Chapter VI
Implications for Future Action

From the foregoing, it may be concluded that forestry sector policies as such will not have a major impact on the overall land-use patterns in Asia's Key Watersheds. Action should be focussed on approaches in which the forestry section can play an important role. The major areas of attention should be the following.

i) Focus on Elevation Zones between 300 and 3,000 Metres

The percentage of forest cover is still relatively high in the altitudinal ranges between 1,000 and 3,000m, especially in the Brahmaputra and Mekong watersheds. In addition, the lower hill slopes of from 300-1,000m are often the most fragile ones and their deterioration could have a negative impact on lowland agriculture. Therefore future action in forestry should pay particular attention to forests in altitudinal zones between 300 and 3,000m within the respective watersheds.

ii) Forest Management for and by Local Communities

Because of the remoteness of many villages and the intimate role of forests and trees in mountain farming systems and in rural households, forest management has to be practised by and for the local communities. In Nepal, it has been shown that this approach is viable. Forests are coming back in many areas and more than 5,000 user groups are active in managing the forests.

iii) Integrated Area Planning

Although several studies have now rejected the myth that floods in Bangladesh and other floodplains are caused by deforestation in high mountain areas thousands of kilometres away, it is also clear that for small- and medium-sized watersheds, forests are essential for maintaining the regular flow of water so essential for human consumption and irrigation.

Integrated area planning, acknowledging this important role of the forests, is crucial. Various policies such as National Forest Policies, National Environmental Policies, National Land-use Policies, and so on are usually not integrated. Integration within and between nations is an important factor for the development and success of the programmes.

iv) Economic Benefits based on Forestry Products and Environmental Conservation

The fragile environment of this, the youngest geological formation in the world, does not allow for intensive logging practices. The upland areas should never be considered a substantial source of timber for the surrounding plains. Satisfying the timber needs of their own populations is already a major challenge to sustainable forest management. Any economic gains should be based on the trade of sustainably-managed, mountain-specific non-timber forest products of high-value, low-volume, and low perishability.

v) Development of Other Sectors

Development of other sectors, such as energy, will be desirable for mountain communities. One example will be the development of mini- and micro-hydropower for production of electricity, and this will have many positive effects on mountain communities. These efforts will also create job opportunities, in addition to providing higher living standards. Another example is the production of raw materials based on agricultural or forestry products. This will yield income-generating opportunities for mountain communities.

vi) Downstream Benefits for Upland Conservation

New methods have to be devised to ensure that quality water remains available in perpetuity for both upstream and downstream societies and economies. This would include the payment by downstream economies for upstream conservation measures so that infrastructural development for irrigation and hydro-electricity downstream can proceed and no unnecessary level of sacrifice is required from those upstream. Where large rivers cross international boundaries, this will call for cooperation in sharing benefits and costs. The South Asian Association for Regional Cooperation (SAARC) and the Mekong River Commission could be considered as platforms to initiate such dialogues.

vii) International Conventions

The following international conventions have been signed and acceded to.

- *Convention on Biological Diversity*, signed by 168 member countries by 4th June 1993
- *Convention on Climate Change*, signed by 107 countries by 14th August 1997
- *Convention to Combat Desertification*, signed by over 100 nations
- *Convention on International Trade in Endangered Species* (CITES), signed by 134 countries by 16th February 1997
- *Basel Convention on Transboundary Movements of Hazardous Wastes*, signed by 113 countries by 22nd July 1997
- *Convention on Migratory Species* (The Bonn Convention), signed by 51 nations by 1st September 1997
- *Montreal Protocol on Substances that Deplete the Ozone Layer*, 110 governments are Party Members and attended a meeting in September 1997 in Montreal.

Source : UNEP web site on the internet, http://www.unep.org/unep/convent.

The conventions prescribe international collaboration. Most conventions, such as those on Biodiversity, CITES, Climate Change, Ozone, and the Bonn Convention, emphasise environmental conservation. The Combating Desertification Convention is directly concerned with depletion of

forests and forest conservation. Adherence to these international obligations will require considerable investment.

vii) Mangrove Forests

Mangrove forests are important resources existing in the tropical regions of key watersheds. Except for the Yellow River, all the other rivers had mangroves in their deltas. The conditions and extent of mangroves vary, they mostly urgently need rehabilitation. Since these are very important ecological resources, high priority should be given to rebuilding the once severely damaged mangrove resources.

ix) Assistance of the Global Community in the Maintenance of Biodiversity

The very high level of biodiversity in the region of the six key Asian watersheds, ranging from mangroves and tropical vegetation to mountain forests and grasslands, is of global importance and warrants the assistance of the global community, national governments, regional organizations, and local NGOs and community-based organizations. A major factor in preserving the region's biodiversity for the use and enjoyment of future generations will be its linkage with development and income-generating opportunities for the mountain people, the custodians of this diversity.