# **Terminal Evaluation**

# Asia

#### 1. Outline of the Project

- Country: Philippines
- Project title: Principles and Practices of Appropriate Technology
- Issue/Sector: Sector not Specified
- Cooperation scheme: Third Country Training Program
- Division in charge: Southeast Asia Division, Regional Department I
- Total cost: PhP 19,022,125
- Period of Cooperation:
- Fiscal year: 2000 2004
- Partner Country's Implementing Organization: Asian Alliance of Appropriate Technology Practitioners, Inc. (Approtech Asia)
- Supporting Organization in Japan:
- Related Cooperation:

#### 1-1 Background of the Project

JICA's cooperation along the provision of a regional training program with a specific theme each year on various areas of appropriate technology started 15 years ago, in which participants from developing counties were provided necessary training on the principles and practices of appropriate technology to pursue development work in their respective countries. Because of the positive impacts the first two training programs (1989-1993 and 1994-1998) made among NGO participants, a third cooperation agreement (2000-2004) to continue with the program was again forged between JICA and Approtech Asia. All the training programs had capacitated more than 300 participants from at least 17 countries in Asia on various topics related to appropriate technology development.

#### 1-2 Project Overview

#### (1) Overall Goal: Not mentioned in initial plan.

(Reconstructed as: Enhanced level of awareness and knowledge of development workers in the Asian region on the principles and practices of appropriate technology development (ATD) contributes to productivity and well-being of their societies/citizenries.)

#### (2) Project Purpose

To deepen the understanding of participants from developing countries on appropriate technology as a strategy for development and to improve the techniques and methods in development work used by trainers of Asian NGOs engaged in appropriate technology development through provision of multi-skills training as response to the Asian crisis

# (3) Outputs

Participants are able to:

(a) understand the basic principles and practices of ATD, assessment, transfer, adaptation and evaluation;

(b) integrate and share learning and insights with their own knowledge and experience; and

(c) assess and evaluate their own work based on their learning from the course for the planning and implementation of appropriate technology programs in their respective areas of operations.

(4) Inputs	
Japanese side:	
Short-term Expert:	7 Japanese & 2 Third Country (Thailand & India) experts
Training and Implementation Cost:	PhP 19,022,125
Philippine Side:	
Training Facilities/ Equipment	
Training Staff:	6 Staff
Local Cost:	Php 845,000 (annually)

# 2. Evaluation Team

#### Members of Evaluation Team:

JICA Philippines Office contracted out to Center for Local Development Studies (CLDS) CLDS engaged an M & E Consultant & Team Leader, Ms. Violeta S. Corpus **Period of Evaluation:** November 30, 2004 - 22 February 2005 **Type of Evaluation:** Terminal Evaluation by JICA Philippines Office

# 3. Results of Evaluation

#### 3-1 Summary of Evaluation Results

The study methodology involved:

 $(\sqrt{)}$  Collection and review of the ROD, Country Reports, General Information Brochures, Course narrative Reports, Back Home Action Plans

 $(\sqrt{)}$  Conduct of interviews and Focus Group Discussions with ex-participants from India (3) and Bangladesh (8), key informants and officials of the organizations visited (FOOD- and VIKAS –India, VERC, CDA, NGOForum, GKAP, TMSS –Bangladesh, JICA-Bangladesh and ApproTech Asia-Philippines)

(1) Site visits to NGOS in India and Bangladesh, and their projects in Sakipara Village, Chaoli Village, and Kusumba Union

 $(\sqrt{})$  Analysis of survey responses.

For purposes of the study, Survey Questionnaires were sent to all 112 ex-participants of the training courses conducted from JFY 2000 – JFY 2003 and to the implementing organization. There were only 14 respondents from among the ex-participants and 1 from the implementing organization. For the interviews and FGDs, 8 of the ex-participants covered by the study period were met, 2 more ex-participants of earlier courses, 1 participant of the most recent course in JFY 2004, and their management officials. The results of both SQ responses, and interviews/FGDs were used throughout the discussion of the five evaluation criteria: efficiency, effectiveness, impact, relevance and sustainability.

# (1) Achievement of the Plan

A total of 112 participants from 16 Asian countries attended and successfully completed the four month-long training modules courses, namely: Livelihood Technologies and Micro-Enterprise Development (2000); Water Supply and Environmental Sanitation (2001); Alternative Housing Technologies and Sustainable Cities (2002); and Organic Farming Technologies and Healthy Lifestyle (2003). Based from training completion reports, the participants were able to integrate and share learning and insights with their own knowledge and experience in the numerous lectures, discussions, workshops, group planning and activity sessions, hands-on experiencing on technologies demonstrated during the training courses, and study tours. The participants returned home with a commitment to implement their individual back home action plans prepared towards the end of the training courses. Interview results (11 ex-participants) and survey responses (14 respondents) reveal the same findings and confirmed implementation/realization of their back home action plans, including current involvement in appropriate technology development projects/activities.

#### (2) Efficiency (Highly Efficient) (Scale Used: Outstanding-Highly Efficient-Efficient-Fair-Poor)

The 4 training rounds were satisfactorily completed according to schedules. Out of a total of 243 nominees from 18 Asian countries, representing Approtech Asia's wide network of international linkages with numerous NGOs, 112 participants from 16 countries were accepted to the courses. All inputs required per ROD were adequately provided to deliver the required outputs. The resource persons and experts were considered generally very good and have provided useful advice during preparation of the participants' back home action plans (BHAPs). The training materials and equipment were sufficiently provided. Based on post-training surveys, the ex-participants gauged the topics to be well-selected, relevant, valuable for community work and applicable to their jobs; simple teaching methods used were easy to understand and replicable; the training staff competent; and the training courses well-managed by the training team in terms of study visit arrangements, time management, food, transportation and accommodation.

# (3) Effectiveness (Highly Effective) (Scale Used: Outstanding-Highly Effective-Effective-Fair-Poor)

The training completion reports revealed that a total of 112 participants satisfactorily completed the month-long four training rounds and these participants were able to integrate their learning into the formulation of individual BHAPs as part of the training courses. The participants assessed that the purposes intended by the program (i.e., deeper understanding and improved skills on ATD approaches and strategy for development work) were generally achieved. The same finding was affirmed by the interview results and questionnaire responses. The 11 ex-participants interviewed and 13 survey respondents are actively applying their learning in their work, in assisting communities by providing them continuous advice, in constantly improving upon these technologies to suit local needs based on locally-available materials, in the conduct of advocacy and sharing of ATD principles and techniques to other partner organizations and their national/local government.

#### (4) Impact (High) (Scale Used: High-Moderate-Low)

The ex-participants who were visited in India (3) and Bangladesh (8), and 13 out of the 14 respondents said they had various opportunities to apply their learning from the training courses. Survey responses indicate that big impact was largely on poverty alleviation, productivity, participatory development, ex-participants' morale and way of thinking, confidence, motivation and workload, and on the life and mind of the beneficiaries. Some of them realized the impact 1-2 years after training, others 3-4 years after. The positive impacts observed during the visits include: 100% adoption by villagers and unions of hygienic and sanitary practices creating healthy, safe and clean environment (Kusumba Union, Bangladesh); operational community-based garbage disposal and collection system (Vasna, Ahmedabad, India); operational fish processing and marketing system (in coastal areas of Surat and Ahmedabad, India); construction of vacuum flask toilets in bus terminal stations of Tamil Nadu state in India; adoption and integration of organic farming, sanitation and low-cost housing technology principles and practices at community level promoting health, increasing productivity of people, and as additional source of income (Sakipara and Chaolia Villages, Bangladesh); arsenic water detection, community-based rain water harvesting and construction of water tube wells in Bangladesh; and most of the ex-participants were promoted, and are being tapped as trainers, or consultants in their respective fields.

#### (5) Relevance (Very Relevant) (Scale Used: Very Relevant-Relevant-Not Relevant)

The 11 ex-participants interviewed and the 14 who responded to the questionnaire rated the training program as very relevant and in conformity with the current national and organizational development policies and agenda in their countries. The government of Bangladesh is set to achieve 100 percent sanitation coverage all over the country by 2010; Vietnam has a clear policy and complementary program on poverty alleviation through water supply and sanitation in the rural areas; in India and Indonesia, greater attention is devoted to improvement in the quality of life of the grass-root communities; science and technology is a national strategy of China to propagandize scientific knowledge and practical technologies; Lao PDR has a national policy on poverty reduction. Given such enormous tasks to pursue these goals, the ex-participants view the training program to be more important now than before in carrying out necessary development work.

#### (6) Sustainability (High) (Scale Used: High-Moderate-Low-Not Sustainable)

The 11 ex-participants interviewed and 13 out of the 14 who have responded to the questionnaire said they are still working under the same organizations, can already plan, implement and evaluate ATD projects with confidence; half can do research and extension, and can mobilize resources to fund the projects. Half of them were promoted to handle greater responsibilities; the rest were already occupying senior/managerial positions during training, hence implemented ATD activities per back home action plans by the time they return to their organizations or through tie-ups with others, as well as international funding agents. These ex-participants-respondents/interviewed affirmed that they are playing catalyst roles in integrating ATD activities in support of development work in their districts, provinces, local governments and communities. In all of the organizations and work sites visited in India (FOOD & VIKAS) and Bangladesh (VERC, CDA, TMSS, GKAP and NGOForum), there is clear support by the management of the organizations, local government and community beneficiaries. Aside from the ex-participants' expertise, management and political support to innovative ATD approaches as well as updates on latest technologies are the most important factors that contribute to the sustainability of the ATD initiatives adopted on the ground.

# 3-2 Factors that promoted realization effects(1) Factors concerning Planning

(a) Approtech Asia's wide NGO network, linkages and advance planning and overall coordination of the program facilitated course formulation, selection of participants, choice and selection of demonstration sites and arrangements for the study visits prior to actual conduct of the training, and ensured that all necessary inputs/materials are sufficiently provided for the training courses.

(b) Timely approval of the course content, sufficient budget provided by JICA, sending of invitations in advance, and closer coordination among approving authorities greatly facilitated participant selection process and travel arrangements, and planning for the efficient conduct of the training program/courses.

(c) Good choice of experts provided by JICA and selected by ApprotechAsia enhanced the learning of the participants and promoted the training effects.

#### (2) Factors concerning the Implementation Process

(a) Approtech Asia's capability in managing the training program ensured smooth, timely and efficient conduct of the training courses.

(b) Appropriate demonstration sites and hands-on learning activities effectively provided hands-on/practical learning to the participants.

(c) Documentation of course proceedings and participants' evaluation of the course immediately after each training round improved both the planning and implementation processes for the subsequent training courses.

# 3-3 Factors that impeded realization effects

#### (1) Factors concerning Planning

Earlier years' delays in budget approval, training curriculum approval and communication access problems impeded planning ahead, selection and travel arrangements for some participants, but this was resolved in subsequent training courses.

#### (2) Factors concerning the Implementation Process

(a) Some participants were not able to communicate fluently in English as a result of the selection process that did not involve actual interviews of nominated participants.

(b) A couple of participants were non-practitioners of appropriate technology which were not clearly indicated in their application forms used as the basis for selection of participants.

(c) The training program tried to cover as much topics for the maximum benefit of the participants but resulted in the tight scheduling of training activities. Some participants felt that to some extent this dissipated training effects.

#### **3-4 Conclusion**

The training program is rated as generally successful in increasing the level of awareness and knowledge of participants on the principles and practices of appropriate technology development. Despite a couple of ineffective participants, the program had been highly effective in achieving its intended purpose due to the proper matching of the course themes/topics with the current development needs of the Asian countries, to the proper qualifications of majority of the participants selected, and to the invited resource persons and experts. Based on the survey results and country/organizations/community visited, the ex-participants were able to: initiate their ATD projects and implement their back home plans, advocate ATD application to other organizations and government entities, engage managerial and outside funding support, train others, including beneficiary communities, and develop low-cost but adoptable technologies that suit local conditions and local culture. To create more "spread effects" to the societies of the Asian countries, more development workers must be trained on appropriate technology development.

#### 3-5 Recommendations

#### For the Implementing Organization (Approtech Asia):

(a) Implement the training program either through its own, from its alliance (of network NGOs) resources, or from other funding sources and include measures to enhance further effectiveness and impact of future training, e.g., improve the methodology for participant selection, choose mature technologies and encourage the partner organizations to propose relevant topics for their benefit, increase the proportion of practical demonstration to provide participants more time for hands-on experiencing on appropriate technology principles and practice.

(b) Institute a monitoring mechanism that follows-on the status of implementation of individual participant's back home action plans (mid- implementation, at completion, and 1-2 yrs after completion) and tracks down results and outcomes of AT involvement.

(c) Develop a resource pool of experts among the ex-participants who may be invited in future courses, and create a network of participants actively engaged in AT development.

(d) Support the development of an interactive web-based information system that provides updated information on the latest appropriate technologies and allows ex-participants access, or sharing of information on ATD.

#### For JICA:

(a) To be of greater relevance in its ODA assistance and for cost-efficiency, JICA may integrate in its other ongoing schemes of JICA-supported activities for Asian countries priority and high impact technologies that can be widely-practiced and replicated on a national scale and the responsible ex-participants can be tapped as resource persons/experts.

#### 3-6 Lessons Learned

(a) Selection of participants who are trainers and practitioners of appropriate technologies greatly aided the choice of, and preparation of feasible, realistic and implement-able back home action plans.

(b) Strong linkages and network among NGOs facilitated the choice of relevant course topics, and sourcing of right resource persons/experts and demonstration sites.

(c) NGOs whose mission statements and priority program areas conform with or match the training courses have higher chances of appropriate technology adoption, promotion, design improvement, and getting various funding support.

#### 3-7 Follow-up Situation

N/A