# TRENDS IN OWNERSHIPS AND POLICIES RELATIVE TO FOREST RESOURCES

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#### Summary

Major trends in forestland ownership are summarized for Asia and the Pacific, Japan, the Near East, Africa, Europe and the former USSR, Latin America and the Caribbean, and North America. A number of issues and emerging trends in forest management policies and institutions are presented. These issues and trends include comprehensive planning, timber concession and subsidy reform, land ownership and tenure, decentralization and privatization, and increased participation in forest planning and management.

Over the past 8000 years, the development of civilization, in concert with the expansion and intensification of human activities over the past two centuries, have brought great changes in the area and character of forests globally. In addition, the concepts of ownership of forests are changing. Ownership has in general been interpreted as

conveying the right to determine details of management, including the right to sell trees for harvest, to clear the land for agriculture or for real estate development, or to preserve the forest for future needs, such as hunting or personal or public pleasure. The major shift is the recognition that the public has a vital interest globally in forests as an essential element in the human habitat.

Forestlands are held both privately and publicly in many countries. Exceptions exist in the Scandinavian countries, where public interests in forests have long been recognized and management is closely regulated. Throughout the world, governments largely determine how forests should be used. In the industrialized countries, a substantial percentage of remaining forest is on public lands. In the US, for example, the National Forest System includes 77 million ha, more than a quarter of all forestland. In developing countries, over 80% of the closed forest area is public land. Governments have commonly taken over the authority and responsibility for managing forests from indigenous communities, which traditionally used them in accordance with their own laws.

Government policies influence even the use of private forests, intentionally or not. Because commercial forestry involves holding a growing asset for long periods, returns to private investors are sensitive to credit costs, inflation, taxes on land and capital assets, and other economic factors greatly affected by government policy. Although the cover in industrialized countries has not changed significantly in recent years, forest cover in developing countries was shrinking in the late 1970s by about  $(11 \times 10^6)$  hectares per year. (see *Trends in Resources Provided by Forests.*) This chapter outlines the major trends in ownership, policies, and institutional arrangements relative to forest management.

#### 1. Introduction

The quantity and quality of information provided by global and regional assessments are largely dependent on the capacity of national forest inventory systems to collect and analyze data at national and subnational levels. This varies between developing and developed countries in terms of how often comprehensive national forest inventories are carried out.

In most developing countries and countries in transition, the majority of forestland is state property; public forest services/institutions have been responsible for managing this land. Public forest enterprises have also been organized in many developing countries, under free markets as well as central planning systems, to exploit the forest resource, and, in some cases, also to control and supervise the marketing of forest products.

#### 2. Trends in Forest Ownership

### 2.1 Asia and the Pacific

Asia, the Indian subcontinent, Australia, and the island chain of the Southwestern Pacific contain about 16% of the world's forests. Forest decline in Asia and Oceania has occurred mainly through clearing for agriculture and timber. High population densities

have also contributed to forest degradation through fuel wood and fodder harvesting, cattle grazing, land invasion and shifting cultivation, and timber harvesting for local construction.

Throughout Asia and Oceania, most forests are under the control of central or state governments. Private companies wield considerable influence over forestry in the region. The private sector has invested heavily in harvesting equipment and processing facilities and, more recently, in forest plantations. Commercial forest operations provide millions of jobs throughout the region, and contribute millions of dollars each year to government coffers through the taxes and royalties paid. The transition from centrally planned economies towards market economies in China, Laos, Mongolia, Myanmar, and Vietnam is presenting new challenges and opportunities for the private commercial sector and the governments involved.

Environmental organizations (both local and international) are rapidly gaining in power and influence in many countries. In addition, in many countries of the region, local governments and community organizations are being given increasing levels of responsibility for forest management and protection. This movement is most pronounced in South Asia and the Philippines, where social forestry programs have evolved considerably since the 1970s. In Oceania, tribal and clan ownership and management of forest resources has been a long-standing tradition.

Many countries in Asia and the Pacific have made significant progress in reorienting forest policies and strategies to lay the foundation for sustainable forest management. Particular attention is given to policies that strengthen and enhance the conservation of biological diversity, the environmental functions of forests, economic stability, social and cultural values, forest health, and participatory decision making and management. Forests in Asia are undergoing two types of changes of nearly equal measure: gradual changes as a result of rural population pressure (for example, intensification and expansion of shifting cultivation practices); and abrupt changes due to centrally planned operations, including government resettlement schemes and large plantation programs.

## 2.2 Japan

The forest industry in Japan was at a primitive stage until 1868, because Japan was ruled under a feudal system. After 1868, a modern forest management system was introduced, and domestic timber use increased as Japan industrialized. After World War II (WWII), Japan experienced rapid economic growth and joined the ranks of the developed countries. Although 60% of Japan is forested, the domestic wood industry has decreased in importance since the end of WWII. In particular, many old growth forest preservation efforts occurred in the northern part of Japan in the 1980s.

Smaller, privately owned forests dominate in Japan; roughly 2/3 of forestlands are private and 1/3 is national forest. There are approximately 2.5 million private forest owners in Japan, most consisting of very small land areas. Approximately 58% of private owners own less than 1 ha (2.47 acre). Only about 1300 owners (0.1% of total forest owners) own 50 ha or more.

## 2.3 The Near East (Southwest Asia)

The Near East region has never been heavily forested due to its harsh climatic conditions. Forests now cover about 2% of the land area of the Near East region. In 1990, it was calculated that 330 000 ha were in plantations, the rest in natural forest. Much forestland has been degraded by fire, overgrazing, and clear-cutting for local use of wood products. Forces having an impact on forest resources in the Near East region include urbanization, economic changes, and warfare. As with most other developing regions, the Near East is undergoing rapid urbanization, including both seasonal and permanent migration of rural populations to urban areas.

At various times in the past in Turkey, forestry was under the ministry of Agriculture. In most of the other countries in the region, forestry is organized as a department under the Ministry of Agriculture, and most of the forests and woodlands are state owned. Although countries of the Near East have not yet followed the trend in many other parts of the world towards the privatization of forests and expansion of user rights over forest products, they have been examining the pros and cons of such a course of action.

Economic difficulties in most of the region's countries have been one of the main constraints to more efficient conservation and sustainable management of natural resources. However, strong economies in some of the wealthier countries (for example, Saudi Arabia, the United Arab Emirates, Kuwait, Libya, and Oman) have enabled them to allocate considerable financial resources to the establishment of areas of green cover. National and regional disputes and wars have also been a cause of serious forest resource degradation in some countries of the region (for example, Afghanistan, Iraq, and Lebanon).

Forest protection is considered one of the main activities of forestry departments in many countries of the region. This includes combating forest fires and controlling grazing, encroachment, and illegal cuttings. Some efforts have also been made to conserve the region's remaining mangrove forests.

#### 2.4 Africa

In 1995, African forests accounted for about 15% of the world total. Nearly 3/4 of the original tropical moist forests in West Africa were lost over the last 50 years of the twentieth century. Several countries lost more than 90% of their original forest cover in this short period, as populations exploded and the demand for agricultural land soared. Much of the West African tropical humid forest, located mainly in lowland areas and accessible to the coast, has undergone substantial commercial harvesting. In many areas, these forests have been converted to agricultural uses. In Nigeria and Cote d'Ivoire, for example, primary forests were heavily logged in the 1970s, and expansion of agriculture onto forestlands has occurred during the intervening period.

Timber harvesting has intensified in some West African countries, and many timber countries are now operating in Central Africa, which contains more than 90% of the region's remaining rainforests. Political instability has enabled exploitative use to be made of timber resources in the Congo Basin. Pressure on Africa's extensive open

forests is also heavy in many places because of agricultural expansion and increased fuel wood collection and livestock grazing. Changes in forests in Africa are dominated by transition from closed forest, through intermediary stages of depletion, to shrub and short fallow, indicating an extension of subsistence farming under the pressure of rural population growth.

Forest legislation has been in place in most countries since the beginning of the nineteenth century, even though forest policies as such did not exist. Weaknesses in the forest laws and lack of enforcement have limited their effectiveness in protecting forests and wildlife resources.

## 2.5 Europe and the Former USSR

Europe has nearly 215 million ha of forest and other wooded land, and almost all of Europe's forest is managed. Slightly less than one-half of Europe's forestland is in private hands. In part, these belong to large traditional family holdings, or the forest industries, but in many countries, there are thousands, even millions, of owners with very small holdings.

Europe has been through a cycle of deforestation and reforestation. In 1995, about 40% of the potentially forested land supported forest, and there was virtually no primary forest remaining. Many countries are undertaking a fundamental review and reappraisal of their national forestry legislation and policies. Many are drawing up strategies and new policy plans that are concerned with giving the proper weight to environmental and social functions of forests and setting up effective and efficient systems for consultation and implementation. The trend is to conserve what is left of the primary forests and to manage secondary forests for long-term use. An issue for several countries in transition is the restitution or privatization of forestland, which may take many years to resolve.

The former USSR, has some of the largest area of forest (816 million ha) in the world. Wide areas of natural forest have experienced minimal human intervention, and these areas are reserves of biological diversity of global importance. The economic and physical disruptions associated with economic transition, including lack of finance, uncertainty about ownership, enterprise debt (leading to barter), and infrastructure problems have all impacted the rate of harvest of the forestlands. The majority of wood-processing forest enterprises have been privatized, and practically all forestlands still belong to the state.

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# **Biographical Sketch**

Clare M. Ryan is assistant professor of natural resource policy and conflict management at the College of Forest Resources at the University of Washington. She teaches graduate and undergraduate courses in natural resource policy and administration, and environmental conflict management. Her research interests address environmental regulatory policy, public administration, and dispute resolution and conflict management. Within the theme of policy and law, she is particularly interested in collaborative development and implementation of natural resource policy. Related to this are interests in the roles that agencies play in the policy development and implementation process, and how science is incorporated into the policy making process. Within the theme of conflict management, she is interested in studying

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