Summary of Terminal Evaluation

1. Project Overview

<table>
<thead>
<tr>
<th>Country: Republic of Indonesia</th>
<th>Project Title: The Project on Capacity Building for Restoration of Ecosystems in Conservation Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue/Sector: Forestry and Nature Conservation</td>
<td>Cooperation scheme: Technical Cooperation</td>
</tr>
<tr>
<td>Issue/Sector: Forestry and Nature Conservation</td>
<td>Total cost (as of September 2014): JPY 371,101 Thousands</td>
</tr>
<tr>
<td>Cooperation period:</td>
<td>Partner Country’s Implementing Organization: Ministry of Forestry’s General Directorate of Forest Protection and Nature Conservation (PHKA)</td>
</tr>
<tr>
<td>(R/D): March 2010 – March 2015 (5 years)</td>
<td>Supporting Organization in Japan: Forestry Agency</td>
</tr>
<tr>
<td>(Extension): N.A.</td>
<td>Related Cooperation: “The Project for Improvement of Management Capacity of Operation and Maintenance for SHAPWASCO”</td>
</tr>
<tr>
<td>(F/U): N.A.</td>
<td></td>
</tr>
<tr>
<td>(E/N) (Grant Aid): N.A.</td>
<td></td>
</tr>
</tbody>
</table>

1-1. Background of the Project

Republic of Indonesia enjoys the world’s third-largest tropical forest area after Brazil and the Democratic Republic of Congo, which supports the livelihood of local communities and the precious biodiversity that provides a major wildlife’s habitat. Recent years, the importance of forest conservation and restoration has been internationally recognized as an effective measure for the mitigation of-and adaptation to global climate change.

While the importance of forest conservation gains international attention at policy level, forests in Indonesia has suffered from a high pressure from timber production, oil palm plantation, forest fire, and natural disasters even in officially designated conservation areas. In recognition that conservation areas and national parks in particular play a central role in biodiversity conservation in Indonesia, the restoration of the degraded forests has been given a policy priority by Ministry of Forestry (MoF).

As part of the MoF’s efforts to promote the conservation of ecosystems in national parks, Government of Indonesia requested to Government of Japan a technical cooperation to strengthen the 1) institutional, 2) technical and 3) financial capacity of the Directorate General of Forest Protection and Nature Conservation (PHKA), a department in charge of managing conservation areas, as well as of selected national park offices and other relevant stakeholders. In response to this request, JICA started “the Project on Capacity Building for Restoration of Ecosystems in Conservation Areas” (“the Project”) in 2010, in cooperation with the PHKA, national park offices, and relevant stakeholders of the restoration of degraded areas in conservation areas.

1-2. Project Overview

(1) Overall Goal of the Project

“Restoration of degraded land contributing to ecosystem health in conservation areas is promoted.”

(2) Project Purpose

“Capacity of relevant stakeholders for restoration of degraded land in conservation areas is strengthened.”

(3) Outputs

1) “Institutional framework for restoration of degraded land in conservation areas is enhanced.”
2) “Restoration plans of degraded land in the model sites are developed.”
3) “Restoration activities in the model sites are implemented.”

(4) **Inputs** (as of Terminal Evaluation (September 2014))

1) Inputs provided by the Japanese side

- The inputs of 4 long-term experts (1 Chief Advisor and 3 Coordinators) and of 1 short-term expert, between March 2011 and March 2015
- Training of 18 C/P staff in Japan
- Provision of equipment in the amount 1,988 million Indonesian Rupiah (IDR)
- Local activity cost in the amount of 16.4 billion IDR, to cover the cost of travels, honorarium, payment for local consultants and refreshment, among others.

- Total 19 Counterpart (C/P) staff
- C/P budget in the amount of 1,450 million IDR, used mainly to cover staff’s travel expenses and per diem related to the Project activities

<table>
<thead>
<tr>
<th>Members of Evaluation Team</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Mr. Hiroyuki HATORI, Leader of Japanese Evaluation Team/Senior Advisor of Global Environment Department - JICA</td>
<td></td>
</tr>
<tr>
<td>(2) Mr. Hideki KAWATO, Director, International Forestry Cooperation Office, Forestry Agency of Japan</td>
<td></td>
</tr>
<tr>
<td>(3) Mr. Yuki OKADA, Forestry and Nature Conservation Group, Global Environment Department – JICA</td>
<td></td>
</tr>
<tr>
<td>(4) Ms. Emi YOSHINAGA, Evaluation Specialist, Japan Development Service Co. Ltd</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Period of Evaluation</th>
<th>Type of Evaluation: Final Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th to 26th of September, 2014</td>
<td></td>
</tr>
</tbody>
</table>

3. **Results of Evaluation**

3-1. **Project Performance**

**Output 1:** “Institutional framework for restoration of degraded land in conservation areas is enhanced.”(achieved)

- Indicator 1.1 in Recommendations to streamline governmental rules, regulations and guidelines are prepared. ” is achieved by November 2011. A recommendation report named “A Review of Government Guidelines on the Restoration of Ecosystems in Conservation Areas” was prepared by the Project experts in Bahasa, Japanese and English languages. Following this review which recommended to the C/Ps the introduction of “restoration” as a new method of ecosystem regeneration, the concept of “restoration” and “natural regeneration” was mentioned for the first time in the government’s decree.

- Indicator 1.2 Recommendations to improve technical guidelines are prepared” is achieved by October 2010, where a recommendation report named “Review on the Applicable Techniques for the Restoration of Degraded Land” was prepared likewise in Bahasa, Japanese and English languages and submitted to PHKA.

- Regarding Indicator 1.3g Recommendations to develop strategy for mobilizing financial resources for restoration is prepared.”, the Evaluation Team concluded that the objective of this Indicator has been sufficiently met. At the time of this Evaluation, no specific strategy or recommendation document on financial resource mobilisation is prepared by the Project, partly because more time was spent for the
actual restoration activities, as well as because the Project believed that the actual efforts to find financial supporters would be more effective in achieving this objective than writing a general strategy paper on available financial resources. The Project was indeed able to establish partnerships with several private sector organisations and in enlisting their financial support for the restoration activities, and plans to summarise their private sector partnership experiences in an report tentatively named “Restoration Activities through Partnership with Private Sector” by the end of its cooperation. For this achievement, the Team concluded that the objective of this Indicator was sufficiently satisfied.

**Output 2: Restoration plans [of degraded land] in the project sites are developed.” (achieved)**

- Indicator 2.1 *Processes of making restoration plan are documented* is achieved by the Project staff who manage and regularly document the restoration activities. The general process of drafting a restoration plan was first prepared by the Project, while the actual process was documented by the local consultants who oversaw the drafting of the plan in each project site. A visual flow chart of the same process was also created to facilitate the understanding of project participants with limited experience in participatory restoration activities.

- Indicator 2.2 *The restoration plans of each site are prepared* is achieved by March 2011. The preparation of the plans was facilitated by local consultants and was carried out in accordance with the participatory process explained earlier in Output Indicator 2.1.

**Output 3: “Restoration activities in the project sites are implemented.” (expected to be achieved)**

- Indicator 3.1b *Results of the training are recorded.* is also attained. Training in such areas as restoration techniques, restoration plants identification and photography, and forest fire control has been delivered and recorded by the Project.

- Indicator 3.2t *Final report compiling the result of restoration activities including the restored area is submitted to the ministry* is likely to be achieved by the end of the Project. A final report, summarising the 2014 activities and the overall outcomes of this Project is to be prepared by the Project in Bahasa, English and Japanese languages and submitted to the Ministry of Forestry by March 2015. Total 476.12ha of land was restored through the Project activities in 5 sites by September 2014, whose figure the Project plans to inform to the MoF in the same final report.

- Indicator 3.3o *Restoration project(s) in each site is established* is achieved in each site by 2013. Standard restoration method and activities was by and large defined in all the sites by 2013, as a result of regular monitoring, evaluation and modification of these activities by the C/P and the Project experts. 2010, which was the first year of the Project, was invested for the overall planning; 2011, for the proper start-up; and by 2013, a standard format of restoration activities took shape in each site.

**Project Purpose: “Capacity of relevant stakeholders for restoration of degraded land in conservation areas is strengthened” (likely to be achieved)**

The two indicators for the Project Purpose are likely to be attained by the end of this Project.

1) The attainment of Indicator 1.1 *A draft of Restoration Guideline that covers the necessary aspects (institutional, technical and financial) is in place* is likely. So far aiProcess Guideline for the Restoration of Degraded Land in Conservation Areas(*) ("Process Guideline"), and "Technical
Manual for the Restoration of Degraded Land in Conservation Areas(*) (“Technical Manual”) have been prepared by the Project which all together form the “Restoration Guideline” mentioned in this Indicator. Both the Process Guideline and the Technical Manual are composed of two books, one for tropical mountain rainforest and tropical monsoon forest, and the other, for mangrove forest, prepared in Bahasa and Japanese languages. The books on tropical mountain rainforest and tropical monsoon forest were finalised in January 2014, and the one on mangrove is to come out in January 2015.

2) Indicator 2: “Relevant stakeholders (*) are equipped with the capacity to develop the restoration activities(**)” was assessed as generally achieved.

- The institutional framework strengthened through this Project, which is the Restoration Guideline, is sufficiently utilised by the PHKA for further strengthening of the policies related to the restoration. The Restoration Guideline helped the PHKA identify the shape of institutional framework to implement the restoration activities, based on which the PHKA currently formulate the Directorate General’s Decrees and activity plans for future restoration activities.

- The ability of both national park staff and the Working Group's (WG) members to apply the technical knowledge to the restoration activities has shown improvements. Through the training by the LIPI researchers and by the Japanese expert, both the staff and WG members gained the skills to identify the local plants, to create the sampling, and to produce seedling in respective project sites. Although the total recovery of ecosystems in the project sites requires time, the restoration activities themselves are so far carried out in accordance with the Project's Guideline, indicating that the restoration techniques transferred to the stakeholders in the project sites are sufficiently utilized.

- On the ability to utilize financial resources, the Project was able to realize the partnerships with external organizations and in building experience in MoF and the national parks to utilize external finances, if not to actively mobilize the finances by themselves. The funding from the external partnerships per se is not sufficient to cover the cost for restoration; however, they are highly useful to support a part of the activities such as the maintenance of restoration sites or the cost of contracting Field Managers.

(*) Refers to the PHKA officials and those involved in the restoration of degraded land in national parks. Although “those involved” may vary from site to site, it generally refers to the national park staff and the participants from the local community.

(**) Refers to the knowledge and skills of those stakeholders to utilise the institutional framework, restoration techniques and finance for the restoration of degraded areas.

3-2. Evaluation Results

1) Relevance: High

1) Consistency with Indonesia’s policies

- The measures against the degradation and deforestation of the world’s third-largest forest resources in Indonesia is both an urgent task both for Indonesia and a key issue of attention by international society to address global climate change. Of the degraded areas that require urgent measures, the restoration of ecosystems in conservation areas, among others, is recognised by MoF as a symbol of ecosystems
conservation in Indonesia and is therefore as a policy priority.

- The importance given to the restoration of ecosystems in conservation areas is explicit also in Indonesia’s current mid-term national development strategy “Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2010-2014”, which places the rehabilitation of 500 000 hectares of degraded land as a key action under one of nine National Priorities “Environment and Natural Disasters”. Likewise in the “Rencana Strategis 2010-2014” by MoF, the “conservation of biodiversity and protection of forest” appears on the top of 7 programmes of actions, where the “restoration of ecosystems in four locations” is a key indicator for this programme. According to the PHKA’s current strategy of “Rencana Strategis Direktorat Jerderal Perlindungan Hutan dan Konservasi Alam Tahun 2010-2014”, the five restoration sites of this Project are the ones of seven priority locations for ecosystem restoration, providing a clear policy support for the activities of this Project.

- The Government Decree No.28 issued in 2011, Ministerial Decree No.48 issued by Ministry of Forestry in 2014, and the two Directorate General’s Decrees being prepared by PHKA on ecosystem restoration, are all together evaluated as both the impacts of this Project and the policies that further strengthen the relevance of this Project. The Decree No.28, which stipulates that “restoration”, “rehabilitation” and “natural regeneration” be the three methods to recover the ecosystems in conservation areas, was issued integrating the essence of the recommendations from this Project, and the details of this Decree are elaborated in the Ministerial Decree No.48. Accordingly to the PHKA, the two Directorate General’s Decrees are currently being prepared to specify further details of the techniques and implementation arrangements for ecosystems restoration in reference to the Restoration Guidelines of this Project.

2) **Relevance to Capacity Development Need**

This Project was also relevant to the capacity needs of Indonesia’s forestry sector, in terms of timing of implementation and the focus of activities. Although the restoration of ecosystems in conservation areas have been recognized as policy priority since before the Project, the actual measures to do so largely depended on natural regeneration. The effectiveness of natural regeneration method, however, was limited in the areas where the degradation was serious, urging PHKA to secure budget from MoF’s Directorate of Watershed Management Development and Social Forestry and to commence a more active rehabilitation of forests in 2010. The recovery of ecosystems is therefore relatively a new activity for both PHKA and national parks, calling for the establishment of techniques for restoration, as well as for the clear plans and goals for each park to implement the restoration activities. That is, the demand was high among stakeholders for an effective method of restoration, which justifies the relevance of the Project’s intervention in terms of timing and the capacity building needs.

3) **Relevance of the Project Design**

- The structure of this Project is highly relevant. The activities are comprehensive and designed to strengthen the institutional framework, techniques and budget base which are inter-related and all together essential for successful restoration of ecosystems. A financial partnership with the Corporate Social Responsibility (CSR) companies and Indonesian research institutions, in particular, set an innovative example that could be referred to by other similar cooperation projects.

- The selection of target beneficiary is assessed also as relevant, encompassing all the key stakeholders of
restoration at difference level, i.e., the PHKA official who oversee MoF’s ecosystem restoration policy, the national park staff who manage the restoration activities in the project sites, and the local communities whose life would be affected by the restoration activities.

- The selection of project sites is evaluated generally relevant. Some Project participants raised a concern that the restoration sites in Sembliang National Park was limited to the demolished prawn farms, and that Project’s Restoration Guideline for mangroves created only through this experience, is not widely applicable. The Team however concluded that the site selection was generally appropriate, on the ground that the restoration of mangroves in aquaculture farms is highly technical whose experience can be applied for the restoration of degraded land with similar flora.

4) **Relevance to Japan’s policy and comparative advantage**

The Project is consistent with Japan’s Country Assistance Policy for Indonesia (2012) and JICA’s business plan. Under JICA business plan, this Project is recognized as a key part of JICA’s assistance to increase the capacity to deal with the global and regional issues, including environmental conservation and climate change. Japan’s long history of forestry technical cooperation also justifies the relevance for JICA to provide assistance through this Project.

(2) **Effectiveness: High**

The reason for the Team’s conclusion is because the two indicators of the Project Purpose are expected to be achieved by the end of this Project. In deciding the rating for “Effectiveness”, the Team followed its agreed focus of evaluation shown in 1.1.4(3) and attached more weight to Indicator 1 (see 1.1.4(3) “Focus of Evaluation”)

1) **Progress in Attaining Project Purpose Indicator 1**

- As shown in the earlier chapter, the Indicator “1. A draft of Restoration Guideline that covers the necessary aspects (institutional, technical and financial) is in place” is expected to be achieved by the end of this Project. A “Process Guideline for the Restoration of Degraded Land in Conservation Areas (“Process Guideline”), and “Technical Manual for the Restoration of Degraded Land in Conservation Areas (“Technical Manual”) have been prepared by the Project which all together form the “Restoration Guideline” mentioned in this Indicator. The Process Guideline describes the timeline process of all restoration activities from overall design to the preparation and the implementation of a restoration plan, and the Technical Manual elaborates the technical details to implement the restoration activities. These documents are created in Bahasa and Japanese languages incorporating the results of literature review undertaken under Output 1, as well as of the actual restoration activities in 5 project sites implemented under Output 2-3.

- Taking into account the differences of ecosystems in respective project sites, two books are prepared for both the Process Guideline and the Technical Manual - one for tropical mountain rainforest and tropical monsoon forest, and the other, for mangrove. Tropical mountain rainforest and tropical monsoon forest version of the books were finalised in January 2014, and the mangrove version will be finalised in January 2015. Key elements of the Technical Manual are elaborated further in separate guidelines named “Field Guidebook on the Restoration of Plants” and the “Technical Manual on Seedling Production from Seeds”.
• As mentioned in “3.2 (1) Relevance” and “3.2 (5) Sustainability”, two Directorate General’s Decrees are being prepared by the PHKA to define the technical details and management process of restoration activities in conservation areas. The fact that the Project’s Restoration Guidelines are used as reference documents in the process of creating these Decrees not only proves the relevance and effectiveness of this Project, but also contributes to strengthening the sustainability of restoration techniques suggested by this Project.

2) **Progress in Attaining Project Purpose Indicator 2**
• As discussed in “3-1 Project Performance”, the Team concluded that the Indicator “2. Relevant stakeholders are equipped with the capacity to develop the restoration activities” has by and large been achieved.
• The institutional framework strengthened through this Project, which is the Restoration Guideline, is sufficiently utilised by the PHKA for further strengthening of the policies related to the restoration. The Restoration Guideline helped the PHKA identify the shape of institutional framework to implement the restoration activities, based on which the PHKA currently formulate the Directorate General’s Decrees and activity plans for future restoration activities.
• The ability of both national park staff and WG members to apply the technical knowledge to the restoration activities has shown improvements. Through the training by the LIPI researchers and by the Japanese expert, both the staff and WG members gained the skills to identify the local plants, to create the sampling, and to produce seedling in respective project sites. Although the total recovery of ecosystems in the project sites requires time, the restoration activities themselves are so far carried out in accordance with the Project’s Guideline, indicating that the restoration techniques transferred to the stakeholders in the project sites are sufficiently utilised.
• On the ability to utilise financial resources, the Project was able to realise the partnerships with external organisations and in building experience in MoF and the national parks to utilise external finances, if not to actively mobilise the finances by themselves. The funding from the external partnerships *per se* is not sufficient to cover the cost for restoration; however, they are highly useful to support a part of the activities such as the maintenance of restoration sites or the cost of contracting Field Managers.

(3) **Efficiency**: High

The Team’s conclusion was because all the Output Indicators were achieved, the management of implementation process and inputs was overall efficient, and there were innovative collaboration with external organisation to increase efficiency.

1) **Attainment of Output Indicators**

Although some activities experienced delay due to the factors such as natural disasters and frequent changes of C/P staff, all the activities are expected to be complete by the end of the Project and the indicators for the three Outputs in the Project Design Matrix (PDM) are all met. The management of activities in geographically disperse project sites and of the communication among large number of stakeholders was highly efficient, owing the cooperation from the C/Ps and to the leadership of the Project. In addition to the utilization of national human resources, the Project also provided pioneer cases of a partnership with CSR companies, which all contributed to increasing efficiency.
2) **The volume and quality of inputs**

- The inputs from both Japanese and Indonesian sides are evaluated as overall relevant. The inputs of Japanese experts and the training in Japan are provided generally as planned, and so was the assignment of C/P personnel and the office space for the Project by the Indonesian side. Although the input of short-term Japanese experts was limited only to one specialist on seedling production, the reduction in the number of this input was consistent with the demand for training in Indonesia and is deemed appropriate. The counterpart budget, which was not available in 2010 except for in the Bromo Tengger Sumeru National Park, has been secured since 2011 and is used mainly to cover the cost of travel for the staff of PHKA and of the project site national parks.

- Most of the input of machineries and the facilities constructed by the Project have been utilised appropriately. Owing to the construction of 600 m mangrove trail from the port to the project site in Sembilang, for example, the Project stakeholders were able to access to the project site without being disturbed by the ebb and flow of the tide, which contributed well to the Project’s efficiency. Some other equipment, such as the speed boat provided to Sembilang, is underutilised due to some technical reasons, requiring a continuous monitoring on its use and management.

3) **Other factors /efforts to increase efficiency**

- **Partnership with private sector**: the partnerships with such companies as Sumitomo Forestry Co.Ltd, Mitsui-Sumitomo Insurance Co. Ltd, PT. Yamaha Music Indonesia and PT.TS Tech Indonesia contributed to accelerating the restoration activities. Examples of the activities under these partnerships include the delivery of forest fire prevention training in Bromo Tengger Sumeru, and the restoration of total 105 ha of degraded land in Gunung Ciremai, Gunung Merapi.

- **Partnership with academic institutions**: Indonesian Institute of Science (LIPI) contributed significant knowledge and experience in the delivery of training in project sites, and to the creation of the Project’s “Field Guidebook on the Restoration of Plants”, one of key output of this Project which summarises the details of about 300 tree species with their photos.

- **Other partnerships** include with the staff of the United Nations Educational, Scientific and Cultural Organization (UNESCO), as a resource person for the Seminar hosted by the Project on the Restoration of Degraded Land in January 2012; with JICA’s “Project on Mangrove Ecosystem Conservation and Sustainable use in the ASEAN region”, with whom the Project organised a study tour to Mangrove Management Centre in Bali; and with JICA’s Project for Wild Fire and Carbon Management in Peat-forest in Indonesia, whose expert participated as a resource person at the Project’s fire prevention training in Bromo Tengger Sumeru in May 2012.

4) **Impact: Relatively High**

The bases of the Team’s conclusions are as follows: 1) the Overall Goal indicators are likely to be achieved, if several conditions are satisfied; and 2) noteworthy positive impacts were observed through the Project implementation.

1) **Prospect for achieving Overall Goal**

- The objective of the two Overall Goal Indicators - “1. Restoration plan(s) of other national parks
reflecting the result of the project are prepared” and “2.Restoration activities reflecting the result of the project are initiated in other national parks” –are to increase the area coverage of the Project’s activities.

- As mentioned in earlier sections, the PHKA currently prepares two Directorate General’s Decrees on the implementation of restoration activities in conservation areas, with a view to issuing them by the end of 2014. The issuance of the two Decrees will allow the PHKA to plan the activities and budget and to start the socialisation activities in target conservation areas in 2015, followed by the implementation of the plan in 2016. Although the prospect for the two Decrees to be issued by end of 2014 is still uncertain, the fact that their preparation is already in progress provides the positive prospect for Overall Goal Indicators to be achieved within 3 – 5 years after the Project. According to PHKA, the target conservation areas for dissemination are 1) Gunung Leuser, 2) Kerinci Seblat, 3) Bukit Barisan Selatan (all in Sumatra), 4) Kutai in Kalimantan, 5) Bogani Nani Wartabone, and 6) Lore Lindu (both in Sulawesi).

- While the dissemination of the Project activities may contribute to achieving the Overall Goals, the dissemination itself does not ensure the quality of restoration activities. Successful restoration in other locations requires 1) the assignment of personnel with experience either in the restoration of ecosystems or in the design and implementation of the activities of this Project, to assist the dissemination activities; and 2) the sufficient level of budget. Both of these are the Important Assumptions in the PDM for attaining the Overall Goal of this Project. Whether the additional human resources and the budget will be secured through the issuance of the Directorate General’s Decrees, will be the key to the realistic achievement of the Overall Goal.

2) Other impacts and spill-over effects

A number of positive spill-over effects were produced through the implementation of the Project. Examples of such impacts are shown below:

- **Impact on Policy**: following the recommendations from the Project, the concept of “restoration” and “natural regeneration” appeared for the first time in the government’s decree (No. 28, article 29, issued in 2011). The Directorate General in 2011 on the restoration activities, currently being prepared by the PHKA, also take into account of the Guidelines of this Project, which together count as an impact that this Project had on Indonesia’s forestry policy.

- **The change in participants’ awareness and behaviour**: in Bromo Tengger Sumeru national park, for example, the Project activities raised the participants’ awareness on the value of their national park as a destination of ecotourism. This awareness brought about changes in the behaviour of the local community and national park staff and promoted cooperation among them for the voluntary conservation of the ecosystem in the park. Examples of such cooperation are joint patrolling, the cleaning of the sediments in the lakes, and the creation of a garbage disposal spot from the sediments utilizing the knowledge gained from this Project. In Sembilang national park, the Project stimulated the interest of some fish farmers in the mangrove forests, who expressed willingness to contribute to ecotourism in the national park.

- **Impacts on the community’s livelihood**: the training provided by the Project produced several impacts on the lives and livelihood of the participants from the local communities. The knowledge to produce organic fertilisers and biogas from cow manure, for example, is actively utilised by the local
communities to improve their agricultural production and their own livelihood. These training not only had a direct impact on the livelihood of participants, but also were effective in promoting participation of the local community in the restoration activities and to reducing their dependency on forest resources.

- **PR effects:** the Project’s activities produced public relations (PR) effects to attract the attention of several organisations interested in contributing their finance or knowledge. In Sembilang, for example, Forestry Research and Development Agency (LITBANG) expressed interest in conducting their future research in the Project’s restoration site. Pertamina, a state-owned oil and gas company, also has indicated their willingness for partnership with the Sembilang in managing the Project’s restoration site.

3) **Negative impacts**

The implementation of this Project initially raised concern among the local community that it might have a negative impact on their fish farms in the project sites in Sembilang. By inviting WG members to join a study tour in West Java and introducing them to the silvofishery, the Project was able to gain understanding of the community that the mangrove plantation in fact would have a positive impact on their fish farm. As a result, the negative impact on the fish farmers’ lives and livelihood was avoided. According to the Sembilang national park staff, the local community are now cooperate even for the mangrove planting activities implemented outside of this Project.

5) **Sustainability:** *Moderate*

Although enabling policy framework (represented by the aforementioned Directorate General’s Decrees) is likely to be in place, (1) the fact it is NOT YET in place regardless of the long preparation period, and (2) the lack of clarity about to what extent the essence of the Project Restoration Guideline will be incorporated in the Director General’s Decrees, making the prospect of securing budget and human resources for restoration activities somewhat uncertain.

1) **Enabling policy framework**

Forestry sector policies necessary for the future restoration activities in conservation areas are expected to be in place, for two reasons. First, the next PHKA strategy (2015-2019) is expected to include a target indicator to restore 25 million hectares of land over 5 years, indicating that the implementation plan and arrangement necessary to achieve this indicator will also be in place. Second, two Directorate General’s Decrees being prepared by PHKA on the restoration activities are anticipated to be finalized by end 2014. The issuance of these Decrees will allow the PHKA to plan the activities and budget in 2015, and to implement the plan in 2016. The finalization of the Directorate General’s Decrees by end 2014 is therefore an essential first step to sustain the budget level without disruption after the Project, as well as to sustain the skills and motivation of the Project participants.

2) **The organisational structure to manage future activities**

The organizational structure within PHKA is in place, and the dissemination of future restoration activities are already being planned. However, whether the five national parks can continue the restoration activities in the same way as in the Project is uncertain. As mentioned in earlier chapters, the recovery of ecosystems in conservation areas has traditionally been done through natural regeneration.
That is, national parks were neither equipped with the experiences in managing the activities to actively restore the ecosystems, nor with the institutional framework to secure human resources and budget to undertake the restoration activities as part of their work. Whether the budget and human resources are secured for the national parks hinges critically upon whether the recommendations of this Project in its Guideline are sufficiently taken into account of PHKA Directorate General’s Decrees, as well as upon the timing of their issuance.

3) **The Prospect for securing the budget**

   Whether the more budget will be secured for the future restoration activities is uncertain.
   
   - The budget that has been available to PHKA by the Directorate of Watershed Management Development and Social Forestry is 4,000,000IDR per hectare for the rehabilitation (or restoration, as named after the Project) of degraded land in conservation areas. The cost for restoration is higher than this amount, requiring more advanced techniques and the input of labour. The Project estimates in its Guideline that the total cost of the restoration activities may be up to 15,000,000～20,000,000IDR, including the assignment of a Field Managers (FM) and payment to local communities for their labour. Although PHKA is to incorporate the budget for restoration as part of their request for funding for its strategic plan 2015-2019, whether the requested budget will be all approved by Ministry of Finance is uncertain.
   
   - One solution for the budget concern is the aforementioned partnerships with CSR companies and with academic institutions, for which the Project stakeholders established Private Sector Partnership Team. For the team to continue its resource mobilisation activities without the support from the Project, however, more commitment will be necessary from each national park as well as the designation of a liaison person responsible for partnership activities.

4) **Sustainability of skills**

   - As mentioned in “3.2 (2) Effectiveness”, the restoration techniques of relevant stakeholders are being utilised and are expected to be sustained as long as the restoration activities continue. To ensure that the restoration activities continue, the aforementioned Directorate General’s Decrees should be in place to create opportunities for the Project stakeholders to utilise their skills. If the Guidelines of this Project is sufficiently taken into account of the Decrees, that will increase the importance and applicability of the knowledge and techniques that the stakeholders gained through this Project.
   
   - One way of disseminating further the concept and techniques of restoration within MoF, is to share the Project’s guidelines also to the offices or centres of the ministry not involved in the restoration. An example of such offices/centres is the Centre for Forestry Education and Training (CFET), a centre responsible for delivering the training for MoF officials.
   
   - On another note on Sustainability, the formulation of a management plan of the equipment provided to the National Parks, and the clarification of contact persons to manage each equipment/facilities, will ensure Sustainability from a different angle.
3-3. Factors that contributed to achievements of goals

(1) Factors relating to Project Design

- Consistency of the Project’s focus with the capacity building needs of target beneficiary. Owing to this factor, the Project could gain the positive cooperative from the C/P.
- The design of this Project that incorporates 3 key elements essential for successful restoration activities: institutional framework, technical skills and financial base of the C/P organisations. This design helped the Project to lay down an effective policy framework within which to best utilize the restoration techniques acquired through this Project, as well allowed the transfer of Project’s know-how to the C/Ps on financial resource mobilization necessary to administer framework.

(2) Factors relating to Implementation Process

- Utilisation of local human resources. The knowledge of local experts and consultants, some of whom are the former MoF officials, contributed highly to ensuring the quality of the Restoration Guidelines and capacity building by the Project.
- Assignment of FMs to each project site, which allowed a thorough supervision of restoration activities on-site. The direct employment of the Field Managers, instead of contractual consultants, also allowed the Project to ensure the continuity of activities without interruptions during the renewal of contract (as was the case with consultants).
- The positive cooperation from WG members, owing mainly to the incentives given to them by the Project, such as the opportunity to participate in a study tour or the payment for their labour.

3-4. Issues/factors that caused the issues

(1) Factors relating to Project Design: NA

(2) Factors relating to Implementation Process: the following were noted during the Project implementation as the factors that affected or almost affected the progress of some activities, although they did not hinder the overall efficiency.

- Due to the delay in agreeing on the on the selection of project sites before the Project, basic preparation work to start the Project (such as signing on the Record of Discussion) had to be completed during the Project, delaying the start of the Project activities. The schedule, however, later caught up and all the planned activities are expected to be complete within the Project period.
- Natural conditions that affected the progress of activities in some sites, including the eruption of a volcano in Merapi National Park in 2010. Although the incident did not hinder the attainment of Output indicators, the progress of some activities (such as baseline survey in Merapi) in the first half of the Project had to be postponed.

3-5. Conclusion

The “Project on Capacity Building for Restoration of Ecosystems in Conservation Areas” provided technical cooperation to MoF’s PHKA with an objective to developing the capacity of the PHKA, five target national parks, and the local community WGs to plan and implement the restoration activities in conservation areas in Indonesia.

Since March 2010, the Project worked with the target beneficiaries to (1) strengthen the institutional
framework for restoration of degraded land in conservation areas (Output 1), (2) facilitate the development of restoration plans in the project sites in five target national parks (Output 2), and (3) improve the skills of the park staff and WGs to implement the restoration activities in the project sites (Output 3). Based on the experience gained through Output 1-3 activities, two documents — a “Process Guideline for the Restoration of Degraded Land in Conservation Areas” and “Technical Manual for the Restoration of Degraded Land in Conservation Areas” — are produced, which together form the “Restoration Guideline” as a major outcome of the Project.

In the process of implementation, the Project experienced challenges posed by such factors as natural disasters and the frequent changes of C/P personnel. Owing to the good cooperation from the C/Ps and to leadership of the Project, however, the implementation schedule and the provision of inputs were generally on time and appropriate. As a result, all the indicators for Output 1-3 were achieved, and the Project is likely to achieve its primary objective of “Capacity of relevant stakeholders for restoration of degraded land in conservation areas is strengthened” by the end of its five-year cooperation in March 2015.

In view of these achievements, the Team evaluated the Project’s performance as follows:

- **Relevance** is “high”, for the relevance of the Project’s objective and design to the policies of Indonesia and of Japan, and to the capacity building needs of Indonesia’s forestry sector;
- **Effectiveness** is “high”, because the indicators of the Project Purpose are successfully achieved and the objective of this Project was met;
- **Efficiency** is “high”, because all the Output Indicators were achieved, the management of implementation process and inputs was overall efficient, and there were innovative collaboration with external organisation to increase efficiency;
- **Impact** is “relatively high”, because the Overall Goal indicators of this Project are likely to be achieved, and because many positive impacts are produced through the Project implementation. The Team however noted the need for the increased budget and human resources in restoration sites, for which the urgent issuance of the two Directorate General’s Decrees by PHKA is essential;
- **Sustainability** is “moderate”. Although enabling policy framework is likely to be in place, (1) the fact it is NOT YET in place, and (2) the lack of clarity about to what extent the essence of the Project Restoration Guideline will be incorporated in the Director General’s Decrees, are lowering the prospect of securing budget and human resources for restoration activities somewhat uncertain.

In sum, the Project was appropriate and successful in meeting the needs of the target beneficiary, and the knowledge and skills of the stakeholders are likely to be sustained IF the sufficient budget and human resources are secured for the future restoration activities. For this to realise and to ensure sustainability, an institutional framework that takes into account the Project’s Guideline has to be in place, through the urgent issuance of Directorate General’s Decrees.

### 4. Recommendations

#### 4.1 Recommendations to the Project

1. **Assist PHKA in disseminating restoration activities**
   - The Project will assist the PHKA in creating the detailed dissemination plan of the Project’s activities and outputs, to facilitate the PHKA’s efforts in disseminating the Project activities.
To the extent possible within its cooperation period, the Project will continue its efforts to introduce the activities of this Project to other conservation areas. Such public relations activities – which the Project already initiated in three conservation areas other than the project sites – will likewise facilitate the PHKA’s own efforts in promoting the restoration activities in the future.

(2) **Encourage project site staff to contribute to socialization**

As mentioned above, the Project already initiated the socialization in three national parks (Manusela, Laiwangi-Wanggameti and Baluran), to which the national park staff of three project sites (Gunung Bromo-Tengger-Semeru, Manupeu Tanah Daru and Gunung Merapi) cooperated as the lecturers on the Project’s Restoration Guideline. The Project will encourage more staff of the five national parks to work also as the lecturers at the socialization meetings, to strengthen their own knowledge and skills gained through this Project.

(3) **Document the know-how of Private Sector Partnership**

The Project will summarise in a report its knowledge and experience in the partnership with private sector. Such a report will serve as a reference document for MoF and for the offices in conservation areas, and will include the PR activities for resource mobilisation and the administrative procedure for cooperating with the companies. When deemed necessary, the Project will also assist the PHKA in undertaking the recommendation shown in 4.2. (6) below, i.e., to organise the information on CSR partnership.

(4) **Promote information-sharing with CSR companies**

The Project will support the PHKA to establish a unit to mobilise CSR financing. One way of achieving this objective is for the Project to share its partnership experience with the Japanese companies in Indonesia. Such information may involve the progress of restoration in the project sites, the need for financing for the restoration, the specific procedures to arrange a partnership with MoF, and other issues for them to note.

4.2 **Recommendations to PHKA**

(1) **Clarify the role of the Project’s Restoration Guideline**

In the Directorate General’s Decrees currently being prepared by PHKA, PHKA will make a clear reference to the role that the Project’s Restoration Guideline plays in the future activities to restore the degraded land in conservation areas. Such a reference will ensure the restoration activities in consistent with the Project’s Guideline, as well as the successful outcome of these activities.

(2) **Secure the additional budget for restoration activities**

When preparing the budget for future restoration activities, PHKA will take into consideration of the estimate of restoration cost by the Project and seek active support from relevant ministries to secure the increased budget for the future restoration activities.

(3) **Disseminate/utilise the Project’s activities and outputs**

- PHKA will prepare, in writing, a detailed plan to disseminate the Project’s activities and outputs to the conservation areas other than those participating in this Project.
- Upon the issuance of the Directorate General’s Decrees, the PHKA will ensure that the above dissemination plan be implemented. The use of the restoration sites in the five national parks as the model examples of ecosystem restoration, or the utilisation of the Indonesian experts from this Project as resource persons, may facilitate such a dissemination process.
- The PHKA will ensure that the Restoration Guideline be distributed to and utilised by the managers of
other conservation areas with ecosystems similar to the restoration sites of this Project.

(4) **Formulate the Guidelines for the remaining other ecosystems**

Making use of the experiences from this Project, PHKA will formulate Restoration Guidelines similar to the ones created by the Project also for other ecosystems. The “other” ecosystems are those other than mangrove, tropical mountain forests, and tropical monsoon forests for which the guidelines are already in place through this Project.

(5) **Utilise the Restoration Guideline for CFET training**

PHKA will start the discussion and coordination with relevant authorities and with the Centre for CFET among others, to use the Guideline of this Project as text books for the training of the MoF officials. PHKA shall support CFET to organize training courses concerning conservation areas management (such as zoning and boundary) to develop capacity of national park staff, by providing resource persons/materials, and the Restoration Guidelines of this Project.

(6) **Strengthen Partnership with CSR companies**

To attract the private sector financing for the restoration activities, PHKA will recommend MoF to permit the PHKA the establishment of a unit within the Directorate in charge of the partnership with private companies. PHKA will also organise and make available the information that clarifies the options and administrative procedure for cooperation with MoF, as a reference for the private companies interested in the restoration activities as part of their CSR activities. One way of summarizing such information is to create a brochure.

4.3. **Recommendations to the National Parks**

(1) **Prepare an implementation plan for restoration:** Each five national park involved in this Project will prepare a detailed implementation plan to maintain the Project’s restoration sites and to disseminate the restoration activities to the degraded land other than the project sites within their national park.

(2) **Increase efforts for resource mobilisation:** The five national parks will increase the PR activities to attract the cooperation from academic institutions and private companies, by way of securing budget necessary for the implementation of the plan prepared in 4.3.(1) above. Especially, each park will encourage the active partnership with universities, research institutions or Non-Governmental Organizations (NGO), so that they can utilise the project sites for their research and ensure the maintenance and monitoring of these sites.

(3) **Raise awareness of local stakeholders:** The five national parks will increase its efforts to promote understanding and participation from local stakeholders (such as local authorities and communities) for the restoration and conservation of ecosystems in conservation areas. Such efforts could take a form of a workshop or training, to explain to them face-to-face the importance of ecosystem restoration and conservation.

(4) **Share experiences of ecosystem restoration:** When requested by the PHKA during the PHKA's activities to disseminate the restoration activities, the five national parks will share their experiences of this Project with the conservation areas who will initiate the restoration activities in the future.

(5) **Ensure proper management of provided equipment and facilities:** The five national parks will formulate a plan to manage the equipment and facilities provided by this Project and to designate the staff to do so. The five parks will also ensure that the provided equipment and facilities be effectively utilised and maintained.
5. Lessons learned

Below are the lessons learned by JICA through the implementation of this Project.

1. **The effectiveness of including institutional, technical and financial capacity building into project design.**

   To promote the restoration of degraded land in conservation areas, the Project sought to strengthen three different types of capacity of the stakeholders - the institutional capacity, technical skills, and financial base of the counterpart organisations. All three aspects of capacity are inter-related and all together essential for successful restoration activities, and the Project proved the effectiveness of this approach by producing noteworthy impacts on Indonesia’s policies and on the livelihood of local communities. The usefulness to include the institutional, technical and financial capacity development activities can be a reference also for the other projects with similar setting.

2. **Importance of initiating financial mobilisation activities at the early stage of project implementation.**

   It was not until the fourth year of this Project in January 2014 that a “Private Sector Partnership Team” was established, to encourage the C/Ps’ own efforts for financial resource mobilization. The timing to set up such a Team, however, could have been earlier, preferably soon after the routine restoration activities were established for each site in 2013. Initiating the discussion at this timing would have allowed the C/Ps to prepare themselves better for the future resource mobilization for the restoration activities after the Project.

3. **Importance of including the livelihood activities for local communities.**

   Although the activities by the Project to improve the livelihood of the local communities (such as the production of biogas or organic fertilizers) do not itself contribute directly to the restoration of ecosystems, they did contribute to promoting the understanding of the local communities for the restoration activities and to reducing their dependency on forest resources. The lesson learned from this experience is the importance for a project to include livelihood activities, if the project aims to promoting the participation of local communities.