Status and Prospects of Asian Forests and Forest Products

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Abstract

Forest is a very important natural resource not only because of its various functions, but also because of the great challenge and opportunity it offers to mankind. Although it is a renewable resource, its sustainability and functions require wise and sound management. Forest goods in Asia range from wood to non-wood forest products (NWFPs). Forest services and utilization range from soil and water conservation, to employment, tourism and recreation, mitigation of climate change, conservation of biological diversity, and expression of cultural and spiritual values. The different living standards of the people in a particular country, make various stakeholders place different values on the forest. Universities have a role to play in the conservation and management of the forests, as well as in helping find solutions to problems concerning the sustainability of the forests.

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The role of forests is becoming more and more important while their existence is subjected to increasing pressure brought about by the increase in population, which cause the conversion of forest lands into residential areas and food crop lands, as well as the increased demand for forest products, among others. In the Asian region, forests (natural and plantation) occupy a vast 548 million ha of land out of the total land area of 3,085 million ha. It is not the smallest one as compared with the forestland in Oceania region, which only occupied an area of 198 million ha, and more or less equal to the forest area in North and Central America region, but it only occupied 18% of its area, as compared with 23% for Oceania, 26% for North and Central America, or 22% for Africa.

Asia, with a population density of 117.8 per km² in 1999, is much denser than the world average of 45.8 per km² and is the densest region compared to Oceania of 3.5 per km², South America of 19.4 per km², North and Central America of 22.3 per km², Africa of 25.7 per km², or even Europe of 32.2 per km².

To reduce the pressure on natural forest as a source of raw material (wood) for the industry, plantation forests have been established in large areas in some Asian countries. Trees in such plantation have been mainly utilized recently for pulp and paper industries. There have been objections on the monoculture system of the

plantation forest as having negative environmental and social impacts, but so far there have been no solution. Harvesting in forest plantation also left many residues such as leaves, branches and barks that can still be utilized instead of being burned. The barks of some trees contain substances such as tannin that can be used for wood-based industry.

Among the available products that can be obtained from the forest, the share of wood is only five percent of the total economic value, as in the case of Indonesia's natural forest despite the fact that people in the country rely mostly on such commodity for a living. Leaves of many trees actually contain an essential oil; however, promotion on the utilization, and the added value from such products are still being neglected. Various alternative food crops can be obtained from the forest especially during times when the country faces shortage of staple foods. The problem is that there is a lack of knowledge and ability to utilize such alternative economically including the processing and storage of crops for longer periods of time. A better use of NWFPs will assure the existence of tree plantation and hopefully leads to sustainable forest management.

Deforestation in the Asian forests has recently increased dramatically. The causes of forest degradation are varied. In order to avoid overexploitation of forest products a sound forest planning and management should be implemented.

Attention should also be focused on the deforestation caused by forest fire. Establishment of monoculture forest plantations has been identified as one of the main causes of forest fire. To cope with the limited available space, the people in some parts of this region have to implement a more efficient and intensive use of the land. Agroforestry is one of the alternatives to address such limitation. Efforts to introduce agroforestry has increased recently, but related information and studies on the implementation of agroforestry are still limited.

A timber-oriented exploitation in the management of the forest has to be shifted to sound forest ecosystem management--a condition that could conserve our rich biological diversity. Efforts in reducing CO₂ emission need a deeper and comprehensive study on their effects to the existing natural and plantation forests. The potential social, economic and biological diversity benefits arising from investment in high-quality conservation, agroforestry and sustainable forest management initiatives, however, should be clarified.

Almost all countries in Asia still encounter many problems in implementing and assuring sound sustainable forest management. Universities, as one of the key players in human resources development, have to come up with ideas and solutions to challenge the problem related to sustainable forest management. Unfortunately, most of the universities in Asia only put little attention to it. The introduction of a university networking among the countries in Asia, and a stronger cooperation among them will probably lessen the problems.

References

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