

## Home & Foreign News

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**A FORECAST OF WOOD CONSUMPTION: REGIONAL SHORTAGES IN A WORLD OF POTENTIAL SURPLUS**, 1994 Rome, June 12. The use of wood is increasing rapidly throughout the world. A study made by the Food and Agriculture Organization (FAO) of the United Nations examines the consequences—good and bad—by 1994 of the mounting volume of forest products manufactured by industrial countries and the developing countries' increased reliance on wood for fuel.

At a recent meeting of heads of national forest services the FAO foresaw worldwide wood imbalances by 1994 that would take the form of increased regional wood shortages even though the world's forest resource potential would be in surplus. Certain developed regions, notably Japan and Western Europe, were foreseen as experiencing shortages with increasing frequency, and importing wood and trading wood products heavily. In many developing countries FAO predicted serious shortages of the basic fuel for heating and cooking, with no means for buying substitutes.

Both in the developed and developing worlds the few nations possessing vast forest resources were seen as being in even more advantageous positions in the years ahead.

To deal with the rapidly widening gap between wood-rich and wood-poor regions of the world, FAO urged governments to make heavy investments in activities such as afforestation and reforestation, though these are fields where, it noted, it was often difficult to attract investments. Foresters and forest industrialists were urged to radically change methods of management and ways of using tropical forests, where environmental destruction and waste of resources is rife.

The forecast of world wood consumption was given to delegates from forest services of 79 governments and 10 international organizations attending the Fourth Session of the FAO Committee on Forestry here from May 15 through 19. The Committee meets with FAO's forestry department at two-year intervals to examine the state of forestry in the world and review FAO's forestry programmes.

The FAO predicted an increase over the period 1976-1994 of 75 per cent in world consumption of industrial wood products, mainly in the developed countries, and an



increase of 40 per cent in fuel wood consumption, all in developing countries. World consumption of paper was foreseen as doubling, requirements for wood-based panels (ply-fibreboard and particleboard) would more than double, and sawnwood, needs would increase by 50 per cent.

"From the marketing point of view," said the FAO report to the Committee, "it is most gratifying to see such a healthy future prospect for the wood side of the forestry sector's activities, but it is not without its problems."

Removal without replacement of trees and brush for fuel in wood-poor countries such as those of the African Sahel, the Himalayas, the Indian subcontinent, large parts of Southeast Asia and elsewhere has already caused the disappearance of valuable watershed forests, extensive erosion and consequently droughts floods and the spread of deserts.

People in these lands find themselves drawn into a vicious circle: to meet the most basic daily needs of life, they must destroy resources that provide their food fuel shelter and livelihood.

Other developing countries that have forests but are using them too rapidly without management and reforestation are moving towards the same fate as countries that are now wood-poor.

The need for fuel wood and the loss of forests to agriculture are the main reasons for this.

Among the world's major forest producing regions, North America and the Soviet Union were seen as remaining in wood surplus positions in 1994. In the developing world a few wood-rich countries will then possess 70 per cent of the Third World's forest resources while accounting for only 30 per cent of its consumption.

The Third World's wood shortage by 1994 was foreseen as amounting to some 650 million cubic metres represented in roundwood mainly needed for fuel, or two-thirds of the projected fuel requirement for the two-thirds of the population of the world who live in developing countries.

Fuel wood being bulky and of relatively low value, is not traded internationally. It is cut and used close to the source.

Among the wood-rich developing countries are Brazil, Indonesia and certain of the West African nations. The development of forestry and the income earned from export of wood and wood products is playing an increasingly important role in their national development plans.

Still, even with the worldwide increase in wood consumption, the FAO maintains that the total potential of the earth's forest resources will remain ahead of consumption in



1994. The time required to maintain this potential surplus of a resource that is, at least theoretically, infinitely renewable is, however, running out. The difficulty lies in attracting sufficient investment and in changing ways of managing and using forests and wood.

The FAO believes that the required level of investment would average \$47,000 million per year over the 1976-1994 period.

But such investment is difficult to attract to forestry. Funds from international sources such as the World Bank, the United Nations Development Programme and the newly created UN International Fund for Agricultural Development can supply only a fraction of these needs. Private investment is hard to get for the kind of projects most urgently required by developing countries, for example wood lots for fuel and improvement of the overall quality of the environment.

The primary responsibility for forestry investment remains, therefore, with governments. Forest services, however, find themselves at a disadvantage in competing with agriculture, industry and the military, where urgency is more easily demonstrated and results, compared to growing trees, are more rapid.

An important factor in the growing imbalance of the world's wood resources is inherent in the nature of forests and the way forestry is practiced.

Temperate forests contain relatively few species, which become even fewer where the climate is colder. Their main species are conifers and certain hardwoods that are not very dense. The mixed tropical hardwood forests contain hundreds of species of different and often unknown properties. They are located in areas with hot, humid climates, often remote, and the trees are difficult and expensive to extract, process and market. But tropical forestry, as it is generally practiced, is based on methods originally developed for temperate zones and is extremely wasteful of all those species that are unknown or unwanted on international timber markets.

Dr. K.F.S. King, Assistant Director-General incharge of FAO's forestry department, told the chiefs of national forest services that many of their most strongly held attitudes about tropical forestry needed to be radically transformed. With serious shortages on the horizon, he said, it made no sense to continue managing these forests with methods that are outmoded and ill suited to man's needs.

Instead of "creaming" mixed tropical forests of the most valuable woods at the expense of wasteful destruction of most of the other species, he recommended that the unmarketable species be utilized as a source of fibres for wood products such as pulp and wood-based panels. Newly developed industrial processes make this possible and increasingly economical, but well established manufacturing and marketing habits tend to resist innovation.



Among other major questions discussed by the Committee were the integration of forestry and agriculture and the creation of small scale forest industries, both of these recommended by FAO as policies well suited to developing countries.

Agri-silviculture, the harmonization of forestry and agriculture, was suggested as "a prerequisite to halting the alarming forest destruction and degradation by shifting cultivation." Adapted to the differing conditions of developing countries, it was also seen as generally well suited to the way of life of people engaged in small scale farming.—

Concerning small scale industry, the Committee's final report recommended that "there is a real need in the developing world for plants of the minimum size capable of producing a product of acceptable quality for the domestic market." These, it added, "should be labour intensive if possible, while utilizing technologies which are not obsolete."

FAO is currently engaged in an intensive programme in this field in cooperation with leading forest industries. The programme has so far produced 10 design studies with 25 more in preparation. The studies are for wood-based panel mills, saw mills and energy generation, and include the integration of primary and secondary forest industries.

The Committee's report said that "from analysis of the models it seems that wood-based panel plants would be able to hold their own economically given protection against dumping. However, in the case of small scale pulp mills, considerable protection, justifiable only on socio-economic grounds, would be required."

The Committee recommended that FAO expand this work to include development of small industries based on wood and wood residues and linked to existing larger scale industrial complexes. It also asked that more emphasis be put on charcoal production, and that consideration be given to small industries based on forest products other than wood, such as naval stores, honey, mushroom cultivation, medicinal and other herbs common to forests.