Chapter II Forestry and Hilly and Mountainous Rural Communities

1. Forestry

(1) Forestry Production

Total forestry output in 2019 was 498 billion yen, which was an decrease of 1% over the previous year. Wood production accounted for 50% of forestry output and reached 270 billion yen in 2019, which was an increase of 2% over the previous year (Fig. II-1).

Supply of domestic wood totaled 31.0 million m³ in 2019. Of the supply, logs for sawn lumber, plywood and chips accounted for 21.9 million m³, maintaining an uptrend from 2002. By tree species, the volume of Sugi (Japanese cedar) production was 58%, Hinoki (Japanese cypress) 14%, Japanese larch 10%, and hardwood 9% (Fig. II-2).

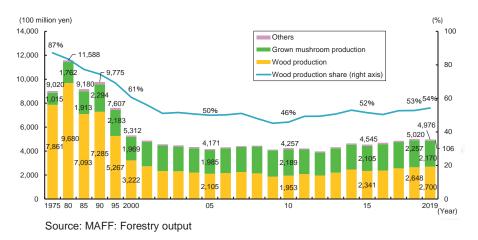


Fig. II-1 Gross forestry output

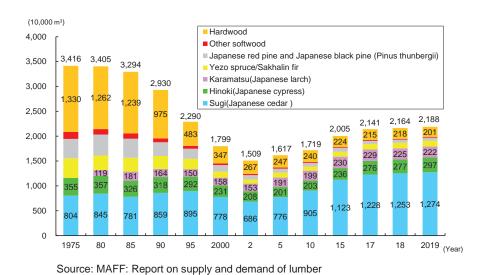


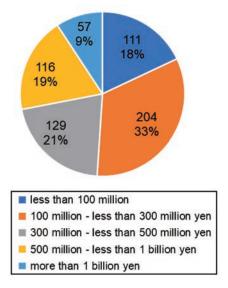
Fig. II-2 Volume of domestic roundwood

(2) Forestry Management

The 2015 Census of Agriculture and Forestry shows that the number of forestry households was 830 thousand, 88% of which owned less than 10 ha of forest area. Small-scaled forest ownership remains dominant (Fig. II-3).

It is necessary to strengthen the management base of forestry owners' cooperatives in terms of increasing profit return to forest owners and forestry workers.

In May 2020, the Forest Owners' Cooperative Associations Act was revised in order to introduce various cooperation methods between cooperatives, expand regular membership qualifications and strengthen their business execution systems.



Source: Forest Agency "Statistics on forest owners' cooperative"

Fig. II-3 Number and percentage of forest owners' cooperatives by the amount of transactions



The Yazu Chuo Forestry owners' cooperative in Tottori Prefecture sets on a president, who has practical experience in sales. Under his leadership, the employees manage their sales results and financial status on a daily basis and set individual goals. They are energetically holding briefing sessions to conclude long-term management entrustment contracts and to promote coordination and consolidation of forestry operations. As a result, the wood production rose dramatically from 600 m³ in 2007 to 44 thousand m³ in 2018.



A briefing session for forest owners

(3) Forestry Workforce

According to the 2015 national census, the number of forestry workers was 45,440, tending to decline in the long-term.

On the other hand, permanent employment rate of forestry workers is on growing trend. In addition, the proportion of young forestry workers remains stable while the proportion of young workers in all industries is tending to decline.

Female forestry workers and female prefectural staffs of forestry have established various voluntary groups in Japan. In 2020, the online network "Forest Women's Meeting" was launched with the aim of gathering, learning, and exchanging ideas among women involved in forestry, beyond the boundaries of voluntary groups.

(4) Improvement of Forest Productivity

Consolidating Forestry Operation

The Forestry Agency and prefectures are consolidating forestry operations by developing Forest Management Planners who will conduct proposal-based coordination with forest owners and consolidation of forestry operations.

Municipalities launched the forest area register system in April 2019 to unitarily compile information on forest owners and ownership boundaries and to provide part of such information for forestry management entities.

The Forestry Agency supports to introduce Forest Cloud to prefectures for sharing forest GIS and the forest area register system efficiently.

Development of Forestry Road System

Although Japan has steep terrain and diverse geology, forestry road system has been developed and the total length reached at 383 thousand km in FY2019. The Forestry Agency promotes to develop forestry road system, which contribute to forestry and mountain village life (Fig. II-4).

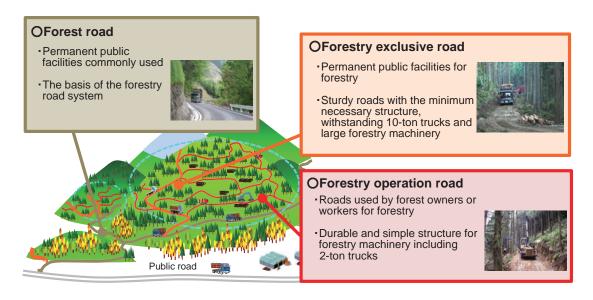


Fig. II-4 Classification and roles of forestry road system

2. Non-wood Forest Products

Non-wood forest products include variety of products such as mushrooms, edible nuts, wild vegetables, Japanese lacquer, bamboo, charcoal and firewood. Non-wood forest products account for about half of the forestry output and play key roles in stimulating rural economies and ensuring employment. The value of non-wood forest products in 2018 was 278.4 billion yen, a decrease of 2% over the previous year.

(1) Mushrooms

Mushrooms earned more than 80% of the value of non-wood forest products in 2019. Production of mushrooms has been flat in recent years, reaching 456,000 tons in 2019.

(2) Other Non-wood Forest Products

Total production of charcoal has been decreasing over the long term, reaching 21,000 tons in 2019. Total fuelwood production was 46,000 m³ in 2019, and it has remained at approximately 50,000 m³ in recent years (converted to logs). Bamboo material had been on growing trend since 2010, but fell to 32,000 tons in 2019, with a decrease of 6% over the previous year. Japanese lacquer production has been increasing in recent years as Japanese lacquer has been adopted in principle for preserving and repairing national treasure and important cultural property buildings (Fig. II-5).

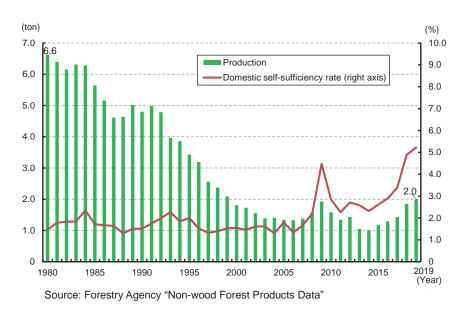


Fig. II-5 Japanese lacquer production



Marukin Co., Ltd. in Nagano Prefecture makes sawdust medium from thinned Sugi (Japanese Cedar) woods for cultivating enokitake mushrooms. Their mushrooms received a high evaluation for using local woods, good texture and flavor, which were used in Michelin-starred restaurants and luxury inns. In addition, the recycle utilization of sawdust medium as organic fertilizer after harvesting is also highly appreciated. They received the Japan Wood Design Award 2020 (social design category) for the first time in the non-wood products sector.



Mushrooms provided on woody sawdust medium made from thinned woods

3. Hilly and Mountainous Rural Communities

(1) Current State of Hilly and Mountainous Rural Communities

Hilly and mountainous rural communities, where people engage in forestry, play a significant role in securing the multiple functions of forests. "Mountain Village Areas Due for Development", designated pursuant to the Mountain Villages Development Act, cover about half of the total land area, accounting for approximately 60% of the total forest area. There are problems such as a decrease in job opportunities and an increase in abandoned farmland due to continuing depopulation and the aging population in such communities.

(2) Revitalization of Hilly and Mountainous Rural Communities

In recent years, there are new movements to use forest spaces in diverse fields such as health promotion, tourism, and education as the people change their lifestyles and diversify their values (Fig. II-6).

The Forestry Agency implements model projects in 16 regions to promote "Forest-related Service Industry" and sharing these results on online forums.

In addition, the Forestry Agency is attempting to use forest including "Recreation Forests" in national forest as tourism resources and field of environmental education and other experiences in order to promote connection between hilly and mountainous rural communities and cities and to increase people who related to these communities.

Fig. II-6 Forest therapy walks