# ANNUAL REPORT

# ON

## TRENDS OF FORESTRY

Fiscal Year 2000

(SUMMARY)

(Provisional Translation)

## FORESTRY AGENCY

Ministry of Agriculture, Forestry and Fisheries, Japan

### Table of Contents

Chapter	: History of previous forestry policy and the direction of the new basic policy
Chapter	: Appropriate forest management and conservation to fulfill multi-functionality 5
Chapter	: Development of forestry and mountain villages responsible for maintaining healthy and vital forests
Chapter	: Promoting wood industry that supports cyclical use of forest resources 9
Chapter	: Reform of national forest management to create "forests for the people" · · · · 11
Chapter	: Global trends in forest and forestry and Japan's contributions

# History of previous forestry policy and the direction of the new basic policy

# 1 The objectives of the former Forestry Basic Law and the current state of forest and forestry

#### ( Background of the former Forestry Basic Law )

With the postwar reconstruction and high economic growth after World War II, wood demand increased rapidly and there was a pressing need for enhancing wood supply capability in Japan. Private forest, which account for about 60% of Japan's total forest area was considered to be one of the obstacles to the development of forestry and the expansion of wood supply because of its considerably small-scale ownership.

The Forestry Basic Law was enacted in 1964 in order to strengthen forestry productivity and to raise the status of forestry workers, with the premise of active demand for wood and a high motivation for forest management.

#### ( Policy development and evaluation under the former Forestry Basic Law )

Various measures under the Forestry Basic Law helped to greatly increase forest resources as well as wood supply capability.

However, the scale of forest management size did not expand, especially among small-scale forest owners. Moreover, the demand has shifted drastically from domestic timber, which is traded in small volumes with numerous varieties and through many distribution stages, to imported timber, which is traded through simpler distribution route in large volumes of consistent quality and with high competency.

Subsequently, under the influence of appreciating yen, wood demand reached a peak and forest-products prices was became stagnant for a long time. Improvement of the structure of forest ownership as well as the production, distribution and processing of wood came to a standstill and the forestry and wood industry became stagnant.

#### ( The current state of forest and forestry )

The public interest or expectations toward forests has become more diverse and more vocal and thus forest management policy to meet the above mentioned interests or expectations is now being sought.

On the other hand, due to the low and stagnating wood prices and the increase of expenses including labor costs, the profitability of forestry has been declining sharply and forest owners, especially small-scale ones, have lost their interest toward forestry.

Amidst increasing calls for sustainable economic society, it is essential to promote the "cyclical use of forest resources" in which wood is produced cyclically and used effciently with forests being nurtured at the same time. It is critical that not only forest owners themselves but also the society as a whole will make the utmost effort to promote this cyclical use of forest resources.

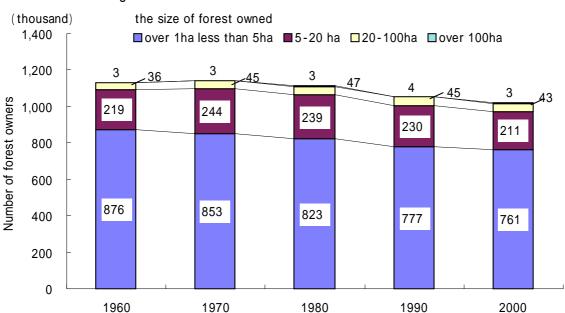


Fig. - 1 Trend of the Number of Individual Forest Owners

Source: Ministry of Agriculture, Forestry and Fisheries,

"the Census of Agriculture and Forestry" (1960,1970,1980,1990)

"Summary of the 2000 Census Agriculture and Forestry" (2000)

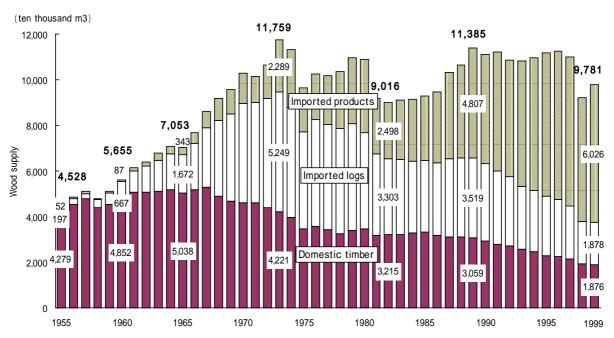


Fig. - 2 Trend of Wood Supply (Industrial wood)

Source: Forestry Agency, "Demand and Supply of Woods"

#### 2 Direction of the new basic policy

#### ( Philosophy of the new basic policy )

The philosophy of the new basic policy is to fulfill the multi-functional role of forests in a sustainable way through "sustainable forest management", under which forests are conserved and utilized while maintaining their soundness and viability.

Also, in consideration of the fact that both forestry and wood industry play an important role in the improvement of forests as well as the cyclical use of forest resources required to help their sound development and to promote production, supply and use of wood in line with public needs.

#### ( Direction of the new basic policy development )

In order to maintain soundness and vitality of forests, and to meet public demands toward forest management according to forest classifications, introduction of long-term cyclical forest management, constant implementation of forestry works including thinning of plantation forests must be promoted.

In order that forestry will be able to continue to be responsible for the maintenance of forests as well as the sustainable use of forest resources, fostering work force capable of effective and stable forest management, intensifying forest works and management, securing and developing employees must be promoted.

In order to stabilize the supply of wood products with reliable quality in line with needs, increasing efficiency of distribution system through information technology and utilizing local timber must be promoted for the wood industry will be able to contribute to the cyclical use of forest resources in future.

In order that mountain villages will be able to play an important role in creating safe and prolific national land, while utilizing local resources, mountain villages need to be vitalized by creating and securing diverse job opportunities, by improving of living conditions and by promoting interchange activities with cities.

Fig. - 3 Long-term Cyclical Forest Management

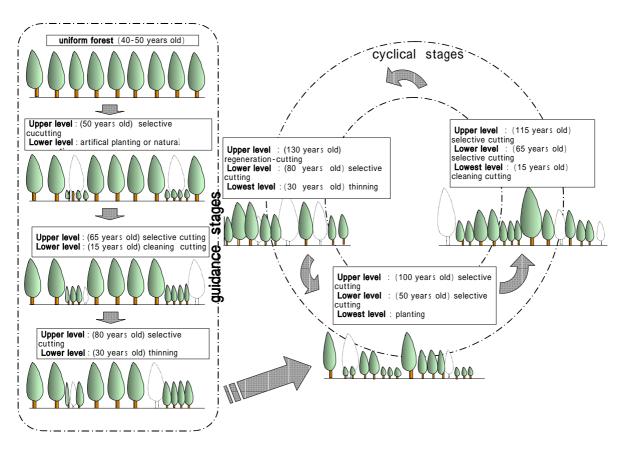
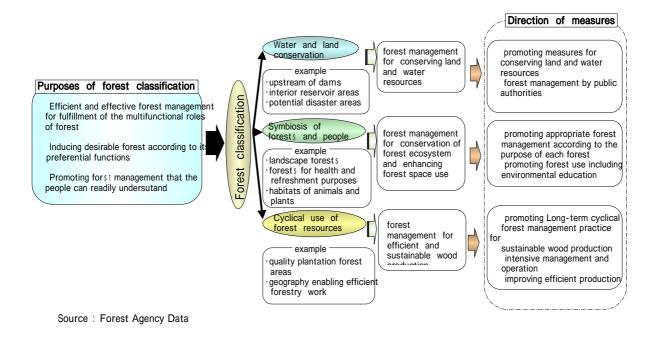


Fig. - 4 Forest Classifications



# Appropriate forest management and conservation to fulfill multi-functionality

#### 1 Current state of forest resources

The Japanese archipelago stretches from north to south in a narrow arc and has ranges of mountains as its backbone. In the mountainous regions of the subarctic zone in Hokkaido and those to the north of the Chubu district, there are forests of conifers such as fir and Japanese spruce. Forests of deciduous broad-leaved trees as typified by beech, oaks etc. are seen mainly in eastern Japan. In western Japan, forests of evergreen broad-leaved trees are widely distributed and in the Southwestern Islands subtropical forests of mangroves, etc. are also found.

Forests cover about 25 million hectares or about 70% of Japan's national land area. Of the entire forested area, planted forests make up 10 million hectares accounting for 41% and natural forests and others make up 15 million hectares accounting for 59%. The current growing stock is about 3.8 billion with an average annual growth of 80 million consisting mainly of planted forest, which mostly require further tending and thinning.

#### 2 Recent development of forests and forestry

8.87 million hectares of forests is designated as Protection Forests for conserving water resources, preventing natural disasters, preserving living environment, etc.. While putting certain restrictions on felling and development, special measures on taxation system, loans, etc. are being taken for forest owners.

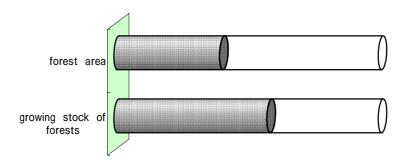
Since many of the planted forests are nearing the time for thinning, urgent and systematic thinning from 2000 to 2004 for 1.5 million hectares has started.

In recent years, there have been new initiatives for forest management such as the support for tree planting and thinning under collaboration with municipalities both downstream and upstream, the creation of fund for forest management utilizing water charges, and public participation in forest management.

#### 3 Diversified demands for forests and the role of forests

Changing with the times, the public demands with regards to forests have become more diverse. Especially in recent years, the demands are becoming even more diversified and specific such as a growing expectation for recreation, the conservation of the natural environment, and the mitigation of global warming.

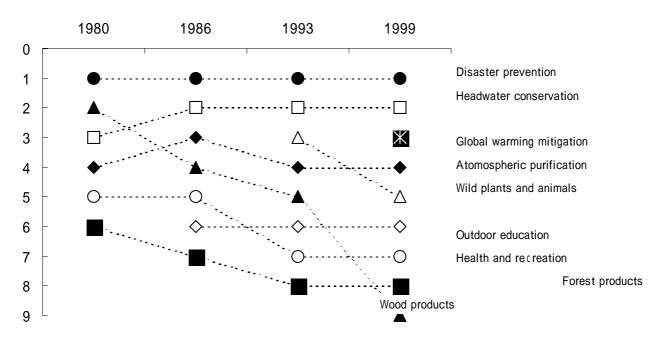
Fig. - 1 State of Japanese Forests



Source: ForestryAgency Data Note: 1) Figures in parentheses indicate the percentage.

- 2) Figures are estimate values as of March 31, 1999.
- 3) Percentages calculated by using the figures shown in the graph are not identical to the parenthesized percentages due to rounding-off.

Fig. - 2 Trend of Public Expectations with regards to Forests



Source: Cabinet Office, "Public opinion poll on forests and forestry"(1980), "Public opinion poll on green and trees"(1986), "Public opinion poll on forests and greens"(1993) and "Public opinion poll on forests and human life"(1999)

Note: 1) Answers are by multiple-choice choosing three out of plural answers and listed in the order of higher expectation rate.

2) All choices are included except answers to "none in particular" and "unknown".

#### Development of forestry and mountain villages responsible for

#### maintaining healthy and vital forests

#### 1 Trend of forest management

94% of forest owners have less than 20 hectares of forest, respectively, this indicates that the scale of each private forest is extremely small in Japan. While forest-product prices have been going down for a long time, management costs, such as labor costs etc., have gone up, then the profitability of forestry has been reduced substantialy. Therefore, the interest in forest management has been decreasing, especially among small-scale forestry owners.

There are approximately 6,000 forestry enterprises working on with log production and sillviculture, 64% of which are private. Many of them are small and weak in management. Forest management units are small and scattered, and the stagnant forestry production of recent forest owners have made it more difficult to maintain business and to improve operational efficiency.

The number of employees in forestry has decreased to 70,000 of which 29% are older than 65 years old, this indicates that forestry employees are decreasing and getting older noticeably.

#### 2 Present state of production base improvement

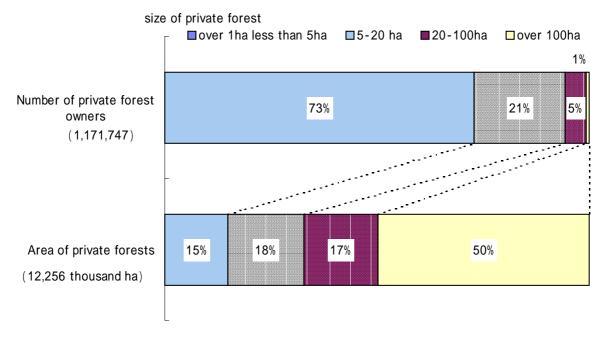
In order to proceed with efficient forestry works and appropriate conservation and management of forests, the forest roads and branch roads are under improvement. Moreover, to accomodate geographical features and forestry implementation, the development and practical application of high performance forestry machines and the establishment of an operation system by combining several high performance forestry machines are on going.

#### 3 Comprehensive measures for revitalizing mountain villages

Mountain villages cover 50% of Japan's national land area but the population accounts for only 4% and the ratio of the elderly people (over 65) is 24%, this is significantly high in comparison to the national average of 15%. Depopulation and aging in mountain villages is advancing.

In order to promote the settlement of people from cities as well as people in mountain villages comprehensive measures are essential, including creating and securing various business oppotunities utilizing regional resources, providing comfortable living condition and promoting exchange between urban and rural communities by making the most of positive feature of mountain villages.

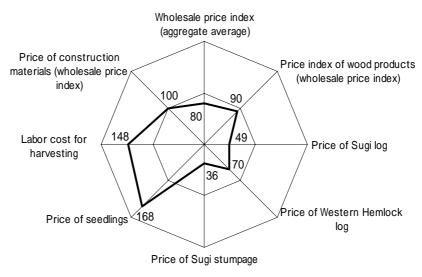
Fig. - 1 Number of Private Forest Owners and Rate of Forests by Size (2000)



Source: Ministry of Agriculture, Forestry and Fisheries, "Summary of the 2000 Census of Agriculture and Forestry"

Note: Survey targets were private forest owners of more than 1ha forest.

Fig. - 2 Factors affecting Forestry Production (Comparison between 1980 and 1999)



Source: Bank of Japan, "Wholesale price index long-term time-series data",

Ministry of Agriculture, Forestry and Fisheries, "Prices of Lumber",

Ministry of Health, Labour and Welfare, "Wage survey of forestry workers by occupation",

Forestry Agency Data

Note: Figures are indexes in 1999 on the basis of the standard in 1980 =100.

#### Promoting wood industry that supports cyclical use of forest

#### resources

#### 1 Trend of wood demand

The demand for wood products (in terms of logs) in 2000 was 97.81 million , a slight increase of 6% from the previous year but was below 100 million for the second consecutive year.

The supply of domestic timber in 2000 was 19 million , 3% less than the previous year. On the other hand, the supply of imported timber increased to 79 million , 9% up from the previous year.

#### 2 Trend of wood import and supply by use of woods

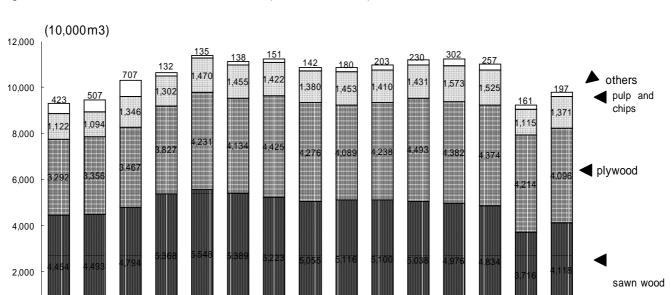
The import volume of softwood lumber products, which are in high demand as building materials, increased from 1999.

By producing area: North American timber still accounts for the majority with about 60% but its share has been decreasing in recent years. On the other hand, European softwood lumber products, which accounted for only 8% in 1995, expanded their share to 25% in 2000 with the increasing price competitiveness due to the devalued Euro.

#### 3 Current state of wood industry

The number of new housing construction decreased from the high level of 1.71 million houses in 1990 and has been fluctuating around 1.2 million due to the sluggish economy, etc.

Amidst a growing demand for housing quality, with the amendment of the "Building Standard Law" (June, 1998) and the enforcement of the "Housing Quality Assurance Law" (April, 2000), the demand for wood has drastically shifted from lumber with excellent surface to kiln-dried lumber or laminated lumber with reliable quality and performance.



1993

1995

1997

1999

Fig. - 1 Trend of Demand for Wood (Industrial Use)

Source : Forestry Agency, "Demand and supply of Wood Chart"

1989

Note: Totals are inconsistent due to rounding.

1987

0

1985

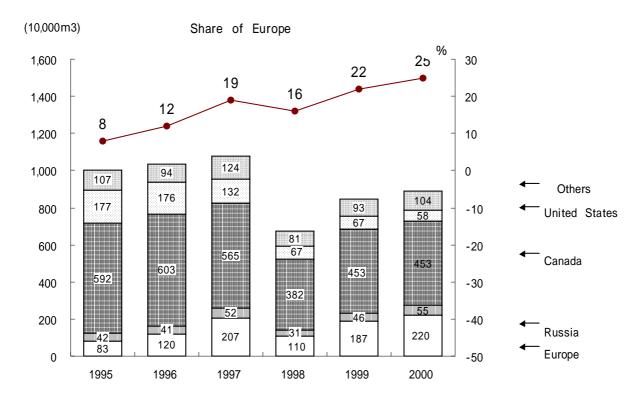


Fig. - 2 Trend of Import Volume of Softwood Lumber Products

1991

Source: Ministry of Finance, "Trade Statistics"

Notes: 1) Wood products include processed woods.
2) Totals are inconsistent due to rounding.

#### Reform of national forest management to create "forests for

#### the people"

#### 1 Steady progress of the reform

In order to manage the national forests as "common assets of the nation, with the people's participation, for the sake of people" and to make it really worth of being named as "forests for the people", a shift to social-benefit-oriented forest management as well as the establishment of a simple and efficient operation system through the streamlining and cutting back of organizations and personnel, is being put forward based on laws concerning the reform of national forests enacted in 1998.

#### 2 Measures for the realization of "forests for the people"

#### ( Social-benefit-oriented forest management )

The national forests cover 7.6 million hectares, approximately 20% of Japan's land area and about 30% of the entire forest area. A large portion of these forests are located in the backbone mountain ranges or upstream water reservoir areas, including pristine natural forests.

The reform process enlarged the area of forests managed primarily for social objectives, from 50% to 80% of total forest area. These objectives include water resource management, soil conservation, recreational use and environment protection.

In addition to the conventional practice of designating protected forests, Green Corridors system which connects protected forests (mainly the forest ecosystem reserves) is introduced to formulate a network of wildlife habitats.

#### ( Effective use of the national forest resources )

Taking advantages of diverse forest resource, the national forests supply rare species timbers or large diameter logs indispensable for the construction of large scale public facilities and traditional buildings such as shrines and temples, etc., which are seldom produced nowadays from private forests.

#### ( Aiming at administration and management of national forests open to the public )

Many national forests are open to the public as "Recreational Forests" for use for health, culture and educational purposes. Local national forest offices work with forestry volunteer groups to establish or improve forest.

Information on forests as well as on forestry is provided to public through various events including forest markets or through websites.

Fig. - 1 Re-organization of the National Forests Zoning System for more social-benefit-oriented Forest Management

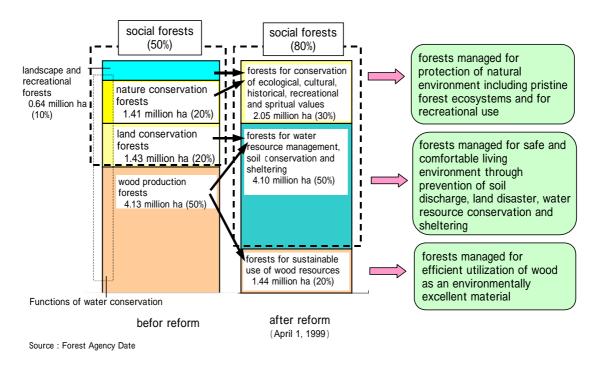
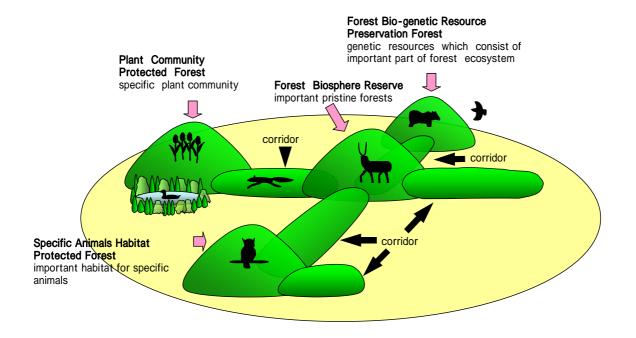


Fig. - 2 Green Corridor System



#### Global trends in forest and forestry and Japan's contributions

#### 1 Forest resources in the world and the current state of wood trading

According to FAO, the area of the world's forests was estimated to be 3,454 million hectares, covering about 27% of the land areas. Between 1990 and 1995, a net loss of 56.3 million hectares of forests was estimated, which is 1.5 times as large as the Japan's entire land area.

Japan is the second largest timber importing-country after the United States. In light of this, Japan aims to emphasize viewpoints of global environmental issues, the sustainable use of resources, the balance of right and responsibility between exporting and importing countries, etc.

#### 2 Global trends in forests and forestry

#### ( Global trends toward sustainable forest management )

In October 2000, the United Nations Economic and Social Council adopted the resolution establishing the United Nations Forest Forum .

In July 2000, the illegal logging issue was discussed at the Kyushu-Okinawa Summit, and G-8 members asserted that they would vigorously tackle this issue. Japan, as a member country of G8, has determined to look into concrete measures.

Certification and labeling of sustainable forest management, the Forest Stewardship Council (FSC), the International Organization for Standardization (ISO) etc., has been developing internationally. In Japan, a forest owner in Mie Prefecture and a forest owners' cooperative in Kochi Prefecture acquired FSC certification in February and in October, 2000 respectively.

#### ( Fighting global warming )

The Sixth Conference of the Parties to the United Nations Framework Convention on Climate Change (COP6) held in November, 2000, discussed how to implement the Kyoto Protocol. The Japanese government maintained that activities to preserve and increase absorbents must be promoted and not be restricted to fight global warming, but it did not reach an agreement. The deliberations are to be resumed in July, 2001.

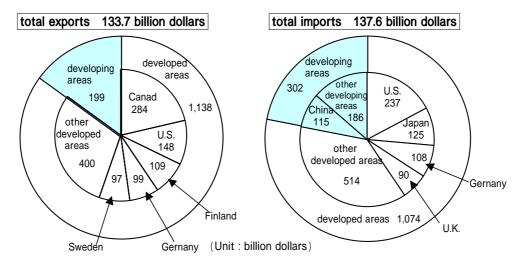
Japan determined the "Outline for Promotion of Efforts to Mitigate Global Warming" in July, 1998, and enforced the "Law Promoting Measures to Fight Global Warming" in the following April. With the reference to the Outline, the Forestry Agency drew up the "Basic Direction of Measures to Fight Global Warming in the spheres of Forests, Forestry and the Timber Industry" and is vigorously pressing forward with this issue by promoting afforestation projects in devastated areas.

#### 3 Japan's contribution to promoting sustainable forest management

Japan is actively promoting bilateral technical cooperation, through the Japan International Cooperation Agency (JICA), financial contributions to international organizations including the International Tropical Timber Organization (ITTO), the Food and Agriculture Organization of the United Nations (FAO) and projects sponsored by the Forestry Agency,

etc.

Fig. - 1 Values of the World's Exports and Imports of Timber



Source: FAO, "STATISTICS DATABASE" (updated on October 5th, 2000 and effective as of December, 2000) Note: Totals are inconsistent due to rounding off of figures.

Fig. - 2 Outline of the Overall Measures to Address Global Warming

