

Annual Report on Forest and Forestry in Japan

Fiscal Year 2019

(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) 2019.

Table of Contents

Forests and Forestry Topics for FY2019	1
Special topic: Key roles of Forest, Forestry and Wood Industry in SDGs	3
Chapter I Forest Management and Conservation	9
Chapter II Forestry and Hilly and Mountainous Rural Communities	16
Chapter III Wood Product Demand and Use of Wood	21
Chapter IV National Forest Management.....	26
Chapter V Reconstruction after the Great East Japan Earthquake	29
Appendix	32

Note: The maps of Japan included in this summary report do not necessarily represent the territory of Japan comprehensively.

Forests and Forestry Topics for FY2019

Topic 1: Launching the Forest Management System and Forest Environment Transfer Tax and Revising the National Forest Management Law

In April 2019, the Forest Management Act took effect to launch a system under which municipal governments or specified forestry practitioners can manage forests which their owners are not able to manage appropriately.

In September 2019, the distribution of the Forest Environment Transfer Tax to local governments started.

National and prefectural governments support municipal governments assigned to implementing the Forest Management System.

Revising the National Forest Management Law

An act for revising the National Forest Management Law and others was enacted in June 2019 and put into force in April 2020 to develop forestry practitioners who will play a key role under the Forest Management System for private forest.

The act allows forestry practitioners to acquire a right to steadily harvest trees from certain designated areas of National Forests for a certain period of time.

Topic 2: Using Wood for Tokyo Olympics/Paralympics Facilities

Some 2,000 m³ of wood have been used in the National Stadium for, such parts as its roof and eaves. Wood from Japan's entire 47 prefectures is symbolically allocated for eaves.

Wood produced throughout Japan has been abundantly used for the Village Plaza for the Athletes Village and the Ariake Gymnastics Arena where the Tokyo Olympics/Paralympics will be held.

For these facilities, wood produced considering sustainability, such as wood subject to forest certification, has been used.

The event is expected to provide an opportunity for promoting the use of wood.



An exterior view of the Japan National Stadium

(©JAPAN SPORT COUNCIL)

Topic 3: Promoting Wood Use for Mid-to-High-Rise Buildings

As calls for a sustainable society are growing, momentum on the demand side including building clients is rising to use more wood for buildings.

New associations of businesses and industries are promoting initiatives to increase wood use in buildings.

Wooden buildings including mid-to-high-rises are under construction at various locations in Japan, with initiatives increasing to choose wooden interior, exterior and structures.



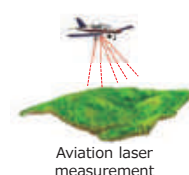
A 12-story apartment building using wooden materials (Tokyo)
(©Takenaka Corporation)

Topic 4: Promoting Forestry Innovations Including Smart Forestry

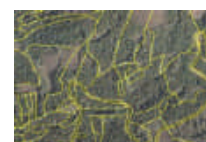
To transform forestry into a growth industry, Japan must address challenges such as the advanced use of forest-related information and the improvement of productivity, safety and profitability during the long cycle from planting to harvesting.

The Forestry Agency is promoting “forestry innovations” utilizing new technology, including machinery automation as well as smart forestry using information and communications technologies that have remarkably developed in recent years.

• Smart forestry utilizing ICT



Aviation laser measurement



Management of land boundary information

• Forestry machine automation



Automation of logging



Automation of transportation

Topic 5: Responses to Forest Damage and Mountainous Disasters from Typhoons (Faxai and Hagibis) in 2019

In September 2019, Typhoon Faxai (Typhoon No.15) hurt 639 ha of forest mainly in Chiba Prefecture, resulting in forest damage totaling about 3.9 billion yen.

In October 2019, record-breaking rainfall accompanying Typhoon Hagibis (Typhoon No.19) and other storms caused landslides at 1,256 locations and forest roads to collapse at 10,886 locations in the Tohoku and Kanto-Koshinetsu regions, resulting in forest damage totaling about 80.5 billion yen.

The damage caused by Typhoon Faxai (Typhoon No.15)



Fallen trees due to strong wind

Sanmu City, Chiba Prefecture

Technical support from Forestry Agency staff



Investigation of damage on forest roads

Tome City, Miyagi Prefecture

The damage caused by Typhoon Hagibis (Typhoon No.19)



Many landslides due to heavy rain

Marumori Town, Miyagi Prefecture



Scour of paved roads due to abnormal rainfall

Fuji City, Shizuoka Prefecture

Special topic: Key roles of Forest, Forestry and Wood Industry in SDGs

1. Sustainable Development Goals (SDGs) and Forests

(1) Growing Interest in SDGs

The 2030 Agenda for Sustainable Development (2030 Agenda) adopted at the United Nations Sustainable Development Summit in September 2015 is an integrated effort to realise a more sustainable planet while harmonising economy, society, and environment, the three integral aspects of our world. The Sustainable Development Goals (SDGs) are listed as 17 goals and 169 targets in the agenda.

The SDGs seek to build on the Millennium Development Goals (MDGs) and complete what they did not achieve. SDGs call for action and participation by not only governments and international organizations but also civil society, the private sector and others.

As indicated by increasing ESG (environment, society and governance) investment, interest in the SDGs is growing globally.

(2) Relationship between the Forest, Forestry and Wood Industry and SDGs

The United Nations Strategic Plan for Forests 2017-2030, adopted at the United Nations General Assembly in April 2017, provides a framework for forest-related contributions to the implementation of the 2030 Agenda, including the SDGs.

Japan's forest stock has increased year by year, paving the way for the wide use of forests. As calls are growing for addressing depopulation in rural regions and improving life quality, forests have the potential to make various contributions to the SDGs.

【Relationship between Japan's cyclical use of forests and the SDGs】

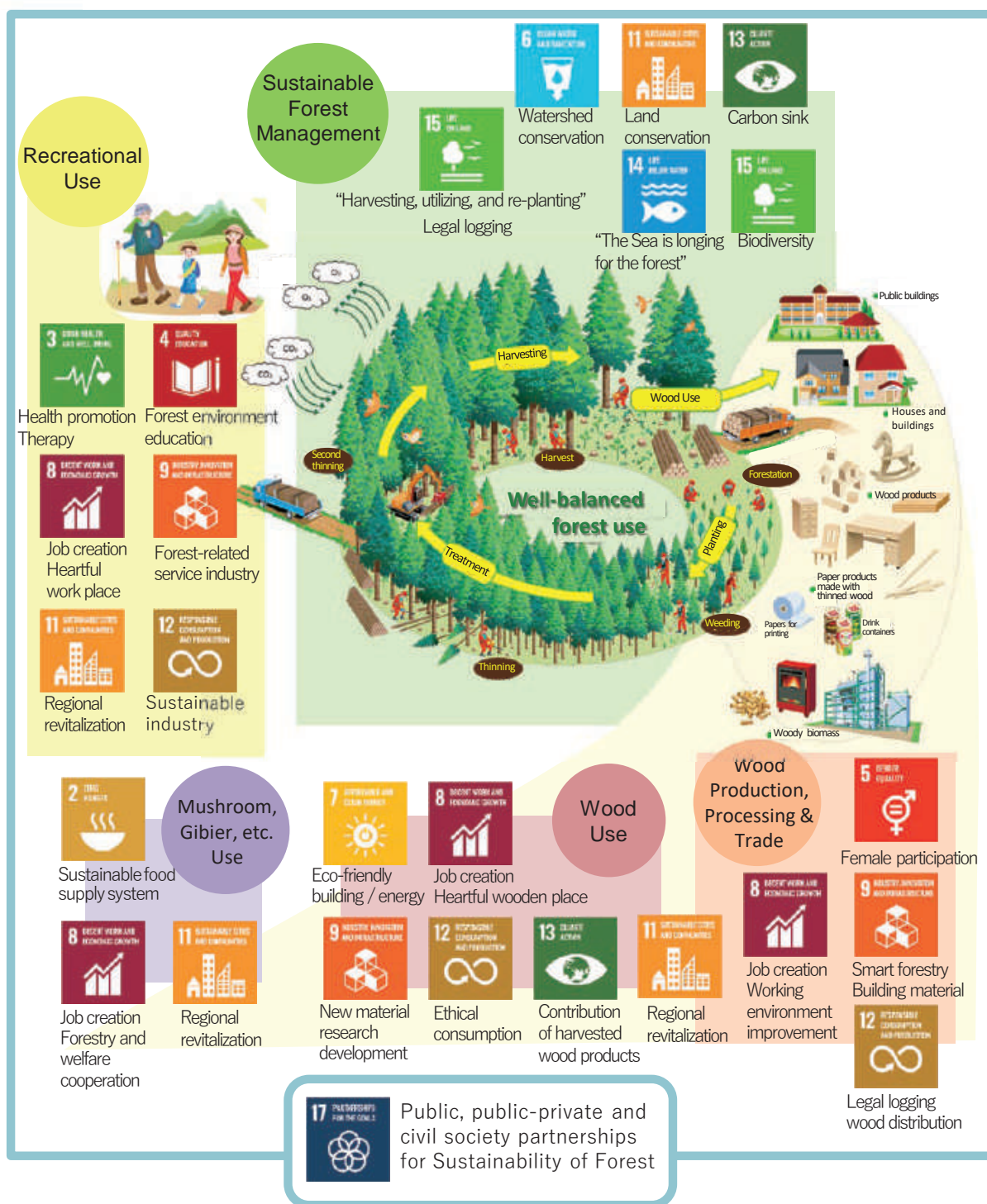
Goal 15 of the SDGs cites sustainable forest management. Furthermore, forests themselves contribute to various SDGs (Goals 6, 11, 13, 14 and 15). The use (including production, processing and distribution) of forest resources such as timber and mushrooms and recreational use contribute to various SDGs (Goals 2, 3, 4, 5, 7, 8, 9, 11, 12 and 13) (Fig. 1).

The use of forests leads to forest development and conservation as a greater cycle, representing the integration of economic, social and environmental dimensions by the SDGs.

Since the sustainable management of forests through the use of wood products certified as legal and planting after harvesting is the premise for the cycle, it indicates the forestry and wood industry's key role in the cycle.



Relationship between Japan's cyclical use of forests and the SDGs



Notes 1: Words below icons represent major expected effects rather than the explanation of goals.

2: In addition to the figure, Goal 1 calls for eradicating poverty for people depending on forests, Goal 10 for guaranteeing rights to use forests, and Goal 16 for promoting a governance framework for implementing sustainable forest management. Various initiatives are expected to make wider contributions to the SDGs, including effects that are not specified in the figure.

Fig. 1 Relationship between Japan's cyclical use of forests and the SDGs

2. Diversifying Relationship with Forests

In Japan, people's relationships with forests are diversifying into forest management, forest resources use, and recreational use.

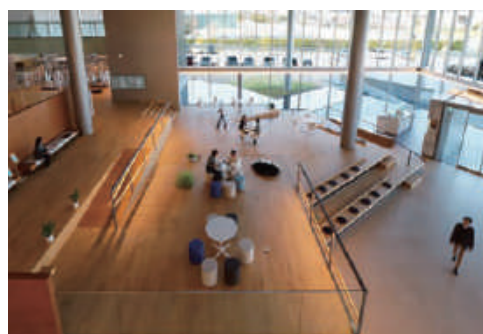
(1) Forest Management

As interest grows in forest conservation and global warming, various entities including nonprofit organizations and business corporations are participating in forest management. There are various forest development objectives, including water resources conservation, biodiversity conservation, soil conservation and marine environment improvement.

Some business corporations outside the forestry and wood industry are taking advantage of their strengths for participating in forestry.

Suntory Holdings Limited implements forest improvement activities to conserve underground water for its liquor products. It cooperates with experts in considering forest management plans while envisioning forests a century away.

Suntory also uses wood produced through forest management for floors and tables at its facilities.



Wood used at a Suntory facility

(2) Forest Resources Use

Initiatives to use forest resources as sustainable materials are increasing.

Regarding buildings, wood is used at commercial, welfare and other facilities because of its warmth. Wood is expected to contribute to making office work easier. The use of wood for buildings contributes to sustainable forest management and regional vitalization in addition to lower environmental load or costs of construction (Fig.2).

New products, such as wooden and paper straws, are attracting attention as plastics substitutions. New wood-based biomass materials (including cellulose nanofibers (CNF) and glycol lignin) have been developed. Some prototypes taking advantage of their characteristics have been manufactured, and some of them have been for



Fig. 2 Wood used for a shop's exterior



Fig 3 A prototype vehicle using CNF components (©Ministry of the Environment)

commercial sale (Fig.3).

Woody biomass energy is being increasingly used as a renewable energy source. Woody biomass energy contributes to regional economic growth and employment through wood collection and processing.

Various entities use mushrooms, bamboo shoots, *gibiers* (game meat) and other forest resources. There are initiatives for forestry's cooperation with welfare such as Shiitake mushroom production by persons with disabilities.

(3) Recreational Use

Forests have been increasingly used for tourism, health promotion, education. Such recreational use contributes to forest management and conservation through progress in exchanges between urban and rural residents and in understanding about forests.

While many people enjoy nature through mountain climbing and hiking, forests have increasingly been used for other leisure purposes, including athletics and tree house making. Trail running is used for regional vitalization. Initiatives have been implemented to attract tourists with forestry experiences and forest walking programs.

Forests are used for preventing lifestyle diseases and promoting health in Japan. Some business corporations use forests for training and recreation to promote their employees' work motivation, teamwork and health (Fig. 4).

Forest kindergartens and other initiatives to provide infants with natural experience opportunities are increasing (Fig. 5). Various forest environment education programs have also been implemented for elementary school pupils.

Some business corporations have launched workation initiatives for telework in salubrious rural regions. In 2019, Wakayama and Nagano prefectural governments took leadership to create a council for local governments' cooperation in promoting workations through campaigns targeting business corporations.



Fig. 4 Health promotion walking



Fig. 5 Forest kindergarten

3. Business Corporations' Expectations and Initiatives for Forests

The Forestry Agency has polled Japanese business corporations about the SDGs and forest/wood use, gaining responses from 392 corporations ranging from small and medium-sized ones to large ones in various industries, including manufacturing.

Some 60% of the respondents are implementing or planning to implement initiatives involving forests, forestry and wood use. More than half of these corporations cited forest management and conservation as their forest-related activities (Fig. 6a).

The most frequently cited effect of forest-related activities is social contribution, followed by interchange with local communities (Fig. 6b).

Toward expanding forest-related activities, business corporations seek information on their advantages regarding such activities and the introduction of forest owners' cooperatives that are proactively exploring business partners.



Fig. 6a Details of initiatives involving forests, forestry and wood use

Fig. 6b Expected effects of forestry-related activities (major objectives)

4. Future Role and Challenges of Stakeholders

(1) Roles and Challenges of Forestry and Wood Industry from the viewpoint of the SDGs

Forestry and wood industry stakeholders' actions are indispensable for various entities' initiatives to use forests and wood. In addition, forestry and wood industry stakeholders' reconsideration of their business operations from the viewpoint of the SDGs contributes to their sustainability.

While sustainable forest management is fundamental, some logging sites have been

left without planting after harvesting. The reason is partly because present log prices are too low to cover planting and forest management costs. Forestry cost reduction and initiatives for cooperation with midstream and downstream sectors are important for increasing profits for upstream sectors.

As people have become aware of sustainability in line with their growing interest in the SDGs, building clients as well as contractors have begun to seek legal wood. Given that adequate arrangements are required for supplying legally harvested wood, it is important to confirm the legality of wood and register wood-related business entities under the Clean Wood Act.

As the productive population declines, it has become even more important to promote safe, easy-to-work and attractive workplaces. It is necessary to improve logging skills with equipment by repeated logging exercises and simulating logging operations.

While the number of female workers in the forestry industry has decreased faster than that of male workers, female workers for logging have increased in number due partly to progress in mechanization. The acceptance of female workers contributes to improving the forestry work environment and is expected to lead to the enhancement of the worker retention rate.

(2) Stakeholders' Roles in Supporting the Forest, Forestry and Wood Industry

Since not only forestry and wood industry but also various business corporations and individuals are related to forest in some way, so that they can influence forest management better and contribute to the SDGs in the context of sustainable forest management.

As there are many regions where forests are important local resources, regional business corporations' cooperation in using forests is expected to lead to favorable environmental, economic and social trends.

In the first step to engage with the SDGs, individuals become aware of these goals. Regarding forests, individuals feel the goodness of forests and wood by enjoying going to forests for tourism or leisure purposes or by using wooden products.

Local and national governments should support the vitalization of initiatives for forests. The GOJ has formulated SDGs implementation Guiding Principles and SDGs action plans. Based on them, the Forestry Agency has promoted sustainable forest management and supported the private sector's various relevant initiatives. The agency has also provided forestry-related assistance to developing countries in a bid to achieve the SDGs.