

JICA's World

JUNE 2011 No.33

6



Japan International Cooperation Agency
Global Environment Development

The Japan International Cooperation Agency (JICA) is the world's largest bilateral development organization, operating in some 150 countries to help some of the globe's most vulnerable people.

JICA's WORLD is published by

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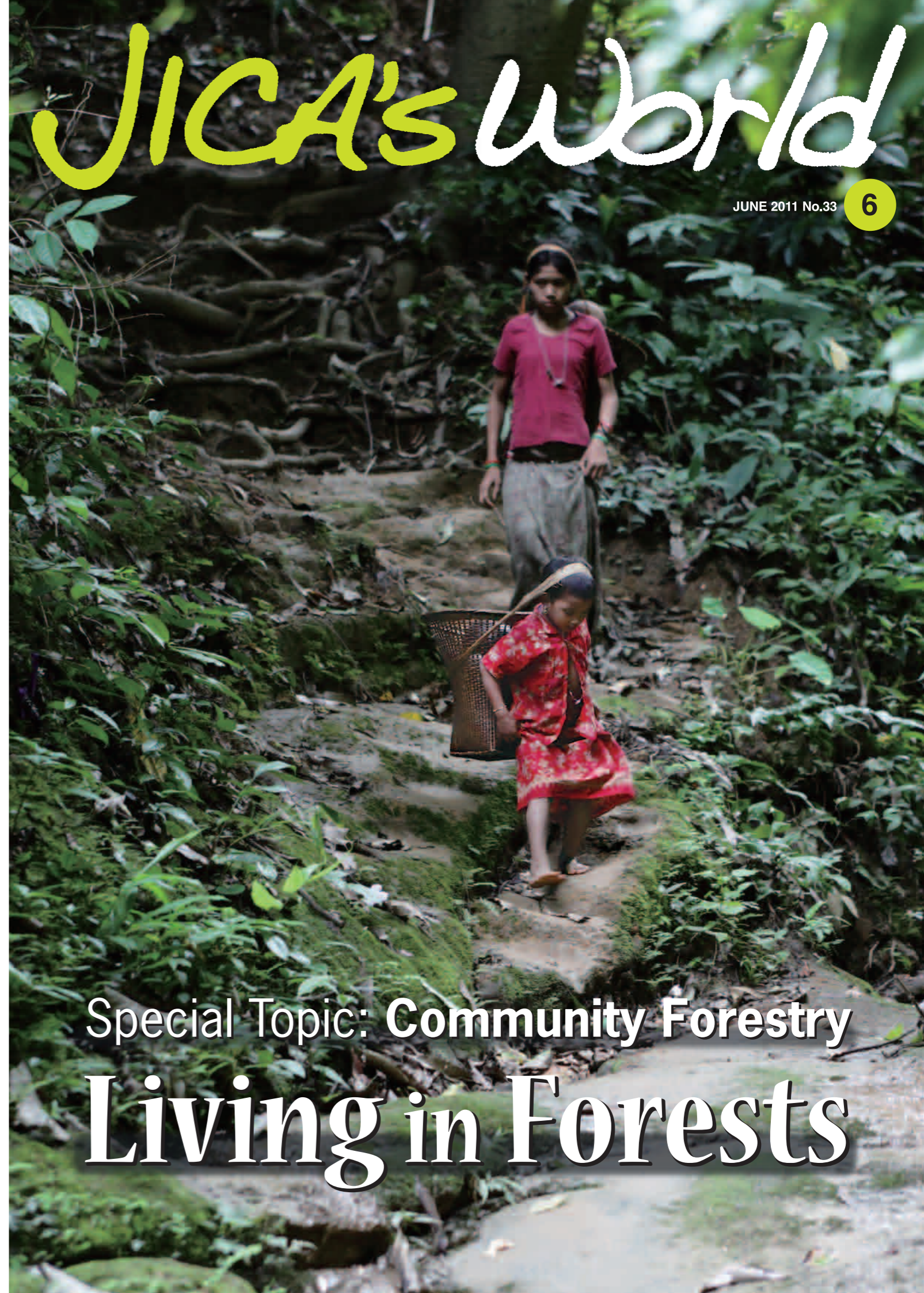
Cover Photograph:

The indigenous people of Jumma in Chittagong Hill, Bangladesh preserve primary forests that range on the hill, while making a living by slash-and-burn farming.

Photo: Atsushi SHIBUYA

Special Topic: **Community Forestry**

Living in Forests



Living in Forests

Forests are disappearing from the earth every moment and minute- world's forests are faced with destruction at an accelerated pace. How many of us are aware that we, human beings, are the very cause of this? The year 2011, the International Year of Forests as declared by the UN, is the time for us to face this reality head on.

Editorial cooperation: Hiroki MIYAZONO, JICA senior advisor
Reference: "Global Forest Resources Assessment 2010"
(Food and Agriculture Organization of the United Nations, FAO)

The Earth Screams – Accelerating Deforestation

An area equivalent to a half or so of Tokyo's 23 wards per day - what does this mean? Surprisingly, this is the pace at which forests on the earth are disappearing these days.

Some 10,000 years ago, there were 6.2 billion hectares of forests on earth. With the advance of civilization, however, humanity began to take advantage of the vast nature: trees were cut down one after another, and forests, burnt; once-verdant land was turned into a bald mountain or a wasteland. The outcome of this is the current level of decrease in world's forests to less than 4 billion hectares, representing some 30 percent of the total land area. We the born beneficiary of the nature, had thus also made ourselves the one to take a toll on the balance of nature -all for the sake of our own livelihood.

Now, even at this very moment of our lives, forests are disappearing at an astonishing speed. "It was around 1980s that deforestation as a social issue received wider international recognition." says Hiroki Miyazono, JICA's Senior Advisor. "Various measures have been taken ever since, including large-scale afforestation. Thanks to these efforts, the pace of deforestation has slowed down compared to in the 80s and 90s. Nonetheless, the loss of rainforests continues in such countries as Brazil and Indonesia."

The International Year of Forests

An international year declared by the United Nations, to raise awareness on sustainable management and conservation of forests. The UN promotes various voluntary events in different parts of the world, and symposiums and events are organized throughout the Year also in Japan. Participating countries are to report their efforts related to the Year at the UN General Assembly in September.

Forests in Indonesia disappear by 2% each year due to fire and excessive logging. (photo: Mika TANIMOTO)

Deforestation: The Negative Effects

There are several reasons for forests to decrease. The first is the use of wood: looking around, one realizes that our living space is full of wooden products—pencils, paper, residential houses, and furniture. Human beings also cut down trees for roads and building construction, and for slash-and-burn farming as practiced chiefly in tropical regions. Besides, the impoverished population in developing countries where the electricity is yet unavailable, rely on firewood for fuel. In short, deforestation is mostly attributable to human activities. On top of these, vast forests also disappear due to droughts, fire and other natural phenomena.

However, the use of wood is not necessarily evil, since forests are renewable resources. Important is to manage and use them sustainably.

What will then happen if forests disappear?

One ought to know that it does not simply mean that we will lose resources essential for our daily lives. Forests play a vital role in maintaining the balance in the nature world; they serve as a crucial sink for carbon dioxide and emissions oxygen, and also absorb moisture and nurture land. The loss of such inherent functions of forests has serious impacts on the natural environment, leading to global warming and to the occurrence of sediment disasters, as well as to the deprivation of home from valuable living creatures.

* "REDD-plus" is the abbreviation for Reducing Emissions from Deforestation and Forest Degradation. The term "plus" includes curbing of deforestation/forest degradation, forest conservation, sustainable forest management, and maintenance/enhancement of carbon stocks.

Community Forestry Utilizing Japan's Experience

Japan, with about 70 percent of its total land area covered by forests, is known as one of the most forest-rich countries in the world. However, because its land area itself is small and the demand for timber outstrips the supply, and also because harvesting is costly due to the precipitous terrain, Japan's timber self-sufficiency ratio is only less than 30 percent (see graph). Partly because cheap timber is available from abroad including Indonesia, Malaysia and many other developing countries, the country depends on imports of over 70 percent of timber. The impact on these developing countries with vulnerable social infrastructures is never small. "We should not just import timber and leave forests in the region exhausted. Importers ought to be responsible for alleviation of deforestation in exporting countries", says Mr. Miyazono.

Since the 1970s, JICA has been committed to forest conservation in Southeast Asia, South America and Africa, among others. It initially focused on "afforestation" to create forests, but, "planting trees will not be a fundamental solution to the problem. We should keep in mind the presence of people living near forests. JICA has changed its approach to the international cooperation by conserving forests and at the same time facilitating these people to maintain their livelihood." explains Mr. Miyazono.

In that context, the idea of "community forestry" has been adopted, where local people conserve and manage forests of their own accord and strive for a better life. "In developing

countries, unlike advanced countries where population concentrates in urban areas, quite a few people live in rural areas where forests still remain", Mr. Miyazono says, "they depend on forest resources to live. In order to achieve sustainable forest conservation, it is important to provide assistance contributing to these people who are closer to forests than anyone else, that is, to assist improving their income." Ever since the United Nations Conference on Environment and Development (the Earth Summit) held in 1992 in Rio de Janeiro, Brazil, "the sustainable management of forests" has been recognized as a keyword.

Actually, in Japan, a system called "iriai rinya (lit. common forests)" has existed since the Edo period, whereby people in villages in mountain area jointly manage forests. In other words, the idea of "community forestry" has been long adopted in Japan. "It was vital for the people in Japan to make effective, sustainable use of small forests to support their livelihood. It is the same as in many present-day developing countries. This is the field where Japan can contribute its experience", emphasizes Mr. Miyazono. Meanwhile, JICA has been making use of Japan's knowledge, putting more efforts on community participatory approaches to forest conservation, and providing various kinds of cooperation, such as training programs in Japan to pass on the know-how of upland areas. In recent years, moreover, JICA is proactively committed to "REDD-plus"*, activities to promote reduction of greenhouse gas emission through forest conservation, afforestation and reforestation in developing countries.

Whether for now and for the future, human beings will live by the grace of forests. We must think about what we ought to do to "coexist" in harmony with forests.

Postage Stamp to Celebrate Activities to Conserve Crested Ibis

This year, 2011, is the 30th anniversary of the rediscovery of crested ibis in Shaanxi Province. The bird was thought to be extinct in China. Shaanxi Province issued the stamp in commemoration of commencement last year of JICA's "Environment Construction at Co-existent Areas of Human Beings and Crested Ibis", as a successor to the Japan - China cooperation for protecting crested ibis that had continued since 1985.

On the stamp, a design of peony, the Chinese national flower, is drawn, and the pictures of activities including the monitoring of wild ibis under the JICA project, are also attached to the stamp sheet.

Although there were only seven ibises when they were found again, the number increased in the next 20 years to some 1,600, as a result of Japan and China's joint efforts for breeding and protection activities. Now that the number continues to increase and their habitat is expanding, the task is shifted to the coexistence of crested ibis and human beings. Since the birds usually look for food in ploughed fields and thus inhabit forests near human dwellings, the protection activities inhibit the use of agrichemicals and industrial development by farmers, causing a reduction in their income. In such circumstances, JICA's project seeks to ensure harmony between the conservation of birds habitats and the improvement of human livelihood, by training farmers in organic farming without agrichemicals, and conducting, in response to the plans to release crested ibises, environmental education for local children to learn the importance of crested ibis.



Net change in forest areas (2005–2010)

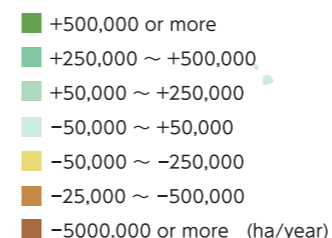
Source: FAO, "Global Forest Resources Assessment 2010"

Forest Areas Decrease Here and Increase There

In the last five years, the total forest area in the world has been decreasing. The decrease is conspicuous particularly in Brazil and Indonesia, both known for rich forests.

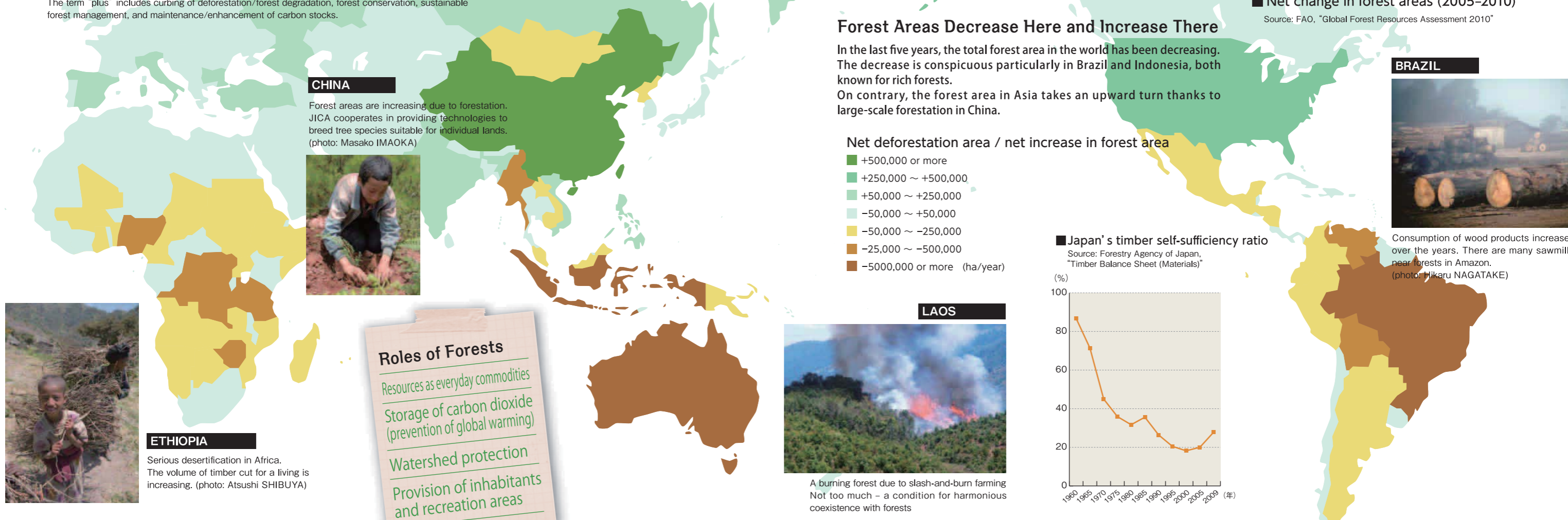
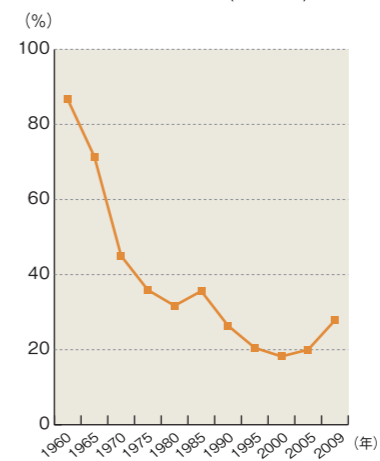
On contrary, the forest area in Asia takes an upward turn thanks to large-scale forestation in China.

Net deforestation area / net increase in forest area



Japan's timber self-sufficiency ratio

Source: Forestry Agency of Japan, "Timber Balance Sheet (Materials)"



CHINA

Forest areas are increasing due to forestation. JICA cooperates in providing technologies to breed tree species suitable for individual lands. (photo: Masako IMAOKA)



ETHIOPIA

Serious desertification in Africa. The volume of timber cut for a living is increasing. (photo: Atsushi SHIBUYA)

Roles of Forests

- Resources as everyday commodities
- Storage of carbon dioxide (prevention of global warming)
- Watershed protection
- Provision of inhabitants and recreation areas

LAOS



A burning forest due to slash-and-burn farming. Not too much – a condition for harmonious coexistence with forests

BRAZIL



Consumption of wood products increases over the years. There are many sawmills near forests in Amazon. (photo: Jikaru NAGATAKE)



In a village, the earth is eroded by rain, and a large V-shaped gully is created. It is attributable to the loss of places to absorb rainfall due to deforestation.

from **MALAWI**

Commitment of the Residents, by the Residents, for the Residents

Forests are disappearing from lush, green mountains. In Malawi, a country in southeast Africa, rapid decrease of forest is driving serious soil erosion. Now, the community stood up to make a breakthrough - a report from the site of community forestry which is in progress under cooperation of JICA.



a. Learning technologies necessary for contour cropping to prevent soil erosion
 b. People delighted at the harvest of corn
 c. Construction of an anti-gully check dam to prevent earth and sand from washing out

“No Trees in the Village” Changes Having Occurred to the Farmland

Descending the stairs of an airplane after 25 hours on different planes from Japan, I saw the blue sky and the vast red land in front of me. I arrived in Malawi, a landlocked country in southeast Africa. The total land area is merely one-third of Japan. Still, the nature before my eyes was so magnificent that its small land size was almost imperceptible.

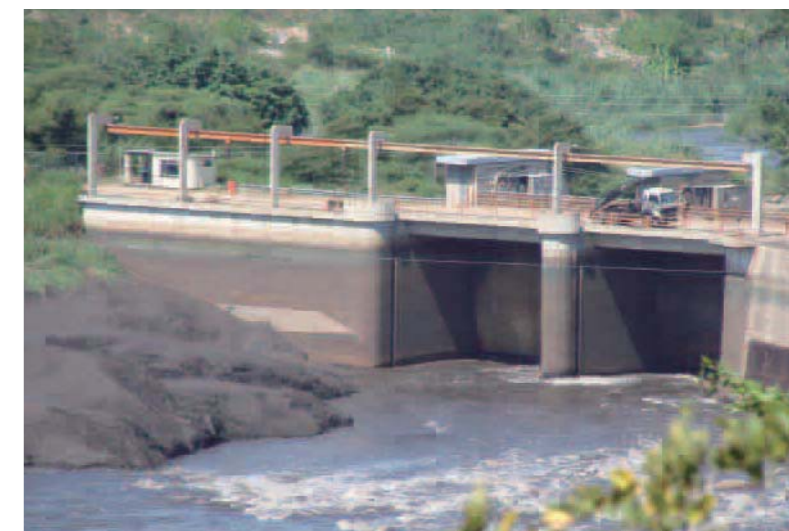
When I was driving a car from the airport in Blantyre, the country’s biggest commercial city, I passed by a “market impromptu”, where people display for sale the vegetables and fruits on straw mats at the side of a paved road. From there lies a limitless vast grassland ahead. With an “African” landscape in view, I felt exhilarated from just following the road stretching straight ahead.

However, once I got off the arterial highway, I found myself on a rough unpaved road. The 4-wheel-drive car rumbled along the bumpy road. It was late April, when the rainy season was just about to end. The road was covered in weeds which grew after the blessed rain. However, having a glance at distant mountains, I found that there were very few trees up there, which reminded me of a serious problem which Malawi faced – a decrease in forest resources. Forests, which account for some 20 percent of the total land area, had been rapidly disappearing in this country. With rising populations since the 1990s, people had overexploited trees for fuel and for cultivation of new farmlands.

Consequently, in a mere 20 years, the environment dramatically changed. In the rainy season, rainwater falling on bald mountains ran down on the surface and caused conspicuous soil erosion. Cultivated fields had been all washed away. In these situations, JICA started in 1999 a survey on the condition of forests and its impacts on the life of local residents in the middle Shire River Basin. In response to the residents’ call for “taking back the life they used to have”, JICA proceeded with model development to promote what is called “community forestry”, an effort for reforestation and improvement in the livelihood of the people concerned, and commenced in 2007 the assistance towards a “Project for Community Vitalization and Afforestation in Middle Shire”.

For Whose Benefit Do We Plant Trees?

Driving a car for two hours from the urban area, I arrived at a dam site at Nkula Falls in the middle basin of Shire River on the outskirts of Blantyre. The river served as a precious water resource for local residents. “Approximately 95 percent of the electricity in Malawi is generated by waterpower, almost all of which relies on three dams built in the middle basin of Shire River”, said Akira Sato, a JICA expert and chief advisor of the Project. “There is enough water to generate the electricity at the moment. In the dry season, however, the water volume decreases, and earth and sand washed away from farmlands during the rainy season accumulate in the dam. So the reservoir storage shrinks considerably”, he added. Deterioration of the natural environment surrounding the middle basin of Shire River, and sediments accumulated at the bottom of the dam



Sediments accumulated in the dam at Nkula Falls interfere with power generation and have serious impacts on the people’s life

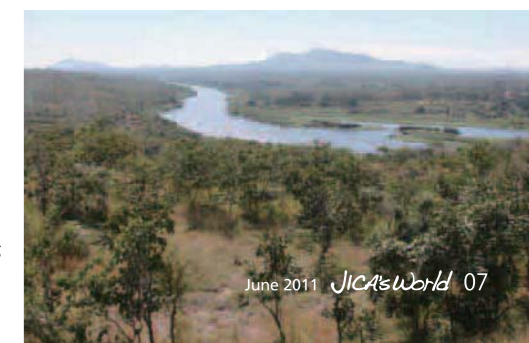


Expert Sato (right) and Hideki Ito, staff of JICA Malawi Office, visit a forestation site. Agroforestry, and conservation and cultivation of existing vegetation are put into practice in a manner suitable for the needs of local residents and the land environment. “More I learn about the situations of farming villages in Malawi, more strongly I can feel the close involvement of forests in humanity and the importance of harmonious coexistence”, says Mr. Ito.

lake cause damage to the power generators, eventually affecting development of the country as a whole. In fact, abrupt blackout took place in the hotel I stayed.

How should we restore forests and conserve the basin? “It was not enough just to plant trees. It was important for local residents to understand what kind of benefits trees would bring to them and for whose benefit trees would be planted, so that they would be able to continue forestation themselves.”

Accordingly, a “training program of the residents, by the residents, for the residents” was adopted. In many cases in traditional training programs addressed to communities in the past, engineers of the recipient countries and Japanese experts



The Shire River running from the south end of Lake Malawi