## I. Project Outline

### Background

In China, policies against deforestation and destruction of the natural environment were being implemented, such as the Construction Plan for National Ecological Demo Zones. The core measures based on such policies were the Six Major Forestry Projects, which were planned, designed, implemented and checked by provinces. Under these projects, a total of 234,000 km² was afforested during the period from 2001 to the end of 2003. However, there were challenges such as low survival rate of seedlings, lack of sense of maintenance and lack of sensitization and instruction for farmers who planted trees, due to county-level forestry personnel’s insufficient skills and knowledge of project management.

Being aware of necessity to develop human resources to steadily implement the Six Major Forestry Projects, the State Forestry Administration (SFA) held up a policy to promote institutionalization and standardization of training for forestry personnel and to designate the State Academy of Forestry Administration in Beijing ("the Academy") under the SFA as the training base. The Academy was the only national-level in-service training institute and had conducted training for county-level forestry personnel before. As its main training courses were for management personnel and for promotion, the Academy urgently needed to upgrade the project management and technical level of, in particular, county-level forestry personnel.

For this project, the Sino-Japan Forestry Ecology Training Center was to be set up within the Academy as the project implementation unit.

### Objectives of the Project

1. **Overall Goal:** Offer training opportunity to China’s forestry personnel at the county level, upgrade their capability in project management and technical operation, and enable China’s ecological construction cantering on the Six Major Forestry Projects to proceed smoothly.

2. **Project Purpose:** The Sino-Japan Forestry Ecology Training Center ("the Center") serves as a base for forestry cooperation between China and Japan. With the Center as the leading factor, a training system relating to China’s Six Major Forestry Projects, is improved. The system aims to upgrade the county-level forestry personnel’s capability in project management and technical operation.

3. **Assumed steps for achieving the project goals:** This project develops a training system for county-level forestry personnel at the Center and implement model training courses. Then, the Center and the regional training centers ("regional centers") in the eight model provinces become able to conduct training using the course development method of this project. At the same time, the method is disseminated to regional centers in other provinces. As a result, the project management and technical operation capability of the county-level forestry personnel who received the training are upgraded and thereby contribute to smooth implementation of activity for natural environment protection.

### Activities of the project

1. **Project site:** State Academy of Forestry Administration (Beijing) and regional training centers in the eight model provinces (Sichuan Academy of Forestry, Heilongjiang Forestry Vocation Technical College, Fujian Forestry Vocation Technical College, Shaanxi Province Department of Forestry Training Center, Hubei Province Forest Tree Breeding Center, Guizhou Forestry School, Xinjiang Uyghur Autonomous Region Forestry School, Shanxi Forestry Technician School).

2. **Main activities:** Development of training programs, networking with regional centers, development/ improvement/ implementation of training courses, development of a training manual, collection/ communication/ accumulation of information, etc.

3. **Inputs (to carry out above activities)**

   **Japanese Side**

   1) Experts: 44 persons
   2) Trainees received: 63 persons
   3) Equipment: simultaneous interpretation system, multimedia system, vehicles, etc.

   **China Side**

   1. Staff allocated: 52 persons
   2. Land and facilities: project offices, utilities
   3. Local cost

### Project Period

- **Implementing Agency:** Department of Human Resource, State Forestry Administration (executing agency); State Academy of Forestry Administration in Beijing (implementing agency)
- **October 2004 to October 2009**
- **Project Cost:** 618 million yen

---

1. The Six Major Forestry Projects include: 1) natural forest resources preservation; 2) construction of a protective forest system in the Sanbei Region (northeast, north, and northwest China) and the middle and lower stretches of the Yangtze River; 3) a project to stop cultivation and plant ring forests; 4) Beijing Tianjin sandstorm improvement project; 5) protection of wild animals and plants and construction of natural reserves; and 6) construction of bases for fast-growing, high yield timber forests in priority areas.

2. Reviewed at the time of the ex-post evaluation.
II. Result of the Evaluation

1 Relevance

This project has been highly relevant with China's development policy “human resource development to steadily improve the Six Major Forestry Projects” and “institutionalization and standardization of the training system to improve quality of forestry personnel” as set in the Construction Plan for National Ecological Demo Zones (1999), the 10th (2001-2005) and 11th (2006-2010) Five-year Plans for National Economic and Social Development, and the 11th Five-year Plan for Forestry Development (2006-2010), development needs “upgrading project management and technical capability of county-level forestry personnel”, as well as Japan’s ODA policy, “JICA’s Country Assistance Program” at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project implemented various activities such as training needs assessment, development of curriculum and textbooks and development of training implementation structure in the six fields ((i) forestry administration, (ii) afforestation management, (iii) afforestation techniques, (iv) wildlife protection, (v) training/human resources development, and (vi) restoration of ecosystem after earthquake) at the Center. By the time of project completion, 2,315 forestry personnel (including 2,226 provincial-level personnel), which was more than planned (2,173 persons), received the model courses at the Center and the eight regional centers. Relevant sections of the SFA, the Academy’s superior organization, formed the consultative group for this project, and the group provided advise on course planning and undertook coordination such as for region-wide training courses involving more than two provinces.

As a result, the project purpose “improvement of the training system for upgrading county-level forestry personnel’s capability in project management and technical operation with the Center as the leading factor” was achieved. Through implementation of the model courses, both the Center and the eight regional centers accumulated sufficient experience in a series of process of training needs identification, course planning/implementation and evaluation. Such process was systematized into a training manual. After project completion, this manual has been revised and utilized. The Center currently implements training courses in collective forest right system and state-owned forest reform as part of the Project on Forestry Human Resource Development in Western Region ("subsequent project"), and the above-mentioned courses developed under this project are implemented in accordance with the Academy’s annual training plan. The annual numbers of trainees in those courses (developed under this project) are 1,360 persons in total at the Academy and 300 persons on average at each of the four regional centers from which the data were available. Among those four provinces, Sichuan Province and Shaanxi Province continues to be the model area under the subsequent project, but even in Guizhou Province and Xinjiang Uygur Autonomous Region that are not directly assisted under that project, the courses have been continued in the same manner as well. All training centers including the ones in the rest of the model provinces responded that the output of this project has continuously been useful for implementation of high quality training courses. Trainees’ satisfaction according to course evaluations has been consistently high throughout the whole period from during project implementation to present.

With respect to the overall goal, the curriculum and course development method developed under this project have been shared with other provinces on nation-wide symposia and similar occasions. They have also begun utilized by Guangxi Zhuang Autonomous Region and Ningxia Hui Autonomous Region through the subsequent project. The Academy has further developed its institutional setting for training with support from the SFA: it now provides various contents and modes of training (including on-line courses) to government personnel from state to local levels as well as the private sector. In doing so, the Academy has revised and used the method developed under this project. Therefore, the overall goal “offering training opportunity to China’s forestry personnel at the county level” has been achieved. In the eight model provinces as well, the method has been widely used with necessary improvement. Furthermore, there are cases reported on the ex-trainees’ contribution to natural resources protection activity including the Six Major Forestry Projects such as through dissemination of the knowledge and techniques learned from the training courses to their colleagues and farmers and utilization in the field.

Therefore, effectiveness/ impact of the project is high.

<table>
<thead>
<tr>
<th>Achievement of project purpose and overall goal</th>
<th>Aim</th>
<th>Indicators</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Project Purpose) Improve the training system for upgrading</td>
<td>The Center becomes able to identify needs of county-level forestry personnel and develop, implement</td>
<td>(Project completion) Training capability of staff of the Center improved through the model courses. A series of training process was standardized and documented into the training manual.</td>
<td></td>
</tr>
<tr>
<td>Project Management and Technical Operation with the Center as the Leading Factor</td>
<td>and improve training courses.</td>
<td>(Ex-post evaluation) The training manual has been revised partly through the subsequent project. The Academy is implementing courses that are standardized and with enhanced quality based on the manual.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The eight regional training centers become able to develop, implement and improve their training courses for county-level forestry personnel, with technical support from the Center, in a manner that is responding to trainees’ needs.</td>
<td>(Project completion) Training capability of each regional training center was improved through the model courses and courses of their own. Each regional training center developed its own “provincial forestry training manual” with reference to the Center’s manual.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The number of views of the project’s homepage increases every year.</td>
<td>(Project completion) It increased every year and reached 270,000 at the end of March 2009.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Chinese side uploads information on on-going China-Japan cooperation projects to several websites. The number of views is unknown.</td>
<td>(Ex-post evaluation) The homepage was closed after project completion.</td>
<td></td>
</tr>
<tr>
<td>Overall goal</td>
<td>Offer training opportunity to China’s forestry personnel at county level, upgrade their capability in project management and technical operation, and enable China’s ecological construction centering on the Six Major Forestry Projects to proceed smoothly</td>
<td>(Ex-post evaluation) They are continuing courses with revision and use of the training manual (also see “Ex-post evaluation” under “Project Purpose” above). The manual is also applied to other courses of the Academy than the ones developed under this project and to provincial-specific training courses. The Center is promoting the institutional development and providing training to various trainees including county-level forestry personnel in the whole country.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Academy and the eight regional training centers conduct training using the development method of training curriculum and materials (include other courses at the Academy).</td>
<td>(Ex-post evaluation) The method introduced under this project was shared with other provinces, and used in Guangxi and Ningxia under the subsequent project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training using the development method of training curriculum and materials is conducted, with support from the Academy, in two provinces other than model provinces.</td>
<td>(Supplementary indicator) Cases of contribution to smooth implementation of the Six Major Forestry Projects and other natural environment protection activity.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Supplementary indicator) Ex-trainees have contributed to implementation of the Six Major Forestry Projects, etc. through improved on-site technical support and surveys/research, dissemination of the learned knowledge to colleagues and enhanced willingness to receive other training courses (also see Box below).</td>
<td>(Ex-post evaluation) The provincial training manual has been revised at each regional training center. They are implementing courses that are standardized and with enhanced quality based on the manual.</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Terminal Evaluation Report; responses to the questionnaire from the implementing agency.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was as planned (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 112%) because of adjustments of the number of trainees to receive and the items of training equipment to provide based on the implementation situation of the project. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, this project is still given importance in the current development policy as the 12th Five-year Plan for National Economic and Social Development (2011-2015) and the 12th Five-year Plan for National Forestry Development (2011-2015) keep mentioning continuous implementation of the Six Major Forestry Projects and human resource development in forestry. Institutionally, the organizational status of the Academy remains the same with allocation of sufficient number of staff and relationship with regional centers for training implementation. In the technical aspect, there is no problem as both the Academy and the regional centers identify needs and accordingly develop curriculum and implement training. In the financial aspect, while both the Academy and the regional centers have secured necessary budget, there are concerns on possible shortage of training budget at some regional centers due to recent hike of price and personnel cost.

From these findings, it is considered that the project has some problems in the financial aspect of the implementing agency; therefore, sustainability of effectiveness of the project is fair.

5 Summary of the Evaluation

For the project purpose “improvement of the training system for upgrading county-level forestry personnel’s capability in project management and technical operation with the Sino-Japan Forestry Ecology Training Center as the leading factor”, the Center and the regional training centers in eight provinces became able to develop training plans and curriculum, implement courses and evaluate/improve the training. They have continuously provided training by the time of ex-post evaluation with use and improvement of the training course development method developed under this project. For the overall goal, the regional centers in the eight provinces have widely used the method in their training including provinces’ own courses. Additional two provinces started using the method that this project disseminated. Also, there were cases observed that ex-trainees utilized the learned knowledge and techniques and contributed to the Six Major Forestry Projects, etc. As for sustainability, there are concerns on possible shortage of budget at some regional centers. On efficiency, the project cost exceeded the plan. In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned
Recommendations for Implementing agency:

The Academy should make further effort to disseminate the method developed under this project to provinces other than the model provinces of this project. For this, instructions and support from the SFA is indispensable.

Lessons learned for JICA

One of the promoting factors to high effectiveness/impact of this project is instructions and support from the SFA, the upper-level organization of the implementing agency as well as provincial forestry departments throughout the period from project implementation to post completion. As smooth implementation and dissemination of outcomes need not only efforts of the implementing agency but also support from the upper level organization, it is desirable to involve the latter organization in designing the project implementation structure.

Box: Some cases on ex-traineep’s contribution to the Six Major Forestry Projects and similar activity

- Guizhou Province: Applied the learned knowledge and techniques for development of an ecological agriculture model under the environmental improvement project in the Shiqiao small river basin in Yachi Town, Qixingguan District, and contributed to outcomes such as increase in grass coverage.
- Fujian Province: Established a lily production model and promoted industrialization of forestry in Yanping District.
- Sichuan Province and Xinjiang Uyghur Autonomous Region: Disseminated the learned tree-planting and raising seedling techniques, which enhanced survival rate.
- Shanxi Province: Disseminated the learned walnut growing techniques and information such as on preferential policies and laws/regulations related to agro-economic development, and contributed to development of walnut industry in Lantian area.
- Hubei Province: Provided in-field technical instruction and training in oil tea (low tree; oil is extracted from its seed) extension project, which increased seedling production.