

Assessing Different Approaches to Forest Management in Viet Nam



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[Photo: In northern Viet Nam, a household-level approach appears to be the best option for forest management.]

A groundbreaking study in northern Viet Nam has combined high-tech computer analysis with grassroots consultation to assess different ways of managing the region's forests. The research, which was funded by the [Economy and Environment Program for Southeast Asia](#) (EEPSEA), found that a management approach based at the household level outranks other approaches in terms of environmental and socio-economic benefits. (EEPSEA is sponsored by the International Development Research Centre (IDRC) and other donors.)

"The aim of our research was to involve local people in identifying problems, to find out about their aspirations for the future, and to work out the best ways forward," explains study leader [Nguyen Nghia Bien](#) who works at the Forestry University of Vietnam and is currently based at the [Australian National University](#) in Canberra. "To do this, we lived, ate, and worked with the local communities so that we could learn from them."

Management approaches

Nguyen's team visited three villages — Moi Hamlet, Village 7, and DongVanh Village — which between them represent a cross section of communities and forest habitats. The team found a variety of different types of forest management regimes. Schemes managed by private households and state-managed forest enterprises predominated, but commune and village level management were also observed as were contract and joint management set-ups.

The study was conducted against a background of continually worsening tropical forest destruction. Prior to 1954 most of the northern mountain region was covered with forests, but now in many areas only 8 to 10 % remains under forest cover. This has resulted in serious environmental problems such as soil erosion, loss of biodiversity, and the destruction of the livelihoods of millions of forest-dependent people. Major reasons for this destruction include inadequate property rights, lack of local participation and empowerment, and misguided government policies.

Assessment criteria

To find a way to resolve these problems, Nguyen and his team analysed the nature and extent of both forest management and destruction around each of the three study villages. Then, with the help of villagers and other stakeholders such as forest rangers, they selected ten criteria and indicators (C&Is) to assess the environmental and socioeconomic performance of the different forest management strategies.

The C&Is included issues such as the security of long-term use rights for all stakeholders and improvement in the quality of life for local people. These were drawn from an initial choice of 113 indicators developed by the [Center for International Forestry Research](#) (CIFOR) and other international organizations and initiatives. "Using the CIFOR approach we could make sure that the principle of sustainability was secured and that the criteria we used were locally adapted," says Nguyen.

MCDM program

The analysis was undertaken using the TopDec computer-based multi-criteria decision-making (MCDM) program. "TopDec is a recently developed computerized program that can be used for assessing different institutional structures against sets of selected C&Is," explains Nguyen. "In other words, it is a decision support software program, which aims to assist in selecting a 'best choice' from a range of options."

Nguyen and his team found that the MCDM analysis ranked household-based forest management as the most preferable option. This type of management ranked highest even when different weighting systems were applied to the C&Is used. "The household is a vital entity which has many advantages over other management institutions," stresses Nguyen. "In fact, forest cover and quality have been seen to improve after only a few years of implementing land allocation to farmers for long-term management."

Household benefits

In DongVanh Village, almost all of the forest land has been allocated to two-thirds of the village households, which have been given land use titles. The benefits these households gain from managing the local forests include secured irrigation water, intercropping products, thinning cuttings, fuelwood, and other non-timber products.

The MCDM analysis also ranked state-run forest enterprise-based management highly. This finding correlates with the advantages such government institutions have in terms of human and financial resources. By contrast, village-based management scored poorly. According to Nguyen, this was probably because village communities have lost their indigenous customs and beliefs over the last decade and are institutionally weak. As for contract and joint management options, these have weak legal recognition and it was therefore not surprising that they also scored low.

Remote areas

The MCDM results were backed by the finding that deforestation in the region is particularly bad in remote areas. This may be due to a lack of enforcement or conflict resolution measures and low payment for protection — in other words people have little incentive to manage or look after remote areas. Nguyen's team also found a direct link between food security and forest management. For instance, the forests in Village 7 and DongVanh Village are quite well protected because rice production is strong.

Moreover, people are aware of the importance of forests in securing irrigation and protection from both floods and drought. In light of these findings, Nguyen is calling for more support and intervention from the government in terms of its policy on local food security, the creation of markets for locally produced commodities, and legalization of land tenure for local people.

Visible proof

"I think that this work has provided visible proof that household management is the best option for the management of production and dual production-protection forests," Nguyen says. He believes that his findings may have already had some impact 'on the ground', since many of the villagers and forest rangers he worked with responded enthusiastically to them. "I hope that they have internalized some of what we found in their work," he concludes.

Rufus Bellamy is a Singapore-based writer who specializes in environmental issues. (Photo: Nguyen Nghia Bien)

If you have any comments about this article, please contact info@idrc.ca.

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