Annual Report on Forest and Forestry in Japan

Fiscal Year 2024

(Summary)

Forestry Agency

Ministry of Agriculture, Forestry and Fisheries, Japan

The Annual Report on Forest and Forestry is a report which the Government of Japan (GOJ) submits to the Diet every year, in accordance with article 10 of the Forest and Forestry Basic Act. This document is a summary of the annual report for fiscal year (FY) 2024.

Table of Contents

Special Topic

Forestry Management and Wood Use to Enhance Biodiversity

Summary

Ensuring healthy biodiversity provides various benefits such as the supply of food, water, and oxygen in the atmosphere, thereby supporting people's livelihoods. Maintaining biodiversity is one of the global issues, alongside climate change, and interest in it is growing.

Geographically, Japan is an archipelago that extends over a long north – south axis and features significant elevation differences from coastal areas to mountain regions, resulting in a wide range of climate zones. Therefore, Japan has a wide range of habitats for various living organisms. Forests, which account for about two-thirds of Japan's land area, exhibit remarkable biodiversity. Japan's forests comprise primeval natural forests that have remained untouched by human activities for a long time, satoyama forests that have been continuously used and managed to provide daily necessities and agricultural materials, such as firewood and charcoal, and planted forests designated for wood production through forestry management. To date, Japan has undertaken biodiversity conservation measures, including the protection and management of primeval natural forests.

In March 2024, the Forestry Agency established the 'Guidelines for Forestry Management to Enhance Forest Biodiversity', drawing on past examples of biodiversity conservation practices. In the current situation, where planted forest resources are abundant and available, it is essential to continue the protection and management of natural forests, contribute to biodiversity through forestry management, promote sustainable wood use, and ensure that Japan's forests are passed down for future generations.

1. The importance of and growing interest in biodiversity

(1) Biodiversity and its significance

Biodiversity is defined in the Basic Act on Biodiversity as " the existence of various ecosystems and the existence of various differences between species or within species."

Biodiversity at three levels—ecosystems, species (interspecies), and genes (intraspecies)—is interrelated. Ensuring diversity in ecosystems provides habitat for different species and populations, contributing to the diversity of species and genes.

The current biodiversity has been formed throughout the history of biological evolution, and when biodiversity is compromised, it requires an extremely long period for recovery.

The conservation of biodiversity in forests supports the proper functioning of the multiple functions of forests - such as wood production and water resource conservation - which are known as ecosystem services. The loss of biodiversity leads to a decline in ecosystem services and the loss of the foundation for future livelihoods.

(2) Recent trends regarding biodiversity

Maintaining biodiversity is one of the global issues alongside climate change. International efforts to address these issues have been promoted under the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC), both of which were adopted in conjunction with the Earth Summit in 1992.

The Kunming-Montreal Global Biodiversity Framework, adopted at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15) Part Two in December 2022, sets forth a goal - commonly referred to as “nature positive” – to take urgent action to halt and reverse biodiversity loss and put nature on a path to recovery by 2030. In addition, the '30by30 target' was established, aiming to conserve at least 30% of both terrestrial and inland water areas, and of marine and coastal areas through protected areas and other effective area-based conservation measures (OECMs).

The Government of Japan (GOJ) adopted the 'National Biodiversity Strategy 2023-2030' at a Cabinet meeting in March 2023. In line with this, the Ministry of Agriculture, Forestry and Fisheries (MAFF) revised the 'Biodiversity Strategy of the Ministry of Agriculture, Forestry and Fisheries' promoting agriculture, forestry, and fisheries with a stronger emphasis on biodiversity conservation.

In April 2023, a system was initiated to certify areas where biodiversity is being conserved through private-sector and other initiatives as ‘Nationally Certified Sustainably Managed Natural Sites’ (Shizen Kyōsei Sites), and to register them in the international database as OECMs. As of March 2025, a total of 328 locations, including company-owned forests and water source forests, have been certified (Fig. 1).

Following the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) released in September 2023, private companies have increasingly recognized the importance of evaluating their dependence on natural capital - including forests - and undertaking initiatives to enhance its multiple functions, such as biodiversity conservation.

Suntory Natural Water Sanctuary, Hyogo
Nishiwaki Monryuyama
(Nishiwaki City, Hyogo Prefecture)

Tajima Forest Co.,Ltd.×’Minna-no-Mori Project’
(Hita City, Oita Prefecture)

Fig.1 Forests certified as Nationally Certified Sustainably Managed Natural Sites

2. Biodiversity in Japan’s Forests and the Conservation measures to date

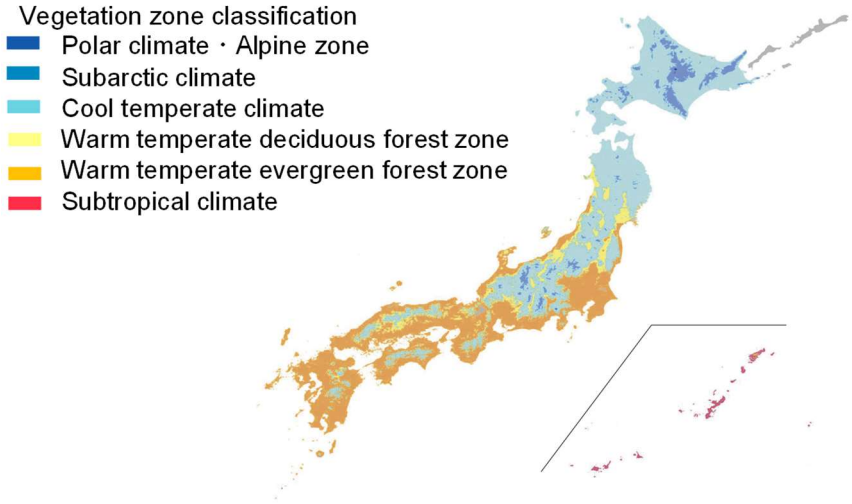
(1) Japan's forests exhibit remarkable biodiversity

Geographically, Japan is an archipelago that extends over a long north – south axis and features significant elevation differences from coastal areas to mountain regions, resulting in a wide range of climate zones (Fig. 2). In addition, the presence of the Ryukyu Islands and the Ogasawara Islands, which possess a unique geological history, has contributed to the development of diverse habitats for a wide range of organisms (Fig. 3).

Forests, which cover approximately two-thirds of the land area, have maintained both their extent and proportion for more than 70 years. Japan ranks third among OECD member

countries in terms of forest coverage. Even in Japan, which is renowned for its rich biodiversity, forests represent the terrestrial ecosystems that harbor the greatest diversity of species.

Forests in Japan undergo changes due to climatic conditions, geographical factors, natural disasters, natural regeneration, and human activities. Consequently, various types of forest have developed, such as primeval natural forests, satoyama forests, and planted forests, each supporting distinct ecosystems.



Source：Forestry Agency

Fig. 2 Distribution of forest vegetation in Japan

Shiretoko （Hokkaido）

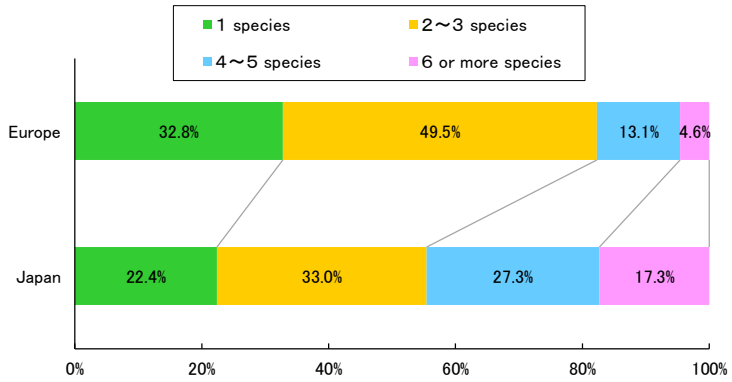
Yambaru Forest and Okinawa rail
（Okinawa Prefecture）

Fig.3 Primeval natural forests designated as World Natural Heritage sites

The diversity of tree species that make up the forest in Japan is greater than in Europe, resulting in higher species-level biodiversity (Fig. 4).

In addition, even within the same species, individual organisms possess different genes, resulting in variations in their traits. Diverse genetic traits arise depending on climatic conditions and other factors. In Japan, Sugi(Japanese cedar) and Hinoki(Japanese cypress) have primarily been used in forestry, with different varieties selectively bred and cultivated across various regions since ancient times.

In this way, various types of forests are distributed across Japan at the ecosystem level, and even within individual forests, diverse species inhabit them according to the forest type. Moreover, rich biodiversity as a whole is formed by the preservation of diverse genetic traits, even within the same species.



Source ：Forest Europe "State of Europe's Forests 2020"; Forestry Agency "National Forest Inventory"（4th period：FY2014～FY2018）.

Note：For Japan, forest area composition ratio is shown based on the number of tree species whose cross-sectional area at breast height accounts for 5% or more of the total.

Fig. 4 A comparison of forest tree species composition between Japan and Europe

Morotsuka Village in Miyazaki Prefecture, where forests cover over 90% of the land area, fostered a way of life in harmony with the forest through a mixed management approach that integrates forestry, shiitake mushroom cultivation, and livestock farming.

After World War Ⅱ, reforestation efforts adopted a policy of establishing mixed forests composed of conifers and broadleaf trees, rather than monoculture conifer plantations. These included coniferous forests for wood production, deciduous broadleaf forests to supply raw materials for shiitake mushroom cultivation, and evergreen broadleaf forests that were conserved and managed as natural forests, arranged in a mosaic pattern across the landscape.

As a result of forestry practices and shiitake mushroom cultivation, mosaic forests not only create a beautiful landscape but also serve as excellent habitats for biodiversity.

Mosaic forests consist of a mixture of coniferous and broadleaf trees

(2) Specific measures for biodiversity conservation

1) Biodiversity from a watershed-level perspective

All forests contribute to the conservation of biodiversity as habitats for various organisms. In light of this, the Forestry Agency is promoting forest management aimed at creating a mosaic of forests composed of various growth stages and tree species. These efforts include converting forests to mixed stands of conifers and broadleaf trees, increasing the proportion

of broadleaf forests, and extending rotation periods for long-term forest management.

To ensure forest management from a long-term perspective, the Forestry Agency operates the forest planning system using “watersheds” - geographically coherent units. In the Municipal Forest Plans, which constitutes the most fundamental level of forest planning, "zoning" is carried out based on the functions expected of forests, - such as water resource conservation, mountain disaster prevention, soil protection, and biodiversity conservation.

In Addition, through the National Forest Inventory (NFI), which has been conducted for 25 years since the FY1999, the Forestry Agency monitors forest conditions and changes, thereby promoting adaptive forest management.

2) Biodiversity from a stand-level perspective

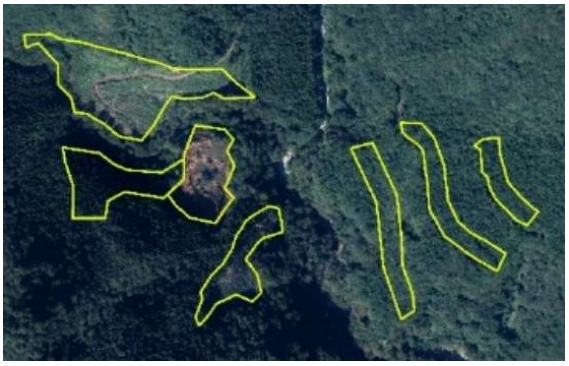
The primeval natural forests, mainly found in remote mountainous areas, have remained untouched by human activity for a long time. These forests have a well-developed stratified structure and contain trees of various ages and sizes, from old trees to young. Dead trees and fallen trees, which provide feeding and nesting sites for avian species, also serve as habitats for a wide range of wildlife, including rare and endangered species. Since such forests are widely distributed within national forests, they are primarily managed through approaches that allow natural ecological succession, such as their designation as protected forests. These measures are intended to conserve and restore forest ecosystems and to protect rare and scattered forest types. To protect rare species, the Forestry Agency is also promoting the monitoring of their populations and habitats, as well as the maintenance and improvement of habitat conditions, by implementing protection and propagation programs based on the Act on Conservation of Endangered Species of Wild Fauna and Flora.

Satoyama forests surrounding rural settlements once served as source of daily necessities and agricultural materials, such as firewood, charcoal, fallen leaves. Satoyama forests have developed unique ecosystems as a result of continuous use by local residents, which helped maintain open and light-filled environment (Fig. 5). However, as the use of firewood and charcoal declined due to changes in industrial structure, vegetation succession has progressed in satoyama forests, resulting in a shift from open, light-filled environments to darker forest conditions. In addition to the decline and loss of habitat quality for species inhabiting satoyama forests, abandoned satoyama forests have become habitats for large wild animals such as deer, and sites of Japanese Oak Wilt outbreaks (Fig. 6). To encourage engagement with satoyama forests by diverse stakeholders, the Forestry Agency is promoting multifaceted and sustained use of these forests by supporting forest management activities carried out in collaboration with local residents, NPOs, private companies, and other diverse entities.

Fig.5 The landscape of satoyama forest

Fig.6 Japanese Oak Wilt Damage in satoyama forest

Planted forests are primarily established as even-aged conifer stands through the cultivation of single tree species, such as Sugi (Japanese cedar), Hinoki (Japanese cypress), and Karamatsu (Japanese larch). As a result, planted forests generally exhibit the following characteristics: 1) simple species composition and structure, 2) absence of dead or fallen trees, and 3) presence of human-induced disturbances such as harvesting, planting, weeding, and thinning. On the other hand, logging sites and young regenerated forests also serve as habitats for grassland species and as hunting grounds for birds of prey such as the golden eagles (Fig. 7). Leaving naturally regenerated broadleaf trees uncut within planted forests also contributes to the conservation of biodiversity.



Experimental logging sites for the creation of hunting grounds for golden eagles.

A golden eagle flying over a logged area.

Fig.7 Experimental trials for the creation of hunting grounds for golden eagles （Minakami town, Gunma prefecture）

3. Towards forestry management and wood use that enhance biodiversity

(1) Contribution of forestry management to biodiversity

In addition to continuing existing biodiversity conservation measures, it is becoming increasingly important to ensure biodiversity in forests where forestry production activities have been carried out. To this end, in March 2024, the Forestry Agency established the 'Guidelines for Forestry Management to Enhance Forest Biodiversity', drawing on past examples of biodiversity conservation practices. Forestry enterprises should pursue sustainable management practices that promote the multiple functions of forests and take ecological considerations into account in their operations (Fig. 8). Consequently, the use of timber supplied as a result of these practices contributes to the socio-economic development.

After logging, planting must be carried out without fail

Areas unsuitable for forestry management will be planted with broadleaf trees to guide them towards a more natural forest

Fig.8 The appearance of forests with diverse forest ages and species arranged through forestry (Wakayama Prefecture)

(2) Future forestry management from the perspective of biodiversity

Forestry enterprises are expected to contribute to the spatial diversity through zoning and ensure biodiversity by implementing forest management practices that take into account the habitats and living conditions of various species. In Hokkaido, a pilot project on "retention forestry" is being conducted, aiming to balance wood production and biodiversity conservation by intentionally retaining certain trees during logging operations (Fig. 9). In national forests, considerations for biodiversity are being made, such as protecting riparian forests when conducting forest operations (Fig. 10).

Forestry enterprises can enhance their value by effectively communicating their contributions to biodiversity. Additionally, by collaborating with companies from other sectors that are also engaged in biodiversity conservation, they may gain access to new revenue opportunities.

Fig.9 Experimental site for retention forestry

Fig.10 Preservation of riparian forests

(3) Towards the use of timber produced through sustainable management

Expanding the use of timber produced from forests that are managed sustainably with consideration for biodiversity through evaluation by consumers contributes to ensuring profits in forestry management and further enhancing the biodiversity of Japan's forests.

In response to the recommendations of the TNFD, private companies are increasingly required to assess their dependence on natural capital and to consider biodiversity conservation and the sustainable wood use when procuring raw materials for their business activities.

In this context, it is important to selectively utilize timber produced from sustainably managed forests, including from the perspective of biodiversity, throughout the supply chain.
For example, it is an effective way to promote selective use of timber that forestry enterprises incorporating actions related to biodiversity into their collective forest management plans, and communicating this information throughout timber distribution process.

(4) Securing biodiversity through forest and forestry policies

The numerous benefits derived from forest ecosystems have been continuously provided due to forestry management practices that have both utilized and regenerated forest resources.

Basic Plan for Forest and Forestry sets out implementation of measures for the proper management of forests and the sustainable development of the forestry and wood industry in order to improve the stable lives of the citizenry and to develop the national economy. The plan also aims to create spatially and temporally diverse forests through sustainable forestry production and conservation activities in recognition that all forests are important components that support rich biodiversity.

Going forward, it is important for stakeholders – including those in forest, forestry, and the wood industry, timber users, and consumers - to deepen their understanding of the importance of forest conservation and biodiversity, as well as the contributions of forestry management. In addition, it is necessary to pass on Japan's forests to future generations by practicing forestry management that enhances biodiversity and sustainable wood use.

Forest and Forestry Topics for FY2024

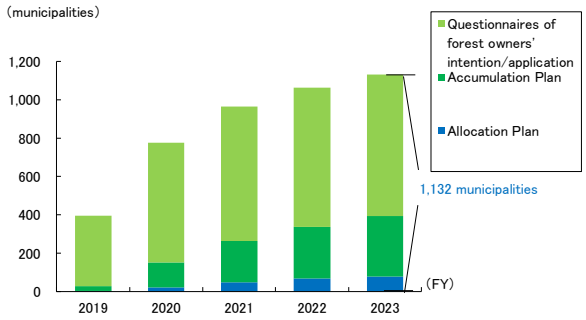
Topic 1: Five-Year Results of The Private Forest Management Entrustment System

The Private Forest Management Entrustment System is a system in which municipalities are entrusted with the management of forests which their owners are not able to manage appropriately, and those forests suitable for forestry management are subcontracted to forestry managers, while those that are not suitable for forestry management are managed by the municipalities themselves.

Five years have passed since this system was introduced with the enforcement of the Private Forest Management Entrustment Act in 2019, and almost all municipalities (1,132 municipalities) that need to utilize this system have begun to implement it (Fig. 1).

On the other hand, there are also issues such as insufficient cooperation between local stakeholders and municipalities, which has prevented consolidation, and insufficient systems within municipalities.

In light of these issues, in February 2025, the GOJ submitted the Act Partially Amending the Private Forest Management Entrustment Act and the Forest Act, which includes the creation of a new system for promoting the circular use of forest resources through the consolidation of management and the establishment of a system for corporations that support municipal affairs under contract.



Source: Survey by Forestry Agency

Implementation of thinning in forests that an accumulation plan has been formulated (Aridagawa Town, Wakayama Prefecture)

Fig.1 Number of municipalities implementing the Private Forest Management Entrustment System

Topic 2: Start of National Trade Skill Tests for "Forestry Occupation" ~The Birth of Forestry Certified Skilled Worker~

The GOJ has newly established the "Forestry Occupation" category in the National Trade Skill Tests, with the aim of contributing to the improvement of the skills of forestry workers, the enhancement of their working environment and social/economic status, and the reduction of labor accidents through improvements in safety. Those who pass the Tests will be referred to as "Forestry Certified Skilled Worker".

The Forestry Skills Improvement Center, a designated test organization which conducts examination operations, held its first examination from January to March 2025 in two locations: Ehime Prefecture and Kumamoto Prefecture. In this examination, the necessary skills and knowledge in silviculture and production of logs are targeted and evaluated

through written and practical tests across multiple levels (Grade 1, Grade 2, Grade 3, and Basic Grade).

Practical test (Kumamoto Prefecture)

Written test (Ehime Prefecture)

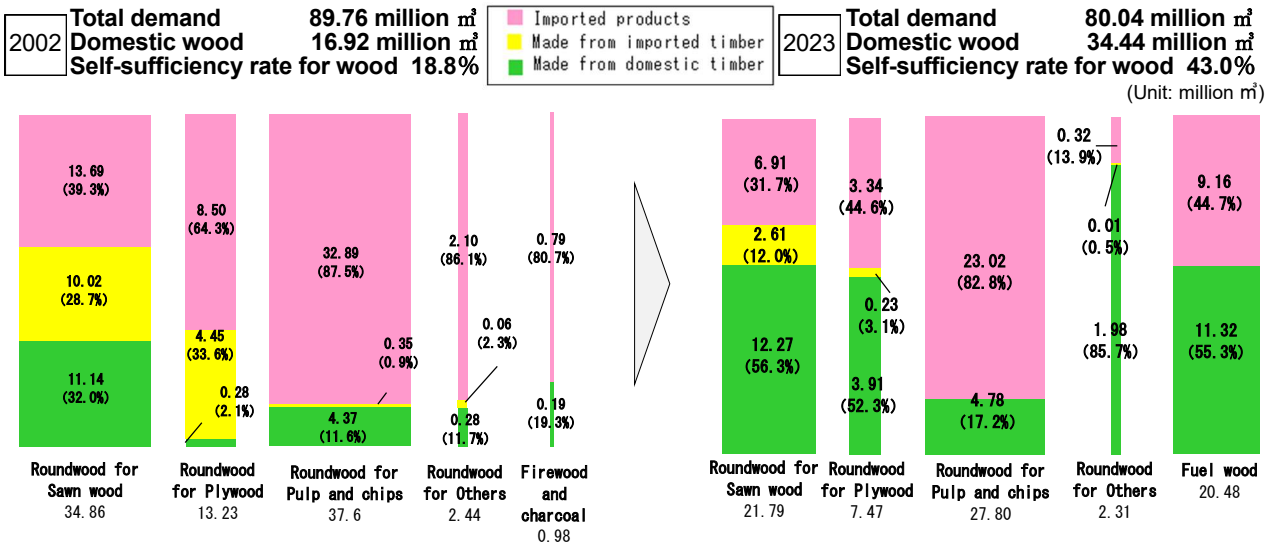
Topic 3: "Self-Sufficiency Rate for Wood Recovers to 43%, Highest in Recent Years

After reaching a record low of 18.8% in 2002, Japan's self-sufficiency rate for wood has risen continuously to 43.0% in 2023, the highest level in recent years(Fig. 2).

The background for the increase in the self-sufficiency rate for wood includes not only the enhancement of planted forest resources but also the increase in the use of domestic wood as raw material for plywood. Additionally, the introduction of the Feed-in Tariff in 2012 has led to the development of woody biomass power plants in various regions, and the use of fuelwood such as wood chips has been increasing year by year. This is also seen as a factor contributing to the increase in domestic wood supply.

In construction materials, the increasing use of domestic wood such as Sugi(Japanese cedar) glued laminated timber(glulam), particularly for columns in post-and-beam construction method, contributes to a rising trend in the share of domestic wood. On the other hand, imported wood still has a high share of horizontal members.

In order to improve the self-sufficiency rate further, the Forestry Agency is promoting technological development and dissemination of the use of domestic wood in components with a low rate of domestic wood.



Source: Forestry Agency "Wood Supply and Demand Chart"
Note: From 2014, fuel chips used for energy were newly included in "Firewood and charcoal" and the item name was changed to " Fuelwood."

Fig.2 Changes in the composition of wood supply and demand

Topic 4: The Spread of Wooden Construction in Mid-to-high-rise Buildings

In recent years, the number of mid-to-high-rise(four stories or more) buildings built with domestic wood, which had not been commonly used, has been increasing in urban area (Fig. 3).

Wood use in construction contributes to carbon storage, energy consumption savings, and the reduction of CO_2 emissions. In addition, wood is reproductive and contributes to achieving Net Zero by 2050. Therefore, major construction companies are actively utilizing domestic wood in the construction of mid-to-high-rise buildings, and some companies signed agreements for wood use promotion in buildings established under the Act for Promotion of Use of Wood in Buildings to Contribute to the Realization of a Decarbonized Society. The number of wooden buildings based on this agreement is on the rise nationwide.

There is a movement toward wooden construction even in privately-owned low-rise buildings such as stores and offices, where the ratio of wooden structures is low. There are cases where companies that operate convenience stores, etc., conclude agreements for wood use promotion in buildings and build new stores using wood(Fig. 3).

[Mid-to-high-rise buildings]

HULIC ＆New GINZA 8
(Chuo-ku, Tokyo. Completed in 2021)
(©FOTOTECA)

[Low-rise non-residential buildings]

Seven-Eleven Fukuoka Momochi Store
(Fukuoka City, Fukuoka Prefecture.Completed in 2024)

Fig.3 Wooden buildings in urban areas

Topic 5: Future Developments of Glycol Lignin, a Biomass-Based Material that can Replace Plastics

Efforts to achieve net-zero by 2050 are being promoted globally. In the industrial sector, there is a strong demand for biomass-based materials. From the perspective of a circular economy, the social implementation of wood-based chemical materials as substituted for fossil-based plastics is urgently needed.

Glycol lignin made from Sugi(Japanese cedar) has excellent processability, heat resistance and strength, making it suitable for a wide range of applications including high-performance plastics. As a result, various application developments are being carried out(Fig. 4).

The Forestry Agency held a discussion group composed of experts and summarized the future direction of glycol lignin in April 2024. In light of this, the Forestry Agency is supporting the demonstration of large-scale manufacturing technology conducted by a startup company in Kihoku-cho, Ehime Prefecture.

Fig.4 Flow of application development

Topic 6: Response to Mountain Disasters Caused by the Noto Peninsula Earthquake and Heavy Rain in 2024

The Noto Peninsula earthquake that occurred on January 1, 2024, caused forest degradation. The total damage to forestry-related facilities such as forest conservation facilities, forest roads, wood processing and distribution facilities, and non-timber forest products facilities amounts to approximately 90.1 billion yen.

The Forestry Agency conducted helicopter investigations of the damage from the day after the earthquake, and also dispatched the Ministry of Agriculture, Forestry and Fisheries Support and Advice Team (MAFF-SAT) to provide technical assistance for understanding the damage situation in the mountainous areas and formulating recovery plans. In addition, the Forestry Agency conducted aerial LiDAR measurements in collaboration with the Geospatial Information Authority of Japan, and started providing the preliminary results to Ishikawa Prefecture and related municipalities from July 2024.

Furthermore, the Forestry Agency has implemented disaster recovery projects under national supervision for the large-scale hillside failures areas that occurred in private forests in Wajima City and Suzu City, aimed at the early restoration of the affected regions.

Subsequently, Government-led forest conservation project in private forests was initiated in the six areas of private forests in both cities, with a restoration period set for ten years.

As of December 2024, 23.3% of the emergency temporary houses in Ishikawa Prefecture are constructed of wood.

In the Noto region of Ishikawa Prefecture, damage such as hillside failures occurred due to heavy rain from September 20, 2024. The Forestry Agency is providing technical assistance for understanding the damage situation and formulating recovery plans to Ishikawa Prefecture and relevant cities and towns.

In addition, as of March 2025, 49 out of 61 wood processing and distribution facilities, as well as non-timber forest products facilities that were affected by the earthquakes and heavy rains in Ishikawa Prefecture, have resumed operations.

Hillside failures areas due to earthquakes and heavy rains (Suzu City, Ishikawa Prefecture)

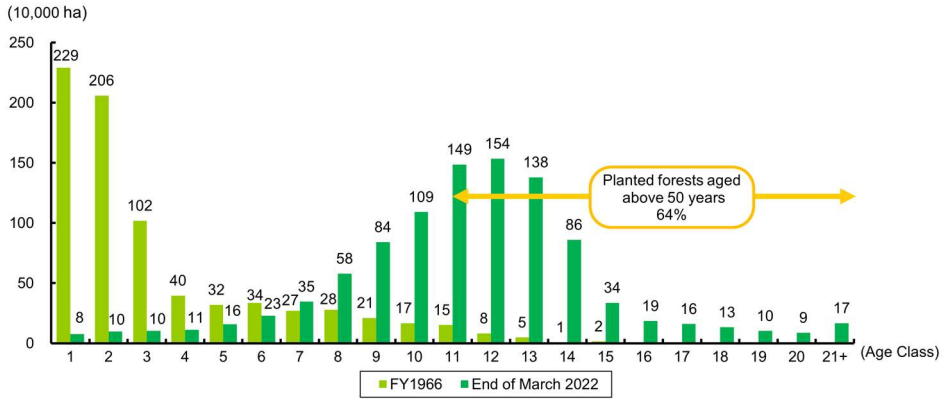
Chapter I

Forest Management and Conservation

1. Promoting Appropriate Management and Conservation of Forests

(1) Current State of Forests and Multiple Functions

Japan's forests cover about 25 million hectares, which accounts for two-thirds of the national land area. About 40% of them are planted forests. 64% of the planted forests are aged above 50 years and entering their period of use (Fig. I-1). The forest area consists of private forest, public forest, and national forest, which account for 57%, 12%, and 31%, respectively (Fig. I-2).



Sources: Forestry Agency "State of Forest Resources" (March 31, 2022) and "Forest Resources of Japan" (April 1968)

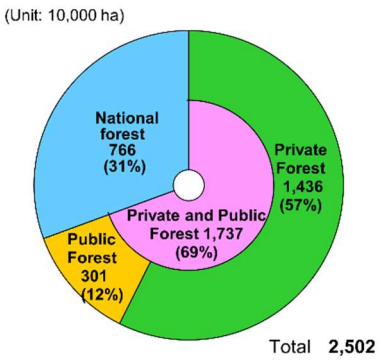
Note: Age-classes are divided by 5 year-period steps. "Age-class 1" includes the 1st to 5th year after planting with the year of planting counted as the 1st year.

Fig. I-1 Area of planted forest age class

The stock of forest is steadily expanding mainly on planted forests, reaching about 5.6 billion m^3 by the end of March 2022.

Forests contribute to the stability of people's lives and development of sustainable economy through their multiple functions including land conservation, water resource conservation, mitigating global warming, wood production and biodiversity conservation.

Through these multiple functions, forests also contribute to the achievement of SDGs and net-zero by 2050 and to the economic and social benefits of forestry and wood industry.



Source: Forestry Agency "State of Forest Resources" (March 31, 2022)

Fig. I-2 Forest area by owners

(2) The Fundamental Framework of Forest Plans for Appropriate Management and Conservation

To make sure forests perform their multiple functions sustainably, the GOJ formulates the Basic Plan for Forest and Forestry (latest revision in June 2021) in accordance with the Forest and Forestry Basic Act. The Basic Plan sets targets for the state of forests and the supply of forest products, and specifies measures to be taken by the GOJ.

The Minister of Agriculture, Forestry and Fisheries formulates the National Forest Plan under the Forest Act. The National Forest Plan sets targets for forest management and conservation, the amount of logging, and reforestation areas to align with the Basic Plan for Forest and Forestry. Prefectural governors formulate Regional Forest Plans based on the National Forest Plan. Mayors of municipalities formulate Municipality Forest Plans, in accordance with the Regional Forest Plans, that indicate zoning and forestry road system plans according to the functions of forests to be emphasized.

(3) Research and Development

In the “Strategy for Research and Technology Development in Forest, Forestry, and Wood Industry” revised in March 2022, the Forestry Agency has stated a policy to promote the following development; (1) labor-saving and cost reduction of reforestation and silviculture technology; (2) development of superior seedlings; (3) prediction of the impact of climate change on domestic and foreign forests and forestry; (4) sophistication of monitoring technology to calculate forest removals with high accuracy; and (5) development of cross-laminated timber (CLT) utilization technology. Furthermore, the Forestry Agency updated the “Forestry Innovation Field Implementation Promotion Program” in July 2022 to accelerate innovation in the forestry sector.

The GOJ has stated policies of working on zero emissions in the "Green Growth Strategy Through Achieving Carbon Neutrality in 2050," published in June 2021. The Forestry Agency is promoting related development using the Green Innovation Fund created based on this strategy. In addition, the Ministry of Agriculture, Forestry, and Fisheries (MAFF) has developed a “Strategy for Sustainable Food Systems” to promote innovation for reducing environmental impact in a medium- to long-term perspective. In the forest and forestry sector, the strategy promotes the development and dissemination of superior seedlings, and development and demonstration of forestry machinery equipped with autonomous driving and/or remote operation functions.

Forestry promotion instructors assigned in each prefecture disseminate and instruct forestry technology to forest owners, forestry workers, municipal officials, and other related people. Furthermore, the Forestry Agency develops Foresters who support municipal governments’ forest administration and management.

2. Forest Management

(1) Promotion of Forest Management

In order to secure the multiple functions of forests for the future, appropriate forest management is required. It is achieved by appropriate and adequate forestry practice on planted forests, such as thinning and replanting after harvesting, and establishment of diverse forests depending on their natural conditions, such as diversification of logging age and inducement of coniferous planted forests into multi-layered forests or mixed forests.

(Unit : 10,000 ha)

Type of work	Private and public forest	National forest	Total
Tree planting	2.5	0.9	3.5
Post establishment nurturing	31	13	44

Source: Survey by Forestry Agency

Table I-1 Forest management area (FY2023)

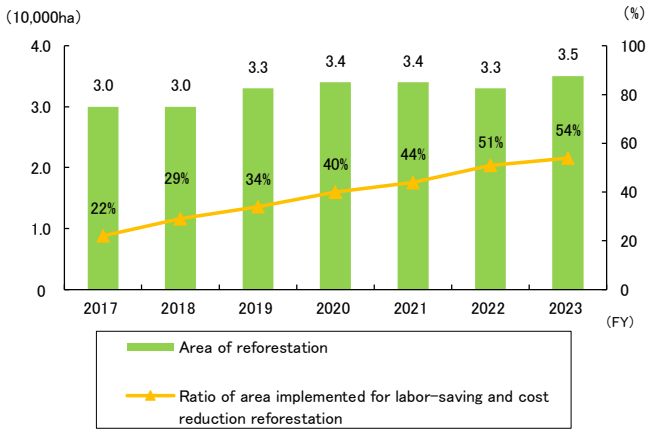
To respond to these issues, the Forestry Agency supports forest management activities by private and public forest owners through forest management projects, while steadily

promoting forest management in national forests (Table I-1).

(2) Steady implementation of reforestation

In order to secure the multiple functions of forests and sustainable use of forest resources for future, appropriate logging and reforestation are required.

Furthermore, it is vital to enhance forest removals to contribute to net-zero by 2050. On the other hand, the carbon dioxide removals is decreasing, and the lack of progress in reforestation is an issue.

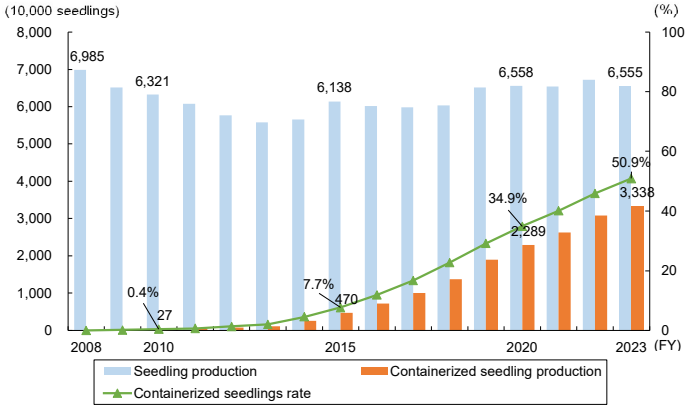


Source: Survey by Forestry Agency

Fig. I-3 Area of reforestation and ratio of area implemented for labor-saving and cost reduction reforestation

In order to realize the labor-saving and cost reduction, the Forestry Agency is promoting “an integrated harvesting and planting system”, low density planting and omitting weeding. The proportion of the area implemented for labor-saving and cost reduction reforestation in FY2023 is 54% (Fig. I-3).

It is essential to improve the supply capacity of seedlings for reforestation due to the expected increase in harvesting of planted forests. In particular, the production proportion of containerized seedlings, which allow a longer planting period, should be increased to help reduce reforestation costs. About 66 million seedlings were produced for planting in FY2023, about 50% of which was raised using containers (Fig. I-4).



Source: Survey by Forestry Agency

Fig. I-4 Production of seedlings for afforestation

Furthermore, it is crucial to develop and supply varieties with superior growth aiming at the increase in carbon dioxide removals and forestry yield and the efficiency of afforestation and nurturing. The Forest Research and Management Organization has been developing the "elite trees" which are selected varieties with faster initial growth and good wood quality through crossbreeding and selection. The MAFF designates trees that meet criteria such as superior growth as the "specified mother trees" and promotes especially the designation of the "elite trees" in recent years. As of March 2025, 573 varieties have been designated as "specified mother trees" with superior growth, of which 395 are the "elite trees." The Forestry Agency is promoting the development of seed and hedge orchards to increase the seedlings derived from "specified mother trees".

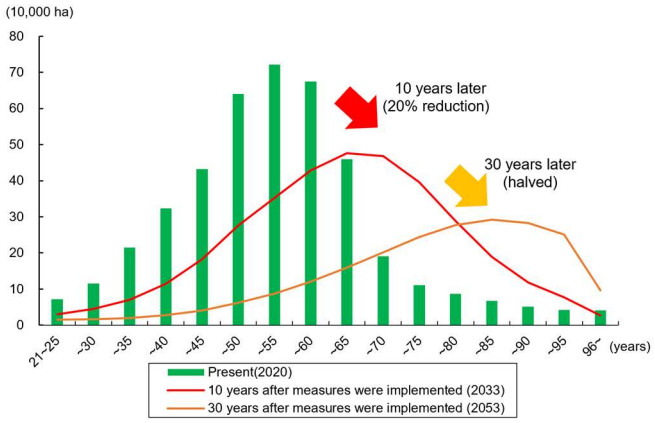
(3) Countermeasures against Pollen Sources

The GOJ decided on "Overall Picture of the Measures Against Pollen Allergy" and compiled the "Measures Against Pollen Allergy Initial Intensive Corresponding Package". The GOJ

set a goal of reducing the area of Sugi forests which are sources of pollen, by 20% in 10 years through measures to reduce pollen sources. Additionally, the goal is to halve the pollen emission in about 30 years (Fig. I-5). The following comprehensive measures will be implemented to reduce pollen sources: 1) accelerating logging and replanting, 2) expanding demand for cedar wood, 3) increasing production of lower pollen cedar seedlings, 4) improving forestry productivity and securing workforce (Fig. I-6).

Through this package, the Forestry Agency has designated approximately 980,000 ha as areas for focused logging and replanting, promoting the consolidation of forests and advancing the implementation of integrated harvesting and replanting operations, as well as the necessary development of forestry road systems for these purposes.

In FY 2023, 18 million low-pollen cedar seedlings were produced, significantly increasing from FY 2012, accounting for about 60% of the total production of cedar seedlings (Fig. I-7).



Source: "Overall Picture of the Measures Against Pollen Allergy" (Decision of the ministerial meeting of hay fever on May 30, 2023)

Fig. I-5 Future of planted cedar forests as a source of pollen

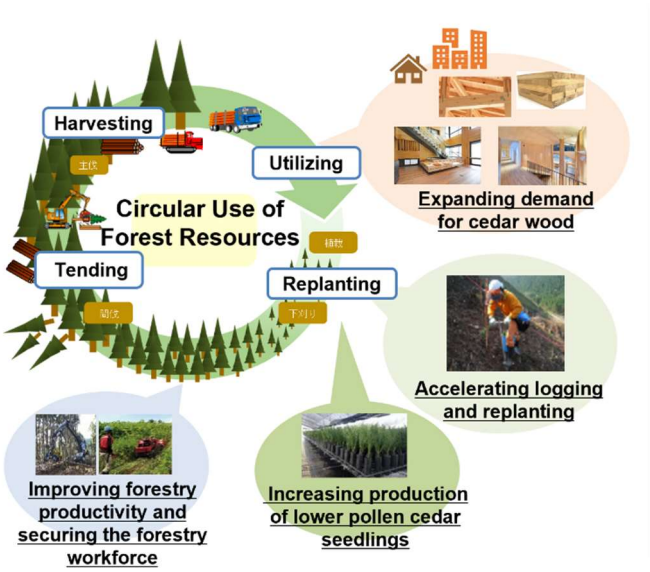
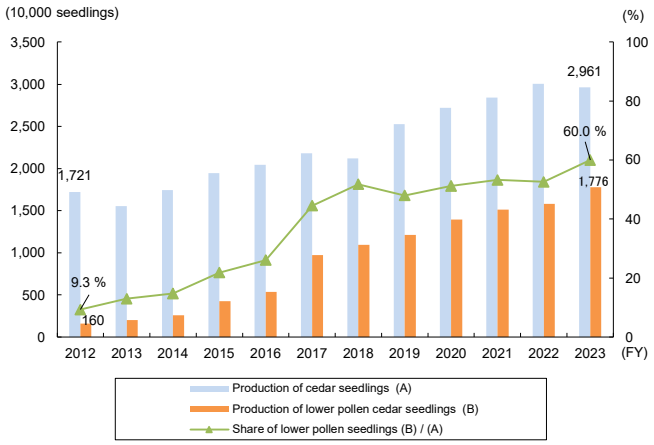


Fig. I-6 Efforts to reduce pollen sources



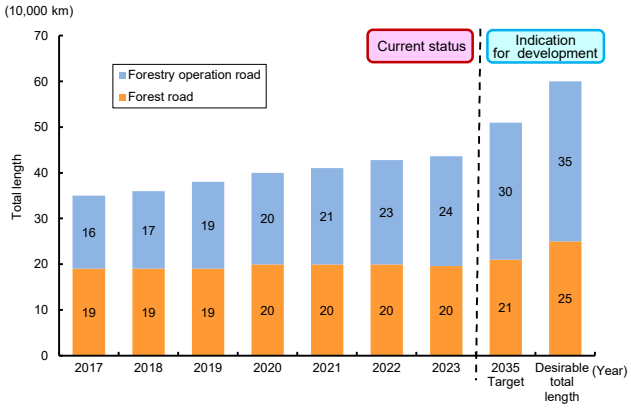
Source: Survey by Forestry Agency

Note: The production of lower pollen cedar seedlings includes the seedlings of low-pollen cedar varieties and pollen-free cedar varieties.

Fig. I-7 Production of lower pollen cedar seedlings

(4) Development of Forestry Road Systems

The Forestry Agency promotes to develop forestry road systems, which are essential infrastructure for forestry and livelihood of rural communities in hilly and mountainous areas. Forestry road systems have been developed to reach the total length of 440 thousand km in FY2023 (Fig. I-8).



Source: Forestry Agency

Note: Forestry roads include "operation roads used mainly by timber transport trucks".

Fig. I-8 Current status of forestry road systems and the indication for development

(5) Private Forest Management Entrustment System and Forest Environment Tax

Since small-scale forest ownership accounts for most private forests in Japan, consolidation is vital for promoting forest management. The Forestry Agency had promoted consolidation effort of forestry management entities, such as forest owners' cooperatives. The Private Forest Management Entrustment System was enforced in April 2019 through the Private Forest Management Entrustment Act, as forestry management entities faced difficulties in consolidating efforts. This was due to difficulties in tracking forest owners caused by generation changes and the declining interest in forest management.

Under the Private Forest Management Entrustment System, local municipalities can be entrusted with the management of forests whose owners are unable to manage appropriately. The municipalities can re-entrust the management of those forests that are suitable for forestry activities to private forestry operators who authorized by prefectural governments. For the forests which are not suitable for forestry activities and are required to fulfill multiple functions, the municipalities manage those entrusted forest by themselves.

Also in 2019, the Forest Environment Tax and Forest Environment Transfer Tax were introduced for the funding of forest management activities by local municipalities. While the Forest Environment Tax has been imposed on each individual as a national tax at a rate of 1,000 yen per capita per year since FY2024, the Forest Environment Transfer Tax has been transferred to all the municipalities in Japan for the expenses of their forest management activities since FY2019.

The utilization of the Forest Environment Transfer Tax is increasing yearly. The total amount of the utilization plan for FY2024 is 60.2 billion yen. The efforts are steadily progressing. For example, the area of forest management using this tax, such as thinning, is about nine times in FY2023 as large as the first year of FY2019.

(6) Social Support and Participation in Forest Management

An increasing number of organizations, such as private companies and NPOs, are engaging in forest management activities in recent years. Active involvement of the private sector in forest management activities is driven by their growing interest in SDGs, prevention of global warming, conservation of biodiversity and ESG investment.

The J-Credit scheme operated by the MAFF, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment certifies the amount of greenhouse gas emissions reductions and removals and embraces forest-based carbon removals methodologies since its inception in 2013. The cumulative number of registered forest management projects under the scheme is 261, and the total issuance of credits certified through the forest methodologies up to FY2024 amounts to about 1,396,000 ton-CO_2. The rapid increase of validated forest projects signals further expansion of removals credits in the years to come.

3. Forest Conservation

(1) Management and Conservation of Protection Forests

“Protection forests” are designated in accordance with the Forest Act when it is considered particularly necessary that they provide important public benefits. Felling and forest development are regulated in them. At the end of FY2023, 12.29 million ha of forests were designated as protection forests. Even when a forest, other than a protection forest, is diverted, the Forest Land Development Control System secures public benefits. In addition, Dangerous embankments are comprehensively regulated under nationwide uniform standards regardless of land use, including residential land, forestland, and cropland, according to the Act on Regulation of Residential Land Development and Specific Embankments enforced in May 2023.

(2) Disaster Control

The Forestry Agency promotes integrated forest conservation projects including accurate clarification of mountain disaster hazard zones, restoration of devastated forests, and development of coastal forests. When natural disasters occur in mountainous areas, the Forestry Agency conducts immediate surveys and elaborates recovery works.

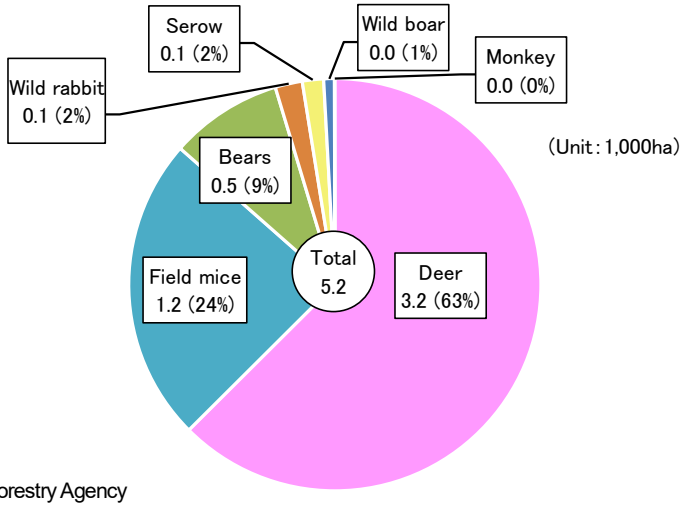
(3) Forest Damage by Wildlife, Pests and Forest Fire

Forest damage caused by wildlife is still serious though it is decreasing. In FY2023, about 5,160 ha of forests were damaged by wildlife, about 63% of which was caused by deer (Fig. I-9). The MAFF and Ministry of the Environment promote comprehensive measures including barrier fences installation and population control through capturing wildlife to

prevent the damage.

Damage caused by pinewood nematode (*Bursaphelenchus xylophilus*) is the most serious forest pest damage in Japan, although it has been declining in the long term. In FY2023, 315 thousand m^3 of trees were damaged by pinewood nematode due to high temperatures and low rainfall in the summer. To prevent the spread of this pest, the Forestry Agency promotes the propagating of pest-resistant seedlings, the implementation of prevention measures with chemicals, and the extermination of the nematode and mediating insects by logging and fumigation of affected trees.

In addition, damage caused by Japanese Oak Wilt, which is transmitted by oak platypodid beetle (*Platypus quercivorus*), has been spreading. In FY2023, 130 thousand m^3 of trees were damaged in 44 prefectures. To prevent the spread of this pest, the Forestry Agency promotes the extermination of insects by fumigation of damaged trees and the prevention of insect invasion by applying adhesives to and covering with vinyl sheets on healthy trees.



Source: Survey by Forestry Agency

Fig. I-9 Area of forests damaged by major wildlife species (FY2023)

In 2023, 1,299 forest fires occurred, burning 844 ha of forest. From February to March 2025, large-scale forest fires occurred one after another in various places, including Ofunato City in Iwate Prefecture. The factors that led to the large scale of these forest fires are believed to be a combination of extreme dryness, localized strong winds, steep slopes, and complex terrain. Forest fires intensively occur in winter and spring, with most of the cases caused by people carelessly using fire.

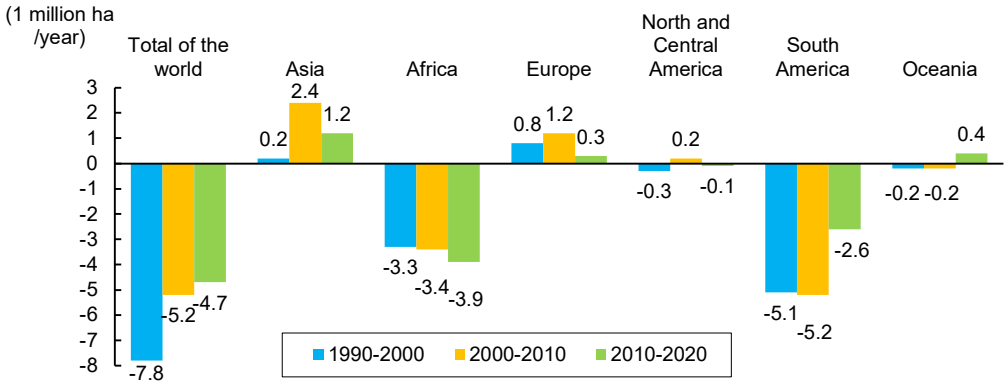
4. Advancing the Global Policy Agenda

(1) Promotion of Sustainable Forest Management

According to the Food and Agriculture Organization of the United Nations (FAO), the global forest area in 2020 was estimated at 4.06 billion ha, accounting for 31% of the total land area. The global forest area continues to decline, particularly in tropical regions of Africa and South America. The annual rate of net forest loss between 2010 and 2020 is estimated at 4.7 million ha/year. However, if increases due to afforestation and forest expansion are excluded, the annual rate of gross forest loss during 2015–2020 would be 10.2 million ha/year (Fig. I-10).

The GOJ promotes sustainable forest management by actively participating in international forest-related dialogues, such as the United Nations Forum on Forests (UNFF), the FAO Committee on Forestry (COFO) and the Montréal Process. Furthermore, the importance of not only sustainable forest management but also the promotion of wood utilization has been recognized at the G7 Hiroshima Summit and other international forums.

In Japan, two forest certification schemes are in place, one is operated by the Forest Stewardship Council (FSC), an international organization, and the other by the Sustainable Green Ecosystem Council (SGEC/PEFC-J), which was established as a domestic certification scheme in Japan, and was endorsed by the Programme for the Endorsement of Forest Certification (PEFC) in 2016. Approximately 10% of Japan's forests are certified under FSC (about 0.42 million ha) and/or SGEC (about 2.20 million ha).



Source: Prepared by the Forestry Agency based on Global Forest Resources Assessment 2020 (FAO)

Fig. I-10 Annual net change in forest area by decade and region, 1990–2020

(2) Global Warming and Forests

Global warming is one of the most serious environmental problems. The adverse impacts caused by rising global average temperature are a growing concern.

To realize net-zero by 2050, the GOJ aims to reduce its GHG emissions by 46% in FY2030 compared to FY2013 levels. In addition, in the Plan for Global Warming Countermeasures approved by the Cabinet in February 2025, the GOJ set reduction targets: a 60% reduction by FY2035 and a 73% reduction by FY2040, both compared to FY2013 levels. Regarding forest removals, the estimation method has been revised to align with international standards, utilizing National Forest Inventory (NFI) data for direct estimation. As a result, the target for forest removals by FY 2040 has been set to ensure a reduction equivalent to 5.1% of FY2013 levels.

Promoting measures to enhance forest carbon sinks is essential for achieving the targets. These measures include implementing appropriate forest management and conservation practices as well as promoting wood utilization.

The GOJ has promoted "Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of carbon stocks in developing countries" (REDD+). In addition, the GOJ has promoted climate change adaptation measures based on the Climate Change Adaptation Plan, which was revised in May 2023.

(3) International Cooperation

The GOJ promotes sustainable forest management in developing countries by providing technical cooperation and financial assistance through both by bilateral and multilateral, including international organizations.

Japan's technical cooperation is implemented through projects that optimally combine the dispatch of experts, acceptance of training participants, the provision of equipment, and policy and technical training courses conducted via the Japan International Cooperation Agency (JICA). The GOJ also provides financial support through JICA, including loans for promoting afforestation and reforestation projects and developing human resources, as well as grants for the procurement of machinery and materials for forest management.

The GOJ also provides financial support for projects implemented by the International Tropical Timber Organization (ITTO) and FAO. Through these projects, ITTO promotes sustainable wood use in India and East Asian countries, while FAO supports efforts to disseminate approaches that balance forest conservation and agriculture to halt deforestation.

Papua New Guinea has a land area of approximately 46 million ha, with around 36 million ha forest cover – meaning that about 78% of the land is covered by forests. Of these forests, approximately 12 million ha are designated as production forests for timber production.

In Papua New Guinea, deforestation and forest degradation caused by commercial logging are major sources of greenhouse gas emissions. Therefore, the implementation of sustainable forest management is required.

Under the JICA technical cooperation project launched in 2022, Japan has dispatched experts and provided technical cooperation and training in three areas: 1) ensuring compliance with logging-related regulations in commercial logging, 2) promoting the recovery of forest resources after logging, and 3) developing monitoring methods to estimate carbon emissions resulting from logging operations.

Through strengthened monitoring of commercial logging and other measures under the project, deforestation and forest degradation are expected to be mitigated, thereby contributing to the reduction of greenhouse gas emissions.

Opening ceremony for the logging-related regulations training by the Papua New Guinea Forest Authority

On-site training

Chapter II

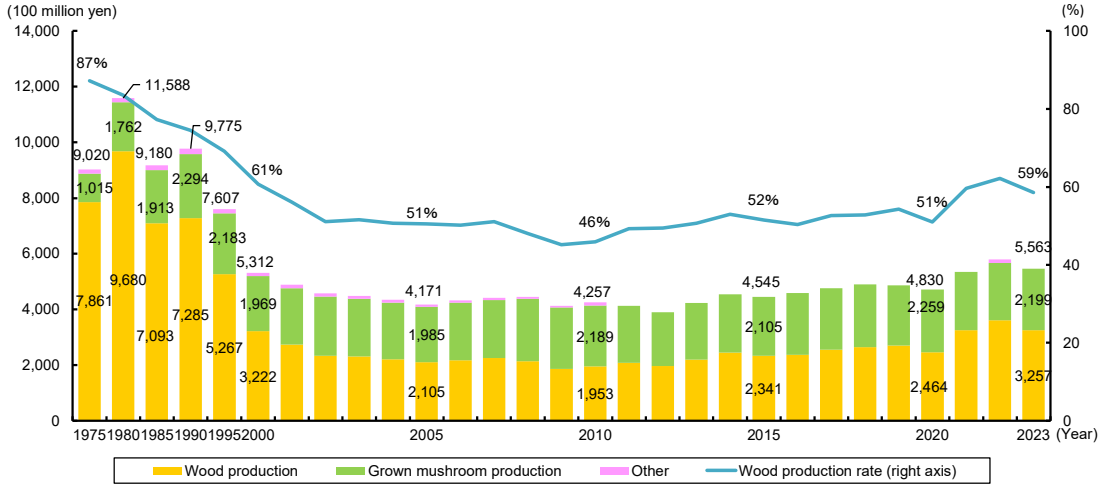
Forestry and Rural Communities in Hilly and Mountainous Areas

1. Forestry

(1) Forestry Production

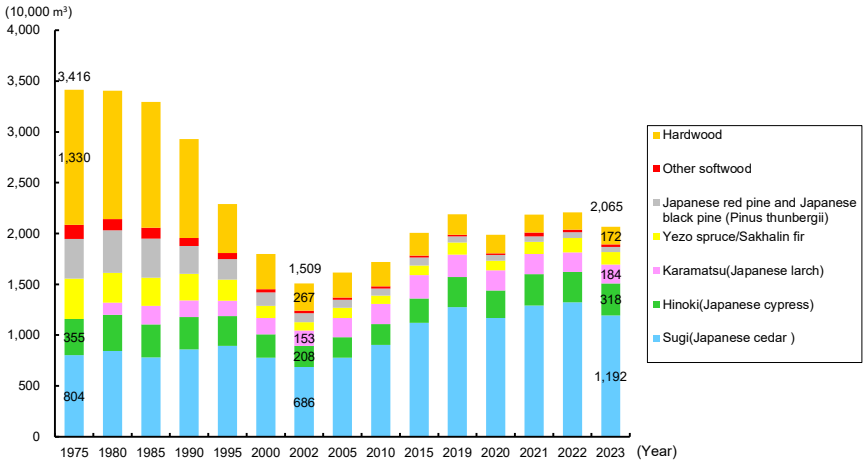
Total forestry output of Japan in 2023 was 556.3 billion yen, a decrease of 4.0% from the previous year. Wood production accounted for about 60% of forestry output and was 325.7 billion yen in 2023, which was a decrease of 9.6% from the previous year (Fig. II-1).

Supply of domestic wood totaled 34.44 million m^3 in 2023. Of the supply, logs for sawn wood, plywood and chips accounted for 20.65 million m^3. By tree species, the volume of Sugi (Japanese cedar) production was 57.7%, Hinoki (Japanese cypress) 15.4%, Japanese larch 8.9%, and hardwood 8.3%, respectively (Fig. II-2).



Source: MAFF "Forestry output"

Fig. II-1 Gross forestry output



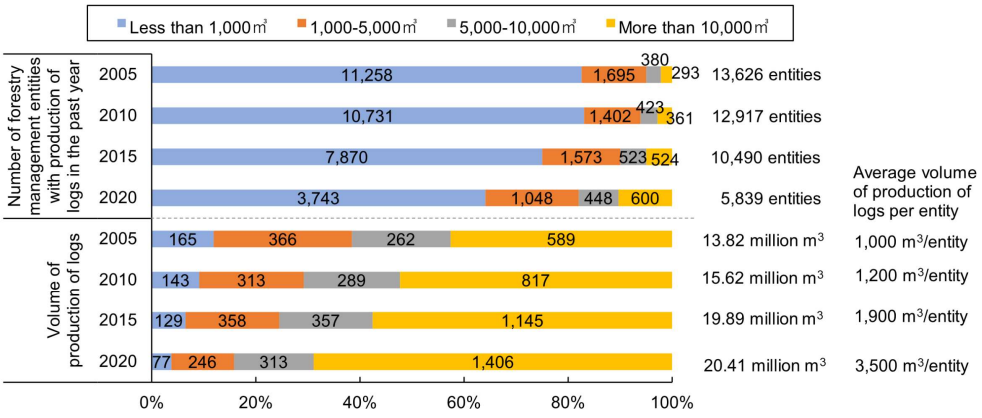
Source: MAFF "Report on supply and demand of lumber"

Fig. II-2 Domestic roundwood production

(2) Forestry Management

The number of forestry households in 2020 was 690 thousand, 88% of which owned less than 10 ha of forest area. Small-scale forest ownership remains dominant.

The number of forestry management entities is about 34,000, significantly decreasing from about 200,000 in 2005. On the other hand, the average volume of log production per forestry management entity has increased. In addition, the proportion of log volume by entities with the annual log production of more than 10,000 m^3 has increased to 70%, indicating that the scale of entities is expanding (Fig. II-3).



Source: MAFF "Census of Agriculture and Forestry" (aggregate calculation after reclassification)

Fig. II-3 Number of forestry management entities by the scale of log production

Forest owners' cooperatives are the main players in forest management. Thus, it is necessary to strengthen their management base in terms of increasing profit return to forest owners and forestry workers.

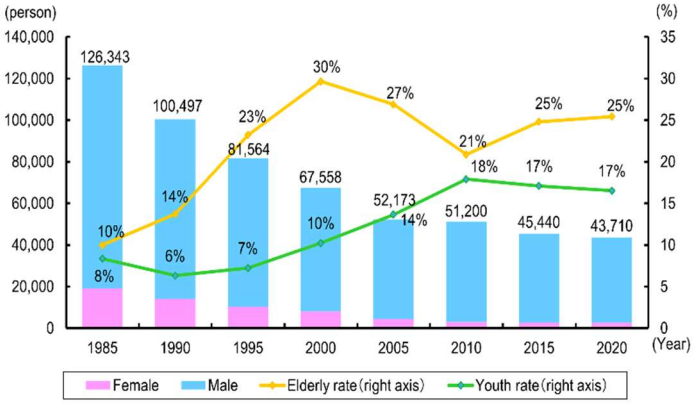
To strengthen the management skills of forestry management entities, the Forestry Agency has supported the development of "Forest Management Planners" who engage in selling woods strategically and sustainable forest management.

(3) Forestry Workforce

The number of forestry workers in 2020 was 43,710, which leveled off after a long-term declining trend.

The proportion of young workers in forestry remains stable while that in all industries is on a declining trend (Fig. II-4).

Since the rate of occupational accidents in forestry is higher than in other industries, the Forestry Agency promotes safety patrol guidance to forestry management entities, and offers various training programs for forestry workers (Fig. II-5).

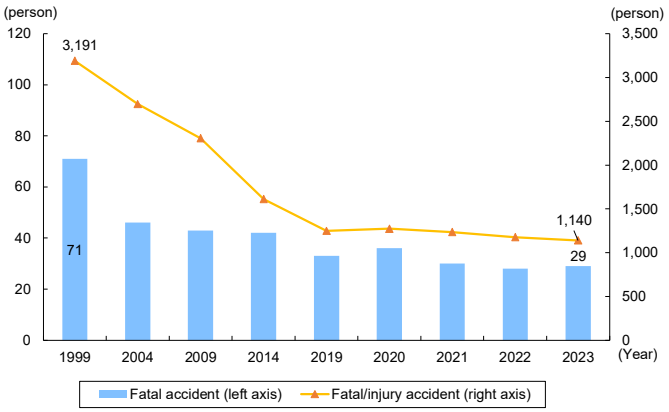


Source: Ministry of Internal Affairs and Communications "National Census"

Notes: 1. "Elderly rate" reflects the rate of people aged 65 or over.
2. "Youth rate" reflects the rate of people aged under 35.

Fig. II-4 Number of forestry workers

Permanent year-round employment rate of forestry workers is on a growing trend. On the other hand, the average annual salary for forestry workers is lower than in other industries. Therefore, the Forestry Agency is making efforts to improve their salary levels. Although the proportion of females engaged in forestry is lower than that of males (Fig. II-4), the opportunities that women play an active role such as the log production and forest surveys have increased due to the progress of the mechanization of forestry in recent years. In addition, some entities have developed the environments where women can work comfortably.



Source: Ministry of Health, Labour and Welfare "Report on Fatal Accidents" and "Report on occupational casualties"

Fig. II-5 Number of occupational accidents in forestry

(4) Improvement of the Efficiency of Forestry Management

Consolidating Forestry Operations

Consolidation of forestry operations is necessary to improve productivity since most of the private forests in Japan consist of small-scale forest owners.

The Forestry Agency encourages such operations through the Collective Forest Management Plan System, the Private Forest Management Entrustment System and the development of Forest Practice Planners.

It is also promoted to provide forestry entities with forest information necessary for consolidating operations through forest land ledgers, in which each municipality consolidates ownership and boundary information, and “Forest Cloud Systems” introduced by prefectures for efficient information sharing among stakeholders.

Development of the New Forestry

Based on the revised Basic Plan for Forest and Forestry, the Forestry Agency is promoting initiatives for the “New forestry” that utilizes new technologies to improve productivity and safety, which makes it possible to significantly improve profitability of forestry, from logging to reforestation and silviculture processes. Introducing of the “elite trees” and “Smart forestry”, which utilize ICT and new technologies such as forestry machinery equipped with autonomous driving and/or remote operation functions, is considered to be the key to realizing the “New forestry”.

2. Non-timber Forest Products

Non-timber forest products include variety of products such as mushrooms, edible nuts, wild vegetables, Japanese lacquer, bamboo, charcoal, and firewood. The value of non-timber forest products in 2023 was 230.6 billion yen, accounting for about 40% of the forestry output. Non-timber forest products play key roles in stimulating rural economies and increasing in income.

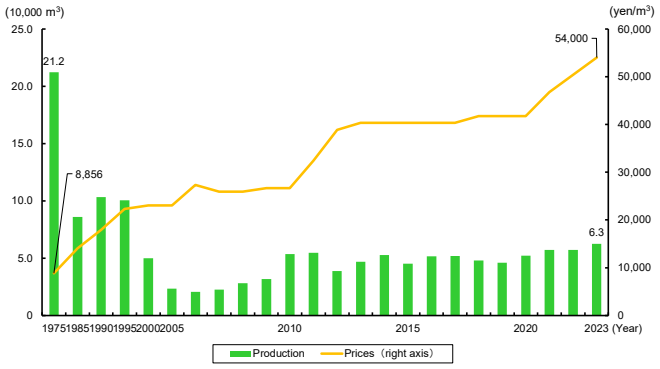
(1) Mushrooms

Mushrooms earned more than 90% of the value of non-timber forest products in 2023.

Production of mushrooms has been 436 thousand tons in 2023, which has been a decrease of 5.1% from the previous year.

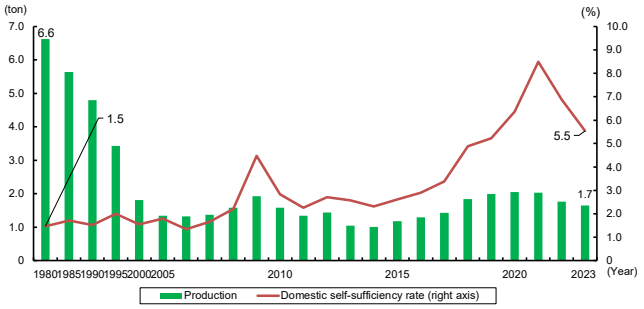
(2) Other Non-timber Forest Products

Total production of charcoal has been increasing and amounted to 20 thousand tons in 2023. In addition, reflecting continued popularity of camping, total production of firewood for sale was amounted to 63 thousand m^3, which was an increase of 9.5% from the previous year (Fig. II-6). Production of bamboo material was 27 thousand tons in 2023, an increase of 8.5% from the previous year. Production of domestically produced lacquer has been increasing since the Agency for Cultural Affairs announced a policy to use domestically produced lacquer in principle for the preservation and restoration of national treasure and important cultural property buildings in 2015. Domestic production in 2023 was 1.7 tons, which was a decrease of 6.5% from the previous year. (Fig. II-7).



Source: MAFF “Non-timber Forest Products Data”

Fig. II-6 Production and prices of firewood for sale



Source: MAFF “Non-timber Forest Products Data”

Fig. II-7 Production of Japanese lacquer

3. Rural Communities in Hilly and Mountainous Areas

(1) Current State of Rural Communities in Hilly and Mountainous Areas

Rural communities in hilly and mountainous areas, where many people engage in forestry and other activities based on forest, 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 Japan’s total land area, accounting for approximately 60% of the total forest area. These communities face several problems such as a decrease in job opportunities and an increase in abandoned farmland due to continuing depopulation and the aging population.

On the other hand, there has been increasing interest by urban residents and foreign tourists in abundant forests, clear water, landscape and culture in rural communities in hilly and mountainous areas.

(2) Revitalization of Rural Communities in Hilly and Mountainous Areas

The MAFF has supported to discover local resources such as non-timber forest products, hardwood and *gibiers* (game meat) and to improve the added value of the resource, in addition to develop the forestry and wood industry by utilizing forest resources.

In order to revitalize the community in rural communities in hilly and mountainous areas, the Forestry Agency is supporting collaborative activities for the continuous conservation management and utilization of satoyama forests by local residents and external stakeholders (such as the visitors who deeply connected to local people).

In recent years, there are new movements to use forest spaces in diverse fields such as health promotion, tourism, and education as people change their lifestyles and diversify their values. The Forestry Agency has worked to create and promote the “Forest-related Service Industry” in these fields.

In rural communities in hilly and mountainous area of Kamaishi City, Iwate Prefecture, immigrants inspired by volunteer activities related to the Great East Japan Earthquake and local forest owners formed "Tonari no Mori" in 2019. They are working on maintenance such as weeding ,removal of dead trees and improvement cutting in satoyama forests that is not well maintained, as well as the utilization of forest resources.

They process the felled broadleaf trees into firewood, plates, coasters, cutting boards, chopping boards, etc., and sell those. The firewood is also sold at nearby campsites by local tourism companies in collaboration with them. In addition, through conservation activities in satoyama forests, they are also promoting the creation of an environment where people can enjoy the forest, contributing to local revitalization by conducting forest play events for local residents.

Broadleaf trees used for firewood

The scene of selling wooden products

©Tonari no Mori

Chapter III

Wood Product Demand, Wood Use and Wood Industry

1. Supply and Demand for Wood

(1) Global Wood Supply and Demand

In 2023, the global consumption of industrial roundwood decreased by 4.4% from the previous year to 1,931 million m^3.

The global imports of industrial roundwood decreased by 13.2% from the previous year to 103 million m^3. China was the world's largest industrial roundwood importer in 2023, accounting for 37% of global imports of industrial roundwood.

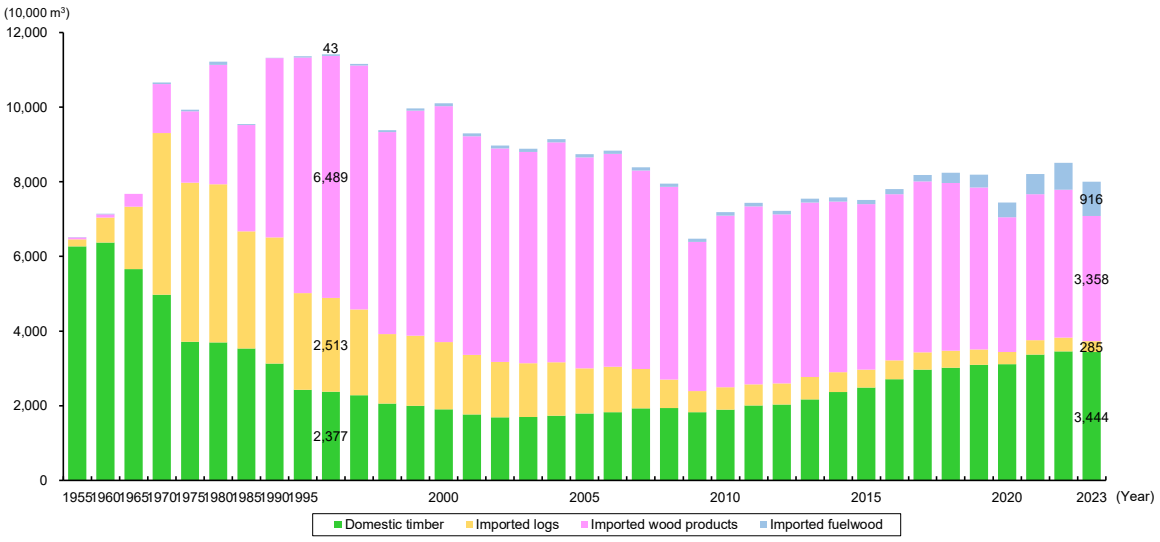
In 2023, the global production of sawn wood decreased by 3.9% from the previous year to 445 million m^3. The global imports of sawn wood decreased by 6.9% to 127 million m^3. China was the world's largest sawn wood importer in 2023.

(2) Wood Supply and Demand in Japan

Japan's wood demand bottomed out in 2009 and has since recovered. The total wood product demand in Japan in 2023 was 80.04 million m^3 (roundwood equivalent), which was a decrease of 5.9% from the previous year.

The domestic wood supply bottomed out in 2002 and has since recovered. It was 34.44 million m^3 in 2023, which was a decrease of 0.4% from the previous year (Fig. III-1).

The volume of imported wood in 2023 was 45.59 million m^3, which was a decrease of 9.7% from the previous year, due to a decrease in the imports of roundwood and wood products (Fig. III-1).



Source: Forestry Agency "Wood Supply and Demand Chart"

Fig. III-1 Wood supply in Japan

(3) Wood Prices

The prices of domestic roundwood and sawn wood products increased significantly in 2021 due to a shortage of imported materials as the demand recovered with the post-COVID-19

economic recovery. The prices have been declining since 2022, but the prices in 2024 remain at higher levels than in 2020 before the price increase.

(4) Addressing Illegal Logging

The Clean Wood Act, enforced in 2017, stipulates that all business entities must endeavor to use legally harvested wood and wood products, and that Wood-related business entities in particular shall endeavor to confirm the legality of the wood and wood products they handle.

Wood-related business entities that properly and reliably take measures for ensuring the use of legally harvested wood and wood products may apply to a registering organization to obtain registration as a “Registered Wood-related Business Entities”. As of March 2025, 729 entities have been registered.

To further promote the distribution of legally harvested wood and wood products, the Act partially amending the Clean Wood Act, which requires upstream wood-related business entities and wood-related importers to confirm legality, was passed in the National Diet in April 2023. This Act will come into effect in April 2025. The GOJ supports the establishment of legal and sustainable supply chain in wood producing countries through the contribution to ITTO. Japan has joined the Experts Group on Illegal Logging and Associated Trade (EGILAT) of Asia-Pacific Economic Cooperation (APEC), which shares information and exchanges views regarding measures to combat illegal logging.

2. Wood Use

(1) Significance of Wood Use

Wood use in buildings stores carbon absorbed by forests for a long time and contributes to reducing construction-related carbon dioxide emissions since wood consumes less energy than other materials during manufacturing and processing. Wood used in buildings can be utilized as a substitute for fossil fuels, contributing to the reduction of carbon dioxide emissions.

In addition, wood provides a comfortable and healthy indoor environment since it has humidity control function, high thermal insulation properties, and positive physiological and psychological effects.

Wood Rise Sendai
(Sendai City, Miyagi Prefecture)
©Nacasa&Partners

(2) Wood Use in Buildings

In Japan, about 80% of low-rise (up to three stories) residential buildings are wooden on the basis of new building starts floor area. However, wooden buildings account for less than 10% of mid-to-high-rise (four stories and above) buildings and non-residential ones.

In recent years, as the technical and institutional environment for the use of wood has been developed to a certain extent, there is a growing number of leading examples of mid-to-high-rise and non-residential buildings with wooden structures (Fig. III-2). The Forestry Agency has been supporting the development of fire-

Tsuyama Shinkin-Bank Ninomiya Branch
(Tsuyama City, Okayama Prefecture)

Fig. III-2 Examples of wood use in buildings

resistant wooden materials and CLT in collaboration with other ministries and agencies. To further expand the use of wood, the public and private sectors are collaborating in examining challenges and solutions in wood use.

(3) Use of Woody Biomass

Use for New Material

High-value materials based from woody biomass, such as glycol lignin with excellent processability, heat resistance and strength, and cellulose nanofibers (CNF) that are both lightweight and strong, are being developed as alternatives to fossil-based materials. Glycol lignin is expected to be utilized for high-performance materials, and demonstration of large-scale manufacturing technology is underway.

As for CNF, manufacturing facilities are under operation in various places, and some products using CNF have been put into practical use, including additives for foods and paint.

Use for Energy

The quantity of woody biomass for energy has been increasing recently. Japan's fuelwood consumption including wood chips, wood pellets, firewood, and charcoal in 2023 increased by 17.9% from the previous year to 20.47 million m^3. The increase was primarily due to the boom in woody biomass power plants.

The Forestry Agency is promoting the transportation and utilization of low-quality wood that has not been utilized. It is also encouraging heat-use and cogeneration, which has higher energy conversion efficiency.

(4) Spread of the Use of Wood among Consumers

The Forestry Agency has been promoting the "Kizukai Undo" (attention to wood use) initiative to disseminate the importance of wood use among consumers, including through the Japan Wood Design Award which acknowledges outstanding wood products and related activities that contribute to the re-discovery of the excellence and value of wood from the consumers' viewpoints.

The Forestry Agency has also been promoting "Mokuiku" (wood use education) activities to disseminate the excellence and significance of wood use among both adults and children.

3. Wood Industry

(1) State of the Wood Industry

The added value amount of lumber and the wood industry has been increasing in recent years. In 2022, the value rose to 1,193 billion yen.

(2) Strengthening the Competitiveness of the Wood Industry

The scaling-up and consolidation of sawmills and plywood mills are progressing to stabilize the supply of products with reliable quality and performance at low cost in order to strengthen global competitiveness of wood industry in Japan.

In order to strengthen local competitiveness of small and medium-sized sawmills, the Forestry Agency promotes their initiatives to produce a wide range of products, as well as to collaborate with local log producers, local builders, and other stakeholders to meet the needs of local communities.

In addition, it is essential to establish a supply system for Japanese Agricultural Standards

(JAS) products of reliable quality and performance. The MAFF is working to rationalize the classification and criteria of the JAS in line with actual usage conditions, as well as supporting demonstrative use of JAS structural wood products.

(3) Development and Dissemination of Products and Technologies toward Utilization of Japan's Forest Resources

The Forestry Agency is promoting; 1) the development and dissemination of milling and drying technologies for large-diameter logs, the supply of which is expected to increase as Japan's forest resources grow; 2) the standardization of dimensions of CLT panels and other wood materials and the technological development of fire-resistant wooden materials in order to expand the wood use in non-residential and mid-to-high-rise buildings; and 3) the development of new products, such as softwood floorboards with increased surface hardness in order to increase demand in the fields of renovation and furniture manufacturing.

(4) Each Sector of the Wood Industry

Sawmilling Industry

Shipments of sawn wood products have remained flat in recent years. In 2023, shipments rose to 7.97 million m^3, which was a decrease of 7.4% from the previous year. The quantity of industrial wood received by sawmills was 15.06 million m^3 in 2023.

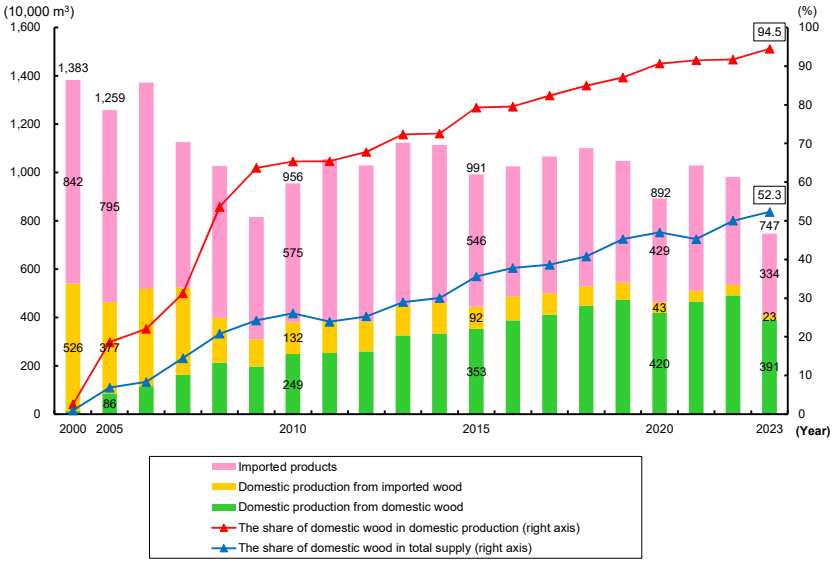
Glued Laminated Timber Manufacturing Industry

Glued laminated timber production in 2023 totaled 1.68 million m^3 of which structural use accounted for 1.59 million m^3. Japan’s import of glued laminated timber products in 2023 stood at 0.65 million m^3.

Plywood Industry

Production of plywood in 2023 was 2.53 million m^3, which was a decrease of 17.2% from the previous year. Most of this – 2.23 million m^3 - was for structural use, while 20 thousand m^3 was used as concrete formwork.

The share of domestic wood in domestic plywood production in 2023 rose to 94.5% (3.91 million m^3). In 2023, the total wood supply for plywood, including imported products, was



Source: Forestry Agency “Wood Supply and Demand Chart”

Fig. III-3 Supply of wood for plywood

7.47 million m^3. Domestic wood accounted for 52.3% of total wood supply for plywood in Japan (Fig. III-3).

Wood Chip Manufacturing Industry

Production of wood chips (excluding fuel use chips) in 2023 was 5.26 million tons, which was a decrease of 0.3% from the previous year.

Japan's import of wood chips in 2023 totaled 11.12 million tons, accounting for 67.9% of wood chip supply in Japan.

Particle Board and Fiberboard Industry

Production of particle board in 2023 was 0.94 million m^3, which was a decrease of 5.0% from the previous year. Production of fiberboard in 2023 was 0.62 million m^3, which was a decrease of 13.2% from the previous year.

Precut Processing Industry

"Precut lumber" refers to lumber that is pre-processed into the required shapes and sizes of building components, such as posts and beams, which enables quick and easy assembling of the components onsite.

The share of precut lumber in the lumber used for the post-and-beam construction method, which is one of the main construction methods for houses in Japan, reached 95% in 2023.

Wood Distribution Industry

In the distribution of domestic logs in 2023, 41.8% was sold directly from log producer to mills, 31.0% was sold through the timber market, while 27.3% was sold through the wood suppliers.

Chapter IV

National Forest Management

1. Roles of National Forests

(1) Distribution and Roles of National Forests

National forests occupy 7.58 million ha of land, which account for approximately 20% of the land area of Japan and approximately 30% of the total forest area. They are widely distributed in the remote mountainous areas and headwaters areas, and they play important roles in fulfillment of the multiple functions of forests, including land conservation and watershed conservation.

National Forests, which have diverse ecosystems such as planted forests and primeval natural forests, are a place for the growth and habitat of various wildlife including rare species. They also provide fields for health and recreation in forests.

(2) National Forests Management

National forests, an important asset of the country, are managed by the Forestry Agency in an integrated manner under the National Forest Management Program.

2. Specific Initiatives under the National Forest Management Program

(1) Further Promotion of Management with Emphasis on Public Benefits

The Forestry Agency manages each national forest in accordance with the five forest types categorized based on the expected functions of “mountain disaster prevention”, “nature conservation”, “recreational use”, “comfortable environment development”, and “watershed conservation”.

Approximately 90% of national forests are protection forests such as water resource conservation. The Forestry Agency improves devastated land and protection forests through forest conservation projects in order to ensure safe and secure life.

The Forestry Agency designates and manages “Protected Forests” and “Green Corridors” in order to conserve biodiversity. As of March 2024, Protected Forests were designated at 658 locations covering approximately 1,016,000 ha of land, which accounted for 13.4% of national forest area. “Green Corridors” were formed as of March 2024 at 24 locations, covering approximately 583,000 ha of land, and accounting for 7.7% of national forest area. The Forestry Agency takes measures to protect rare species of wildlife and prevents deer and other wildlife from damaging forests.

In the Togenosawa of Yuzawa City, Akita Prefecture, the stream was devastated due to heavy rains in 2018. The Forestry Agency implemented forestry conservation projects contributing to the preservation of national roads and railways located downstream, and installed two forest conservation dams.

Heavy rains starting from July 25, 2024, caused landslide and other damages, particularly in northern Japan. In Akita Prefecture, mountain disasters occurred in 77 locations, but at the Togenosawa, two forest conservation dams have been effective in mitigating sediment runoff, preventing damage to national roads and railways located downstream.

Installation location of the forest conservation dams and conservation targets in the Togenosawa

(2) Contribution to Revitalizing Forest and Forestry

Through the organizations, technical capabilities and resources of the National Forest Management Program, the Forestry Agency is (I) developing and disseminating technologies for low-cost and effective forestry practices, such as utilization of containerized seedlings, drones and Information and Communication Technology (ICT) and an integrated harvesting and planting system; (II) establishing cooperative forest management areas to collaborate with private forests to promote development of forestry road systems and forest operations; and (III) promoting stable wood supply to lumber and plywood mills through “System Sales”.

In April 2020, the Timber Harvesting Rights System was enforced. Under this system, forestry management entities can acquire the right to steadily harvest trees in certain designated areas of national forests for a certain period, while ensuring multiple functions of the forest.

(3) National Forests as “Forests for People”

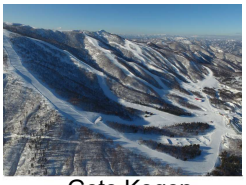
The Forestry Agency provides various organizations (e.g. schools, voluntary groups, corporations, traditional woodworkers) with places for field activities such as forest environmental education and forest management practices, by designating forests for such activities within national forests. The Forestry Agency also undertakes “model projects” to manage forests in cooperation with local parties and nature conservation groups.

The Forestry Agency leases national forests to local governments and residents. “Recreation Forests” are managed and administered in partnership with municipalities and other stakeholders in local communities such as the tourist industry. In FY2023, a total of about 112 million people visited “Recreation Forests”.

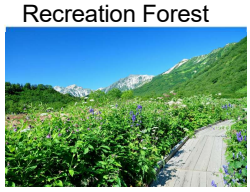
Recreation Forests of JAPAN

QR Code for “Japan’s Forests with Breathtaking Views” website

Enkatsura Recreation Forest



Geto Kogen Outdoor Sports Area



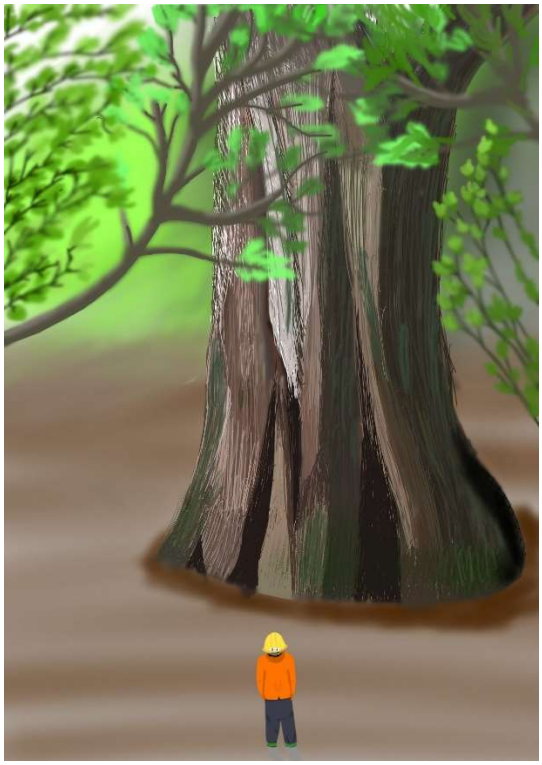
Tsugaike-Moor Recreation Forest

Kumamoto Recreation Forest

Source: Forestry Agency

Fig. IV-1 Examples of “Japan’s Forests with Breathtaking Views”

And 93 of “Recreation Forests” that have potential attractiveness as tourism resources were selected as “Japan’s Forests with Breathtaking Views” (Fig. IV-1). To encourage more people to visit these forests, the Forestry Agency has provided information on web sites in English and has improved facilities by posting multilingual signs, and intensive environmental maintenance, such as facility repairs.



Chapter V

Reconstruction after the Great East Japan Earthquake

1. Recovery of Forests, Forestry and the Wood Industry

(1) The Great East Japan Earthquake

On March 11, 2011, the Great East Japan Earthquake, the largest earthquake ever recorded in Japan, hit the eastern part of Japan. It caused a strong earth tremor over a broad area and brought a great tsunami which devastated entire coastal communities along the eastern coast of the Tohoku region.

In July 2011, the GOJ developed the fundamental reconstruction policy, titled the Basic Guidelines for Reconstruction in Response to the Great East Japan Earthquake, setting the timeframe for reconstruction at 10 years.

In March 2021, the GOJ established “Basic Guidelines for Reconstruction from the Great East Japan Earthquake After the “Reconstruction and Revitalization Period””.

(2) Recovery of Forests

The Great East Japan Earthquake caused damages to forests and forest conservation facilities and forest roads in 15 prefectures. By FY2021, the recovery works had been completed.

Approximately 164 km of coastal disaster-prevention forests damaged by the tsunami required restoration work. The restoration work was completed on about 163km of them as of the end of March 2025. It is necessary to continue the project for growing the seedlings.

In Miyagi Prefecture, planting has been completed for all private forests in the disaster-affected coastal forests. In addition, maintenance management such as weeding and thinning is being carried out.

Due to the challenges of maintenance management costs and the effective use of timbers from thinning, Miyagi Prefecture has launched an initiative to utilize them as woody biomass. In FY 2024, the prefecture held a transfer meeting and distributed the thinned wood to interested organizations and individuals.

Provided timber in the transfer meeting

(3) Recovery of Forestry and the Wood Industry

The Great East Japan Earthquake damaged 115 wood processing/distribution facilities and 476 non-timber forest products facilities. Distribution of plywood materials and wood chips was disrupted as large-scale plywood and paper mills along the Pacific Coast were damaged.

The production of logs and wooden products has generally recovered to the respective levels before the earthquake.

27.5% (about 15,000) of “emergency temporary houses” were constructed with wood.

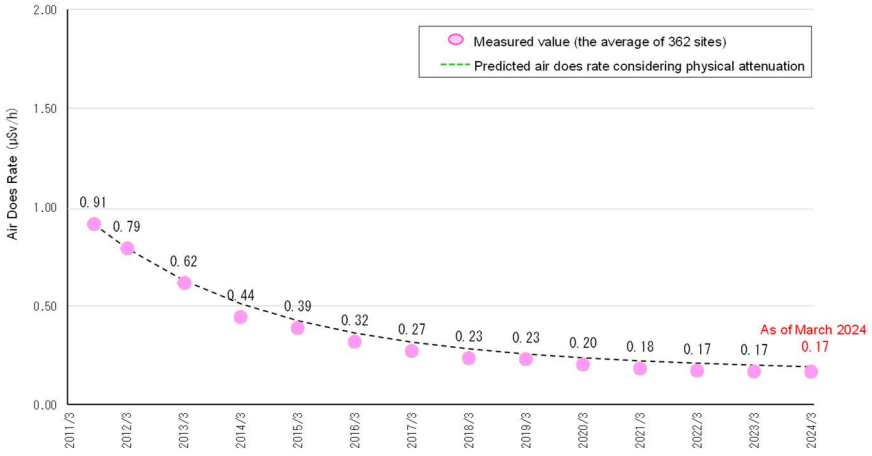
By the end of FY2020, approximately 25% of public housing built for disaster victims had been constructed with wood.

The use of wood has been promoted in the reconstruction of public buildings. Furthermore, woody biomass facilities such as power plants have been introduced in the disaster-affected prefectures, contributing to reconstruction.

2. Reconstruction after the Nuclear Accident

(1) Measures against Radioactive Substances in Forests

Air dose rate in forests in Fukushima Prefecture has been declining year by year (Fig. V-1).



Source: Forest planning division of Fukushima prefectural government,
the current state and prediction of radioactive materials in forests (FY 2023)

Fig. V-1 Changes of Air Dose Rate in forests in Fukushima Prefecture

The GOJ conducts monitoring and research about trends of distribution of radioactive substances within forests.

For decontamination of the forests, the measures in the vicinity of residence had been given top priority. Based on “Comprehensive Efforts towards the Regeneration of Forests and Forestry in Fukushima” (March 2016), the Forestry Agency is undertaking comprehensive projects to implement forest management such as thinning and to deal with radioactive substances, and projects to restore "satoyama forests" around residential areas.

For ensuring safety and security against radiation for forest workers, the Forestry Agency published a guidebook for forest workers in 2016.

To supply safe wood products to consumers, the Forestry Agency supports research and analysis on radioactivity in wood and the relevant work environment, and initiatives to develop arrangements for certifying the safety of wood products.

The Forestry Agency has launched the “Restoration of satoyama and hardwood forest project” in cooperation with people in Fukushima Prefecture and promotes the restoration of satoyama hardwood forest for shiitake mushroom logs. Municipalities have created a plan (a restoration plan) for restoring log forests that set out the area of log forests to be regenerated, the implementation system, and other related matters. They have implemented full-scale harvesting of hardwood forests since FY2022.

(2) Supply Safe Forest Products

The GOJ set standard limits for radioactive substances in foods at 100 Bq/kg for general foods. As of March31, 2025, 22 items of non-timber forest products have shipping restrictions.

The production of shiitake mushrooms on sawdust medium has recovered to almost the level before the Great East Japan Earthquake, but that on logs has not recovered even now.

The Forestry Agency has collected, analyzed, and provided information on the supply and demand of mushroom logs in response to the decrease in production volume in Fukushima Prefecture and other mushroom log production areas, which has affected log procurement in many prefectures.

The Forestry Agency established Guidelines Concerning Management of Log Cultivation of Mushrooms to Decrease Radioactive Cesium. Shipping restrictions on mushrooms are to be lifted when cultivation is managed based on this guideline and it has been determined that no mushrooms are produced whose radioactivity exceeds the standard limits. The Forestry Agency supports the maintenance of simple greenhouses and equipment for measuring radioactive substances, which are necessary for safe mushroom production.

Since 2021, if a system for properly managing and inspecting mushrooms and edible wild plants is developed under the shipping and inspection policy set by prefectures, it can be possible to ship the products which are confirmed not to exceed the limit for general foods by non-destructive inspection. As a result, the shipments of Matsutake mushrooms, unpeeled bamboo shoots, Nameko mushrooms, Naratake mushrooms, Mukitake mushrooms and Kuritake mushrooms have resumed in some restriction areas.

Appendix

1. Forestry-related Fundamental Figures

Item	Unit	2000	2005	2010	2015	2019	2020	2021	2022	2023
i Nominal gross domestic product (GDP)	billion yen	535,418	532,516	505,531	538,032	557,911	539,646	553,068	560,506	591,913
Forestry	billion yen	176	137	196	234	248	232	269	281	267
Forestry / GDP	%	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05
ii Total number of workers	million	64.46	63.56	62.57	64.01	67.50	67.10	67.13	67.23	67.47
Forestry	million	0.07	0.06	0.08	0.07	0.08	0.06	0.06	0.07	0.07
Forestry / Total # of workers	%	0.11	0.09	0.13	0.11	0.12	0.09	0.09	0.10	0.10
iii Land area of Japan	million ha	37.79	37.79	37.80	37.80	37.80	37.80	37.80	37.80	37.80
iv Forest	million ha	25.15	25.12	25.10	25.08	25.05	25.05	25.05	25.02	25.02
Forest / Land area	%	67.5	67.4	67.3	67.3	67.2	67.2	67.2	67.1	67.1
v Protection forest	million ha	8.93	11.65	12.02	12.17	12.23	12.25	12.26	12.27	12.29
Protection forest / Forest	%	35.5	46.4	47.9	48.5	48.8	48.9	48.9	49.0	49.1
vi Growing stock of forest	billion m^3	3.5	4.0	4.4	4.9	5.2	5.2	5.2	5.6	5.6
vii Total wood supply/demand	million m^3	101.01	87.42	71.88	75.16	81.91	74.42	82.13	85.07	80.04
Domestic production	million m^3	19.06	17.90	18.92	24.92	30.99	31.13	33.72	34.59	34.44
Import	million m^3	81.95	69.52	52.96	50.24	50.92	43.29	48.41	50.48	45.59
Self-sufficiency rate	%	18.9	20.5	26.3	33.2	37.8	41.8	41.1	40.7	43.0
viii New housing starts	million units	1.23	1.24	0.81	0.91	0.91	0.82	0.86	0.86	0.82
Proportion of wooden structure	%	45.2	43.9	56.6	55.5	57.8	57.6	58.7	55.6	55.4

Sources: i: Cabinet Office "Annual Report on National Accounts for 2023"
ii: Ministry of Internal Affairs and Communications "Annual Report on the Labour Force Survey"
iii: Geospatial Information Authority of Japan "The Report of Statistical reports on the land area by prefectures and municipalities in Japan"
iv, v, vi: Forestry Agency.
vii: Forestry Agency "Wood Supply and Demand Chart"
viii: Ministry of Land, Infrastructure, Transport and Tourism "Housing Starts"
Note: "Total wood supply/demand", "Domestic production" and "Import" in "vii" refer to the volume in roundwood equivalent.

2. Forestry Output

(Unit: billion yen)

Item	2000	2005	2010	2015	2019	2020	2021	2022	2023
Forestry output	531.15	417.05	425.70	454.47	497.28	483.03	545.63	579.22	556.25
Wood production	322.18	210.50	195.29	234.08	270.00	246.43	325.41	360.46	325.70
Softwood	265.33	177.41	170.16	198.19	213.01	179.02	251.70	278.78	233.03
Sugi (Japanese cedar)	123.78	87.53	93.50	118.09	127.43	107.39	147.26	167.45	131.37
Hardwood	54.72	31.71	23.76	19.51	16.95	15.82	15.25	14.53	15.64
Firewood and charcoal production	6.16	6.09	5.08	5.31	5.81	5.96	6.23	6.39	7.19
Grown mushroom production	196.89	198.50	218.91	210.52	216.67	225.93	209.13	206.61	219.92
Minor forestry products production	5.92	1.96	6.42	4.55	4.80	4.71	4.86	5.76	3.45
Forestry income produced	351.91	245.78	229.22	251.02	264.35	253.56	286.44	306.30	314.89

Source Ministry of Agriculture, Forestry and Fisheries (MAFF) "Forestry Output"

Notes 1. "Wood production" includes the output of wood chips for fuel since 2011.
2. "Softwood" in wood production includes output of other softwood and wood for pulp.
3. "Fuelwood and charcoal production" includes the output of bamboo charcoal and charcoal dust since 2001.
4. "Grown mushroom production" includes the output of eryngii mushrooms and other varieties of grown mushrooms since 2001.
5. "Minor forestry products production" includes the output of Japan wax and Japanese lacquer since 2002, the output of wild grass (wild vegetables and wild herbs) since 2010 and the output of gibier since 2016.
6. Due to rounding, some totals may not correspond with the sum of the separate figures.

3. Current State of Forest Resources

(Unit: 1,000 ha, million m^3)

Classification			Total		Standing timber area (canopy cover more than 30%)				Treeless land (canopy cover less than 30%)		Bamboo groves
					Planted forest		Natural forest				
			Area	Growing stock	Area	Growing stock	Area	Growing stock	Area	Growing stock	Area
Total			25,025	5,560.20	10,093	3,545.49	13,553	2,013.72	1,204	0.99	175
National forest	Subtotal		7,657	1,300.55	2,247	553.73	4,756	746.21	653	0.60	0
	Under the Forestry Agency's jurisdiction	Subtotal	7,587	1,295.37	2,243	553.32	4,696	741.44	649	0.60	0
		State-owned	7,510	1,276.54	2,176	534.72	4,693	741.22	640	0.60	0
		Government reforestation	77	18.83	66	18.61	2	0.22	8	0	-
		Other	0	0	-	-	-	-	0	0	-
	Under other Agencys' jurisdiction		70	5.18	5	0.41	61	4.77	4	-	-
Private and public forest	Subtotal		17,368	4,259.65	7,846	2,991.76	8,796	1,267.50	551	0.39	175
	Public forest	Subtotal	3,009	659.13	1,334	427.73	1,548	231.11	121	0.30	6
		Prefecture	1,296	268.78	534	156.28	710	112.25	52	0.24	1
		Municipality/Property ward	1,713	390.36	800	271.44	838	118.86	69	0.06	5
	Private forest		14,311	3,596.71	6,500	2,562.28	7,220	1,034.34	426	0.09	165
	Others		47	3.81	12	1.75	28	2.05	4	0	3

Source Forestry Agency

Notes 1. Data cover the forests defined in Article 2 of the Forest Act.
2. "Others" refers to forests that are not subject to the "Regional Forest Plans" for non-national forest under Article 5 of the Forest Act, and for national forest under Article 7-2 of the Forest Act.
3. Figures are as of March 31, 2017.
4. Symbol of "-" means "not applicable".
5. Due to rounding, some totals may not correspond with the sum of the separate figures.

4. Planted Area by Tree Species

(Unit: ha)

	Total	Softwood					Hardwood
		Sugi (Japanese cedar)	Hinoki (Japanese cypress)	Matsu (Pine)	Karamatsu (Japanese larch)	Other	
2000	(31,316)	(8,223)	(11,574)	(233)	(2,524)	(4,954)	(3,808)
	28,480	7,967	10,745	223	2,493	4,014	3,038
2005	(25,584)	(5,216)	(7,096)	(226)	(3,534)	(5,728)	(3,784)
	22,498	5,011	6,307	183	3,423	4,611	2,963
2010	(18,756)	(4,132)	(2,820)	(247)	(4,604)	(4,265)	(2,688)
	16,388	3,844	2,262	237	4,418	3,381	2,246
2015	(19,429)	(5,537)	(2,039)	(185)	(4,467)	(5,250)	(1,950)
	16,607	5,390	1,930	168	4,027	3,450	1,642
2019	(22,788)	(7,189)	(1,821)	(311)	(6,466)	(5,046)	(1,954)
	20,562	7,005	1,745	308	6,139	3,692	1,673
2020	(22,777)	(7,571)	(1,894)	(309)	(6,681)	(4,412)	(1,910)
	20,686	7,359	1,738	294	6,198	3,445	1,653
2021	(23,015)	(8,207)	(2,230)	(249)	(6,662)	(3,760)	(1,906)
	20,266	7,477	1,798	210	6,271	2,901	1,609
2022	(24,133)	(9,127)	(2,298)	(205)	(6,732)	(3,907)	(1,864)
	20,796	8,253	1,673	168	6,153	3,033	1,516
2023	(25,325)	(9,949)	(2,261)	(194)	(7,204)	(3,930)	(1,787)
	22,354	9,033	1,696	106	6,830	3,240	1,448

Source Forestry Agency

Notes 1. Figures do not include national forest.
2. Figures in parentheses refer to the total area which includes area planted as lower layer of multi-layered forest.
3. Matsu includes Japanese red pine and Japanese black pine.

5. Planted Forest Area by Age Classes

(Unit: 1,000 ha)

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI
1985	604	895	1,263	1,691	1,762	1,569	947	337	240	205	178	137	111	83	148						
1989	436	700	943	1,351	1,691	1,746	1,413	777	270	224	183	151	118	93	79	52	62				
1994	278	421	699	937	1,336	1,686	1,719	1,388	735	262	213	172	139	112	86	67	105				
2001	131	226	350	589	874	1,149	1,599	1,677	1,522	946	353	204	171	144	112	89	62	52	70		
2006	88	168	227	352	593	873	1,143	1,582	1,649	1,500	918	345	200	168	141	106	90	62	120		
2011	73	114	159	231	347	584	852	1,111	1,565	1,631	1,473	921	345	194	164	138	105	87	174		
2016	68	102	114	164	224	348	582	846	1,108	1,529	1,592	1,428	893	340	190	162	135	104	86	172	
2021	77	97	103	112	159	229	346	580	842	1,092	1,487	1,535	1,380	861	337	186	161	133	103	88	168

Source Forestry Agency

Notes 1. Figures are as the end of each fiscal year.
2. The maximum age class of planted forests for each year is as follows: 1985 is age-class XV, 1989 and 1994 are age-class XVII, 2001, 2006, and 2011 are age-class XIX, 2016 is age-class XX, and 2021 is age-class XXI. Age classes beyond these are included in the respective maximum age class for each year.
3. Data cover the forests defined in Article 5 or Article 7-2 of the Forest Act.

6. Thinned Area and Use of Thinnings

(FY)	Thinned area (1,000 ha)			Volume of thinnings used (million m^3)					
	Total	Private and public forest	National forest	Total	Private and public forest				National forest
					Subtotal	Sawnwood	Roundwood	Others	
2010	556	445	110	6.65	4.43	2.70	0.42	1.31	2.22
2014	465	339	126	7.69	5.21	2.91	0.33	1.97	2.47
2015	452	341	112	8.13	5.65	2.97	0.35	2.32	2.48
2016	440	319	121	8.23	5.76	2.95	0.30	2.51	2.47
2017	410	304	106	8.12	5.56	2.75	0.28	2.53	2.56
2018	370	269	101	7.46	4.94	2.37	0.25	2.32	2.52
2019	365	268	98	7.68	5.21	2.53	0.30	2.37	2.47
2020	357	261	96	7.29	4.79	2.26	0.29	2.25	2.50
2021	365	269	96	7.82	5.00	2.45	0.30	2.25	2.82
2022	329	236	93	7.46	4.80	2.37	0.24	2.18	2.66
2023	307	222	85	7.50	4.60	2.15	0.24	2.21	2.90

Source Forestry Agency

Notes 1. Volumes are in roundwood equivalent.
2. "Sawnwood" means the wood such as wood building materials and wood packaging materials.
3. "Roundwood" means the wood such as scaffolding timber and stakes.
4. "Others" includes the wood such as wood chip and wood powder (sawdust).
5. Due to rounding, some totals may not correspond with the sum of the separate figures.

7. Forest Area by Owners

	2015		2020	
	Forest area (ha)	Proportion of total area (%)	Forest area (ha)	Proportion of total area (%)
Total	17,626,761	100.0	17,616,863	100.0
Private	13,563,827	77.0	13,560,696	77.0
Public	3,370,380	19.1	3,407,898	19.3
Prefecture	1,271,571	7.2	1,310,110	7.4
Public corporation	391,189	2.2	351,519	2.0
Municipality	1,406,063	8.0	1,434,838	8.1
Property ward	301,557	1.7	311,431	1.8
Incorporated Administrative Agencies	692,554	3.9	648,269	3.7

Source MAFF "Census of Agriculture and Forestry"

Notes 1. Due to rounding, some totals may not correspond with the sum of the separate figures.
2. "Incorporated Administrative Agencies" include Independent Administrative Agencies, National University Corporations and Special Corporations.

8. Number of Forestry Management Entities and their Forest Areas

(Unit: entity, ha)

	Total		Less than 3 ha		3-5 ha		5-20 ha		20-50 ha		50-100 ha		100 ha or more	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Total	34,001	3,322,691	1,520	628	6,236	22,979	15,220	148,280	6,045	176,477	2,151	142,598	2,829	2,831,728
Corporation	4,093	1,245,256	983	210	201	757	765	8,398	611	19,542	423	29,441	1,110	1,186,908
Private company	1,994	663,822	656	114	90	322	372	3,868	270	8,221	143	9,562	463	641,736
Cooperative	1,608	314,120	271	87	65	256	268	3,229	267	8,842	229	16,117	508	285,588
Agricultural cooperative	47	15,354	-	-	1	3	4	40	8	298	4	283	30	14,730
Forest owners' cooperative	1,388	212,763	238	87	51	198	229	2,751	234	7,702	209	14,682	427	187,343
Other cooperatives	173	86,003	33	-	13	55	35	438	25	842	16	1,152	51	83,516
Other corporations	491	267,314	56	8	46	179	125	1,301	74	2,480	51	3,763	139	259,583
Non-corporation	29,080	723,038	536	417	6,031	22,207	14,399	139,244	5,374	154,949	1,648	107,263	1,092	298,959
Individual	27,776	616,223	494	398	5,883	21,634	13,940	134,299	5,093	146,131	1,484	95,694	882	218,067
Public	828	1,354,397	1	1	4	15	56	638	60	1,986	80	5,894	627	1,345,862

Source MAFF "2020 Census of Agriculture and Forestry"

Notes 1. The symbol "-" means "not applicable".
2. "Forestry management entities" corresponds to one of the followings. The entities (I) own more than 3 hectares of forest, and also have conducted forestry or have established a “Forest Management Plan” for the past five years, (II) have been entrusted with forestation or (III) have harvested more than 200 m^3 of logs for the past one year through the entrustment and the purchase of standing trees.

9. Roundwood Production

(Unit: 1,000 m^3)

			2000	2005	2010	2015	2019	2020	2021	2022	2023	Relative change from the previous year (%)
Total			17,034	16,166	17,193	20,049	21,883	19,882	21,847	22,082	20,647	▲ 6.5
By tree species	Softwood	Subtotal	13,707 (80)	13,695 (85)	14,789 (86)	17,815 (89)	19,876 (91)	18,037 (91)	20,088 (92)	20,386 (92)	18,926 (92)	▲ 7.2
		Sugi (Japanese cedar)	7,671	7,756	9,049	11,226	12,736	11,663	12,917	13,238	11,917	▲ 10.0
		for sawnwood	7,258 <57>	6,737 <58>	6,695 <63>	7,869 <66>	8,582 <67>	7,841 <68>	8,630 <67>	8,900 <69>	8,120 <66>	▲ 8.8
		Hinoki (Japanese cypress)	2,273	2,014	2,029	2,364	2,966	2,722	3,079	2,971	3,180	7.0
		Akamatsu (Japanese red pine), Kuromatsu (Japanese black pine)	1,034	783	694	779	601	570	529	559	494	▲ 11.6
		Karamatsu (Japanese larch), Ezomatsu (Yezo spruce), Todomatsu (Sakhalin fir)	2,410	2,910	2,816	3,268	3,405	2,940	3,183	3,362	3,078	▲ 8.4
		Other	319	232	201	170	168	142	380	256	257	0.4
	Hardwood		3,327 (20)	2,471 (15)	2,404 (14)	2,236 (11)	2,007 (9)	1,845 (9)	1,759 (8)	1,696 (8)	1,721 (8)	1.5
By use	Sawnwood		12,798 (75)	11,571 (72)	10,582 (62)	12,004 (60)	12,875 (59)	11,615 (58)	12,861 (59)	12,937 (59)	12,271 (59)	▲ 5.1
	Plywood		138 (1)	863 (5)	2,490 (14)	3,356 (17)	4,745 (22)	4,195 (21)	4,661 (21)	4,912 (22)	3,909 (19)	▲ 20.4
	Chips		4,098 (24)	3,732 (23)	4,121 (24)	4,689 (23)	4,263 (19)	4,072 (20)	4,325 (20)	4,233 (19)	4,467 (22)	5.5

Source MAFF "Wood Supply and Demand Report"

Notes 1. Figures in parentheses refer to the percentage of each to total volume.
2. Figures in angle brackets refer to the percentage of Sugi for sawnwood to the volume for sawnwood of all species.
3. Roundwood Production excludes forest residue.
4. Total figures is the sum of "Sawnwood", "Plywood" and "Chips".
5. Due to rounding, some totals may not correspond with the sum of the separate figures.
6. Production of roundwood for LVL is added to "Plywood" since 2017.

10. Wood Supply and Demand Chart (roundwood equivalent)

(Unit: 1,000 m^3)

Supply \ Demand			Demand								Domestic consumption										Export										
				Industrial use								Industrial use							Fuel wood					Industrial use							Fuel wood			
			Total	Subtotal	Sawnwood	Plywood	Pulp and chips	Other	Wood for mushroom production	Fuel wood	Total	Subtotal	Sawnwood	Plywood	Pulp and chips	Other	Wood for mushroom production	Subtotal	Charcoal	Firewood	Wood chips for fuel	Total	Subtotal	Roundwood	Sawnwood	Plywood	Pulp and chips	Other	Subtotal	Charcoal	Firewood	Wood chips for fuel
Supply	Total		(18,718)	(6,134)			(6,134)			(12,584)	(18,718)	(6,134)			(6,134)			(12,584)			(12,584)										
			80,035	59,368	21,790	7,474	27,797	2,307	191	20,476	76,640	55,979	21,563	7,280	26,427	710	191	20,471	785	68	19,618	3,395	3,390	1,595	227	194	1,371	3	5	2	0	3
	Industrial use	Roundwood	(6,134)	(6,134)			(6,134)				(6,134)	(6,134)			(6,134)																
			25,694	25,694	14,878	4,137	4,692	1,987			22,306	22,306	14,652	3,943	3,322	389						3,389	3,389	1,595	226	194	1,371	3				
		Forest residue	90	90			90				90	90			90																
		Import	33,584	33,584	6,912	3,337	23,015	320			33,583	33,583	6,911	3,337	23,015	320						1	1		1							
	Wood for mushroom production		191						191		191						191															
	Fuel wood		(12,584)							(12,584)	(12,584)							(12,584)			(12,584)										
			20,476							20,476	20,471							20,471	785	68	19,618	5							5	2	0	3
Domestic production	Total		34,441	22,930	12,267	3,909	4,778	1,976	191	11,320	31,053	19,547	12,042	3,719	3,408	378	191	11,315	45	62	11,207	3,388	3,383	1,595	225	190	1,371	3	5	2	0	3
	Industrial use	Roundwood	22,840	22,840	12,267	3,909	4,688	1,976			19,457	19,457	12,042	3,719	3,318	378						3,383	3,383	1,595	225	190	1,371	3				
		Forest residue	90	90			90				90	90			90																
	Wood for mushroom production		191						191		191						191															
	Fuel wood		11,320							11,320	11,315							11,315	45	62	11,207	5							5	2	0	3
Import	Total		45,594	36,438	9,523	3,565	23,019	331		9,156	45,588	36,432	9,521	3,561	23,019	331		9,156	740	5	8,411	6	6		2	4						
	Industrial use	Roundwood	2,854	2,854	2,611	228	4	11			2,848	2,848	2,610	224	4	11						5	5		1	4						
		Wood products Subtotal	33,584	33,584	6,912	3,337	23,015	320			33,583	33,583	6,911	3,337	23,015	320						1	1		1							
		Sawnwood	6,912	6,912	6,912						6,911	6,911	6,911									1	1		1							
		Plywood	3,337	3,337		3,337					3,337	3,337		3,337																		
		Pulp	3,868	3,868			3,868				3,868	3,868			3,868																	
		Chips	19,147	19,147			19,147				19,147	19,147			19,147																	
		Other	320	320				320			320	320				320																
	Fuel wood		9,156							9,156	9,156							9,156	740	5	8,411										

Source Forestry Agency "Wood Supply and Demand Chart", 2023

Notes 1. Figures in parentheses of the volume of pulp and chips and fuel wood, for example wood chips from mill residue or construction waste, are not included in the "total" and "subtotal".
2. "Forest residue" refers to branches or roots carried into mills for use.
3. Due to rounding, some totals may not correspond with the sum of the separate figures.

11. Wood Supply/Demand (roundwood equivalent)

(Unit: 1,000 m^3)

	Wood supply/demand				Wood demand for industrial use by sector				Wood supply for industrial use by source	
	Total	Wood for industrial use	Fuel wood	Wood for mushroom production	Sawnwood	Plywood	Pulp and chips	Others	Domestic production	Import (roundwood and wood products)
1955	65,206	45,278	19,928	…	30,295	2,297	8,285	4,401	42,794	2,484
1960	71,467	56,547	14,920	…	37,789	3,178	10,189	5,391	49,006	7,541
1965	76,798	70,530	6,268	…	47,084	5,187	14,335	3,924	50,375	20,155
1970	106,601	102,679	2,348	1,574	62,009	13,059	24,887	2,724	46,241	56,438
1975	99,303	96,369	1,132	1,802	55,341	11,173	27,298	2,557	34,577	61,792
1980	112,211	108,964	1,200	2,047	56,713	12,840	35,868	3,543	34,557	74,407
1985	95,447	92,901	572	1,974	44,539	11,217	32,915	4,230	33,074	59,827
1990	113,242	111,162	517	1,563	53,887	14,546	41,344	1,385	29,369	81,793
1995	113,698	111,922	721	1,055	50,384	14,314	44,922	2,302	22,916	89,006
2000	101,006	99,263	940	803	40,946	13,825	42,186	2,306	18,022	81,241
2005	87,423	85,857	1,001	565	32,901	12,586	37,608	2,763	17,176	68,681
2010	71,884	70,253	1,099	532	25,379	9,556	32,350	2,968	18,236	52,018
2015	75,160	70,883	3,962	315	25,358	9,914	31,783	3,829	21,797	49,086
2019	81,905	71,269	10,386	251	25,270	10,474	31,061	4,464	23,805	47,464
2020	74,424	61,392	12,790	242	24,597	8,919	26,064	1,812	21,980	39,412
2021	82,130	67,142	14,742	246	26,179	10,294	28,743	1,926	24,127	43,015
2022	85,069	67,494	17,365	209	26,263	9,820	29,547	1,865	24,144	43,351
2023	80,035	59,368	20,476	191	21,790	7,474	27,797	2,307	22,930	36,438

Source Forestry Agency "Wood Supply and Demand Chart"

Notes 1. "Others" includes items such as roundwood for export.
2. The symbol "…" means "unknown or lack of investigation".
3. Due to rounding, some totals may not correspond with the sum of the separate figures.
4. "Fuel wood" includes wood chip for fuel utilized by woody biomass power plants since 2014.

12. Trend of self-sufficiency rate for wood

(Unit: 1,000 m^3)

			2000	2005	2010	2015	2019	2020	2021	2022	2023	Relative change from the previous year (%)
Total wood supply/demand			101,006	87,423	71,884	75,160	81,905	74,424	82,130	85,069	80,035	▲ 5.9
Wood for industrial use			99,263	85,857	70,253	70,883	71,269	61,392	67,142	67,494	59,368	▲ 12.0
Wood for mushroom production			803	565	532	315	251	242	246	209	191	▲ 8.6
Fuel wood			940	1,001	1,099	3,962	10,386	12,790	14,742	17,365	20,476	17.9
Domestic production			19,058	17,899	18,923	24,918	30,988	31,134	33,721	34,593	34,441	▲ 0.4
Import			81,948	69,523	52,961	50,242	50,917	43,290	48,409	50,477	45,594	▲ 9.7
Self-sufficiency rate (%)			18.9	20.5	26.3	33.2	37.8	41.8	41.1	40.7	43.0	2.3
Wood demand for industrial use by sector	Total	Total	99,263	85,857	70,253	70,883	71,269	61,392	67,142	67,494	59,368	▲ 12.0
		Domestic production	18,022	17,176	18,236	21,797	23,805	21,980	24,127	24,144	22,930	▲ 5.0
		Import	81,241	68,681	52,018	49,086	47,464	39,412	43,015	43,351	36,438	▲ 15.9
		Self-sufficiency rate (%)	18.2	20.0	26.0	30.8	33.4	35.8	35.9	35.8	38.6	2.8
	Sawnwood	Subtotal	40,946	32,901	25,379	25,358	25,270	24,597	26,179	26,263	21,790	▲ 17.0
		Domestic production	12,798	11,571	10,582	12,004	12,875	11,615	12,861	12,937	12,267	▲ 5.2
		Import	28,148	21,330	14,797	13,354	12,395	12,982	13,318	13,326	9,523	▲ 28.5
		Self-sufficiency rate (%)	31.3	35.2	41.7	47.3	51.0	47.2	49.1	49.3	56.3	7.0
	Plywood	Subtotal	13,825	12,586	9,556	9,914	10,474	8,919	10,294	9,820	7,474	▲ 23.9
		Domestic production	138	863	2,490	3,530	4,745	4,195	4,661	4,912	3,909	▲ 20.4
		Import	13,687	11,723	7,066	6,384	5,729	4,724	5,633	4,908	3,565	▲ 27.4
		Self-sufficiency rate (%)	1.0	6.9	26.1	35.6	45.3	47.0	45.3	50.0	52.3	2.3
	Pulp and chips		(6,537)	(7,974)	(6,192)	(6,667)	(6,258)	(5,634)	(7,210)	(6,242)	(6,134)	▲ 1.7
		Subtotal	42,186	37,608	32,350	31,783	31,061	26,064	28,743	29,547	27,797	▲ 5.9
		Domestic production	4,749	4,426	4,785	5,202	4,651	4,420	4,744	4,563	4,778	4.7
		Import	37,437	33,181	27,565	26,581	26,410	21,644	24,000	24,983	23,019	▲ 7.9
		Self-sufficiency rate (%)	11.3	11.8	14.8	16.4	15.0	17.0	16.5	15.4	17.2	1.8
	Others	Subtotal	2,306	2,763	2,968	3,829	4,464	1,812	1,926	1,865	2,307	23.7
		Domestic production	337	316	379	1,061	1,534	1,750	1,862	1,732	1,976	14.1
		Import	1,969	2,447	2,589	2,767	2,931	62	65	134	331	147.0
		Self-sufficiency rate (%)	14.6	11.4	12.8	27.7	34.4	96.6	96.6	92.8	85.6	▲ 7.2
Wood for mushroom production		Subtotal	803	565	532	315	251	242	246	209	191	▲ 8.6
		Domestic production	803	565	532	315	251	242	246	209	191	▲ 8.6
		Import	-	-	-	-	-	-	-	-	-	-
		Self-sufficiency rate (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Fuel wood			…	…	…	(12,473)	(12,827)	(13,029)	(12,887)	(12,594)	(12,584)	▲ 0.1
		Subtotal	940	1,001	1,099	3,962	10,386	12,790	14,742	17,365	20,476	17.9
		Domestic production	233	159	155	2,806	6,932	8,912	9,348	10,239	11,320	10.6
		Import	707	842	943	1,156	3,454	3,878	5,394	7,126	9,156	28.5
		Self-sufficiency rate (%)	24.8	15.9	14.1	70.8	66.7	69.7	63.4	59.0	55.3	▲ 3.7

Source Forestry Agency "Wood Supply and Demand Chart"

Notes 1. Self-sufficiency rate is calculated by domestic production divided by total or subtotal in each category.
2. "Others" includes items such as roundwood for export.
3. Figures in parentheses refer to the volume of wood chip from mill residue or construction waste. They are not included in the "total" and "subtotal".
4. Symbol of "-" means "not applicable."
5. The symbol "…" means "unknown or lack of investigation".
6. Due to rounding, some totals may not correspond with the sum of the separate figures.
7. "Fuel wood" includes wood chip for fuel utilized by woody biomass power plants since 2014.
8. Among "relative change from the previous year", "self-sufficiency rate" field is the difference from the previous year.

13. Wood Supply by Country (roundwood equivalent)

(Unit: 1,000 m³, %)

			2000	2005	2010	2015	2019	2020	2021	2022	2023
Imported wood	North America	Subtotal	(28.9) 28,700	(18.8) 16,129	(19.2) 13,506	(17.5) 12,415	(15.3) 10,893	(14.8) 9,068	(14.6) 9,835	(14.7) 9,937	(13.8) 8,170
		U.S.A	14,460	6,844	5,838	6,057	5,754	5,488	5,590	6,174	5,330
		Canada	14,240	9,285	7,668	6,359	5,139	3,580	4,245	3,763	2,840
	Southeast Asia	Subtotal	(13.7) 13,569	(12.2) 10,511	(8.9) 6,287	(8.3) 5,848	(6.9) 4,949	(6.9) 4,215	(6.7) 4,504	(6.7) 4,492	(6.1) 3,626
		Malaysia	6,690	5,888	3,773	2,917	2,213	1,771	1,820	1,730	1,227
		Indonesia	5,858	4,137	2,304	2,804	2,548	2,333	2,625	2,669	2,313
		Others	1,021	486	209	127	187	111	59	92	86
	Russia Federation		(7.5) 7,429	(8.6) 7,411	(3.3) 2,343	(2.9) 2,081	(3.5) 2,459	(3.3) 2,050	(3.3) 2,202	(2.4) 1,606	(1.4) 845
	Europe		(4.7) 4,675	(6.9) 5,937	(7.1) 4,967	(7.6) 5,374	(8.4) 5,974	(9.3) 5,695	(7.9) 5,311	(9.1) 6,139	(7.0) 4,146
	Others	New Zealand	(4.4) 4,374	(3.4) 2,878	(3.9) 2,720	(2.3) 1,638	(2.0) 1,393	(1.8) 1,086	(1.9) 1,291	(1.6) 1,083	(1.6) 968
		Chile	(3.8) 3,795	(4.6) 3,952	(6.7) 4,726	(5.6) 3,987	(4.9) 3,479	(4.9) 2,994	(3.7) 2,457	(3.3) 2,208	(3.0) 1,805
		Australia	(8.7) 8,604	(10.2) 8,729	(11.0) 7,722	(6.6) 4,662	(6.0) 4,271	(4.3) 2,628	(5.1) 3,432	(5.2) 3,505	(6.0) 3,586
		China	(2.5) 2,445	(3.0) 2,544	(3.0) 2,084	(2.8) 1,967	(2.5) 1,777	(2.6) 1,591	(3.2) 2,144	(2.4) 1,588	(2.0) 1,206
		Viet Nam				(7.6) 5,418	(9.0) 6,446	(9.5) 5,840	(11.0) 7,364	(11.3) 7,599	(12.0) 7,112
		Other	(7.7) 7,651	(12.3) 10,591	(10.9) 7,663	(8.0) 5,696	(8.2) 5,823	(6.9) 4,245	(6.7) 4,476	(7.7) 5,193	(8.4) 4,974
	Subtotal		(81.8) 81,241	(80.0) 68,681	(74.0) 52,018	(69.2) 49,086	(66.6) 47,464	(64.2) 39,412	(64.1) 43,015	(64.2) 43,351	(61.4) 36,438
Domestic wood			(18.2) 18,022	(20.0) 17,176	(26.0) 18,236	(30.8) 21,797	(33.4) 23,805	(35.8) 21,980	(35.9) 24,127	(35.8) 24,144	(38.6) 22,930
Total			99,263	85,857	70,253	70,883	71,269	61,392	67,142	67,494	59,368

Sources Ministry of Finance "Trade Statistics of Japan", Forestry Agency "Wood Supply and Demand Chart"

Notes 1. Figures refer to the sum of domestic/imported roundwood volume and imported products volume (sawnwood, plywood, and pulp and chips) converted into roundwood equivalent.
2. "Others" of "Southeast Asia" includes Philippines, Singapore, Brunei, Papua New Guinea, and Solomon.
3. "Others" of "Others" includes African countries.
4. "Others" of "Others" includes Viet Nam until 2014.
5. Figures in parentheses refer to the percentage of each volume to the "total" volume of each year.
6. Due to rounding, some totals may not correspond with the sum of the separate figures.

14. Number of Mills/Factories and Production Volume

		Unit	2000	2005	2010	2015	2019	2020	2021	2022	2023
Sawnwood	Number of mills	mill	11,692	9,011	6,569	5,206	4,382	4,115	3,948	3,804	3,749
	Arrival of logs	1,000 m³	26,526	20,540	15,762	16,182	16,637	14,851	16,650	16,363	15,061
	Shipment	1,000 m³	17,231	12,825	9,415	9,231	9,032	8,203	9,091	8,600	7,965
Plywood	Number of mills	mill	354	271	192	185	176	173	158	155	164
	Arrival of logs	1,000 m³	5,401	4,636	3,811	4,218	5,448	4,626	5,093	5,355	4,137
	Surface-untreated plywood production	1,000 m³	3,218	3,212	2,645	2,756	3,337	2,999	3,172	3,059	2,532
	Surface-treated plywood production	1,000 m³	1,534	1,037	647	524	562	551	494	516	519
Glued laminated timber	Number of factories	factory	281	259	182	157	162	148	132	140	143
	Production	1,000 m³	892	1,512	1,455	1,485	1,920	1,740	1,982	1,659	1,675
Cross laminated timber	Number of factories	factory	…	…	…	…	9	11	11	9	10
	Production	1,000 m³	…	…	…	…	13	13	15	15	18
Wood chips	Number of mills	mill	2,657	2,040	1,577	1,424	1,250	1,196	1,082	1,110	1,119
	Production	1,000 tons	…	6,005	5,407	5,745	5,266	4,753	6,070	5,278	5,260
		(1,000 m³)	10,851	…	…	…	…	…	…	…	…

Sources MAFF "Wood Supply and Demand Report", Japan Laminated Wood Products Association

Notes 1. "Sawnwood" excludes sawmills with output power less than 7.5kW.
2. Figures of LVL are added to figures of "Plywood" since 2017.
3. Figures of glued laminated timber are based on the data from Japan Laminated Wood Products Association until 2016.
4. "Wood chips" excludes chips for fuel.
5. The symbol "…" means "unknown or lack of investigation".

Full text (in Japanese) of the “Annual Report on Forest and Forestry for FY2024” is available on the website of the Forestry Agency:
https://www.rinya.maff.go.jp/j/kikaku/hakusyo/r6hakusyo/index.html

Please refer to those texts for further information on the issues contained in this brochure, or ask the Annual Report Group of the Forestry Agency:

Annual Report Group
Policy Planning Division, Forest Policy Planning Department,
Forestry Agency
Ministry of Agriculture, Forestry, and Fisheries (MAFF)
1-2-1 Kasumigaseki, Chiyoda-ku, TOKYO 100-8952
JAPAN
Contact of the Ministry of Agriculture, Forestry and Fisheries
https://www.contactus.maff.go.jp/rinya/form/rinsei/inquiry_rinya_160801.html

Kiguri, the mascot character of Annual Report on Forest and Forestry