Protecting the Forests of Papua New Guinea

Japan's support for sustainable forest management



Mr. Tatsuya Watanabe meets with officials of the Public Forestry Corporation at the branch office of the Public Forestry Corporation in Milne Bay Province Office, Papua New Guinea. (Photo: Masaya Nishimura)

Papua New Guinea has a land area approximately 1.2 times the size of Japan and is home to one of the world's largest rain forests. The rain forests serve not only the conservation of biodiversity, but also the production of timber, which is the major export item of Papua New Guinea. The forests are also a vital resource for people living in rural communities, who use the forest in various ways in their daily lives. However, due to the large-scale deforestation by foreign companies and also the expansion of agricultural areas due to the growth of the population, it is reported that the percentage of forest land in Papua New Guinea decreased from 82% to 71% during the 30 years from 1972 to 2002.

Finding measures to respond to the reduction and degradation of forests are an imminent issue from the perspective of tackling climate change. Much of Papua New Guinea's domestic emissions of greenhouse gases are caused by the reduction and degradation of forests. In response, the Government of Papua New Guinea prioritizes REDD+1 actions and the development of systems to facilitate such actions. However, the forest distribution maps that support the measures for such efforts are out of date because they were compiled in the 1970s through the support of another donor country. As such, these maps do not accurately reflect the current realities of forest vegetation, and the borders between forested and non-forested areas are unclear. Due to a lack of human resources and financial resources, the necessary information management and updates for monitoring forest resources have not been implemented. There is therefore a strong need for improvement, from the dual perspectives of forest management and climate change countermeasures.

Since 2010 Japan has been providing assistance for the monitoring of forest resources, through grant aid and technical cooperation. A forest distribution map has been developed using high-resolution satellite images. In addition, a database has also been developed that enables integrated management of forest resource information. These efforts formed the basis for the construction of a PNG Forest Resource Information Management System. This system is capable of acquiring the latest forest coverage information,² which was previously impossible, and also estimating forest carbon content. Furthermore, a successor project was started in August 2014 and is scheduled to run until

Mr. Tatsuya Watanabe stands in front of a harvested tree (Papua New Guinea Rosewood) to show how large it is at a forestry site in Milne Bay Province, Papua New Guinea. (Photo: Kiyoshi Suzuki)

August 2019. It supports the enhancement of the forest resource monitoring capabilities of the Papua New Guinea Forest Authority (PNGFA), which operates the system.

Mr. Tatsuya Watanabe was dispatched from the Forestry Agency of Japan to Papua New Guinea in 2011 as a long-term JICA expert. He believes that it is highly important for staff members of PNGFA and other persons involved to actually see forest sites by themselves in order to understand the significance of forest preservation. He says that he has taken PNGFA staff on field trips, sometimes requiring two- to three-day journeys by plane, vehicle, and boat, to visit and confirm the status of the forests that was analyzed through satellite images.

"Rather than forcing solutions onto the staff members, I tried to think and search for improvement plans together with them. As a result, they accepted me as a friend and we have also been able to share the joy of capacity-building by learning new techniques. I feel that this is a uniquely Japanese way of providing assistance."

The forest coverage map data that was compiled in the previous project was confirmed in June 2016 and is now due to be released to the public. It is expected to also be used by local governments, researchers and NGOs involved in climate change, and land owners.

Mr. Watanabe feels that there has been a good response, noting, "It may be part of the national character, but initially the Papua New Guinea administrative organizations were hesitant to release the research data publicly. However, they changed their minds and moved to actively publicize the data because they understood my repeated explanations about the benefits and importance of the information." Mr. Watanabe's explanations about the need to publicize data as part of the information infrastructure for appropriate social and economic development have thus been recognized.

The project is scheduled to run until 2019. In future, further measures will be critical for enabling the Papua New Guinea Government to continue to implement forest resource monitoring itself. Such measures include regular reporting on greenhouse gas emissions volumes, the formulation of plans for sustainable forest management, and the utilization of map data in local settings.

Mr. Watanabe says, "Papua New Guinea is one of the world's foremost forested regions, after the Amazon River basin in South America and the Congo River basin in Africa. Protecting Papua New Guinea's forests will mean that we can retain a global forest storehouse³ for carbon into the future." Through this project Japan is helping to promote sustainable forest management and measures against climate change in Papua New Guinea.

- *1 REDD+ refers to initiatives aimed at Reducing Emissions from Deforestation and Forest Degradation (REDD) to which the further goals have been added (hence the "+" mark) of strengthening forest preservation and sustainable management practices, and enhancing the carbon capture and storage capacity of forests.
- *2 This refers to information about the degree to which regions are covered by forests.
- *3 Although it is important to ensure that atmospheric concentrations of greenhouse gases do not increase any further, including carbon dioxide emissions, which have the largest impact on global warming; forests also contribute to global warming prevention by absorbing carbon dioxide.