

**Report to the Fourth United Nations Forum on Forests (UNFF)  
on Japan's Implementation of the IPF/IFF Proposals for Action**

**April 2004**

**Japan**

This report to the United Nations Forum on Forests (UNFF) describes Japan's principal efforts over the past several years to implement the Intergovernmental Panel on Forests and Intergovernmental Forum on Forests (IPF/IFF) Proposals for Action, as well as the support Japan has provided for implementation of the IPF/IFF Proposals for Action in developing countries through such means as official development assistance (ODA). There are many IPF/IFF Proposals for Action, and Japan's efforts on some of these will be addressed at the Fourth United Nations Forum on Forests (UNFF), to be held in May 2004. Basically, information already contained in the reports presented to the Second and Third sessions of United Nations Forum on Forests (UNFF) are not included in this report (where appropriate, references are made to the previous reports in the relevant sections). Because various topics are covered here only briefly, this report does not purport to offer a detailed consideration of every aspect of the activities discussed.

# Report on Implementation of IPF/IFF Proposals for Action

## Japan

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## **Major Developments Since the Previous Report**

### **Amendment of the Forest Law and Establishment of a National Forest Plan**

As noted in the reports of the last two years, implementation standards for zoning of forests and guidelines for forest management practices to be promoted are provided in forest plans at each of the three levels of national, regional and municipal governments under the Forest Planning System based on the Forest Law. Appropriate forest management has been promoted as such, based on the local natural conditions as well as the region's diverse forest-related needs.

Furthermore, the Forest Law was amended in 2003 based on recent changes in forest and forestry conditions. "Basic Items Concerning Forest Conservation including Goals of Forest Conservation" were added to the previously stipulated "Basic Items Concerning Forest Improvement including Goals of Forest Improvement" as items in the Forest Plan. In October 2003, the new National Forest Plan was established based on the revised Forest Law, and the regional level Forest Plans were also established and revised during FY2003 in accordance with the new National Forest Plan.

With a view to fulfilling the multiple functions of forests in a sustainable manner, the Forest Law has been amended also in 2004 in order to implement measures to comprehensively promote policies such as the management of healthy forests, appropriate management and conservation of protection forests, and conservation and improvement of forests with public participation.

In this way, legal and institutional systems for forest management in Japan have been continuously reviewed and improved as needed in order to promote sustainable forest management. These reviews aim to comprehensively and effectively promote forest management through combined efforts for the improvement of forests, including reforestation, thinning and tending, and the conservation of forests, including appropriate designation and management of protection forests and implementation of conservation projects, thus appropriately fulfilling the multiple functions of forests.

### **Creation of Japan's own Forest Certification System**

In June 2003, the Sustainable Green Ecosystem Council (SGEC) was inaugurated, which established its own forest certification system based on the need in Japan to promote cyclic use of abundant planted forest resources and to contribute to the better utilization of the local natural resources. The distinctive features of this system include certification standards and guidelines based on the situation in Japan where there is a high proportion of planted forests and small-scale ownership, and the utilization of Forest Planning System when carrying out

certification.

### **Signing of the Joint Announcement and Action Plan on the Cooperation in Combating Illegal Logging between Japan and Indonesia**

Illegal logging and the trade in illegally logged timber are enormous obstacles to the achievement of sustainable forest management in each country. Since the G8 Kyushu-Okinawa Summit in 2000, Japan has led the world in stressing the need for efforts to deal with these issues. As a result of the G8 Summit in June 2002 and World Summit on Sustainable Development (WSSD), which was held from August to September 2002, measures to combat illegal logging has advanced from the stage of formation of an international consensus concerning the necessity and importance of such measures to the stage of consideration of specific measures.

Against this background, Japan and Indonesia signed and announced the “Joint Announcement” and “Action Plan” on the Cooperation in Combating Illegal Logging on 24 June 2003. The “Joint Announcement” is a document describing the cooperation between two countries such as in developing a mechanism to verify legally harvested timber, exchanging information on the trade of timber and related legal and institutional systems, and building capacity of human resources necessary for sustainable forest management. The “Action Plan” includes various measures for bilateral cooperation between Japan and Indonesia to combat illegal logging, which are to be implemented in the short, medium, and long-term. The main contents of the Action Plan are as follows:

- (a) Development of a mechanism to verify and track legally harvested timber.
- (b) Monitoring and inspection of the implementation of the mechanism through the participation of civil society.
- (c) Studies on the necessary measures against distribution and export of illegally harvested timber.

Please refer to the following website for more information on the joint announcement and action plan on Japan-Indonesia cooperation in combating illegal logging and the trade in illegally logged timber and wood products:

<http://www.mofa.go.jp/region/asia-paci/indonesia/pv0306/>

### **International Expert Meeting on the Development and Implementation of National Codes of Practice for Forest Harvesting**

The International Expert Meeting on the Development and Implementation of National Codes of Practice for Forest Harvesting was held in Japan from November 17 (Monday) to November 20 (Thursday) 2003. This meeting was co-hosted by the Forestry Agency and Chiba Prefecture, with the support from the Ministry of Foreign Affairs, and with the cooperation of the United Nations Food and Agriculture Organization (FAO), the International Tropical Timber Organization (ITTO), International Union of Forest Research Organizations

(IUFRO), and the Japan Forest Engineering Society (JFES), with the aims of deepening the shared understanding of the participants on the situation of the development and implementation of national codes of practice for forest harvesting as well as on the current status of the development and dissemination of reduced impact logging technology, sharing issues encountered or lessons learned in these efforts so far, and discussing practical measures that could be taken in the future from the ground level of forest management to the policy level. Approximately 120 participants participated from both within and outside Japan, including from governments of 16 countries including both developed and developing countries, mainly from Asia, five international organizations, as well as universities, research institutes, non-governmental organizations (NGOs), forest-related industries, and others involved in forests or forestry.

At the meeting, representatives of the participating countries and organizations presented examples of efforts being made to promote sustainable logging activities and then group discussions were held on the issues that need to be resolved and measures to be introduced in order to establish and implement appropriate national codes of practice for forest harvesting. In concluding the meeting, the Summary Report that was compiled based on the group discussions was adopted, which contains recommendations of ways to effectively consolidate and promote sustainable logging activities. The Summary Report is expected to be utilized by countries as a guide for their forestry policies and to contribute also to the development of international efforts to combat illegal logging.

Please refer to the following website for more details about the Summary Report and the meeting: <http://www.rinya.maff.go.jp/code-h2003/>

### **Third Meeting for the Promotion of Asia Forest Partnership (AFP)**

Following the International Expert Meeting on the Development and Implementation of National Codes of Practice for Forest Harvesting mentioned above, the Third Meeting for the Promotion of Asia Forest Partnership (AFP) was held in Japan on November 21, 2003 (Friday) co-hosted by the Government of Japan (the Ministry of Foreign Affairs and the Forestry Agency), the Government of Indonesia, the Center for International Forestry Research (CIFOR), and The Nature Conservancy (TNC). Participants included representatives of 21 countries, six international organizations, and a number of people from NGOs, research institutes, and the industry from both within and outside Japan.

At the meeting, further deliberation was undertaken concerning the concrete actions that should be prioritized by the AFP with respect to the main objectives of the AFP agreed at the Second Meeting for the Promotion of Asia Forest Partnership (AFP) held in July 2003 in Indonesia, namely, “measures to combat illegal logging,” “prevention of forest fires,” and “rehabilitation and reforestation of degraded lands.” In each field, various work plans were

submitted and deliberated, including the following: “developing minimum standards of legality, timber tracking and chain of custody (CoC) systems, verification systems among AFP partners,” “harmonization of existing initiatives to combat illegal logging in the region and reviewing the existing bilateral agreements and announcements on illegal logging,” “creating a framework for cooperation among customs agencies and other relevant agencies in the Asia-Pacific region,” “review and revision of all measures regarding the rehabilitation and reforestation of degraded lands,” “sharing and joint use of satellite information,” and “compilation of a database of training resources in the Asia region on sustainable forest management.” As a result, agreement was reached among the partners on the completion of work plans that incorporate the views and comments expressed by partners. Discussions also centered around organizational issues including the creation of an information network and a decision-making mechanism among AFP partners, fund raising and management, and the way to expand and strengthen the partnership, upon which the importance was reaffirmed of strengthening and promoting AFP activities.

In order to assist AFP activities, the Government of Japan pledged the contribution of US\$100,000 at the meeting. It was announced that this assistance will be specifically utilized in the implementation of surveys and compilation of reports that are generated in connection to the work plan as described above to “develop minimum standard of legality, timber tracking and chain of custody (CoC) systems, verification systems among AFP partners,” and to assist in the work of the AFP Secretariat, which is undertaken by CIFOR. The fund is expected to contribute to the promotion of AFP activities in combination with the US\$150,000 contributed by Japan and others to the implementation of the Decision 3 (XXXIV) “Strengthening The Asia Forest Partnership” adopted by the International Tropical Timber Council (ITTC) in May 2003.

Please refer to the following website for more details about the AFP.

AFP Web Site: <http://www.asiaforests.org/>

The Ministry of Foreign Affairs of Japan: <http://www.mofa.go.jp/policy/environment/afp/>

## **1. Social and Cultural Aspects of Forests**

### **Protection of the Social and Cultural Value of Forests Through the Forest Planning System, the Protected Forest System, and Other Legal and Institutional Systems**

As noted in the previous report, all forests in Japan are zoned into three categories under the Forest Planning System based on the Basic Law on Forest and Forestry and the Forest Law according to their social needs: “forests for water and soil conservation,” “forests for the people,” and “forests for cyclic use” with the aim of ensuring the continuing fulfillment of the multiple functions of forests in a sustainable manner. Forests are managed and conserved in a

proper way so that the prioritized functions of each zone can be sufficiently fulfilled. In particular, forests that are required to fulfill a high level of recreational and cultural functions, such as forests that constitute beautiful natural scenery and historical site in combination with towns, historical sites, and other places of scenic beauty, or forests suitable for people's recreation as well as for cultural and educational uses, are classified as "forests for the people." Appropriate forest management practices that contribute to maintaining the composition of forests and increased diversity in tree species are encouraged for those forests. They are also designated, as necessary, as "protection forests for people's health" and "protection forests for preservation of scenic beauty" to secure appropriate conservation.

Furthermore, Japan takes regulatory measures through designation of restricted forests, including protection forests, under various systems within which management of forests are restricted to certain degrees, with a view to fulfilling the multiple functions of forests to a high degree. These regulatory measures are being applied even to privately owned forests, approximately 35% of which are designated as restricted forests. Forests that are managed to preserve cultural, social, and mental needs are increasing both in terms of actual land area and in terms of types.

#### **The Role of Mountain Villages and Efforts to Revitalize Mountain Villages**

Most of the forests that cover about 67% of Japan's total land area are located on steep mountainous terrain, whereas the residents of mountain villages, who make up only a small fraction of Japan's total population, fulfill an important role in the maintenance and conservation of such a vast area of forests through forestry production practices and management activities such as daily forest patrols. However, in mountain village regions, in addition to their severe geographical conditions with a lack of concentration of flat land for example, social infrastructure such as roads and water supplies are underdeveloped, and there are insufficient employment opportunities. Against this background, the population is declining and aging, and the number of absentee forest owners is increasing. As a result, the area of poorly managed forests is increasing and there is a concern that it will become difficult for forests in mountainous areas to fulfill the diverse functions which they have fulfilled previously such as conserving national land and providing safe, clean water and air.

On the other hand, there is an increasing interest in experiencing nature, especially among urban residents, and it is expected that mountain villages will fulfill an important role as places to meet these needs and realize diverse lifestyles.

For this reason, policies are promoted to revitalize mountain villages and promote interaction between urban areas and mountain villages. These policies include: i) fostering industries that utilize diverse regional resources such as wood products and agricultural products produced locally, special forest products including mushrooms, reproducible wood biomass, beautiful

natural scenery, and the traditional culture unique to mountain villages, in order to ensure employment opportunities; ii) developing the living environment necessary to promote settlement in mountain villages of workers in forestry, for example, by providing water drainage facilities, communications facilities, and the infrastructure for housing; and iii) building capacity and developing facilities, for example by training guide personnel, to enable urban residents to stay in mountain villages to experience a variety of forest activities.

In addition, most of Japan's mountain villages are subject to the Mountain Village Revitalization Law (enacted in 1965), which is designed to promote the conservation of forests and development of economic base and living environment in mountainous regions, and the Special Measures Law to Promote the Self-reliance of Under-populated Areas (enacted in 2000), which is designed to promote development of production functions and a living environment in under-populated areas. In promoting policies to revitalize mountain villages described above, comprehensive measures are taken including the provision of financial support for development of core forest roads and long-term low-interest financing for forestry entrepreneurs based on these laws.

#### **The Role of National Forests as “Forests of the People”**

National forests occupy about 20% of Japan's total land area and 30% of the total forests. Many of them are located in remote mountains or at the headwaters of rivers and many of these forests play an important role as habitats for wild flora and fauna. Furthermore, national forests supply forest products in a sustainable manner, and are utilized in various forms to promote industries such as agriculture and forestry in the surrounding areas and to improve the welfare of residents. In order to continue appropriately and efficiently managing national forests, which fulfill an important role in the conservation of Japan's natural environment and the development of the country's economic and social well-being, related laws and ordinances have been developed, including the 1998 National Forest Management Law. Under these laws and ordinances, national forests are positioned as important shared asset of the people of Japan, or in other words, as “forests of the people,” and the efforts are being continued to carry out simple and efficient management of national forests, while listening to the opinions of the people.

#### **Improvement and Conservation of Forests with Public Participation**

As noted in the 2002 report, policies are actively promoted throughout national, public and privately owned forests, such as the provision of information to the public on forests and forestry as well as on timber and wood products, promotion of public participation in the policy formulation process, utilization of forests as places for education, and conservation and management of forests through volunteer activities; aiming at meeting the needs of the people who would like to have opportunities to experience forests and directly participate in forest conservation activities, and at raising public awareness of the need for society as a whole to

support the management and conservation of forests.

Beginning in 2003, Forestry Agency has started providing consultations and necessary information on the condition of activity fields and the activities carried out by different organizations in order to respond to inquiries from citizens who wish to be involved in forest improvement and conservation activities and to support and promote forest volunteer activities by a variety of people and organizations.

As noted in the 2002 report, in national forests, “Friendly Forests” (literally “forests for contact and interaction” in Japanese) have been established since 1999, in which voluntary groups independently carry out forest improvement activities. Since 2002, in addition, “Forest Improvement to Support Wood Culture” activities have been implemented with the participation of a variety of people and organizations such as local authorities and volunteer groups, in order to protect elements of wood culture that should be passed on to the next generation, such as historical wooden buildings, local festivals and events, and traditional arts and crafts.

#### **The Roles of Women and Young People in Forests and Forestry**

According to the 2000 National Census, one in every six workers in Japan’s forestry is a woman. While women are mostly active in tree-planting work, in recent years some of them are also working as operators of high-performance machinery as well. Furthermore, women fulfill important roles in support of local community and industry, such as village activities and food processing. In addition, among forestry study groups organized mainly by the successors of forestry management, the number of women members and the number of woman-only groups is increasing nationwide, and women are becoming increasingly motivated.

In revitalizing forests and forestry as well as mountain villages and regional communities in general, it is necessary to create an environment geared towards ensuring a learning environment and improving employment and entrepreneurial opportunities so that women can actively realize their own potential and live safely and comfortably with a sense of purpose in life. For this reason, policy measures are taken to facilitate the participation of women in forestry management through such means as support for the promotion of compound business management utilizing the viewpoint of women, survey and research activities, interaction with different sectors and industries, and product displays at events. Also, Japan implements policies to promote the activities of women’s groups of forestry and to develop their networks. The Ministry of Agriculture, Forestry and Fisheries is holding consultation meetings in the regions with women active in the agriculture, forestry, or fishing industries and women leaders, and is carrying out lively exchanges of opinions in order to promote efforts to realize a gender-equal society.

For young people who will take on the next generation, it is important to form their character and raise their awareness of the importance of forests through participation in forest management and conservation activities. It is also important to promote new entries in the forestry in view of future of the industry. For this reason, the Forestry Agency, in cooperation with the Ministry of Education, Culture, Sports, Science and Technology, is promoting policies to provide high school students with opportunities to experience and study forests and forestry, to train teaching staff as providers of forests and forestry education, and to develop facilities and fields as centers of forests and forestry education for young people and the general public.

In national forest, with an aim to contribute to the promotion of education on forest environment, “Forests for Playing” have been established as places where children can freely study and play in a forest and educational campaigns have been implemented through Forest Classrooms and field trips to forestry.

#### **Placing Importance on Social Aspects in International Cooperation**

Japan is providing international assistance to developing countries with respect to forests and forestry. The assistance places importance on the social aspects of forests, including the provision of support for efforts by the residents themselves to conserve, establish, and manage forests so that all the people involved in forest management can self-sustain their efforts to prevent deforestation and degradation of forests. Such support is promoted paying due consideration on the state of forest resources, the degree of economic development, and the needs of the residents in the country or region receiving assistance.

The Japan International Cooperation Agency (JICA) and the Japan Bank for International Cooperation (JBIC), which are the main implementing bodies of Japan’s official development assistance (ODA), have formulated and revised guidelines for environmental and societal consideration. When implementing a project, JICA and JBIC carry out a screening to evaluate the impact on the environment and society, and work to ensure the participation of stakeholders in decision-making, transparency of information, accountability, and efficiency. (Both JICA and JBIC have recently carried out a review of guidelines for environmental consideration based on the opinions of experts and citizens in order to strengthen them with respect to consideration of social aspects. JBIC formulated the JBIC Guidelines for Confirmation of Environmental and Social Considerations in 2002 and JICA completed a revision of the JICA Guidelines for Environmental and Social Considerations in 2004.)

## **2. Traditional Forest-related Knowledge**

### **“Forest Nation Campaign” and “Foxfire in Japan –Listen and Write about the Forests –”**

Japan’s forests have been protected and nurtured and their benefits used over the ages by the untiring efforts of people. These were the actions of people possessing a lot of skill and wisdom, and these actions supported the vitality of the forests. However, in modern times, as urbanization continues and most of the younger generation no longer has any involvement with forests in their daily lives, the depopulation and aging of mountain villages continues, and the forestry stagnates, the traditional wisdom, life skills and occupations related to forests are being lost.

Against this background, the **“Forest Nation Campaign”** was commenced in 2002 with the participation of many cultural leaders who are representative of Japan. The aims of the campaign are to take another look at the relationships of individual citizens to forests, hand down the traditional skills and wisdom concerning forests, and suggest a lifestyle in which people live together with forests. Nationwide, among traditional occupations related to forests, such as lumberjacks, hunters called *“matagi,”* and charcoal burners, 100 people possessing significant skills and that are models to others, were selected as **“100 Masters of the Forest”** (100 people were selected in both 2002 and 2003, respectively). Furthermore, in conjunction with the **“Forest Nation Campaign,”** **“Foxfire in Japan –Listen and Write about the Forests –”** project has been carried out under the cooperation of the Government of Japan (the Forestry Agency and the Ministry of Education, Culture, Sports, Science and Technology), non-profit organizations (NPOs), and private sector companies, in which high school students, who will take on the next generation, are given opportunities to meet with the 100 Masters. Through the project, those young people, with the youthful sensibility and enthusiasm, listen to the words of the Masters and write them down to pass on to later generations.

### **Study for Development of Traditional Forest Related Knowledge of Ethnic People**

Based on the recognition that, particularly in developing countries, the traditional forest-related knowledge (TFRK) possessed by indigenous people who depend on forests for their livelihood fulfils an important role in the promotion of regional sustainable forest management, Japan implemented the Study for Development of Traditional Forest Related Knowledge of Ethnic People over five years from 1998 to 2002. In this project, information on TFRK case studies in developing countries in Asia, Oceania, and Central and South America was collected, organized, and classified, and catalogues were drawn up, and detailed surveys and analyses were carried out of the cases in which TFRK was effectively reflected in regional sustainable forest management.

Through this project, field surveys were conducted in 14 countries (detailed survey in eight of those), and deliberations were carried out concerning the way to harmonize forest and forestry technology with TFRK, based on the natural conditions and state of the forests, traditional forest management and use methods, and social, economic, and cultural conditions in each

country. It is expected that the results of this project will contribute to the promotion of appropriate forest and forestry development in these countries.

### **3. Forest-related Scientific Knowledge**

#### **Research and Technology Development in the Fields of Forests, Forestry and Wood Industry in Japan**

In order to promote efficient and effective research and technology development across all areas of the forests, forestry and wood industry, and for the effective dissemination of the results of research and development, the “Strategy for Research and Technological Development in the Fields of Forests, Forestry and Wood Industry” and the “Strategy for Forest Tree Breeding” were formulated in 2001. Forestry and Forest Products Research Institute (FFPRI) and the Forest Tree Breeding Center (FTBC), both incorporated administrative agencies, are taking a leading role in the promotion of research and technology development based on clear issues and goals stipulated in the strategies in cooperation with prefectural experimental research institutions, universities, scientific organizations, the private sector, and the national forest management. Research results are evaluated in light of the goal to be achieved and reviews are carried out based on the evaluation.

Concerning experimental research in the fields of forests, forestry and wood industry, the FFPRI, based on a medium-term plan in line with the above-mentioned Strategy for Research and Technological Development in the Fields of Forests, Forestry and Wood Industry, carries out research on the following key themes: i) conservation of biological diversity in forests; ii) conservation of forest land, cultivation of water resources, and conservation of the living environment; iii) technology to avoid or prevent damage to forests by pests, animals or the climate; iv) comprehensive fulfillment of diverse public functions of forests; v) conservation and regeneration of forests under global environmental changes; vi) building of an efficient production system; vii) stimulation of mountain villages through new ways of utilizing forests; viii) use of wood resources to contribute to the building of a cyclic society; ix) clarification of the biological functions related to forests and development of new materials using forest-based resources; and x) policies related to forest, forestry and wood industry. In addition, financial support is provided to surveys and experimental research on urgent issues carried out by prefectures and private sector organizations.

Furthermore, based on the Strategy for Forest Tree Breeding, the FTBC has a central role in forest tree breeding and is implementing it in close cooperation with related institutions such as prefectural governments and universities. The priority areas in the FTBC forest tree breeding research are: i) development of new varieties of forest trees; ii) collecting and preserving forest tree genetic resources; and iii) promoting international technical cooperation

with respect to forest tree breeding.

Please refer to the following link for more details about the Forestry and Forest Products Research Institute (FFPRI) and the Forest Tree Breeding Center (FTBC).

FFPRI: [http://ss.ffpri.affrc.go.jp/e\\_version/index-e.html](http://ss.ffpri.affrc.go.jp/e_version/index-e.html)

FTBC: <http://ftbc.job.affrc.go.jp/html/english/index.html>

### **Technology Development and Popularization of Forestry Machinery**

It is important to promote mechanization in order to improve productivity, reduce costs, reduce work intensity, and ensure safe work in the forestry. Specifically, in Japan most forests are located on steep, mountainous terrain, and a long-term slump in timber and wood products prices and increases in labor and other production costs have greatly worsened the profitability of the forestry, inviting a decline in the number of workers in the forestry. In addition, in recent times new issues have emerged, such as the need to reduce the impact of forestry production activities on the environment, to make the work environment safer and more comfortable, and to promote the long-term engagement of young people in the forestry. Against these backgrounds, it is becoming more and more important to mechanize the forestry, and in particular to introduce high-performance forestry machinery.

For this reason, the Basic Policy for the Promotion of High-Performance Mechanization of Forestry was established in 1991. Based on this policy, measures have been formulated to develop and put into operation high-performance forestry machinery used for logging and tending and adapted to Japan's topography and tree species, and to build, disseminate and firmly establish a work system centered on high-performance forestry machinery. In addition, the Basic Policy was revised in 2000, based on which technology development and dissemination of forestry machinery and work systems have been carried out with the aims of placing priority on the sustainable fulfillment of the multiple functions of forests and the reduction of environmental impacts, as well as for establishing and introducing a new high-performance forestry machinery work system that is well adapted to non-clear-cutting practices such as thinning and selective cutting and to local work conditions.

### **Technology Development Through Supporting Technology Research Association**

One of Japan's policies in support of research and technology development by the private sector is the Industrial Technology Research Association System. This system, based on the Law on Industrial Technology Research Association enacted in 1961, is a system for improving the efficiency of research by having multiple private sector companies establish technology research association and carry out joint experimental research. Those association that have been certified by the government based on the law are granted various kinds of special tax treatment, and financial support is provided for their experimental research in some cases.

So far 13 associations have been established as technology research unions related to forests, forestry and wood industry (as of February 2004, six associations are conducting research activities), and they are contributing to the promotion of experimental research and technology development in related fields as well as the practical application of advanced technology. For example, the Tropical Forests Regeneration Technology Research Association, established in 1991 with the aim of developing technology that contributes to sustainable management of tropical forests, developed technology over the 10 years up until 2000 concerned with planting, establishing forests, social forestry, and the use of forest products in tropical forests, with government financial support and advice from experts in the FFPRI and other institutions including universities, and in cooperation with its counterparts in partner countries, making a significant contribution to the development of technologies related to the cultivation and use of tropical forests and to the transfer of those technologies to developing countries.

### **The Forestry Extension Program**

Based on the Forest Law, personnel for forestry extension (forestry extension specialists (SPs) and forestry extension agents (AGs)) are deployed to each prefecture, to act as intermediaries between forest owners and the administrators for the permeation of administrative policies and realization of the intended effects of policy measures, in addition to disseminating the results of research and development carried out at public experimental research institutes to forest owners as practical technology adapted to the conditions and characteristics of the regions. Financial support is provided to Prefectural governments for the deployment and basic activities of forestry extension personnel.

Furthermore, in order to supplement the activities of forestry extension personnel and to efficiently and effectively promote the Forestry Extension Program, various policies have been developed such as training to improve the quality of forestry extension personnel, activities to improve the technology of motivated stakeholders in the forestry, and support to holding lectures for people who wish to enter the forestry.

### **International Research Cooperation**

Japan promotes international research cooperation in the fields of forests and forestry within a variety of bilateral and multilateral frameworks. Such cooperation includes support for experimental research activities concerning forests and forestry in developing countries, joint research, exchange of information and researchers, and contributions of funds and dispatch of researchers to international research institutions.

Bilateral research cooperation is carried out with a number of developed and developing countries, including exchange of information and researchers and the holding of joint committee meetings to review activities and to identify research cooperation priorities, based

on science and technology cooperation agreements, environmental protection cooperation agreements, and other bilateral joint declarations.

Multilateral research cooperation includes contributions of funds to the Center for International Forestry Research (CIFOR) and the World Agroforestry Center (ICRAF), both members of the Consultative Group on International Agricultural Research (CGIAR). Currently one Japanese researcher is dispatched to CIFOR from the FFPRI. Furthermore, many research institutes in Japan, such as the FFPRI and universities, are members of the International Union of Forest Research Organizations (IUFRO) and are actively participating in its activities.

#### **4. Monitoring, Assessment and Reporting, Concepts, Terminology and Definitions**

##### **Collecting and Sharing a Wide Range of Information Concerning Forests**

Information on forests are collected in Japan using various methods described below and are widely shared among parties involved such as the related departments and agencies within the government, local authorities, people involved in forests or forestry, researchers and the general public.

Information collection methods:

- 1) Statistics and national census: Statistical surveys carried out by government ministries and agencies. These include statistics by the Ministry of Agriculture, Forestry and Fisheries (e.g., the number of forestry households, the quantity of production and distribution forest products and their prices, the total land area converted from forest to other uses), statistics on birds and animals by the Ministry of the Environment (e.g., the number of birds and animals captured by hunters, the state of establishment of wildlife protection areas), statistics on trade by the Ministry of Finance (the volume and value of trade in forest products).
- 2) Survey on the state of forest resources: This survey compiles inventory data for forest resources possessed by the Forestry Agency and the prefectures to be used as basic data for the National Forest Plan drawn up once every five years based on the Forest Law.
- 3) Nationwide forest resources monitoring: This survey collects such information as the soil condition, vegetation, trees, signs of birds and animals and healthiness every 5 years within 15,700 fixed monitoring plots set up throughout Japan.
- 4) Basic survey on natural environment conservation (Green National Census): This survey, based on the Natural Environment Conservation Law, is implemented in order to provide the basic information to grasp the present state and changes in the natural environment in Japan

from a nationwide perspective and to promote natural environment conservation policies.

5) Documents and reports submitted by local authorities and business establishments based on laws and ordinances: For instance, data are collected from written notifications submitted under the Forest Law regarding logging and reforestation after logging, logging of forests according to forest management plans, and logging of trees in protection forests.

6) Other data, such as those collected in the process of experimental research activities carried out by research institutions, and information collected by related ministries, agencies and departments out of administrative necessity.

Because these information are widely scattered throughout different ministries, agencies and departments from the national to the local level, it is necessary to efficiently share information among parties involved, and put it to use for comprehensive monitoring and assessment of the state of progress of sustainable forest management. Recently, many ministries and agencies, prefectural governments, and public research institutions have been publishing a wide range of information and statistical data on Internet as well as in printed and published materials. Furthermore, in 2003 Japan drew up and announced the Montréal Process First Country Forest Report, the first report which comprehensively summarized information concerning forests based on the seven criteria and 67 indicators of the Montréal Process (please refer to the section in the next chapter titled “Participation in the Montréal Process”). Through these measures, efforts have been continued in Japan to share information on the state of progress towards sustainable forest management among a wide range of stakeholders.

In addition, efforts are made in recent years to develop and compile information concerning forest resources and the natural environment in the Geographic Information Systems (GIS) and in other electronic information databases. These databases are becoming effective tools for carrying out efficient decision-making concerning forest management and related policies.

### **Assessment and Reporting**

In addition to sharing related information and statistical data among a wide range of stakeholders, following measures have been taken with a view to ensuring accountability and providing accurate information to citizens and people involved in policy decision-making.

#### **1) Annual Government Reports**

In Japan, there is a system established under which the government compiles annual reports (known as White Papers) to be reported to the Diet or Cabinet, which include reports on forests and forestry, the environment, and ODA. These reports provide information and assessment on the objective situation of the above-mentioned areas both in Japan and in the world, issues to be addressed, policies being carried out by the government and their

evaluation, and case studies of efforts being made such as by the private sector.

Reports especially closely related to the assessment and reporting on the state of Japan's implementation of the IPF/IFF proposals for action include the Annual Report on the Trends in Forest and Forestry (known as the White Paper on the Forest and Forestry) compiled in accordance with the Basic Law on Forest and Forestry; the Annual Report on the State of the Environment (known as the White Paper on the Environment) compiled in accordance with the Basic Law on the Environment; and the ODA Annual Report compiled in accordance with the ODA Charter. The ministries and agencies mainly responsible for compiling these reports are the Forestry Agency, the Ministry of the Environment, and the Ministry of Foreign Affairs, respectively.

## 2) Evaluation of Policies and Projects

In Japan, based on the "Law on the Evaluation of Policies Carried out by Administrative Organs of the Government" enacted in 2001, all administrative organs including ministries and agencies are proceeding with efforts to establish the Plan-Do-Check-Action management cycle under which they objectively measure the effect of policies and, based on such understandings, carry out a self-evaluation of the necessity, efficiency, and effectiveness of the policies, and appropriately reflect the results of such evaluation in the policies concerned. In this process, efforts are made by respective administrative organs to fulfill their accountability to the public concerning various policy measures being carried out, through establishing external groups of experts to receive advice from them, and publicly disclosing information concerning the evaluation of policies.

Policy areas related to forests and forestry that are subject to evaluation include "improvement of forests," "conservation of forests," "improvement and conservation of forests with public participation and promotion of new ways of forests use," "promotion of the use of wood products and sound development their industry," "fostering efficient and stable forestry operations," "promotion of research and development concerning forests and forestry," "promotion of special forest products," "revitalization of mountain village areas," "collection and provision of statistical information," "promotion of information technologies in the management of agriculture, forestry and fishing industries," and "promotion of information technologies and infrastructure of rural areas." Each fiscal year, the goals to be achieved and the issues to be tackled in order to achieve those goals are identified to evaluate the performance of overall policies and individual policy measures (projects).

### **Support for Monitoring of Forests in Developing Countries**

In many developing countries, there are insufficient information that form the basis of forest management, such as the state of forest resources, the state of forest degradation, and their future risks, which makes it difficult for such countries to formulate and implement accurate

forest plans and appropriate policies.

In response to this situation, Japan has been implementing “development surveys” through JICA, which carry out surveys on the forest resources and social and economic condition of the country and formulate master plans for the sustainable use, restoration, and conservation of forest resources, under the collaboration with engineers of the governments of developing countries. Since 1976 up to the end of February 2004, a total of 68 surveys have been implemented in 43 countries (of these, seven are currently being implemented).

Furthermore, since FY1990 Japan has been supporting efforts by developing countries in the Asian region to accurately reflect the state of forest resources and degradation in their forest policy formulation by using satellites to efficiently gather such information over wide areas and to project the future degradation (the Information System Development Project for the Management of Tropical Forests from FY1990 to FY2000, and the Forest Dynamism Study Project for Eastern Part of Asia from FY2001 to FY2005) Japan also implemented the Establishment of Monitoring System for Sustainable Forest Management from FY1996 to FY2000 to carry out technical assistance mainly in countries with tropical forests for the development and establishment of monitoring approaches taking into consideration the internationally developed criteria and indicators such as those of the International Tropical Timber Organization (ITTO) Process and the Montréal Process.

Japan, through such assistance, aims to transfer to developing countries technology accumulated by Japan for monitoring and assessing information on forests and to promote cooperation to realize the formulation and implementation of appropriate policies in developing countries.

## **5. Criteria and Indicators of Sustainable Forest Management**

### **Participation in the Montréal Process**

Japan has been participating in the Montréal Process since its inception, and has made an active contribution to efforts to draw up and apply the criteria and indicators for sustainable forest management. In July 2003, Japan drew up and announced the Montréal Process First Country Forest Report based on the seven criteria and 67 indicators of the Montréal Process. This was the first report to comprehensively describe the state of forest management in Japan with respect to all 67 indicators, which though included case studies and preliminary data for some indicators.

The report not only attempts to accurately inform a wide range of stakeholders of the state of progress of Japan towards sustainable forest management, but in the final chapter it also attempts to examine the potential and issues of the criteria and indicators with respect to

“application,” which is the next step in the process. Future issues include working to improve the data precision of the report based on the results of the Nationwide Forest Resources Monitoring Survey, which will finish the first round of data tabulation in 2004, and promoting discussion to effectively utilize the criteria and indicators, for example by reflecting the results of the criteria and indicators in systems and frameworks in the area of forest and forestry such as forest policies, policy evaluation, and forest certification, and coordinating the criteria and indicators with such systems and frameworks..

### **Monitoring in Accordance with the Criteria and Indicators for Sustainable Forest Management**

As was noted in the section titled “Collecting and Sharing a Wide Range of Information Concerning Forests” in the previous chapter, information concerning forests are collected in a variety of ways to conduct comprehensive monitoring and assessment of the state of progress of sustainable forest management. Looking at the criteria and indicators for sustainable forest management, however, there are still many indicators which cannot be measured or which can be measured but greater precision in the measurement is required. (At the present time, Japan is able to measure and report on 50 of the 67 indicators of the Montréal Process.) For this reason, Japan is proceeding with the following efforts to improve forest management monitoring technology and establish methods to reflect monitoring results in policies.

#### 1) Survey of methods to introduce public projects that place priority on forest ecosystems

Survey zones have been established in two river basins in Hokkaido and Kochi Prefectures and since FY1996 the Survey of Methods to Introduce Public Projects that Place Priority on Forest Ecosystems has been implemented (the duration of the project is 10 years) under the cooperation among the Forestry Agency, FFPRI, and local authorities concerned in the two prefectures. The survey is carried out with the aim of monitoring the state of forest ecosystems with reference to the criteria and indicators of the Montréal Process, and, based on that, studying methods to introduce forestry public projects that place priority on forest ecosystems. Furthermore, as the public expectations on environmental conservation functions of forest ecosystems become higher and more complicated, this survey shall have an important role also in explaining to the public the necessity of such projects in a comprehensible way.

#### 2) Efforts by the FFPRI

The FFPRI is continuing independent research concerning monitoring and assessment methods based on the criteria and indicators of the Montréal Process. It established a testing site in the Kasama region of Ibaraki Prefecture, carried out surveys and research concerning the development of monitoring methods, and in 1999 compiled and announced the results of this research in the Kasama Report. The report illustrates in plain words methods for introducing the criteria and indicators approach to the assessment of national and regional forest management using monitoring data collected in the testing site, contributing to the

dissemination of information and knowledge concerning the criteria and indicators. Subsequently the Fourth Meeting of the Technical Advisory Committee (TAC) of the Montréal Process was held at the FFPRI, at the occasion of which the state of data collection in Japan was discussed on site and the results were reflected in the criteria for drawing up the country report.

In addition, the FFPRI established three survey sites in Hokkaido, Ibaraki and Kochi Prefectures in 2000 and proceeded with international joint research on sustainable forest management guidelines based on the criteria and indicators (the duration of the project is five years.) This project is carrying out re-evaluation and development of monitoring and evaluation methods, from the perspective of botany, entomology, mycology, and GIS, for the indicators of Criterion 1 “Conservation of biological diversity” and Criterion 3 “Maintenance of forest ecosystem health and vitality,” the criteria judged to be the most difficult to measure of all the seven criteria and 67 indicators. In addition, this project is carrying out research together with holding international workshops in order to incorporate the research results and methods of other countries participating in the Montréal Process into these methods. Four international workshops have already been held, in Ibaraki Prefecture (Tsukuba City) in 2000, in Hokkaido Prefecture (Sapporo City) in 2001, in Ibaraki Prefecture (Tsukuba City) in 2002, and in Kochi Prefecture (Kochi City) in 2003, with participation of researchers from Canada, the United States of America, Australia, Republic of Korea, and CIFOR. The interim report of the project was issued in March 2004.