3-1-3 Japan's foreign aid policy

(1) Japan's Medium-term Policy on ODA

In the priority issues of Japan's Medium-term Policy on ODA as described below, Japan tries to give high priority to cooperation in the conservation of the natural environment by means such as the management of nature reserves, conservation and management of forests, measures against desertification, and natural resource management. Cooperation is provided based on the following approaches.

> In order to enhance the overall capacity of the authorities, research institutes, and other agencies in developing countries to address environmental problems, Japan will support human resource development.
>
> Japan will provide support to developing countries by making use of its experience and know-how in overcoming environmental problems and its scientific technology in combating complex environmental problems. Such experience, know-how, and the technology have been accumulated by a broad range of organizations outside government in Japan, including local governments, private enterprises, research institutes, NGOs, and others. Thus, Japan will actively collaborate with such organizations in assisting developing countries.

Thus, the contents of the Project correspond to the priority issues of the Policy as mentioned above.

(2) JICA's plan for country-specific program implementation

JICA has five priority areas of assistance in Indonesia. Fourth priority area of assistance is "environmental conservation" in which "forest conservation" is explicitly described as a sub-program. Therefore, this project is in line with JICA's priority area of assistance.

3-2 Effectiveness

For the following reasons, the effectiveness of the Project is judged to be high to a certain degree.

3-2-1 Achievement of the Project purpose

As mentioned in the section of 2-1-1, the Forestry and Nature Conservation Research and Development Center, MoF became to be able to transfer nursery management skills to the forestry sector organizations through the training programs. In the year of 2006, more than 15 forestry sector organizations attended training courses

at each model nurseries as shown in the indicator (1) of PDM.

In the indicator (2), more than five forestry sector organizations were supposed to have technical consultations. According to the project outcomes, six institutions in 2005 and 16 organizations in 2006 came to the Project for the technical consultations.

In the indicator (3), there are 19 counterparts who can conduct training at each nursery, and the number of counterparts is sufficient enough to conduct training courses at model nurseries.

Based on the above indicators, the Team concluded that the Project strengthened the capacity of FORDA, a part of MoF to transfer nursery management skills to forestry sector organizations.

3-2-2 The project outputs from the perspective of the technical aspects

(1) The technology for the mass-propagation of native tree species

The Project is based on the KOFFCO system and aimed to transfer it as a tool for mass-propagation planting stocks. The system has been modified to meet local circumstances when the model nurseries developed in the outer islands. The counterparts newly assigned to the model nurseries obtained the skills on managing nurseries and also testing new tree species for mass-propagation as well as transferring their technique to other institutions through the Project. The Project also modified the system to increase its cost efficiency by focusing on specific sites and tree species. Those contributed to improve the system more applicable to other nurseries as well as to increase possibility to meet future needs from forestry sector organizations. The details of those activities are shown in the report on nursery management (Activity 1-8).

(2) The contents of the related manual

The draft manual of mass-propagation technique of dipterocarps species was distributed to the participants in the training program. The contents of daft manual were revised by getting the feedback from the participants, and the final-version manual was ultimately drawn up by the Project. The manual includes the usage of the equipment, design method for greenhouse, the way of making medium, setting up the propagation boxes, and how to cut the cutting materials, etc. It is easy for the researchers, technicians, and workers at nurseries to understand how they adopt the mass-propagation technique of native tree species through the manual.

In case of the Forestry Research Institute in Samarinda, they made an audio visual manual and posters for disseminating the technology to the forestry sector organizations with their own initiative. In this way, the technology is definitely extended

to the forestry sectors by the efforts of FORDA.

According to the interview survey to the Forestry Research Institute in Samarinda and the Balikpapan Forest Industry (BFI), they considered that the manual on mass-propagation technique was quite useful because the contents were focused on technical aspects rather than the scientific aspects. Thus, it is easier for readers to understand the manual with various pictures and illustrations.

3-2-3 Important assumption from the outputs to the Project purpose

As mentioned in the section of "Relevance", MoF enhanced the programs such as TPTII for the rehabilitation in degraded land by native tree species.

3-3 Efficiency

The Project inputs were efficiently transferred to the project activities and outputs.

3-3-1 Progress of the project activities

Appropriate environmental conditions are required for mass-propagation of planting stocks from cuttings in the greenhouse. Those include, air and leaf temperature, relative humidity, light intensity, and medium. FORDA and Komatsu had identified the appropriate condition through developing the KOFFCO system. The Project modified the system when it developed model nurseries in outer islands to meet local condition as well as to reduce the cost for producing a planting stock. In this way, the Project has increased the data and information of environmental conditions through various types of tests by using fog cooling systems, propagation boxes, shading nets, and coconut dust (medium for cutting propagation).

The Project has improved the KOFFCO system adoptable to each model nursery with appropriate means for nursery management according to the geographical conditions through the Project activities. It also increased the skill of counterparts to be able to test new species for mass- propagation and also to provide trainings for other institution. The details of the activities are summarized in the report on nursery management prepared in the Project activity 1-8.

3-3-2 Inputs to conduct the Project activities

(1) Human resources of FORDA

Before the Project, FORDA and Komatsu had carried out various types of tests in nursery production at the Forestry and Nature Conservation Research and

Development Center in Bogor. The staffs of the Center had acquired the substantial skills and knowledge on the production of planting stock at the time when the Project started. FORDA assigned those staff to the Project. Thus, the Project could transfer the nursery management skills to the newly assigned staffs efficiently.

Accordingly, the project activities with an adequate quality of inputs were implemented.

(2) Utilization and maintenance of provided equipment

In general, the equipment, such as propagation boxes, pots, various types of measuring instruments, is appropriately utilized by the counterparts and technicians. Equipment for the fog cooling system, such as fans, nozzles, pumps, and filters, is quite expensive. In order to set up the system at the lower cost, the nozzle-type mist cooling system nursery was established at each model because locally-made nozzles, pumps, timers, etc. were procured for the system.

In Kuok model nursery the fog cooling system was broken repeatedly because of the fluctuation of the voltage, but it was repaired time to times. Therefore, the maintenance of the system and provided equipment is well.

(3) Manual preparation

The manual was efficiently prepared by including knowledge that had been accumulated by FORDA and Komatsu in the past decade.

3-3-3 Factors promoting the achievement of the outputs

As mentioned in 3-3-1, the Project has been implemented based on the KOFFCO system developed by FORDA and Komatsu. The outputs, therefore, have been achieved efficiently by utilizing the theory and knowledge of the system.

3-4 Impact

The following impact is recognizable from the implementation of the Project, and the possibility that the overall goal is achieved within a certain period would be high.

3-4-1 The achievement of the overall goal as an effect of the Project

(1) Technical capacity of the forestry sector

In order to produce planting stocks of native tree species, a propagation box has been utilized in the Project. Also, the training programs for the forestry sector

organizations are conducted by using the propagation box. It is very important for the participants to utilize the propagation box by applying the skills acquired in the training programs when they go back to their nurseries. Thus, if the propagation boxes are effectively utilized at their nurseries, it would be regarded that the technology developed by the Project is suitable for practical use for the forestry sector. In addition, the propagation boxes will be improved by collecting the users' feedback.

(2) Broad dissemination of the nursery management techniques

The Project made a ripple effect to the local community. In 2006, Director General of FORDA explained the mass-propagation technique to DPR in the presentation of the programs for rehabilitation of degraded land with dipterocarps. DPR requested FORDA to apply the technique to the local community. Then FORDA has tested to apply the technique to a local community, Sari Daun in Nangarang village of Sukabumi. FORDA established a nursery with the KOFFCO system in Nangarang village in 2006. The financial support by FORDA was continued by December 2006. As it is now, the production potential for planting stocks in Nangarang village is 120,000.

Furthermore, as the Project activities along with the KOFFCO system are highly appreciated in Kalimantan, the forestry training and education institute under MoF adopted the cuttings as one of regular topics in the training programs.

(3) The logical relationship between the overall goal and the project purpose

The project purpose is to strengthen the capacity of FORDA to transfer nursery management skills to the forestry sector organizations. After the achievement of the project purpose, the overall goal aims at disseminating the skills and knowledge to the forestry sector, in order to produce planting stocks of native tree species in a wider range. Up to now, the counterparts has introduced the technology through the seminars and exhibitions during the cooperation period. As a consequence, several enterprises requested this project for the technical assistance, which means that they try to adopt and utilize the KOFFCO system for production of planting stocks. In future, it is necessary to measure the achievement of the overall goal with the proper indicators which should be set up before the termination of the Project.

Also, what is highly appreciated in this project is to initiate the activities for the overall goal during the cooperation period. It is very crucial to achieve the overall goal within three to five years after the termination of the Project.

(4) Diffusion of technique and Intellectual property right

As some enterprises and organizations in the forestry sector participating in the training programs recognize the practicality of propagation boxes, they request to procure propagation boxes. Then the propagation boxes can be sold to the forestry sector organizations. In this situation, the propagation box will be copied by some private companies and disseminated without technical support from FORDA. That is inconvenient for FORDA to disseminate the techniques in proper way. In addition, if a private company obtains the patent on the propagation box, FORDA could not conduct the dissemination activities of KOFFCO techniques to the forestry sector organizations. Therefore, the Project plans to take a patent for the propagation box in order to prevent imitating. Now the application form of the patent has been prepared and is to be submitted to a patent office.

On the other hand, to meet with the needs of the forestry sector organizations, it is important to sell the propagator boxes. FORDA decided the selling of the propagation box through the Kantor Pengelolaan Kekayaan Intelektual and Alih Teknologi (KPKIAT: an extra-governmental organization in the MOF) in 2006. Now the KPKIAT sells propagation boxes to the institutes in the forestry sector organizations which joined the training or seminar in the Project.

3-4-2 Factors inhibiting and promoting the achievement of the overall goal

(1) Collaboration with other donor agencies

The Project has disseminated the nursery management skill including the mass-propagation technique to the forestry sector organizations. It was well-recognized by other donors. For instance, Korea International Cooperation Agency (KOICA) has applied the technique into its project. In addition, the ITTO project, Model Development to Establish Commercial Plantation of Diptercarps, requested the Project to conduct a training on the propagation technology of native tree species. The Team recognized that the nursery management skill was also disseminated in collaboration with other donor agencies.

(2) Factors inhibiting the project implementation

Forestry enterprises are capable enough to put the technology into practice and to procure the facilities and equipment by themselves. Although small-scale companies and entrepreneurs are able to practice the technology, it is difficult for them to procure the facilities and equipment.

As there are local disparities between Bogor and outer islands, it is difficult to

get the consumables, such as propagation box, medium, nozzles, etc. in the outer islands. As a result, the consumables are always transported from Bogor. It is quite expensive to transport the consumables, such as propagation boxes and coconut dusts, from Bogor to other model nurseries. Thus, the challenge for the future is to make those consumables by each model nursery.

3-5 Sustainability

The prospects of the Project sustainability will be possible if human and financial resources are properly secured by FORDA under MoF.

3-5-1 Continuation of the policy aid after the termination of the cooperation

According to the TPTII (2005-2035) and the UMHTM (2002-2032) as mentioned in 3-1-2, planting of dipterocarps species is encouraged over a couple of decades. From the policy aspect, the needs for planting stocks of native tree species will increase those programs. The sustainability and further expansion of the Project achievement will be the key factor to above programs. Therefore the sustainability of the Project will be secured in the policy respect.

3-5-2 Budgetary conditions including operating expenses

As shown in Annex 4, the budget for model nurseries increased from 2004 to 2006. However, the budgets for model nurseries were still not enough and partly covered by the Project. Without further increase of budget, the activities at model nurseries cannot be sustained even at current level.

3-5-3 The organizational capacity of FORDA

(1) Operational and management capacity of FORDA

The mass-propagation technique has been transferred according to the environments and situations at each model nursery. It is anticipated that the number of staff at the model nurseries is sustained for the continuation of the project activities at the model nurseries. It is crucial to transfer the skill to new staff at the model nurseries in case of personnel shift and turnover.

(2) A sense of ownership towards the project

The Center, institutes, and station in the four target areas truly appreciate the technology transferred by the Project, and they have expanded nurseries with their own initiatives and efforts. For instance, the Forestry Research Station in Kuok established a

new greenhouse by themselves. Also, they held workshops and seminars by allocating their own budget. From the perspective of the budget, the ownership towards the project has clearly appeared.

3-5-4 Utilization of the transferred technologies after the termination of the project

To meet increasing demands for the planting stocks of native tree species, it is expected that the mass-propagation technique will be utilized by the forestry sector organizations. The counterparts have skills to apply the mass-propagation technique to new native tree species. It will help meet the future requirements from the forestry sector organizations.

4. Conclusions

In conclusion, the project purpose is achieved satisfactorily. According to the five evaluation criteria, the Team also confirms that the project achievements are high.

The Project had a solid base because of the former research activities of FORDA and Komatsu. The Project has efficiently improved and transferred the technique and knowledge. The national programs, such as GERHAN, TPTII, and UMHTM, supported to promote the Project activities. Those national programs will continue for a couple of decades even after the termination of the Project. In addition, counterparts at each model nursery became able to transfer skills to the forestry sector organizations, including a community group, with their own initiatives. Therefore, it is anticipated that the project activities will also be sustained in future even after the Project is completed.

5. Recommendations

The result of joint terminal evaluation indicates that the Project has the large potential to contribute to the national programs for rehabilitating degraded forests and for developing timber plantations. The outcomes of the Project can be applied to planting activities in ex-mining areas, less productive logged over forests and degraded vegetation in national parks. For enhancing the potential, FORDA is encouraged to maintain and continuously develop its capacity on nursery management skills, and make further efforts to disseminate the skills to forestry sector organizations such as private companies, state institutes and also local communities. It is noted that community based

planting stock production at Sukabumi district will imply to increase its livelihood, if they can sell the planting stock to forestry organizations that implement forest rehabilitation programs.

In response to the future activities of FORDA, the Team recommends that MoF would extend its policy on rehabilitation of native tree species, with establishing the system which mobilizes the plantation by forestry sector organizations. In the system establishment, it is needed that MoF takes into account community based planting stock production, as above mentioned. In addition, it is recommended that MoF would allocate the enough budgets to FORDA for providing technical support to the forestry sector organizations that they will plant native species.

In relation to the statement of the Vice President of the Republic of Indonesia on 24 January 2007, to accelerate forest rehabilitation targeting 2 million ha/year from 2007, the Team expects further contribution of FORDA to this new challenge by promoting KOFFCO system. FORDA with supports from other related institutions should extend the activities in the model nurseries to show the effectiveness of the system and to develop alternative nursery management system with various local species. Moreover, MoF should introduce the developed system into its own reforestation initiatives.

Annex 1: Project Design Matrix (PDM)

Project Name: Promotion of the mass propagation of native tree species technique for reforestation and rehabilitation
Period of Cooperation: 3 years (2004 – 2007)
Implementing Agency: Forestry Research and Development Agency, Ministry of Forestry
Target Beneficiaries: Institutions within the Forestry Sector (private and state companies, forest farmers, government institutions and universities) Version : March 5, 2003

Narrative summary	Verifiable indicators	Means of verification	Important assumptions
Overall Goal To increase the technical capacity of the forestry sector (private and state companies, government institutions and universities) to produce planting stocks of native tree species.	Annual monitoring and inquiry	Survey of their nursery activities for native tree species. .	Government policy for rehabilitation of degraded land using native tree species continues.
Project Purpose To strengthen the capacity of the Ministry of Forestry to transfer nursery management technology for the mass-propagation of native tree species technique to institutions within the forestry sector.	1 Representatives from at least 15 forestry sector organizations attend training courses at the model nurseries. 2 Technical consultations for at least 5 Institutions within the forestry sector are conducted for their nurseries. 3 Counterpart staff who can conduct training at the model nurseries remain at each model nursery. 4 Operational budget is secured for model nurseries.	1. Record of training course at the model nurseries. 2. Record of technical consultation for forestry sector nurseries.	1. Government policy for rehabilitation of degraded land using native tree species continues. 2. Investment by forestry sector in reforestation of native tree species is maintained.

Outputs 1. A prototype nursery for the mass propagation for native tree species' planting stocks is established. 2. The mass propagation method is optimized for several native tree species requested by the forestry sector.	**1-1 Some native tree species' planting stocks are produced at the model nurseries (100,000/year in Bogor and 10,000/year at the other locations).** **1-2 At least one manual for nursery management is prepared.** 2 Mass-propagation methods are developed for at least 5 native tree species requested by forestry sector.	1. Record of the planting stocks produced at the model nurseries 2. Training and consultation record 3. The number of native tree species developed for the nursery technique	Government policy to promote rehabilitation of native tree species is continued.
Activities 1-1. To establish a model nursery center (Bogor) and three model nursery stations (East Kalimantan, South Kalimatan and Sumatra) to develop nursery technology for native tree species 1-2. To transfer nursery technology to the model nurseries 1-3. To produce planting stocks of native tree species for the model nurseries 1-4. To prepare manuals on nursery technology 1-5. To conduct training courses on nursery technology for institutions within the forestry sector 1-6. To conduct consultation activities for nursery management of native tree species at several nurseries of forestry sector institutions, including forest farmer groups 1-7. To distribute native tree species' planting stocks produced at the model nurseries to promote trial reforestation and rehabilitation activities. 1-8. To prepare a report on nursery management including cost analysis 2-1 To develop mass-propagation techniques for several native tree species.	Input (Japanese contribution) 1. Dispatch of an expert on nurseries and propagation 2. Training of Indonesian Personnel in Japan and/or Indonesia 3. Equipment and materials necessary for establishing model nurseries. (Bogor and three locations) (Indonesian contribution) 1. Counterparts for nursery management. (Bogor: 3, East Kalimantan: 2, South Kalimantan: 2, Sumatra: 2) 2. Provision of existing greenhouses and nurseries developed in cooperation with Komatsu in Bogor. Provision of existing facilities at each location.		The Indonesian policy of 'Establishment of plantation forest and reforestation' is executed.

Annex 2: Evaluation Grid for Terminal Evaluation Study

	Evaluation Questions Main Questions	Evaluation Questions Sub-questions	Criteria and Method for Judgment	Required Data	Information Source	Data Collection
Performance	Were inputs conducted as planned?	Japanese experts (long- and short-term experts)	–	Name, specialty, period of dispatch, etc.	Report	Literature Survey
		Training of Indonesian personnel in Japan	–	The number of personnel participating in the training, period, etc.	Report	
		Equipment necessary for establishing model nurseries	–	Types, quantities, and costs of procured equipment	Report	
		Local operational expenses from Japanese side	–	Operational budget and expense item	Report	
		Assignment of C/P	–	Name of C/P, period of assignment, position, etc.	Report	
		Local costs from Indonesian side	–	Operational budget and expense item	Report	
		Other inputs from Indonesian side	–	Inputs from Indonesian side, periods, etc.	Report	
	Were outputs produced as planned?	Was a prototype nursery for the mass propagation for native tree species' planting stocks established?	1. Native tree species' planting stocks are produced at the model nurseries as follows: ・The model nursery in Bogor: 100,000/year ・The model nurseries at the other locations: 10,000/year 2. A manual for nursery management is prepared.	1. The number of production of native tree species' planting stocks at the model nurseries 2. The number of manuals prepared for nursery management	Report, expert	Literature Survey and Interview
		Was the mass propagation method optimized for several native tree species?	Mass-propagation methods for at least 5 native tree species are developed.	The number of mass-propagation methods developed for native tree species	Report, expert, C/P	Literature Survey and Interview
	Will the project purpose be achieved?	Will the capacity of the Ministry of Forestry be strengthened in the area of nursery management technology for the mass-propagation of native tree species?	Representatives from at least 15 forestry-sector organizations attend training courses at the model nurseries.	The number of representatives from forestry-sector organizations attending training courses at the model nurseries	Report, expert	Literature Survey and Interview
			Technical consultations for at least 5 institutions within forestry sector are conducted for their nurseries.	The number of institutions within forestry sector for which technical consultations were conducted	Report, expert	Literature Survey and Interview
			Counterpart staff who can conduct training on nursery management remains at each model nursery.	Allocation of C/P staff who can conduct training at the model nurseries	Report, expert, C/P	Literature Survey and Interview
	Are there prospects that the overall goal will be achieved?	Are there prospects that technical capacity of the forestry sector to produce planting stocks of native tree species is increased?	The number of institutions within forestry sector which had explanations on technology for production of planting stocks developed by the project	The number of institutions within forestry sector which had explanations on technology for production of planting stocks	Report, expert, C/P	Literature Survey and Interview
			The number of institutions within forestry sector which adopted the technology for production of planting stocks developed by the project	The number of institutions within forestry sector which adopted the technology for production of planting stocks	Report, expert, C/P	Literature Survey and Interview
Implementation Process	Were the project activities conducted as planned?	Were there any problems in the project activities?		Opinion of involved parities	Expert, C/P	Interview
	Were there no problems in the method for technology transfer?			Opinion of involved parities	Expert, C/P	Interview
	Were there no problems in the project management system?	How about the monitoring system?		Performance of monitoring activities	Expert, C/P	Interview
		How about the communication mechanisms within the project?		・The means of information sharing among the Project, JICA Indonesia Office, and JICA Headquarters, as well as the current situation ・The frequency and contents of information exchange among four target areas	Expert, C/P	Interview

Annex 2: Evaluation Grid for Terminal Evaluation Study

	Evaluation Questions Main Questions	Evaluation Questions Sub-questions	Criteria and Method for Judgment	Required Data	Information Source	Data Collection
Relevance	Was the project in line with the needs of the target group?	Are the needs of FORDA fulfilled?		Opinion of involved parities	Expert, C/P	Interview
	Is the Overall Goal consistent with the National Development Policy in Indonesia?	Is the content of the national development policy on reforestation in Ministry of Forestry consistent with the direction of the project?		Contents of the development policy on reforestation in Indonesia	Development plan on reforestation in Indonesia	Literature Survey
	Is the project in line with Japan's foreign aid policy?	Does the project correspond to Japan's foreign aid policy?		Contents of Japanese aid on reforestation	Japan's medium-term policy on ODA	Literature Survey
		Is the project consistent with JICA Country Program?		Contents of Japanese aid on reforestation	JICA's plan for country-specific program implementation	Literature Survey
	Did Japan have a technological advantage compared to Indonesia?	Were the C/Ps able to utilize Japan's technology and know-how on nursery?		Opinion of involved parities	Expert, C/P	Interview
Effectiveness	Are the project outputs effective from the perspective of the technical aspects?	Were the technology for the mass propagation of native tree species and the contents of the related manuals effective?		Contents of the technologies developed by the project Opinioin of involved parties	Report, Expert, C/P	Literature Survey and Interview
	What are the inhibiting and promoting factors for the achievement of the project purpose, including the important assumptions?			Opinion of involved parities	Expert, C/P	Interview
Efficiency	Were the activities sufficient to produce the outputs?	Were activities with an adequate quantity and quality performed?		Opinion of involved parities	Expert, C/P	Interview
		Were there any problems in terms of timing of project activities?		Opinion of involved parities	Expert, C/P	Interview
	Was the input of an adequate quantity and quality performed at the right time to conduct the activities?	Were the number of experts dispatched, their fields of expertise, and the timing of the dispatch appropriate?		Achievement of dispatch of Japanese experts	Records on dispatch of Japanese experts	Literature Survey
		Were the head count, placement, and skills of the counterparts appropriate?		Assignment of C/P staff	Table of C/P assignment	Literature Survey
		Were the types, quantity, utilization, and maintenance of provided equipment appropriate?		Utilization and maintenance of equipment	Expert, C/P	Interview
	Were there any influences of the important assumptions from the activities to the outputs?	Were there factors that inhibited the achievement of the outputs, including the important assumptions?		Opinion of involved parities	Expert, C/P	Interview

Annex 2: Evaluation Grid for Terminal Evaluation Study

	Evaluation Questions Main Questions	Evaluation Questions Sub-questions	Criteria and Method for Judgment	Required Data	Information Source	Data Collection
Impact	Are there prospects that the overall goal will be produced as an effect of the project?	Are there prospects that technical capacity of the forestry sector to produce planting stocks of native tree species is increased?		Opinion of involved parities	Expert, C/P	Interview
		Are the overall goal and the project purpose logically connected?		Logicality between the project purpose and overall goal	Report, etc.	Literature Survey
	Are there any factors inhibiting or promoting the achievement of the overall goal?	How do the activities by Komatsu Ltd in the past decade contribute to the achievement of the overall goal?		Opinion of involved parities	Expert, C/P	Interview
		Are there any collaboration with other donor agencies?		・Information sharing with other donor agencies ・Application of project outcomes by other donors	Expert, C/P, other donor agencies	Interview
		Are there any other factors inhibiting or promoting project activities?		Opinion of involved parities	Expert, C/P	Interview
	Is the possibility high that the important assumptions from the project purpose to the overall goal are fulfilled?			Opinion of involved parities	Expert, C/P	Interview
	Were there any positive or negative impacts beside the overall goal?	Were there any positive or negative influences as well as ripple effects which were unexpected by the project?		Opinion of involved parities	Expert, C/P, organizations related to forestry sector	Interview
Sustainability	Will policy aid continue also after the cooperation is finished?	Does the reforestation policy by native tree species continue also after the cooperation is finished?		Policy and plan on reforestation by the Ministry of Forestry	Development plan on reforestation in Indonesia	Literature Survey
	Are sufficient budget measures taken in order to secure the budget, including operating expenses?	Is the budget for the operation of the model nurseries secured?		Budgetary performance at four model nurseries	Budgetary sheets	Literature Survey
	Does FORDA have the organizational capacity to continue the business even after the cooperation has ended?	Does FORDA have the operation and management capacity?		The changes of performance by C/P, etc	Expert, C/P	Interview
		Are there any remarks to continue project activities in sustainable way?		Opinion of involved parities	Expert, C/P	Interview
		Do the project-involved organizations communicate with each other smoothly?		Situation of communication among four target areas	Expert, C/P	Interview
		Is a sense of ownership towards the project at the implementing agency sufficiently secured?		Opinion of involved parities	Expert, C/P	Interview
	Is the transferred technology utilized appropriately even after the termination of the project?	Are the model nurseries continuously operated?		Opinion of involved parities	Expert, C/P	Interview
		Is the maintenance of the model nurseries conducted appropriately?		Opinion of involved parities	Expert, C/P	Interview
		Will the transferred technology be able to spread outside the target areas?		Opinion of involved parities	Expert, C/P	Interview
		Can the C/P have the capacity for developing the mass propagation method of new other native tree species by themselves?		Opinion of involved parities	Expert, C/P	Interview

ANNEX 3 Input by Japanese Side

(1) Expert dispatch

Name		Assignment	Period	Office affiliated
【Long-term】				
Chikaya	SAKAI	Promotion of Mass Propagation Technique of Native Tree Species/ Project Manager	Feb. 2004～Feb. 2007 (Total 24.66 MM)	Komatsu Ltd.

(2) Counterpart training in Japan

Name	Position	Subject of training	Fiscal Year of Japan	Duration
Mr. HENTI HENDA LASTUTI R. , S. Hut	Junior Researcher Non-Wood Forst Product, Research and development Unit	Joint Trainig Course for Forest and Forestry Project Counterparts	2004	From August 10 2004 to Sep 24 2004
Ms. RENI SETYO WAHYUNINGYAS	Candidate - Researcher Plantation Forest Research and Development Institute of Eastern Indonesia	Joint Trainig Course for Forest and Forestry Project Counterparts	2005	From August 23, 2005 to October 8, 2005
Mr. SUBIAKTO ATOK	Research Scientist Forstry Research and Development Center	Forest Management and Ecology	2006	From November 19, 2006 to December 2, 2006

ANNEX 3 Input by Japanese Side

(3) Local cost borne by Japanese side

(Unit: JPY)

	Description	JFY 2003	JFY 2004	JFY 2005	JFY 2006 (Plan)	Total
1	Travel Expence for Japanese Expert	267,000	1,079,000	938,000	740,000	**3,024,000**
2	General activity budget	1,296,000*1	13,942,000	14,493,000	15,872,000	**44,307,000**
3	Construction cost	0	26,308,000	0	0	**26,308,000**
4	Equipment	0	3,377,000	944,000	156,000	**4,477,000**
5	Contract withLocal Consultant	0	0	0	150,000	**150,000**
Total		**267,000**	**44,706,000**	**16,375,000**	**16,918,000**	**78,266,000**

*1;include some equipment cost for mobile phone, PC, Prnter, Digital Camera

ANNEX 4 Input by Indonesian side

(1) Allocation of counterpart personnel (Working group member list)

		Name	Post	Assignment	Term	Training in Japan
FORDA (in Jakarta)						
1	1	Dr. Hadi Pasaribu	Director General of Forest Research and Development Agency	Project Steering Committee	2004- 2005	-
2	2	Mr. Wahjudi Wardojo	Director General of Forest Research and Development Agency	Project Steering Committee	2005-2007	-
Forest and Nature Conservation Research and Development Center (Bogor)						
3	1	Dr. Fauzi Masud	Director of Forest and Nature Conservation Research and Development Centre	Project Steering Committee	2004	-
4	2	Dr. Slamet R. Gadas	Director of Forest and Nature Conservation Research and Development Centre	Project Steering Committee	2004-2005	
5	3	Mr. Anwar	Director of Forest and Nature Conservation Research and Development Centre	Project Steering Committee	2005-2007	-
6	4	Mr. Atok Subiakto	Researcher at Forest and Nature Conservation Research and Development Centre	Organizing Team	2004-2007	Nov. 2006
Samarinda Forestry Research Institute						
7	1	Mr. Sulistyo A. Siran	Head of Forest Research and Development Institute, Kalimantan	Organizing Team	2004-2007	-
8	2	Mr. R. Gunawan Hadi	Researcher of Forest Research and Development Institute, Kalimantan	Local Counterpart	2004-2007	-
9	3	Mr. Rayan	Researcher of Forest Research and Development Institute, Kalimantan	Local Counterpart	2004-2007	-
10	4	Mr. Giono	Researcher of Forest Research and Development Institute, Kalimantan	Local Counterpart	2004-2007	-
11	5	Mr. Deni Prasetiawan	Researcher of Forest Research and Development Institute, Kalimantan	Local Counterpart	2004-2007	-
Banjarbaru Forestry Research Institute						
12	1	Mr. Agus Tampubolon	Head of Forest Research and Development Institute, Eastern Indonesia	Organizing Team	2004-2005	-
13	2	Mr. Didik Purwito	Head of Forest Research and Development Institute, Eastern Indonesia	Organizing Team	2005-2007	-
14	3	Ms. Reni Setyo W.	Researcher of Forest Research and Development Institute, Eastern Indonesia	Local Counterpart	2004-2007	From Au Oct., 2(
15	4	Mr. Rusmana	Researcher of Forest Research and Development Institute, Eastern Indonesia	Local Counterpart	2004-2007	-
Kuok Forestry Research Station						
16	1	Ir. Tigor Butarbutar, Msc.	Head of Non Timber Forest Product Research and Development Station	Organizing Team	2004	-
17	2	Mr. Sunarno	Head of Non Timber Forest Product Research and Development Station	Organizing Team	2004-2007	-
18	3	Mr. Henti Henda Lastuti R. S.	Researcher of Non Timber Forest Product Research and Development Station	Local Counterpart	2004	From Aug. to Sep.,2004
19	4	Mr. Asep Hidayat	Researcher of Non Timber Forest Product Research and Development Station	Local Counterpart	2004-2007	-
20	5	Mr. Dodi Prianto	Researcher of Non Timber Forest Product Research and Development Station	Local Counterpart	2004-2007	-

Note: Persons indicated with Italic fonts denote counterpart personnel concurrent with other components.

Annex 4: Input by Indonesian side
(2) Local cost borne by Indonesian side

In Bogor (2004-2006) **(Unit: Rp)**

	Description	2004	2005	2006	Total
1	Management fee	22,500,000	23,500,000	24,500,000	70,500,000
2	Expenditure to conduct field activities	40,000,000	45,000,000	68,500,000	153,500,000
3	Office equipment	5,000,000	5,000,000	5,000,000	15,000,000
4	Workshop and seminar	0	25,000,000	25,000,000	50,000,000
5	Information dissemination, data establishment	2,000,000	2,000,000	2,000,000	6,000,000
6	Project expert working facilities	0	0	33,300,000	33,300,000
7	Receiving, operation and maintenance of equipment	0	0	0	0
8	Others	0	0	0	0
Total		**69,500,000**	**100,500,000**	**158,300,000**	**328,300,000**

In Samarinda (2004-2006) **(Unit: Rp)**

	Description	2004	2005	2006	Total
1	Management fee	29,500,000	30,900,000	32,300,000	92,700,000
2	Expenditure to conduct field activities	15,000,000	15,000,000	15,000,000	45,000,000
3	Office equipment	12,000,000	12,000,000	12,000,000	36,000,000
4	Workshop and seminar	7,500,000	10,000,000	50,000,000	67,500,000
5	Information dissemination, data establishment	0	10,000,000	35,000,000	45,000,000
6	Project expert working facilities	0	0	0	0
7	Receiving, operation and maintenance of equipment	9,600,000	9,600,000	9,600,000	28,800,000
8	Others	0	25,000,000	100,000,000	125,000,000
Total		**73,600,000**	**112,500,000**	**253,900,000**	**440,000,000**

Annex 4: Input by Indonesian side
(2) Local cost borne by Indonesian side

In Banjar Baru (2004-2006) **(Unit: Rp)**

	Description	2004	2005	2006	Total
1	Management fee	157,500,000	171,900,000	186,300,000	515,700,000
2	Expenditure to conduct field activities	27,500,000	27,500,000	27,500,000	82,500,000
3	Office equipment	11,500,000	11,500,000	11,500,000	34,500,000
4	Workshop and seminar	1,000,000	60,400,000	45,300,000	106,700,000
5	Information dissemination, data establishment	0	2,000,000	2,000,000	4,000,000
6	Project expert working facilities	0	0	0	0
7	Receiving, operation and maintenance of equipment	19,000,000	19,000,000	19,000,000	57,000,000
8	Others	0	0	0	0
	Total	**216,500,000**	**292,300,000**	**291,600,000**	**800,400,000**

In Kuok (2004-2006) **(Unit: Rp)**

	Description	2004	2005	2006	Total
1	Management fee	132,000,000	144,000,000	156,000,000	432,000,000
2	Expenditure to conduct field activities	25,000,000	25,000,000	25,000,000	75,000,000
3	Office equipment	11,500,000	11,500,000	11,500,000	34,500,000
4	Workshop and seminar	0	25,000,000	35,000,000	60,000,000
5	Information dissemination, data establishment	0	7,500,000	7,500,000	15,000,000
6	Project expert working facilities	0	0	0	0
7	Receiving, operation and maintenance of equipment	18,000,000	18,000,000	18,000,000	54,000,000
8	Others	3,000,000	3,000,000	194,000,000	200,000,000
	Total	**189,500,000**	**234,000,000**	**447,000,000**	**870,500,000**