I. Outline of the Project				
Country: Nepal		Project title: Agricultural Training and Extension		
		Improvement Project (ATEIP)		
Issue / Sector: Agriculture		Cooperation scheme:		
		Technical Cooperation Project		
Division in charge: JICA Nepal Office		Total cost: about 360 million yen		
Period of Cooperation	5 years from January 2004 to January 2009	Partner Country's Implementing Organization:		
		Ministry of Agriculture and Cooperatives (MOAC)		
		Department of Agriculture (DOA)		
		Supporting Organization in Japan :		
		Ministry of Agriculture, Forestry and Fisheries		
Related Cooperation:				

# **Summary of Evaluation Results**

# **1. Background of the Project**

Agriculture is the backbone of the Nepalese economy, which absorbs a major part of labour forces; about 66 percent of the economically active population and 33 percent of the country's Gross Domestic Product (GDP). However, the agricultural growth has been slow and has barely kept pace with population growth during the last two decades. The Government of Nepal recognized the need of further improvement in efficiency and effectiveness of agricultural training and extension services to enhance agricultural productivity.

Under these circumstances, the Agriculture Training and Extension Improvement Project (ATEIP) (hereinafter referred to as the Project) was requested to the Government of Japan in Japanese Fiscal Year (JFY) 2000 and inaugurated in January 2004 for the period of five years, aiming at improvement of the current agricultural training and extension services in Nepal to meet the needs of farmers. The target area of ATEIP is five districts in the central development region, namely Dhading, Rasuwa, Makwanpur, Nuwakot and Sindhupalchowk.

In September 2006, the mid-term evaluation was implemented to review and confirm the progress of the Project, and the Project Design Matrix (PDM) and Plan of Operation (PO) were revised in line with the result of mid-term evaluation. This time, eight months prior to the completion of the Project, the joint final evaluation study (hereinafter referred as the Study) was conducted to evaluate whether the Project has achieved the expected outputs and the project purpose and to draw lessons to be applied to other similar projects. The specific objectives of final evaluation are summarized in the next section.

#### 2. Project Overview

#### (1) Overall Goal:

- 1. Farmers' farming activities are improved in the Project districts.
- 2. Improved agriculture service delivery system is replicated to other areas inside and outside the Project districts.

# (2) Project Purpose:

Agriculture service delivery system is improved in the Project districts through training and extension.

(Delivery system involves agriculture technology, group organization, facilitation, M&E, documentation, coordination, etc.)

### (3) Outputs:

- 1. Practical training is imparted to extension workers and farmers.
- 2. Farmers' need-based extension services are delivered.
- 3. Activities of different service providers in agriculture development are coordinated/ facilitated.

### (4) Inputs (as of this final evaluation)

#### Japanese side:

No. of long term and short term experts:	9 persons (149.66 m/m)	
No. of trainees received in Japan:	14 persons	
Provision of equipment:	Items that can be utilized for extension activities such as PC,	
	projectors and so on (Approximately JPY 8 million)	

# Thai side:

Counterparts:	Four (4) major counterparts from MOAC DOA and DADO			
	officers and JT/JTAs in five project districts			
Local cost:	Approximately JPY 3 million from KR2 Fund			
Provision of land and facility:	For the project office space			

II. Evaluation Team			
Members of	Japanese Side		
Evaluation	(1) Mr. Yoshio Fukuda (Leader)		
Team	Deputy Resident Representative, Japan International Cooperation Agency (JICA)		
	Nepal Office		
	(2) Dr. Shun Suzuki (Agricultural Extension)		
	Professor, Department of International Agricultural Development, Tokyo		
	University of Agriculture		
	(3) Mr. Yasuaki Momita (Project Planning)		
	Assistant Resident Representative, JICA Nepal Office		
	(4) Ms. Misa Oishi (Evaluation Analysis)		
	Consultant, Overseas Operations Department, Kokusai Kogyo Co., Ltd.		
	Nepalese Side		
	(1) Mr. Rajendra Prasad Adhikari (Leader)		
I	Senior Agricultural Economist, Ministry of Agricultural Cooperatives (MOAC)		

(2) Mr. Sanjay Verma (Member)

Agricultural Economist, MOAC

(3) Ms.Bina Chitrakar (Member)

Agricultural Economist, Department of Agriculture (DOA), MOAC

<b>Period of Evaluation:</b> May 5, 2008~May 22, 2008	Type of Evaluation: Final Evaluation
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# **III. Results of Evaluation**

### 1. Achievements

# (1) Project Purposes

Based on the status of indicators as seen below, it can be concluded that the Project Purpose is being attained.

Indicator 1: 70% of the farmers, able to access to Project activities, are satisfied with training and extension services provided.

For the purpose of final evaluation study, minimum of 100 farmers (at least 20 farmers from each district) who belong to the following six categories were targeted to be interviewed, being assumed as "the farmers, able to access to project activities".

- (1) Members of Agricultural Development Committee(ADC)
- (2) Participants of the training courses on ADC
- (3) Beneficiaries of micro projects
- (4) Training and Demonstration (T/D) Farm cooperating Farmers
- (5) Extension Model (E/M) Farmers
- (6) Participants of field days organized by T/D Farms and E/M Farmers

In fact, 118 farmers were interviewed; 102 (86%) of them are satisfied with training and extension services provided.

Indicator 2: 70% of the farmers, able to access to Project activities, agree that training and extension services provided have been improved.

Interviews to the same 118 farmers revealed that 106(90%) of them agree that training and extension services provided have been improved.

In addition to the positive indications by two indicators, it is worth mentioning that farmers reiterated during the interviews that they have been benefited from the close communication between their communities and JT/JTAs through ADC members, That was not so before the Project. Farmers have

obtained useful agricultural knowledge such as new varieties, soil improvement, pesticides and others, and moreover information on DADO programs that they can be benefited.

## (2) Outputs

- Five training courses for DADO officers were held in Nepal by the Project and 3.67 training 1. courses per DADO officer were provided on average. In addition, three DADO officers from the project districts joined in the study tour to India and Bangladesh. Also, eight DADO officers participated in the training courses in Japan. Indeed, the questionnaire survey to DADO officers who received trainings from the Project revealed that all interviewed officers (effective answers: 16) consider that their capabilities have been improved in every aspects of planning, providing guidance to JT/JTAs and managing / monitoring. As for training for extension workers, 18 training courses for JT/JTAs were held in Nepal by the Project and 5.16 training courses per JT/JTAs were provided. In addition, the Project conducted the third country training in India, and 62 JT/JTAs attended in the training course in India. For the final evaluation, 26 JT/JTAs who received training from the Project were questioned and 25 (96%) agreed that their capabilities in technical aspects have been improved, and 26 (100%) agreed their capabilities in human skill aspects have been enhanced. In addition, 71 out of 86 JT/JTAs (83%) who are working in the five districts have been engaged in T/D Farm activities and received practical on-the-farm training. Likewise, series of training courses to major stakeholders such as DADO officers and JT/JTAs have been extensively carried out in the Project; thus it can be concluded that achievement level of Output 1 is satisfactory.
- 2. All 26 JT/JTAs who were questioned during the final evaluation study agreed that extension services provided to farmers have been improved. Interviews to 118 farmers also confirmed the enhancement of JT/JTAs' capability by resulting that 113 (96%) of them agree that capabilities of JT/JTAs have been improved. In addition, the Project implemented activities concerning farm management and community-based agricultural development through 33 E/M Farmers and 33 ADCs. As a part of ADC activities, 57 small-scale projects aiming at the need-based agricultural development in target communities were carried out; they are mostly small-scale irrigation (33 projects), secondly training on vegetable cultivation (14 projects) and others. The Project encourages ADCs to coordinate with other relevant organizations, and actually 15 ADCs has carried out 16 micro projects in collaboration with the concerned agencies such as District Development Committee (DDC), Village Development Committee (VDC), District Soil Conservation Office, Ministry of Forest and Soil Conservation, DADO and local Non Governmental Organizations (NGOs). As just seen above, a wide range of activities were carried

out; thus it can be concluded that achievement level of Output 2 is satisfactory.

3. The district-level coordination workshops were conducted in all five districts, and organizations such as DDC, VDC, DADO, other government organizations, NGOs, Cooperatives, representatives of ADCs and E/M Farmers participated in these workshops, shared information on the Project's activities such as E/M Farmers and ADCs. Also the result sharing workshop participated by 98 stakeholders such as DOA officers, DADO officers and JT/JTAs in the five districts was held on March 17, 2008 by the Project. In addition, the Project produced wide range of public relations materials such as video documentary on T/D Farm activities, T-shirts and bags with the logo of the Project and others. Also, the Project plans to produce community development textbook for extension workers, training material on farm management and marketing, compilation of good practices of E/M Farmer activities, and video documentary on ADC and E/M Farmers to accelerate further information sharing with stakeholders. Efforts to share information were well made through workshops organized and public relations materials produced by the Project as seen above. Indeed, it can be concluded Output 3 is reasonably attained at the time of final evaluation.

#### 2. Summary of Evaluation Results

#### (1) Relevance

The Team concluded that the Project remains highly relevant in terms of the Policy of Nepalese government and the needs of C/P agency.

Agricultural Perspective Plan (1995-2015), National Agricultural Policy, 2004, Tenth Five Year Plan (2002-2007) and Three Year Interim Plan (2007-2009) all aim to (i) accelerate growth of the agricultural sector through increased productivity, (ii) alleviate poverty through expansion of agricultural sector, provision of employment opportunities and diversification of agriculture through introduction of high value crops. Establishment of agricultural technology responsive to farmers' needs and its effective extension are proposed as a means of realizing these aims. In addition, *National Agriculture Extension Strategy 2007*, emphasizes the importance of capacity development of extension workers and adaptation of participatory approaches responsive to farmers' needs.

Indeed, Agriculture is the mainstay of the Nepalese economy, which produces 33% of the country's Gross Domestic Product (GDP) and absorbs 66% of its labor force. In order to enhance the agricultural development, several policies and strategies were adopted as just seen above. Especially, *National Agriculture Extension Strategy*, which appreciates JT/JTAs as "frontline extension workers", considers enhancement of extension workers' capabilities as essential for agricultural productivity improvement. As

a response to this strategy, DOA needs to further improve agricultural training and extension activities.

In view of this policy consistency in appreciating role of agricultural training and extension and Japanese assistance in Nepalese agricultural development, the relevance of the Project is well ensured.

## (2) Effectiveness

The Team concluded that the effectiveness of the Project is substantially secured by considering reasonable achievement levels of the outputs and the Project Purpose. It can be attributed to the integration of training and extension components together to produce better results. Each of three outputs has been produced through a wide range of vital activities, such as training to DADO officials, training to JT/JTAs, third-country training, T/D Farm activities, E/M Farmer activities and ADC activities including micro projects. Although some efforts should be added for the rest of the Project period, the numbers of outputs and the achievement level of each output are sufficient to achieve the Project Purpose.

# (3) Efficiency

A number of activities have been carried out and the outputs are being produced mostly as planned although Japanese experts especially in the first half faced difficulty in mobility due to security situations. In addition, the interview surveys reveal that overall satisfaction towards inputs such as human resources (Japanese experts), trainings and provided equipment is high, and so is the level of utilization, as seen below. Therefore it can be concluded that the efficiency is secured at the time of final evaluation.

#### Human recourses (Japanese experts)

Especially in the latter half of the Project's period, the Project established good communication and collaboration; also was able to accelerate major activities such as provision of training, T/D Farm activities, E/M Farmer activities and ADC activities. Many C/Ps, DADO officers, JT/JTAs and farmers not only participated in the Project but worked collaboratively with the Japanese experts. Therefore, it can be said that human resources were utilized well.

#### Training courses in Japan

Fourteen (14) persons including officers from Ministry of Agriculture and Cooperatives (MOAC) and C/Ps participated in training courses in Japan. Eight (8) of them joined in the individual courses and the rest in the group courses. Also, 8 of 14 participants are DADO officers. According to the interviews to the participants, it became clear that the courses were beneficial to them since they could actually observe field activities and also exchange opinions and experiences with trainees from other countries.

#### **Equipment**

The Project provided equipment that can be utilized for extension activities such as personal computers, projectors, digital cameras and others. It was reported that some equipment had been provided without sufficient assessment of the needs of each DADO partially due to immobility in the beginning. However, it became clear during the field observation that the provided equipment is in use now.

### (4) Impact

Usually it is rather too early to measure impacts at the end of projects. However, the effects of the Project have already affected farmer's farming activities positively, as a first step of impact realization. In addition, currently 15 ADCs (45% of the currently established 33 ADCs) have carried out micro projects in collaboration with the concerned agencies. It is realized that ADCs and E/M Farmers were utilized by other agencies such as VDC, DDC and other NGOs as a district-level community platform. In other words, as a kind of impact, ADCs and E/M Farmers are also beneficial to agencies such as VDC, DDC and others.

### (5) Sustainability

The Team concluded that the sustainability in terms of organizational and institutional aspect, financial aspect and technical aspect will be ensured.

# Organizational and institutional aspect

C/Ps in Kathmandu deepens their understanding on the Project's results through taking part in training courses, workshops and site visits. Concerning T/D Farm activities, which are highly recognized as great opportunities for JT/JTAs' on-the-farm training, DOA initiated to form a committee called T/D Farm Internalization Committee; the committee studied effects of T/D Farm, and in October 2007, submitted a report that recommends DOA to internalize T/D Farm activities as DOA's regular program. Likewise, C/Ps in DOA office in Kathmandu are actively involved in the Project. As for DADO officers and JT/JTAs in the target five districts, they have recognized that their capabilities and the quality of services delivered to farmers have been improved through participating in training courses, workshops, T/D Farm activities, E/M Farmer activities and ADC activities.

Likewise, both in the central and district levels, personnel who play key roles in agricultural training and extension were able to enhance their capabilities through the Project; thus, although further efforts to internalize and replicate the Project fruit such as T/D Farm activities to other districts are necessary, the sustainability in terms of organizational and institutional aspects will be secured.

#### Financial aspect

As reiterated, T/D Farm activities that enable JT/JTAs to obtain practical knowledge and experiences are

highly recognized in DOA. As for the five project districts, each DADO has officially requested for the budget for T/D Farm activities, and therefore it is highly likely that T/D Farm activities will be carried out in the five districts even after the Project. However, the only concern is that JT/JTAs implementing T/D Farm activities are not getting extra allowance like travel allowance while working within their respective field.

### Technical aspect

T/D Farm activities considered as a vital component of the Project are highly appreciated by DOA and DOA is hoping to replicate this type of activity in many districts. In fact, it is confirmed that the five DADO have officially requested for the budget for T/D Farm activities, and T/D Farm activities will be continued by DADO officers and JT/JTAs who are trained under the Project. As for E/M Farmer activities and ADC activities, technically speaking, both DADO officers and JT/JTAs have been acquiring capabilities to carry out by themselves. It is worth mentioning here that the Project pay close attentions to social aspects such as gender issues and social inclusion as well throughout the field-level activities. This, along with the technological aspect, reinforces the prospect of sustainability of the Projects' activities.

Likewise, the Project has been carried out by considering technical aspects such as technical level of C/Ps, DADO officers and JT/JTAs and social aspects such as social inclusion and gender. The concerned stakeholders could easily acquire and transfer the developed knowledge and skills. Thus it can be said that for the Project districts, the sustainability in terms of technical aspects is likely to be secured. As for replication to other districts, it might take some time since E/M Farmer activities and ADC activities carry newly introduced concepts and require intensive efforts to get activities off the ground. In a response to these situations, "Guideline for ADC and E/M Farmers" in the Field Notebook that is currently used in the Project can be deployed. Once staffs working in the project districts transferred to other districts, they could easily replicate these activities. In addition, several training materials are planned to be produced and distributed to major stakeholders in order to disseminate the as much Project effects as possible.

#### **3.** Factors that promoted realization of effects

Factors concerning the planning

• *National Agriculture Extension Strategy*, naming JT/JTAs "frontline extension workers", considered enhancement of extension workers' capabilities as essential for agricultural productivity improvement. As a response to this strategy, improvement in agricultural training and extension activities is seriously considered in the country.

Factors concerning the implementation process

- DOA well acknowledges the outcomes from the Project, and also highly committed C/Ps actively participated in the Project.
- The experts dispatched in the latter half of the Project's period have had work experiences in Nepal, and had knowledge on the conditions of Nepalese agriculture. Moreover, they are fluent in Nepalese. These could be a part of reasons that the Project has been implemented efficiently in spite of the fact that most of the experts are short-term, and come and go often.

### 4. Factors that impeded realization of effects

Factors concerning the planning

• It was difficult to provide training opportunities to all JT/JTAs and all DADO officers since they are under frequent personnel shift.

Factors concerning the implementation process

• Due to security reasons, especially the Japanese experts in the first half of the project period had difficulties to visit some of the project sites.

### 5. Conclusion

Thanks to the fullest cooperation from MOAC, DOA, the Project and people in Nepal, the Evaluation Team was able to conduct the Study successfully. The Team discussed with C/Ps in Kathmandu and analyzed the field survey results from the five districts, namely Dhading, Rasuwa, Nuwakot, Makwanpur and Sindhupalchowk. As the Project has been progressing smoothly with close cooperation between people concerned and their dedicated efforts, achieving the project outputs set forth, and consequently is successfully attaining the project purpose, the Project should be terminated as planned.

### 6. Recommendations

# 6.1 During the rest of the Project period

Although the Team realized that the Project has been successfully carried out according to the plan, it can be mentioned that the following items were not achieved in terms of the Indicators, by the time of the Final Evaluation; the Project should continue activities especially focusing on these items, as well as continuous monitoring and evaluation on them.

- As of now, 33 ADCs have been established. Continuous effort is necessary to accomplish the numerical goal of 35.
- Though the numerical goal of E/M Farmer has been set to 45, the Project has decided to re-set it to 35, according to the necessity of relating the ADC activities to the activities of E/M Farmers. The Project should get an approval by Joint Coordinating Committee (JCC) on this matter, and the Project is to accomplish the re-set goal by the end of the Project.

Also, considering the achievement of Overall Goal in the future, the Project is recommended to carry out activities such as follows;

- The benefit from this Project should be expanded beyond ADCs and E/M Farmers to more farmers. In this sense, the Project should make efforts for the expansion of the benefit through extension activities by ADCs and E/M Farmers.
- To ensure institutional sustainability of ADCs, it is recommended to encourage DADO to register these ADCs officially.
- Organizations of ADCs are still ongoing in some area, and the lack of experience and capacity of those newly formed ADCs is considered as a concern. As the Project is planning to develop capacities among ADCs through implementation of micro projects until the termination of the Project, those activities should also focus on the capacity development and accumulation of know-how among extension workers (including DADO officers and JT/JTAs), in expectation of sustainable guidance by them.
- Since other donors are implementing projects in the field of agricultural extension, exchange of information and outputs is highly recommended. The Project should actively transmit information and promote outputs to other donors, as well as to mainstream the outputs within the related agencies within the Government of Nepal.
- In order to extensively utilize the outputs from the Project, deliverables such as resource book, materials, and good practices should be documented and distributed.

#### 6.2 After the completion of the Project

- Budget allocation by the Government of Nepal, which was also pointed out during the Mid-term evaluation, has been improving. However, as it is still relying on the counterpart fund from KR2 Fund, further effort to procure general account budget shall be appreciated.
- Also as mentioned during the Mid-term evaluation, effort for introducing performance based evaluation system and its reflection to promotion, positioning and other incentives such as training, study opportunities and exposure visit. Further it is strongly recommended that sufficient field allowance for extension workers should be provided. Until a well-functioning performance based evaluation system is in place, incentive mechanisms for extension workers need to be inbuilt within the activities. Moreover, it is arguable that the title of "Junior" Technician (JT) is reconsidered in order to add incentive among them.
- The target 5 districts have decided to continue T/D farm. Expansion of T/D farm activities to other districts, as well as continuation by the 5 districts, is highly recommended.
- The Team found that certain ADCs have implemented micro projects with other donors or NGOs, utilizing the experiences from the Project. Extension workers should facilitate such farmer-oriented activities even after the termination of the Project.

- The achievements from the Project such as training curriculum and contents should be introduced to the periodical trainings for extension workers by the Government, so as to pledge sustainability. They should also be reflected into Technical Schools in charge of fostering new extension workers.
- Utilization of possible schemes such as "In-country Training Course on Agricultural Sector" for expansion of the outputs from this Project should be considered.
- Deliverables documented and distributed by the Project should be periodicals by the Government and be published with periodical revision.

#### 7. Lessons Learned

7.1 Importance of Needs-oriented Approach in agricultural extension projects

Through the field visits to the developed sites, T/D farm activities, etc., the Project aimed at shortening the distance between extension workers and farmers, which provided extension workers not only the agricultural technology but also confidence, motivation, and trust between farmers and extension workers. In addition, the Project especially in the last half has put an emphasis on organization of farmer groups which enables the farmers to seek for extension services by themselves, in accordance with the recommendation by the Mid-term Evaluation. This "Confidence Building Approach", connecting the extension workers and farmers through the linkage between top-down and bottom-up approach, is realized as very effective in such agricultural extension projects.

#### 7.2 Experience in a certain country as expertise for Project Experts

The Japanese experts dispatched in the last half of the Project had rich experience in the field works in Nepal, including fluency in Nepalese language and knowledge in Nepalese culture besides their technical expertise, and it greatly contributed to smooth implementation and communication between Nepalese side and Japanese side. Though it is understood that such a case is rare due to unavailability of human resources in Japan, it is still recommended to recruit experts with experience in the assigned countries.