

終了時評価調査結果要約表（英文）

I. Outline of the Project	
Country: India	Project title: Conservation and Wise-Use of Natural Resources of Chilika Lagoon through Community Participation
Issue/Sector: Poverty Reduction	Cooperation scheme: Technical Cooperation
Division in charge: Rural Development Department	Total cost: 240million Yen
Period of Cooperation	(R/D): 3 October 2006 to 2 October 2009
	(Extension): (F/U) : (E/N) (Grant Aid)
Partner Country's Implementing Organization: Chilika Development Authority (CDA)	
Supporting Organization in Japan: None	
Related Cooperation:	
<p>1. Background of the Project</p> <p>Chilika lagoon in the state of Orissa has been designated as Ramsar site since 1981. About 120,000 traditional fishers in fishing communities in and around the Chilika lagoon depend on its fishery resources for income as well as protein sources. However, it is of concern on the fishing pressure due to increasing population and economic activities. Since the traditional fishers depend on limited natural resources in the lagoon, their livelihood is quite vulnerable to these negative impacts. Therefore, it is an important issue to improve and stabilize the livelihood of people in and around the lagoon while simultaneously conserving the wetland. In this regard, prolonged collaborative activity by community people is indispensable for community development based on the conservation of natural environment and sustainable use of natural resources. Therefore, it is required to promote environmental awareness for conservation and sustainable use of natural resources. In this regard, the CDA should take a major role to establish a system of support and collaboration among stakeholders and government agencies.</p> <p>With this background, the Government of India (GOI) requested support of the Government of Japan (GOJ) under the form of technical cooperation. Responding to the request, the record of discussion (R/D) was signed in July 2006. The three-year technical cooperation project "Conservation and Wise-Use of Natural Resources in Chilika Lagoon through Community Participation" was launched in October 2006. The Project is being implemented for the last two and half years and will be completed after six months. JICA and CDA formed a joint terminal evaluation team for the purpose of reviewing the achievements of activities of the Project, evaluating them, and suggesting directions for both remaining period of the Project and after the Project completion.</p> <p>2. Project Overview</p> <p>(1) Overall Goal Sustainable rural development activities are expanded in and around Chilika lagoon.</p> <p>(2) Project Purpose Strengthening the capacity of CDA to plan and carry out sustainable development of rural communities inhabiting in and around Chilika lagoon.</p> <p>(3) Outputs</p> <p>Output 1: The capacity augmentation of CDA to plan and conduct scientific fishery resources management in collaboration with fishers for conservation and wise-use of natural resources of Chilika lagoon.</p> <p>Output 2: The project formulation and management capacity enrichment of CDA for securing and improving the livelihood of fishing communities in conformity with environment in pilot villages.</p> <p>Output 3: The collaboration mechanism among CDA, government agencies and rural communities are strengthened for effective implementation of the project.</p> <p>(4) Inputs</p> <p>Japanese side: Dispatch of Experts: two long-term experts (natural resource management and conservation /project coordinator, project coordinator), five short-term experts (chief advisor/rural</p>	

development, fishery resources management (2), water quality monitoring, and acoustic survey)
 Equipment: vehicle, furniture, computers, potable water meters, GPS data loggers, etc.
 Local cost: around 17.75 million yen (by the end of March 2009)
 Trainings in Japan: 6 trainees in 4 training courses in Japan (another 3 trainees will be dispatched in Jul.-Aug. 2009)

Total Cost 240 Million Yen

Indian side:

Appointment of counterparts: 10 persons in total
 Provision of office space for the Project in CDA office
 Local cost : around 796,800 Indian Rupees (by the end of March 2009)

II. Evaluation Team

Members of Evaluation Team	Mr. Shunji Sugiyama, Leader, Senior Advisor, JICA Mr. Mitsuaki Suzuki, Evaluation Management, Assistant Director, Paddy Field Based Farming Area Division 3, Rural Development Department, JICA Ms. Junko Saikawa, Evaluation Analysis, Consultant, KRI International Corp.	
Period of Evaluation	26 April to 16 May 2009	Type of Evaluation: terminal evaluation

III. Results of Evaluation

1. Summary of Achievements

(1) Activities for achieving Output 1

1) Fishery resources survey and data management: A new log book was introduced in Oct. 2007. Fishing ground survey with using GPS data-loggers has been undertaken since Jun. 2008. Biological and ecological data as well as fishery data have been collected. A database system has been developed for managing data collected. Data collected are analyzed for collating them into fishing ground/gear-wise fish-catch, CPUE, species composition of catch, length frequencies, maturity, migratory routes. Trainings on data analysis with using software were conducted for CDA C/P twice. Manuals for data analysis and usage of software are under preparation.

2) Baseline survey on socio-economic situation in the rural communities: Baseline survey was undertaken for 127 fishing communities in/around Chilika lagoon (Jan.-May 2007). The result of the survey was published as a data book in Jan. 2009.

3) Sensitization workshops for fishing communities: First stage of sensitization workshops were undertaken in 10 villages in Aug. 2008. Implementation of the second stage workshops for 5 villages has been initiated by CDA (2 villages were already undertaken in Feb. 2009).

4) Fishery Resources Management Plan (FRMP): Committee for formulating a FRMP was established in Dec. 2008 with participation of CDA, JICA experts, Fisheries Dept., CIFRI, etc. First draft of the FRMP has been prepared and will be finalized by the end of Aug. 2009.

(2) Activities for achieving Output 2

1) Selection of the target villages for pilot projects: 4 villages of Bhusandapur (north), Alandapatuna (central), Gourangapatna (south), and Mahisa (outer channel) were selected considering their i) homogeneity, ii) leader, iii) ownership/interest, iv) with/without illegal fishing.

2) Formulation of pilot projects: Four local NGOs were assigned to facilitate/support the activities in respective villages. A series of consultation and workshops were held in each village (since Feb. 2008) for selecting possible alternative income generating activities.

3) Implementation of pilot projects: Pilot project activities were started in Jul. 2008. VASs from DoFARD and a junior agriculture officer from DoA have supported these activities by providing technical guidance to SHG members. Technical trainings were also designed and provided by CARI (duck farming), DoFARD (goat farming and dairy), and DoA (groundnuts cultivation).

4) Monitoring/evaluation of pilot activities: Monthly meetings have been held by CDA C/Ps, JICA experts, a senior officer and VASs from DoFARD, a junior agriculture officer, NGOs, and SHG members since Jul. 2008 for monitoring the progress of the activities. CDA C/Ps and JICA experts regularly visit these villages to monitor the activities and provide necessary instruction/guidance. Mid-term review and terminal review for pilot projects were conducted in Dec. 2008 and Mar. 2009, respectively. Recommendations and lessons learnt from the activities are under compilation.

5) Manuals on livelihood improvement activities: Manuals for planning, training, monitoring, and

evaluation are planned to be compiled and published based on the experiences from the pilot projects.

(3) Activities for achieving Output 3

1) JCC meetings: They have been held 6 times (Dec. 2006, Jul. 2007, Jan. 2008, May 2008, Dec. 2008, and May 2009) to share information on progress of the Project and discuss its problems, with participation of relevant government departments (Dept. of F& E, DoFARD, DoA, etc.)

2) Project final report: It will be prepared from Jun. 2009. Analytical results, reports and manuals regarding respective Project activities will be annexes for this final report.

2. Summary of Evaluation Results

(1) Relevance

The Project is relevant to Indian development policies (11th Five Year Plan, 2007-2012), Japanese ODA policies (Japan's Country Assistance Program for India, May 2006), and needs of the target area and groups.

(2) Effectiveness

Achievement of the Outputs

Output 1: Through the Project activities, CDA C/Ps have enhanced their skills and experiences on fishery resources survey, analysis of fishery data, formulating a FRMP, and sensitizing fishers. Therefore, it is considered that capacity of CDA C/Ps to plan and conduct scientific fishery resources management in collaboration with fishers has been further strengthened; thus this output 1 has been achieved.

Output 2: CDA C/Ps have acquired experiences and knowledge on participatory planning, implementation, coordination with other agencies, monitoring and assessment of livelihood improvement activities, which could be also heard from comments of a CDA C/P officer. VASs, NGOs and SHG members interviewed stated that CDA officers have appropriately coordinated the pilot project activities and addressed their problems by providing guidance. Therefore, it is evaluated that capacity of CDA C/Ps to plan and manage livelihood improvement activities in fishing communities has been enhanced; thus this output 2 has been achieved.

In order to accumulate institutional memories to enhance the capacity of CDA as a whole, the Project has also made such efforts as developing the systems for managing and analyzing fishery resources data collected and preparing several manuals and guidelines.

Output 3: Though "cooperation and collaboration with other institutions of the states, national or international institutions for all-round development of the Lake" is included in mandates of CDA, it could be said that collaborative mechanism among CDA, government agencies and rural communities has been further strengthened through the Project activities such as formulating a FRMP and undertaking pilot projects. Thus, it could be thought that this output 3 has been achieved to sufficient extent.

Achievement of the Project Purpose

It is highly expected that the FRMP will be prepared and ready for submission to the State Government within the Project period. In addition, undertaking livelihood improvement activities for fishers in/around Chilika lagoon is included in the CDA action plan already proposed for 13th Finance Commission Grant (2010-2015). Therefore, it is highly expected that the project purpose will be achieved by the end of the Project period.

(3) Efficiency

Efficiency of Inputs: Dispatch of the expert on fishery resources management was delayed in the 1st and 2nd fiscal years, and this expert was changed to another one. Efforts should have been made to ensure long-term engagement of an expert to these duties. Other inputs from Japanese side (e.g. other experts, trainings in Japan, and equipment) have generally been utilized for undertaking project activities for achieving the outputs. Although the work volume of CDA C/Ps required for undertaking the Project activities was sometimes not balanced to actual time and efforts allocated by them, they basically have positively committed to the Project activities.

Efficiency of Activities: The Project activities are appropriate and sufficient in general for generation the outputs. However, though fishery resources survey has been conducted for a year under this

Project, it needs to be continued further for longer-term basis to upgrade the FRMP in the future. In addition, technical competency of the local NGOs who have worked as facilitators at the pilot sites was not high enough, which have impeded efficiency.

(4) Impacts

Proposals for related activities including fishery resources data collection and alternative livelihood options for fishers have been incorporated in the CDA action plan already submitted to the Government. In addition, the FRMP is to be proposed to the State Government after its finalization. Prospect for achieving the overall goal of the Project highly depends on actual implementation of such activities in wider areas in future.

The Project has brought several other positive impacts. The baseline survey covering 127 villages in/around Chilika lagoon is the first of its kind in terms of comprehensive coverage of whole lagoon area. Also, the fishery resources survey was the first attempt with scientifically sound measures. Resulting analysis could be utilized not only for fishery resources management plan formulation but also for other departments/institutes for planning livelihood improvement activities and conducting fisheries resources survey in other areas. Through pilot project activities, target SHGs have been changed to better; i.e. strengthened unity among its members, their positive attitude toward collective works, strengthened cooperative relations to CDA and other related departments, and start of additional economic activities.

(5) Sustainability

Since CDA has maintained favorable relations with other departments such as Dept. of F & E, DoA and DoFARD, policy supports from these departments are highly expected to be continued. Financial aspects for continuing the similar activities including fishery resources data collection and livelihood improvement activities for fishers are likely to be ensured. Regarding technical and organizational aspects, it can be observed that capacity of CDA C/Ps have been further strengthened through the Project activities to continue quality activities. The Project has also made such efforts as developing the systems for managing and analyzing fishery resources data collected and preparing several manuals and guidelines to accumulate institutional memories to enhance the capacity of CDA as a whole.

3. Factors that promoted realization of effects

(1) Factors concerning to Planning

None.

(2) Factors concerning to the Implementation Process

Through several meetings such as JCC meeting, FRMC meeting, and monthly meeting for pilot projects, the Project activities have been regularly monitored and problems occurred have been appropriately addressed.

4. Factors that impeded realization of effects

(1) Factors concerning to Planning

Scope and focus of this Project has been changed in the process from project formation to R/D. However, an official document explaining this background was not prepared and this issue was not sufficiently discussed among related parties, which has prevented those parties from having common understanding on the Project scope including PDM.

(2) Factors concerning to the Implementation Process

Technical competency of the local NGOs who have worked as facilitators at the pilot sites was not high enough, which have impeded efficiency.

5. Conclusion

The Project is consistent with development policy of the GOI, Japanese ODA policies, and reflects the needs of the target area and groups. Despite slow pace in the first half of the Project period, the Project

has undertaken several activities toward conservation and wise-use of natural resources of lagoon through positive collaboration with other stakeholders. Inputs of the Project have been appropriately utilized for the activities, leading to sufficient amount of accomplishment in the outputs. Project purpose is also highly expected to be achieved by the end of the Project. Thus, effectiveness and efficiency of the Project could be though high. Positive impacts (e.g. compilation of publications which could be effective guideline and manuals for future similar activities, capacity enhancement of SHG members) have been generated by the Project. Sustainability after the Project completion could be ensured to certain extent in terms of policy, financial, organizational and technical aspects. Judging from these results, it could be concluded that the Project could be terminated in October 2009 as initially agreed in the R/D.

6. Recommendations

In order to complete the Project with full achievement of its purpose and to ensure future sustainability of effects, it is recommended to work on these efforts and actions as follows:

Actions to be taken within the remaining Project period

(1) Fishery resources survey

- Frequency at which each data items should be collected, required minimum coverage of data collection and sample size shall be examined and described.
- Guidelines on the effective use of local ecological knowledge (LEK) of fishers in fishery data collection shall be prepared.
- Manuals and guidelines on analytical methods/procedure and related software shall be developed and prepared. Necessary training shall be provided to CDA C/Ps.
- The results of biological/ecological analysis of lagoon resources shall be compiled as a publication.

(2) Compilation of the pilot project activities

- Lessons learnt and experiences gained from the pilot activities shall be compiled as reports with consideration of socio-economic, cultural and geographical characteristics of the target villages.
- A manual on how to plan, implement, monitor and evaluate livelihood improvement activities as well as related training materials should be compiled.
- How the pilot activities affect present practices of fishery related activities of the community shall be monitored and assessed.

(3) Finalization of the FRMP

- Possible resource management measures should be examined, with consideration of socio-economic situation of fishers.
- Brief procedure and guidance of implementing proposed management measures should be included in the FRMP, together with indicative budget estimate required for the implementation.
- Opportunities should be secured for fishers' communities to learn the contents of the proposed plan, express their opinions, and discuss acceptable options.
- Full discussion on the FRMP with the stakeholders including experts and policy planners should be made and their basic consensus should be obtained.

(4) Public Relations

- Major outputs of the Project should be compiled as publications and distributed to the interested parties and individuals.
- Those outputs should be posted on the website of CDA.

(5) Stakeholder Workshop

- In order to share the outputs of the Project with stakeholders, a workshop should be held with wide participation of the stakeholders including CDA, JICA, concerned departments/agencies of the State Government, concerned ministries of GOI, universities/research institutions, other donors, NGOs, SHGs, representatives of fishers, and so forth.

Actions to be taken after the Project completion

(1) Implementation of the FRMP

- CDA should ensure the prompt submission of the proposal on the FRMP through Dep. of F & E to the State Government for implementation.

- CDA should monitor progress of the approval on FRMP. If necessary, CDA shall take immediate actions to expedite the progress by discussing with departments concerned to obtain their supports.
- Upon approval of the FRMP, either CDA or the department to be appointed as the implementing agency for the FRMP shall undertake the plan in cooperation with others.
- The FRMP should be periodically reviewed based on the fishery data/information to be continuously collected by CDA.

(2) Implementation of the alternative livelihood options for fishers

- Upon approval by the Government, CDA and other related departments shall implement activities in other villages in line with the lessons learnt from the pilot projects.

(3) Maintenance of coordination functions among parties concerned

- CDA should maintain coordination mechanisms with concerned parties which were followed during the Project activities.

7. Lessons Learnt

- Since there is a high possibility that it is the first experience for a counterpart organization to accommodate JICA technical cooperation in India, both Japanese and Indian sides should recognize that more time is required to have communication and consensus-building between both parties at project preparation stage and beginning stage of its implementation.
- Project document including explanatory note on project formation process should be prepared and shared among parties concerned before implementation of the project.
- In the process of project formation, sufficient consideration should be given to characteristics of an organization to become a counterpart agency in the process of project formation. If the counterpart agency is like a coordination organization dealing with multi-sector issues, roles and responsibilities of the related organizations to be actually involved with implementation of respective project components should be also considered.
- Since it is indispensable to utilize NGOs for implementing technical cooperation projects in India, it is recommended that lessons regarding utilization of NGOs should be accumulated.

8. Follow-up Situation

(Not applicable)