Can Community Forestry Save Biodiversity?

All over the world, governments are handing over control of state forests to local communities, in the hope that local communities will make a better job of managing them than state agencies. But can villagers satisfy their basic needs from community forests without depleting biodiversity? This was the main issue addressed at a seminar entitled "Community Development and Conservation of Biodiversity through Community Forestry" organized by the Regional Community Forestry Training Centre (RECOFTC) in Bangkok on October 26–28th 1994. The meeting was attended by 140 foresters, social scientists and aid agency officials. However, a lack of biological scientists, especially taxonomists, in the audience, severely limited its capability to deal with biodiversity issues. Twenty countries were represented and the organizers should be commended for supporting attendance of delegates from countries rarely seen at international seminars, such as Bhutan, Cambodia, Laos and Myanmar.

The idea of community forestry starts with the premise that government agencies have failed to halt deforestation and depletion of biodiversity, due to their bureaucratic nature, their susceptibility to corruption and the fact that national forest protection policies often disenfranchise people living in or near forests. Local people, therefore, have no interest in protecting forest resources which do not belong to them. Strict enforcement of protective measures by government forestry departments is usually infeasible due to inadequate financing and manpower and human rights considerations. Thus, for governments, community forestry is seen as a cost-effective alternative. The reasoning is that if villagers are given control over local forest resources, benefit from them and can pass on those benefits to their children, they will protect the forests to generate income in the future.

Community forests are established by contracts between governments and communities, usually after lengthy negotiations in which the villagers themselves suggest how the contract should be worded. This so-called participatory approach is seen as the key to the success of community forest management. However, in most cases, contracts stipulate that villagers must maintain the area under tree cover. Villagers are often encouraged to decide themselves which forest products can be harvested and in what quantities, but they must provide for the regeneration of the forest and governments usually retain the right to repossess the forest, if villagers convert the land to non-forest uses or attempt to sell or lease it to outsiders.

The seminar began with papers on broad topics such as why biodiversity conservation is needed and the links between conservation and development. Several speakers said that the idea that biodiversity can be conserved in inviolate reserves is outdated. According to D. Gilmore, we must accept the fact that more than 80% of protected areas have people living in them and that community forestry may be the only way of retaining at least some of the biodiversity in such areas.

Subsequent sessions covered case studies of community forestry projects and country reports. The papers covered a very broad geographic range from the montane forests in N.W. Pakistan to the wetlands of Kakadu National Park in Australia. Although vague aphorisms about integrating conservation with development appeared in almost all papers,

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very few speakers described actual examples of both in the same paper. Most dwelt on community development. Very little actual data on biodiversity in community forests was presented.

A notable exception was W. Jackson's & A. Ingle's paper on the Nepal-Australia Community Forestry Project. They estimated that income to villagers from the sale of products from community forests could be as much as 9.5 times the development budget provided by the Nepalese Government. They found 98 plant species in forests managed by local Forest User Groups (FUG's) and only 54 in nearby degraded state forest. However, no data were presented on plant diversity before the forests came under community control.

K. Malhotra also presented data on plant species in community forests in southwest Bengal. In regenerating Sal (*Shorea robusta*) forest managed by village committees, he recorded 122 plant species of which 70 were gathered for domestic or commercial purposes, contributing up to 17% towards total family income. However, no data on biodiversity in non-community forest were provided for comparison.

Simply handing over forests to local communities does not always have desirable results. In P. Branney's and O. Dev's paper on the Nepal–U.K. project, they mentioned that villagers sometimes become so protective of their community forests, that damage to less well-protected state forests actually increases. Almost complete removal of deadwood from community forests for fuel deprives a diverse range of invertebrates of their habitat. Encouragement of economic species and elimination of non-economic species, which might compete with them, result in a more uniform forest with low diversity. Introduced exotic crops may smother local endemic species. What, then, is the future for the multitude of non-economic species within community forests? Is the high diversity of common, domestic plants found in community forests really an adequate substitute for the biodiversity of the original forest? These questions were mostly ignored at the seminar.

I felt uneasy that in none of the community forest projects described at the meeting had biodiversity been measured both before and after project implementation and compared with an undisturbed reference site. Until such data are published, the notion that community forestry can save biodiversity is an assumption, not a fact.

The bottom-up approach, where projects are initiated by villagers, often supported and encouraged by NGO's, seems to be the most popular. For example J. Ahmed and H. Khan explained that the Agha Khan project encourages the formation of village organizations (VO's) to take control of their resources. In Pakistan, VO's persuaded the government to give them control over a state pine forest which was being over cut by unscrupulous logging contractors. Now the VO's have worked out their own rules to harvest timber to meet local requirements without destroying the forest.

The idea that co-operation of local people is essential for the successful management of forests is hardly new. Yet speaker after speaker felt the need to promote the "participatory approach" with what amounted to evangelical zeal. Somehow I expected something more specific from the seminar than the reiteration of vague generalities which have been widely accepted for years.

However, top-down projects, initiated by governments can also be successful. In W. Bengal the government, driven by the need to reduce the costs of forest protection, initiates negotiations with villagers to form Forest Protection Committees (FPC's). K. Malhotra

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claimed that 74% of FPC's were functioning well. Also in China, the government retains control. W. Wei described China's "Voluntary Tree-Planting Campaign" which stipulates that all Chinese citizens have an obligation to plant 3–5 trees per year.

The second half of the meeting was devoted to group discussions to draw up recommendations. The one I attended on planning and implementing community forest projects was, frankly, disappointing. Discussion was too vague and banal to be useful. Simple diagrams of the planning process (problem > knowledge > thinking > design > action) could be applied as easily to making a cup of tea as running a community forest. I think we all know that defining a problem and thinking about it are more likely to lead to a solution than not doing so. Not surprisingly, this failure to address specific issues meant that the nitty-gritty question of how can community forests be implemented to conserve maximum biodiversity was, once again, avoided.

Recommendations such as "develop techniques to determine important elements of biodiversity" were too general to be useful. As the international symposium on measuring and monitoring biodiversity held in Chiang Mai in August clearly demonstrated, there are already a wide range of methods available to quantify biodiversity. The question is: why don't community forestry experts know about them, use them and publish the results?

The conference showed that outside wildlife sanctuaries, in areas earmarked for rual development, community forestry has potential to both improve the quality of life of the rural poor, whilst maintaining as much biodiversity as can reasonably be expected in such areas. However, within protected areas where conservation of biodiversity is the main priority, it was not shown that community forestry could conserve the full range of biodiversity which such areas are meant to protect.

In bringing people from many different countries together and sharing experiences and outlining general principles, the seminar was undoubtedly successful, but I was rather disappointed that I left with very little new information about specific management activities that could help to retain biodiversity in community forests. As K. Warner, RECOFTC technical adviser, put it in her summing up "the objectives of the seminar have not so much been fulfilled as touched upon".

> Stephen Elliott Chiang Mai University