Project Title: The Republic of the Philippines “Sustainable Environmental Management Project in Northern Palawan” (PH-P225)

[Loan Outline]
Loan Amount / Contract Approved Amount / Disbursed Amount: 2,034 million yen / 1,809 million yen / 1,473 million yen (as of the end of September 2006)
Loan Agreement: May 2001 (5 years after signing the L/A)
Original Project Completion Date: June 2006
Revised Project Completion Date: December 2006
Loan Expiry Date: September 2009
Executing Agency: Department of Tourism (DOT), Palawan Council for Sustainable Development Staff (PCSDS), Department of Public Works and Highways (DPWH)
Operation and Maintenance Agency: LGU (monitoring of ECAN Zone), DPWH (roads, following construction of soil erosion prevention works)
Selection Criteria for Mid-Term Review: Particular Theme (Eco-Tourism)

[Project Objective]
The objective of this project is to promote environment and ecosystems management in the area of northern Palawan through (1) drawing up ECAN zoning, (2) constructing soil erosion prevention works along coastal road (target road: El Nido–Taytay segment), and (3) undertaking project supervision and promotion of eco-tourism.

Consultants: Filipinas Dravo Corporation (Philippines), Philipp’s Technical Consultants Corp (Philippines), Sustainable Ecosystems International Corp. (Philippines), TCGI Engineers (Philippines), Certeza Surveying and Aerophoto Systems, Inc. (Philippines), Daruma Technologies Incorporated (Philippines), Geo-Surveys & Mapping, Inc. (Philippines), ALMEC Corporation (Japan), Pacific Consultants International (Japan), CEST, Incorporated (Philippines), CHL Consulting Group (Ireland)
Contractors: Goldrock Construction and Development Corporation (Philippines), WELEX Construction (Philippines)
### Mid-Term Review Result

<table>
<thead>
<tr>
<th>Item</th>
<th>Ex-ante Evaluation (at time of appraisal) (March 2001)</th>
<th>Result of mid-term review and ex-post evaluation results as estimated at time of mid-term review</th>
</tr>
</thead>
</table>
| **Relevance** | (1) National Policy Level  
・Because deterioration of the ecosystem has progressed in the form of forest destruction and extinction of coral reefs due to chaotic development in the Philippines, environmental management is positioned as an important issues in the Medium Term Philippines Development Plan (1999–2004) (see Note 1). | (1) National Policy Level  
・In the Medium Term Philippines Development Plan (1999–2004), only protection of the natural environment was the policy goal. However, in the Medium Term Philippines Development Plan (2004–2010) (see Note 2) of the current presidential administration, while there is no change in the fact that the natural environment protection policy is a priority policy, it does differentiate between land that should be protected and land that is permitted for development. In addition, the policy has changed slightly regarding land that is permitted for development, to a policy of environmental harmonization wherein the environment is used to improve the lives of residents while emphasizing harmony with the environment. This project is positioned as a pilot project which defines protected land and land permitted for development, promotes regulation by local government units, and offers methods to improve the lives of residents with emphasis on harmony with the environment such as through eco-tourism. As such, the project is consistent with the Philippines’ national policy and possesses sufficient relevance. |
|      | (2) Policy Level  
・The Strategic Environmental Plan Special Law (Republic Law No. 7611) was passed to promote sustainable growth and preservation of the particular natural environmental resources of Palawan Province. The law prescribes that land development be conducted in accordance with land use zoning based on regulation of land use zoning by the local government unit. | (2) Policy Level  
・By January 2007, regulation was issued that prescribed land use zoning by every single local government unit in the northern Palawan area, which is the target area of this project. There was no revision or establishment of new legal systems including laws or regulations that affect to the above regulation. Rather, there is a trend of passing laws applying method for clearly defining land use zones gained from this project outside the project area, as well. Moreover, this trend is clearly stated in Palawan: Vision of Development and in the Palawan Medium Term Development Plan (see Note 3). Consequently, the relevance is |
It was necessary to immediately halt the decline in topsoil conservation capacity and water resources build-up capacity caused by the sudden drop in forest area due to deforestation and to halt the loss of tourism resources due to the rapid decline in ocean resources, with the cooperation of the local residents and based on a long-term viewpoint. Enforcement orders related to environmental protection such as the Strategic Environmental Plan Special Law were prescribed and an environmental protection policy was prepared, but due to the Philippine government’s lack of funds and personnel, it was difficult to implement the infrastructure development and system-building necessary for the policy. Consequently, high priority was placed on the implementation of this project.

Environmental Conditions found at the time of the appraisal, such as the decline in topsoil conservation capacity and water resources build-up capacity as well as the loss of tourism resources due to the sudden drop in ocean resources, are gradually being improved through the establishment of a system to crackdown on violations of the law. However, issues still remain, such as the inability to crackdown on illegal fishing by fishermen from neighboring countries. Henceforth, it is necessary to strengthen activities that promote observance of the law. Provision of residents with alternative methods of earning a livelihood, such as eco-tourism, is proving effective, and because promotion of conservation project in harmony with the environment will be desired even more henceforth, the project is determined to have high relevance.

<table>
<thead>
<tr>
<th>Effectiveness (Impact)</th>
<th>(1) Operation and effect indicators</th>
<th>(i) Quantitative effects</th>
<th>(1) Operation and effect indicators</th>
<th>(i) Quantitative effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indicator</td>
<td>2001 Actual</td>
<td>2006 Planned</td>
<td>Indicator</td>
</tr>
<tr>
<td>(1)ECAN Zoning</td>
<td>Enactment of ECAN zoning regulations (number of local government units)</td>
<td>0</td>
<td>5</td>
<td>Enactment of renewed ECAN map regulations</td>
</tr>
<tr>
<td></td>
<td>Enactment of renewed ECAN map regulations</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
ECAN: Environmentally Critical Areas Network

Note: ECAN zoning regulation is the one that divides development areas from protected areas, and permits development only in the development areas. ECAN map regulation is the one to introduce a map system for clearly defining land use zones into local government policies. Areas to be protected are clearly specified by preparing ECAN maps, but even if areas are clearly specified as “protected areas”, they cannot be immediately designated as protected areas due to conflicts of residents’ interests such as their livelihood measures. Then related parties hold discussions using the ECAN maps, and based on the result of the discussions, protected areas are formally established by ECAN zoning regulations.

(ii) Qualitative effects
1) Protection of the natural environment

- Regarding ECAN maps, because the plan is to have all 11 local government units initially targeted in northern Palawan introduce them by January 2007 and then prescribe zoning regulations based on these land use zoning maps and promote land use, the project can be assessed as having displayed effectiveness with regard to prescription of land use zones. However, outcome indicators for quantitative effects were not set and agreed upon at the time of appraisal, and only the output indicators were agreed upon. By the time of project completion, it is desirable to set indicators to quantitatively measure achievement of outcome and to monitor those indicators. Proposed draft indicators are shown below under “Indicators set for use at the time of ex-post evaluation.”
2) Local promotion and employment expansion through sustainable use of natural resources

- The project component to provide alternative means for livelihood has been effective. It has increased employment of local residents in manufacturing souvenirs and in vegetable and fruit production and produce cash income for them.
- This project held a series of training sessions on eco-tours to develop eco-tour menus, in consultation with PCSDS, which protected natural resources in the core zone as a protected area; however, among the local tour operators in the cities of El Nido and Taytay, there are still none that have developed adequately to the point where they have the ability to offer their own unique tours. Furthermore, there are only a few tour operators in the Philippines that offer eco-tours, and so local promotion and employment expansion through sustainable use of natural resources is still limited.

(2) Factors which may influence the effectiveness and impact of the project
- Given that most illegal fishing is done by intruders from other areas including from neighboring countries, it is necessary not only for the government of Palawan Province but also for the Philippine government to establish a policy and system in response to this. Currently, the system of regulation is not adequately established; tourism resources are declining due to overfishing of ocean resources, and there is concern that...
this will limit the project effectiveness (impact). Specifically, according to PCSDS’s interview study in El Nido and Taytay, the dynamite fishing method is strictly prohibited and is declining, but the fishing method using hydrocyanic acid is still fairly rampant. In a sample study at a test station in Puerto Princesa, hydrocyanic acid was detected in nearly 10% of the fish caught in some samples.

- The goal of soil erosion prevention works (for topsoil erosion prevention) has been achieved. However, due to the poor condition of the access road (Roxas–Taytay segment [approximately 60 km], not part of the Project) used by many tourists who come overland from the provincial capital of Puerto Princesa to the project area, there is concern that the project will have limited effects on the development of the local economy, which was anticipated as one impact of the project.

(3) Factors which may influence the sustainability
- Because the Roxas regional office of DPWH, which is an operation and maintenance agency, does not have adequate personnel or budget, they do not take any measures to budget for operation and maintenance after the completion of road improvements of the El Nido-Taytay segment. It is necessary to secure and implement a reliable budget.

<table>
<thead>
<tr>
<th>Information for reference</th>
<th>Efficiency (1) Output</th>
<th>Efficiency (1) Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Output</td>
<td>(1) Drawing up of ECAN Zoning</td>
<td>(1) Drawing up of ECAN Zoning</td>
</tr>
<tr>
<td>Indicator</td>
<td>2001 Actual</td>
<td>2006 Planned</td>
</tr>
<tr>
<td>(1) Related equipment for ECAN map preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Preparation and digitalization of ECAN maps</td>
<td>0 areas</td>
<td>5 high-priority areas (to be expanded to 6 areas of less high priority)</td>
</tr>
<tr>
<td>(iii) Equipment and vehicles for environmental and ecological studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iv) Coastal and ocean resources studies</td>
<td>3 studies</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>(v) Strengthening of implementation capability and building of a structure for ECAN zoning</td>
<td>1) Assessment of need for training 2) Workshops and seminars - Comprehensive area management plan 3) Alternative means of livelihood program - Local resident training 4) Monitoring and evaluation system 5) Program for environmental education (educational campaign) and spreading understanding</td>
<td></td>
</tr>
<tr>
<td>(2) Soil erosion prevention (road)</td>
<td>0 km 61 km</td>
<td></td>
</tr>
<tr>
<td>(v) Strengthening of implementation capability and building of a structure for ECAN zoning</td>
<td>1) Assessment of need for training 2) Workshops and seminars - Comprehensive area management plan 3) Alternative means of livelihood program - Local resident training 4) Monitoring and evaluation system 5) Program for environmental education (educational campaign) and spreading understanding</td>
<td></td>
</tr>
<tr>
<td>Soil erosion prevention (road improvement extension)</td>
<td>59 km (Immediately after project start, the distance was re-measured and changed from 61 km to 59 km)</td>
<td></td>
</tr>
<tr>
<td>(3) Development of eco-tourism</td>
<td>Same as 2006 actual</td>
<td></td>
</tr>
<tr>
<td>(i) Preparation of standards and guidelines for</td>
<td>(i) Standards and guidelines for Same as 2006 actual</td>
<td></td>
</tr>
</tbody>
</table>
### (3) Development of eco-tourism

(i) Preparation of standards and guidelines for implementation of eco-tourism  
(ii) Preparation of promotion plan for eco-tourism  
(iii) Promotion of resident participation in eco-tourism and implementation of necessary training (Busuanga)

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Extension</th>
</tr>
</thead>
</table>

### Supplementary explanation of specific points

1. (iv) Coastal and ocean resource studies: These coastal and ocean resource studies, which were conducted for the purpose of designating areas to be protected when ECAN maps were prepared, were all carried out according to plan and a written report was completed. Based on the results of these studies, areas to be protected were designated.

2. (v) Strengthening of implementation capability and building of a structure for ECAN zoning: The following five activities were carried out.

1) Assessment of need for training: A study to assess training needs was implemented and a training plan was prepared based on the study.

2) Strengthening of local system and support system necessary for preparing and enforcing ECAN zoning: Support and training were provided for the purpose of preparing and enforcing ECAN zoning regulations.

3) Development and implementation of alternative means of livelihood program: A program was developed and implementation began, with local government receiving support from NGOs, etc. To provide alternative means of livelihood, each local government and NGOs, etc., undertook construction of pilot farms, mangrove planting projects, and...
micro-finance, in keeping with the plan of this project.

4) Review and implementation of monitoring and evaluation system: Monitoring of ECAN zoning, and in particular a regulatory system to enforce the law in case of violations, was established within each local government. Local governments collaborate through committees that periodically discuss results and problem points.

5) Review and implementation of program for environmental education and the spread of understanding: A program for environmental education and spreading understanding was developed by PCSDS, and within that, development of guidelines and curriculum for environmental education at elementary and secondary schools in Palawan Province were developed. Together with distributing these to each elementary and secondary educational institution, workshops were also held for instructors and education-related persons.

(3) Development of eco-tourism: The following activities were planned and all were implemented within the planned period.

(i) Preparation of standards and guidelines for implementation of eco-tourism

- Eco-tourism implementation standards and eco-tourism guidelines were completed as a result and were distributed to each local government and related institution.

(ii) Preparation of promotion plan for eco-tourism

- A promotion plan for eco-tourism was prepared as a result, incorporated into the tourism development master plan, and distributed to each local government unit and related institution. Also, related workshops and training were held.

(iii) Promotion of resident participation in eco-tourism and implementation of necessary training (Busuanga)

- A training program for eco-tourism was developed, and a series of training sessions were held as planned for residents in Busuanga and El Nido.
Mid-Term Review

<table>
<thead>
<tr>
<th>(2) Project period</th>
<th>(3) Project cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) May 2001–June 2006 (61 months)</td>
<td>(3) 2,712 million yen (ODA loan portion: 2,034 million yen)</td>
</tr>
<tr>
<td>(2) May 2001–December 2006 (69 months)</td>
<td>(3) 2,712 million yen (ODA loan portion: 2,034 million yen)</td>
</tr>
</tbody>
</table>

Lessons Learned and Recommendations

Awareness was low at the executing agency that it should be monitoring the project results, and based on that, evaluate the results of the project activities on its own. At the time of this mid-term review, it was recommended that the executing agencies figure out outcome indicators, such as core zone areas, number of tourists, and household income, etc., and then establish a system to monitor and evaluate the project results based on such indicators. It is desirable for the executing agencies to establish outcome indicators and to monitor them as recommended below.

Indicators set for use at time of ex-post evaluation

N.A.

Indicators recommended at the time of the mid-term review to the executing agency as outcome indicators for use in the ex-post evaluation.

- Square area of forest in project area (ha)
- Number of illegal tree-cutting cases exposed
- Number of illegal fishing cases exposed
- Number of eco-tourism promotion plans implemented
- Number of tourists in the project area
- Income produced by alternative means of livelihood supported by local governments and NGOs, etc.

Note 1) Medium Term Philippines Development Plan 1999-2004, National Economic and Development Authority, 1999
Note 2) Medium Term Philippines Development Plan 2004-2010, National Economic and Development Authority, 2004
Palawan Medium Term Development Plan 2006-2010, Provincial Government of Palawan, 2005
Palawan Annual Investment Program 2006, Provincial Government of Palawan, 2005