## **GUEST EDITORIAL**

## ON THE IRRELEVANCE OF TROPICAL FORESTERS AND TROPICAL FORESTRY

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While expanding acreages of plantations are portrayed as contributing to forest conservation, natural forests continue to be lost while expertise in natural forest management declines. Why is it that fibre farming flourishes while silvicultural management of diverse forests receives so little attention and suffers such low credibility? Why is it that foresters have been demonized by environmentalists and marginalized by many other forest stakeholders? I believe that these and other problems we face as natural forest managers are to a great extent of our own creation. My reasons for making this rather harsh claim start with the observation that while many of the few foresters still working in natural forests remain focused on maximizing timber yields from mixed-species and multi-aged stands, other stakeholders do not view forests as simply sources of logs for industry. For this and other reasons, many environmentalists confound forest management with degradation and are wary of working with foresters whom they view as representatives of forest-exploiting industries. But given that the financial rates of return from natural forest management for timber are generally lower than from exploitative harvesting followed by forest conversion, environmentalists are sometimes justified in concluding that natural forest management is not a viable landuse. Then there is the problem that what passes for "forest management plans" are usually little more than plans for timber extraction. In light of the general disregard for silviculture, the best hope for most exploited forests is that the timber is harvested using reduced-impact logging techniques. With the appropriate methods, some of these problems could be avoided but the culture of forestry often does not foster development of the multidisciplinary approaches and intellectual flexibility required to deal with a wide diversity of forest management objectives and to address the needs of a diversity of forest

owners. Consequently, rural people often have little faith in foresters, whom they confuse with military personnel and blame for the criminalization of uses of forests they assumed were their own.

There is nothing new about the fact that many foresters, myself included, are prone to forgetting the forests for the trees when confronted by the stimulating challenge of sustaining timber yields. Given the tremendous variety of species with which they have to deal, tropical foresters seem especially prone to this particular form of myopia. That timber yields are not being sustained in the tropics even where reducedimpact logging (RIL) practices are employed makes the challenge even more compelling and drives us to collect more data, to develop more elaborate computer models and to install more long-term silvicultural experiments. But trees are increasingly thought of in terms other than board feet or cubic meters, and sustaining timber yields is increasingly relegated to a secondary or lower status after the goals of sustaining the yield and quality of water, maintaining biodiversity, promoting wildlife populations, encouraging ecotourism, enhancing social welfare, and sequestering carbon. When these other goals of natural forest management are ascendant, instead of hiring foresters, the jobs go to hydrologists, ecologists and social scientists.

It worries me that silviculture, the art and science of forest management, is seldom practised outside of experimental plots. Consequently, most management plans are little more than plans for timber harvesting. Silvicultural interventions shown to be effective in mixed-age forests, such as liberation of future crop trees, are seldom applied outside of experimental plots. Instead, where there is any silviculture, it most often involves enrichment planting, an intervention with a long history of costly failures. Currently, the best hope for forest management is that RIL

techniques will be employed. Although RIL alone falls short of full forest management, where used it represents a big step towards sustainability.

Unfortunately, when foresters argue that natural forest management for timber is financially competitive with forest pillaging and conversion to fibre farms and other more intensive land uses, they play into the hands of economist-backed environmentalists. I have finally had to accept that, except in very remote areas on very poor sites where access to capital is extremely limited, forest maintenance carries fairly high opportunity costs. To be financially competitive, natural forest management for timber may often need to be coupled with other forest-promoting programmes such payments for carbon sequestration and other environmental services. Unfortunately, whereas reforestation is always included in negotiations about environmental service payment, improved forest management is generally disregarded.

Another challenge facing foresters is that the diversity of forest stakeholders has vastly increased. Until recently, most foresters worked for forest industries, either as civil servants, direct employees, or otherwise. Up-to-date natural forest managers, in contrast, should be tending to the needs of a much wider range of clients, from environmental groups and urban water boards to biodiversity prospectors and social welfare agencies. True, there are still state and parastatal foresters, but many are now employed by certification bodies, environmental groups and forest-owning rural communities. Furthermore, given the growing preponderance of private nonindustrial forests in many parts of the world, and the fact that a large and increasing proportion of the remaining forests in the tropics are under the control of indigenous groups and other rural communities, the client base for foresters is broadening. Not surprisingly, given that many of us entered the profession so as to spend time in forests and were trained more in the technical than in the social aspects of forestry, many needs of these important non-industrial forest owners go poorly served.

Another problem faced by natural forest managers is that even where they have removed the epaulettes from their uniforms and shed their military ranks, partially due to their continued law enforcement responsibilities, rural people are prone to confusing foresters with police and the military. It does not help that field foresters are still mostly male, but this gender gap is starting to close in some countries. Widespread devolution of control over forests to rural communities in the tropics is also reducing the frequency of confrontations between foresters and rural people, but there are still incidents when traditional forest uses have been criminalized and foresters are caught in ethical dilemmas. To be fair, however, it is important to point out that even villagers seemingly removed from formal markets are often prone to the same financial forces that drive over-harvesting and other unsustainable practices in commercial industrial concessions. It is not obvious how such fundamental problems can be avoided, but if foresters are to be accepted by rural people and allowed to influence how forests are treated, they must be viewed as contributing to the welfare of their rural and often impoverished clients.

When foresters are allowed to contribute to management decisions in areas owned by rural communities, their recommendations are often inappropriate or made in inappropriate ways. Sometimes the problem is that simply by following the overly complex or otherwise burdensome regulations governing forest management, foresters working with rural communities are bound to fail. In such cases it is often easier and more lucrative for forest owners to participate in informal markets for their timber, that is, to permit or participate in illegal logging. In other instances, foresters do not listen to or understand their clients and, thus, do not appropriately tailor their recommendations appropriately for local conditions, opting instead for a 'one size fits all' approach. Such is the case when foresters produce expensive management plans for communities that lack the institutional capacity for their proper implementation. Unfortunately for foresters who prefer to spend their time in forest, community-based management is a slow, complicated and inherently social process for which they are often little prepared.

Natural forest managers are fighting uphill battles against other environmentalists in the propaganda war for public approval. Visions of massive clearcuts capture the imaginations of people around the world, even where logging is selective. In the same vein, the fact that valuable trees are harvested before forests are converted for agriculture is interpreted as a causative

relationship, even where the conversion was planned. While we might argue that clearcutting can be a viable silvicultural approach, we must acknowledge that far too much logging is carried out without due concern for future harvests or the environment. It is also undeniable that by providing improved access, logging roads accelerate unplanned forest conversion. More subtly, what constitutes sound management becomes increasingly difficult to communicate to an increasingly urban public that grows ever less comfortable with forest interventions of any sort. Even forests with obvious evidence of human impacts are assumed to be virgin, and the treatments recommended by silviculturalists are questioned. When the only accepted approach to conservation is preservation, forest management activities are disallowed when districts and even entire countries ban logging. The 'New Zealand solution' in which tree harvesting is restricted to plantations may sound like a sound environmental strategy, but the benefits are lost when forest products are simply supplied by places with fewer environmental safeguards.

## CONCLUSIONS AND RECOMMENDATIONS

If the potential for natural forest management to contribute to conservation and development is to be reached, then managers need to more effectively demonstrate their potential. Policymakers and forestland owners need to be convinced that there are alternatives to the options of pillaging or protecting forests, and that these alternatives are rendered viable with the input of foresters. While increasing their credibility, natural forest managers need to spend long periods of time in remote areas learning the identity and silvics of dozens or hundreds of species. When out of the forest, they need to inform forest policy-makers while staying up to date with the forest stand modeling tools that will help them portray a wide variety of management scenarios. Sounds Herculean, but if the more ecologically and silviculturally inclined learn to communicate with and obtain the trust of their more socially and economically oriented colleagues, then a team effort may just work.

Natural forest management is only a 'sunset' profession for foresters who remain fixated on timber production. Governmental designation of 'permanent forest estates', while by no means a guarantee of forest permanence, is at least a clear signal that there will for some time be forests in which forest managers can ply their trade. Furthermore, in developing countries that follow a now-familiar trajectory past the 'forest threshold,' at which point forest regrowth counterbalances deforestation, future natural forest managers will have roles to play, albeit in younger and less diverse forests than those in which their predecessors had the privilege and challenge of working.

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