Restoring a Healthy Circulation of Forest and Forest Industry Providing Full Support for Wood Utilization Initiative

Forest Industry Issues in Japan

Japan is a forest superpower. Japan's forests account for about two-thirds of its national land area and cover about 25 million hectares. The total timber volume (volume of timber in forests) of Japan is about 5.2 billion cubic meters. The majority of Japan's forests are artificial forests planted after World War II. About half of the trees are nearly 50 years old, so cutting and replanting are necessary.
The biggest problem facing the forest industry in Japan is that forest owners cannot replant their forests, even if they wish to do so. This is because of low timber prices, high costs for replanting, and the lack of business succession planning.

Forest Industry Contributions to Mitigate and Adapt to Climate Change

In the meantime, the carbon absorption capacity of forests is attracting attention from the perspective of global warming prevention. Based on the Paris Agreement, and as one of the initiatives to reduce greenhouse gas emissions under the United Nations Framework Convention on Climate Change, Japan aims to promote initiatives to prevent global warming. These initiatives include forest absorption source measures through proper maintenance and conservation of forests, for example, by thinning the trees at an annual average of 0.52-million hectares from FY2013 to FY2020.

The Norinchukin Bank/JForest Association Initiatives

Upstream Issues

Management intensification, integration and expansion of raw wood production

Nochu Potential Forest Productivity Fund	This fund was established in 2005 (the former fund until 2013) and subsidized 99 projects nationwide over a total of 17,700 hectares valued at ¥1.95 billion as of the end of fiscal 2019. This fund contributes to the regeneration of devastated private-owned forests by subsidizing projects that aim to maintain the public benefits and multiple functions of forests in a sustainable manner.
Forestry Labor Safety Improvement Measures	The annual death/injury rate per 1,000 workers in the forest industry is about 10 times the average of all industries. It is urgent to improve the labor safety in the forest industry. This project subsidizes the purchase of safety equipment, etc., for forestry work, which is granted to forest owners' cooperatives, forest owners who cut trees in their forests, and volunteer or part-time students (2,149 cases/400 million yen from FY2015 to FY2019). A new initiative, Forestry Safety Education 360 Degree VR, was added to the project in fiscal 2020. → P25
Low-Cost Forest Replanting Measures A new initiative launched in fiscal 2020	Forest replanting activities to cut, replant, and grow trees are inactive mainly due to low timber prices. To overcome the current situation, we started a new initiative called the Low-cost Forest Replanting Project (a proof-of-concept test in a model management area) in fiscal 2020. We carry out the project in cooperation with JForest Moriren (Prefectural Federations of Forestry Cooperatives) nationwide, aiming to reduce costs (by using a large container nursery tree, low-density planting), shorten the cutting cycle (from 50 years to 30 years by using fast-growing trees), and find new distribution channels. We will carry out the initiative to achieve circular forest and forestry management.

Midstream Issues

Productivity improvement of processing and marketing

Export Support	Wood exports from Japan are on the rise (34.6 billion yen in fiscal 2019), mainly due to a growing demand for wood overseas. We support exports through timber intensification in cooperation with a network of forest owners' cooperatives, and we are exploring new demands for Japanese timber overseas.

Downstream Issues

Wood demand expansion/ wood utilization expansion

Wood Solution Network (WSN)	→ P25
Spreading wood use education and expanding the utilization of wood products nationwide	As part of the efforts to expand the utilization of Japanese wood, we cooperate with a network of forest owners' cooperatives nationwide to promote education by using wood products in events sponsored by government, schools, etc., nationwide. We also participate in activities to donate wood products.

Topics

Wood Solution Network to Expand the Utilization of Japanese Wood

To solve the issues facing the forestry industry in Japan, we must create a platform by which various companies and organizations (from upstream forest owners' cooperatives to midstream lumber, processing, and distribution companies, and finally to the downstream nearest end users) come together to solve issues. In 2016, we established the Wood Solution Network (WSN) to expand the utilization of wood, focusing on Japanese wood. A total of 31 companies and organizations involved in wood participate in the WSN (as of June 2020). These entities include forestry producer's groups, lumber companies involved in wood processing and distribution, trading companies, general contractors, and housing manufacturers. We have established a wood value chain to create added value in wood, from logging and transport, through lumber processing and distribution, and finally to consumption. Our aim here is to expand demand for wood and revitalize the forestry and related industries, as well as promote regional development.

We put together the results of the activities and published them in an approach book.

Satoshi Iwaso, Norinchukin's managing executive officer (left) and Asako Nagano, division director, Forestry Agency (right)

Forestry Safety Education 360 Degree VR that improves the labor safety of forestry

In fiscal 2020, we expanded the Forest Labor Safety Measures and added an educational tool called Forestry Safety Education 360 Degree VR. Labor safety can be improved by experiencing various dangers at forestry sites in a virtual world.

What is VR?

VR is an abbreviation for virtual reality. A landscape totally different from that seen up until now appears before the user due to the user wearing VR goggles, enabling the user to experience the landscape as though really there.

VR Screen Images

People cannot normally experience a life-threatening dangerous experience in which they are hit by a tree felled by another person. VR allows users to receive training safely by repeating the experience until they understand why the tree fell toward them and where things went wrong in the procedure.

From the Front Lines

Food & Agriculture Business Planning Division Forest Group

Kaho Oyobe

The main feature of our Forest Group is to be engaged in solving issues for expanding the utilization of wood and creating new added value downstream in cooperation with industrial and academic communities, focused on maintaining the forest and forestry cycle of cutting → planting → growing trees in mountains.
I expect the WSN to be a platform that solves issues. I am convinced that, through active discussion and activities of more than 30 wood-related companies and organizations with high aspirations and deep knowledge that participate in the network, a chemical reaction will happen. This reaction cannot be achieved by a single company, but only achieved through a network. Improving the labor safety of forestry in sustainable forest management is another important issue. There are many dangerous tasks at forestry sites. My hope is that we can contribute to safety through subsidies and educational tools. We actively promote new initiatives, such as the Forestry Safety Education 360 Degree VR tool, utilizing the latest technologies. We are committed to preserving the rich natural environment of mountains and forests, beautiful water sources, and clean air. We are also committed to passing these natural gifts to future generations by combining our expertise and knowledge with external resources.