

CONCLUDING COMMENTS

The preceding sections have described a small, highly populated, underdeveloped, mountainous country which is undergoing active growth and evolution. Parts of the mountain range are unstable and this instability is exacerbated by man's use of it, particularly by heavy use of the forests, which has, over many centuries, led to large-scale deforestation.

The dependence of the mixed farming system on the forest in the Middle Hills has become increasingly evident during recent years. At the present time, the system runs largely on a substantial 'capital resource' of forest which accumulated over centuries. However, that capital is being depleted rapidly and the whole system appears to be in danger of running down. It is clear that the long-term sustainability of the farming system in its present form depends on a very substantial increase in the area of land under some form of tree cover. Precisely how this increase should take place is far from clear. The community forestry programmes established during recent years have produced heartening results. However, the scope and vision of these programmes must be greatly expanded if they are to have any real impact. Almost all uncultivated land capable of supporting trees, irrespective of tenure, will need to be managed for tree crops, with the emphasis shifting to planting fodder trees and multipurpose trees on private land.

The work of the project has shown that it is possible to establish a large-scale forestation programme by working in consultation with local villagers. Many of the forests established to date have been based on *Pinus sp.*, frequently *P. roxburghii*. While this species produces no worthwhile fodder and only second-rate fuelwood, it is important ecologically as the first step on the path to returning to a broadleaf forest. It has been shown that it is possible to actively manage stands of trees to encourage the transition from conifers to conifer/broadleaf, to mixed broadleaf stands. This ecological shift should be possible within 20 years in most areas and within a much shorter time in certain places.

The plots, which illustrate different ways of treating the forests to achieve different objectives, have provided a very powerful demonstration for local villagers and visitors alike. This has enabled more meaningful discussion of forest management issues to take

place, not only in the project area itself, but throughout Nepal.

While considerable success has been achieved in forestation in Sindhupalchok and Kabhre Palanchok, a degree of caution should be adopted in translating this experience directly to other districts. There is little doubt that the principles will remain the same, but the detailed implementation of a programme in any particular place will need to take account of the unique blend of biophysical (vegetation, soil, climate, altitude, etc.) and social (ethnic groupings, social structure, history, etc.), elements which exist.

Active management of forests to supply the needs of the rural population in the hill regions of Nepal is a new venture and only the first tentative steps have been taken. However, if forest management is to be carried out directly for the local people, it is only logical that management is carried out by the local people, albeit with guidance from those with technical expertise.

The practical reality is that in any one district there will probably be several hundred patches of forest with many combinations and permutations of altitude, species mix, past history, etc. At present, there are only a few forest rangers located in each district. It is clearly beyond their ability to develop, implement, and supervise management plans or working schemes in each of the individual forest areas. In this situation the local people themselves must become intimately involved in the management of their own forests. Management plans need to consider, among other things, the necessity of having the local operations financially self-sustainable. To eliminate the need for government financial subsidies, costs associated with the forest operations (such as wages of watchers) should be covered by the sale of forest products. Plans and working schemes capable of being implemented by local communities need to be developed. These will need to be designed so that only limited inputs from trained forestry professionals and technicians will be required.

There is no doubt that Nepal is a long way from achieving this goal of self-sustainable forest management. One of the major objectives of the Nepal-Australia Forestry Project during the next five years is to develop and implement

technically and socially sound management schemes within the forests of Sindhupalchok and Kabhre Palanchok. Due to the lack of previous experience and to the presence of so many unknown elements, the pace of progress will necessarily be slow, but this is the challenge for the immediate future.

Forestry is not in essence about trees

It is about people

It is only about trees in so far as they serve the needs of the people.

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