availability of irrigation water has improved agricultural production and increased employment opportunities for poor households. However, the benefits are not fairly distributed as only landowners benefit directly (those near the start of irrigation canals benefit most).
- FUGs are more involved in community development activities, and participation in management is fairer than in the WUGs. Both, however, have failed to involve women.

FUGs and WUGs have both achieved strong local influence, but they

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have not achieved integrated management. This is partly because both still focus strongly on their own sector, but also because of conflicts arising from boundary issues and over the use of overlapping resources. To improve the integration of forest and irrigation management, the authors recommend:

- addressing conflicts surrounding water and land resources by using and supporting existing informal contacts, and involving locally elected institutions
- encouraging WUGs to learn from FUGs about protecting users' rights and sharing benefits
- encouraging FUGs to learn from WUGs about working with external agencies and coordinating their activities
- addressing unequal benefits from resources: for example, poor households' access to irrigation needs improving and farmers need help to adopt new water management practices.

Source(s):

'Integrated Management of Water, Forest and Land Resources in Nepal: Opportunities for Improved Livelihood', CA Discussion Paper 2, Comprehensive Assessment Secretariat: Colombo, by Dhruva Pant, Sabita Thapa, Ashok Singh, Madhusudhan Bhattarai and David Molden, 2005 (PDF) [Full document](#).

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