

Summary

Evaluation conducted by: **SERIZAWA Akemi**

1. Outline of the Project	
Country : Morocco	Project Title : The Training Center Project for Agricultural Mechanization
Issue/Sector : Rural Development	Cooperation scheme : Technical Cooperation Project
Division in charge : Field Crop Based Farming Area Team II, Field Crop Based Farming Area Group, Rural Development Department	Total cost : 500million yen (Estimate at the Terminal Evaluation. No records available on the actual total cost at the end of the Project)
Period of Cooperation	From 1 September 2000
	To 31 August 2005
	Partner Country's Implementing Organization : Institut Agronomique et Vétérinaire Hassan II (IAV)
	Supporting Organization in Japan : Ministry of Agriculture, Forestry and Fisheries Bio-oriented Technology Research Advancement Institution
Related Cooperation	Agricultural Machinery Improvement Technology Course for Kingdom of Morocco (2007-2009) Individual Expert "Research guidance of Agricultural Mechanization" (Sept.1995-Sept.2000)
<p>1-1. Background of the Project</p> <p>Agriculture is one of the most important sectors of the national economy of the Kingdom of Morocco. It accounts for around 15% of the Gross Domestic Product (GDP) and about 80% of the rural population work in the agricultural sector. Morocco is yet to achieve self-sufficiency in food production although has increased along with population growth. The government promotes agricultural mechanization of mid- and small-scale farms to achieve self-sufficiency in food production through modernization of agriculture and improved productivity. One of the challenges is insufficient number of agricultural extension workers who have the capacity to train farmers in agricultural machinery.</p> <p>At the request of the government of Morocco for a technical cooperation project to train extension workers to promote mechanization of mid- and small-scale farm, JICA conducted the Training Center Project for Agricultural Mechanization (hereinafter referred as the "Project") for five years from September 2000 to August 2005 in the Training Center for Agricultural Machinery (Centre de Formation en Mécanisation Agricole: CFMA) established in the Agricultural and Veterinary Institute Hassan II (Institut Agronomique et Vétérinaire Hassan II: IAV). The Project strengthened the capacity of CFMA through development of training modules and implementation of the training sessions in "use and maintenance", "testing and evaluation", and "improvement" of agricultural machinery.</p> <p>1-2. Project Overview</p> <p>(1) Overall Goal Small and middle-size farmers gain understanding of agricultural machinery through extension activities.</p> <p>(2) Project Purpose A sufficient number of extension personnel, etc. with agricultural machinery expertise are made available.</p> <p>(3) Outputs</p>	

<p>1. Comprehensive training program for agricultural mechanization targeting agricultural extension personnel, etc., is established in IAV through survey and analysis.</p> <p>2. Course(s) on agricultural machinery use and maintenance for agricultural extension personnel, etc., is developed and implemented in IAV.</p> <p>3. Course(s) on agricultural machinery testing and evaluation for agricultural extension personnel, etc., is developed and implemented in IAV.</p> <p>4. Course(s) on agricultural machinery improvement for agricultural extension personnel, etc., is developed and implemented in IAV.</p> <p>(4) Inputs (as of the terminal evaluation: no record is available on the actual amount of the inputs as of the termination of the Project)</p> <p>Japanese side :</p> <table border="0"> <tr> <td>Long-term Experts</td> <td>4</td> <td>Equipment</td> <td>100million yen</td> </tr> <tr> <td>Short-term Experts</td> <td>15</td> <td>Local costs</td> <td>30million yen</td> </tr> <tr> <td>Trainees received</td> <td>16</td> <td>Others</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Total</td> <td><u>500million yen</u></td> </tr> </table> <p>Tunisian side :</p> <table border="0"> <tr> <td>Counterparts</td> <td>10</td> <td>Equipment</td> <td>(included in the Local Costs below)</td> </tr> <tr> <td>Land and Facilities</td> <td>Project office, laboratories, lecture rooms, experimentation fields, etc.</td> <td>Local Costs</td> <td>2,552,000MAD (30million yen)</td> </tr> </table> <p>Others</p>				Long-term Experts	4	Equipment	100million yen	Short-term Experts	15	Local costs	30million yen	Trainees received	16	Others				Total	<u>500million yen</u>	Counterparts	10	Equipment	(included in the Local Costs below)	Land and Facilities	Project office, laboratories, lecture rooms, experimentation fields, etc.	Local Costs	2,552,000MAD (30million yen)
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2. Evaluation Team																											
Members of Evaluation Team	Industrial Development (Human Resource Development) Evaluation: Akemi SERIZAWA, Social Development Specialist, Global Link Management Inc.																										
Period of Evaluation	13/1/2009-22/1/2009	Type of Evaluation : Ex-post																									
3.PROJECT PERFORMANCE																											
3-1. Performance of Project Purpose																											
<p>“A sufficient number of extension personnel, etc. with agricultural machinery expertise are made available.”</p> <p>Indicator: Total number of participants on the CFMA training courses for 5 years: not less than 500 man courses.</p> <p>The Project Purpose was achieved by the end of the Project. The total number of participants was 873 at the end of the Project, while the actual number estimated was around 100.</p> <p>The total number of participants was 1,225 as of the end of 2008. Since 2008, only a few training courses have been implemented at CFMA: only six persons participated in 2008. In 2007 and 2008, only Module 1 (use and maintenance) was conducted from the total three modules. CFMA has yet to develop a training plan for 2009.</p>																											
3-2. Achievement related to Overall Goal																											
<p>“Small and middle-size farmers gain understanding of agricultural machinery through extension activities.”</p> <p>Indicator: Number of farmers that attended to the extension activities (such as seminars, demonstrations, etc.) in the agricultural mechanization field, conducted by participant(s) CFMA training course(s): not less than 10,000.</p> <p>The Overall Goal was achieved by the time of the Terminal Evaluation in terms of the indicator.</p>																											

According to the impact study conducted in the Terminal Evaluation, about 5,000 farmers in total had participated in the extension sessions conducted by the 21 extension workers surveyed. This led to the estimate that about 25,000 farmers had participated in the extension sessions conducted by the 100 extension workers who participated in CFMA training courses.

The survey of extension workers and farmers during the Ex-post Evaluation confirmed that extension workers had conducted extension sessions using what they had learned at CFMA. The extension workers and farmers in the survey reported that the farmers increased their understanding of agricultural machinery and actual use of machines. The Project also led to other positive impacts on the farmers, such as increased crop yields.

3-3. Follow-up of the Recommendations by Terminal Evaluation Study

Recommendation 1. To develop a concrete plan to perfect the “improvement” course

An Activity Plan for Termination of the Project was developed by the time of the Terminal Evaluation. According to the Final Report of the Project (August 2005), the activities on “workshop technology” and “designing technology” in “machinery improvement” were not completed because of insufficient experience of the CFMA members in the “improvement” field.

Recommendation 2. To secure the necessary budget

During the Terminal Evaluation, the Ministry of Agriculture and IAV made the commitment to secure the CFMA budget according to the “CFMA Action Plan after Project termination” for three years. This promise was kept, and the cost of training at CFMA was covered by the Department of Education, Research and Development (DERD) in the Ministry of Agriculture. In 2008, the training of extension workers was decentralized to the Provincial Departments of Agriculture (DPAs), and DPAs now cover training fees. Due to the reshuffling of the Ministry of Agriculture since April 2008, the budget has not been implemented and DPAs have therefore not been able to conduct training. Therefore CFMA has almost stopped its activities since then. According to the CFMA members and staff of the Ministry, the Ministry will commence operations again in April 2009.

Recommendation 3. To implement country-focused training by JICA to strengthen the skills of counterparts in the “improvement” of agricultural machinery.

It was pointed out in the Terminal Evaluation that the “improvement” area had to be strengthened in CFMA. The country-focused training course entitled “Agricultural Machinery Improvement Technology Course for Kingdom of Morocco” is implemented for three years (2007-2009). This course was designed to enhance skills and knowledge of the participants. As CFMA has not operated Module 3 (“improvement” courses) since 2007, the outcomes of the country-focused training have not been reflected in the CFMA training courses.

Recommendation 4. To establish a regional training center on agricultural machinery.

CFMA is planning to implement training courses for extension workers from Arab and French-speaking African countries. An official request for tripartite cooperation was submitted to JICA in 2008.

4. Results of Evaluation

4-1. Summary of Evaluation Results

(1) Relevance

The Project is highly relevant to the agricultural policies of Morocco and the country’s needs. The agricultural policy of Morocco promotes agricultural mechanization of middle- and small-scale farmers and recognizes the need to continuously train extension workers in agricultural machinery. The Project is also in line with the Japan’s country assistance program to Morocco that puts the priority on agriculture and reduction of disparities. Japan can also share its experience in the mechanization of small land plots with Morocco.

IAV is the only institution at the university level that specializes in agricultural machinery. However, CFMA’s weaknesses when compared to other schools of agriculture include management, presence at the field level and links with enterprises.

(2) Effectiveness

The Ex-post Evaluation reached the same conclusions as the Terminal Evaluation, that the Project was reasonably effective. The Terminal Evaluation pointed out that the Project Purpose was already achieved (more than 500 extension workers in total participated in the CFMA training courses) and the trained extension workers had conducted extension sessions for farmers using their new skills and knowledge. However, “improvement” was not sufficiently taught in the extension sessions.

In the Ex-post evaluation, surveyed extension workers confirmed that they found CFMA training very useful, and that they utilized what they learned at CFMA in their extension sessions.

Based on recommendations in the Terminal Evaluation, the country-focused training “Agricultural Machinery Improvement Technology Course for Kingdom of Morocco” is implemented for three years (2007-2009). The participants benefited from the training, but CFMA has not yet had direct benefit from the country-focused training because CFMA has not operated Module 3 (“improvement” courses) since 2007.

(3) Efficiency

The Terminal Evaluation concluded that the Inputs were efficient compared to the achieved Outputs. The Ex-post Evaluation confirmed its efficiency through the examination of the achievement of the Outputs, implementation of the Inputs, the process in which the Inputs contributed to the Outputs, and the comparison of the scale of the Project with other similar projects.

(4) Impact

The Overall Goal, “Small and middle-size farmers gain understanding of agricultural machinery through extension activities” was achieved at the time of the Terminal Evaluation in terms of the indicator (number of farmers that attended to the extension activities: not less than 10,000).

The findings from the interviews and the questionnaire surveys in the Ex-post Evaluation confirmed that the farmers who participated in the extension sessions had improved their understanding of agricultural machinery, as 87% of the respondents answered that their understanding had improved “very much” or “sufficiently”. They obtained a better understanding particularly in utilization, mechanisms and everyday maintenance of machines, and have actually improved their skills in utilization and maintenance. They also experienced positive changes in their agricultural work, such as increased yields, reduction of working hours, reduction in the quantity of seeds used, and reduced manpower.

(5) Sustainability

The Terminal Evaluation concluded that CFMA was sustainable, which was underpinned by IAV’s official document confirming CFMA’s constitution, CFMA’s three-year action plan after the Project including the secured budget, and the technical competence of CFMA members. The finding from the Ex-post Evaluation study is that the sustainability of CFMA is not very positive at this stage. CFMA is not yet fully operational as an autonomous institution, which is shown as lack of a concrete activity plan and unidentified sources of the budget, and it has not yet established a new process of training management from the recruitment of trainees to the implementation of training sessions. CFMA has almost stopped its activities since 2008. The three-year budget is no longer available, and the Ministry of Agriculture has not implemented its budget due to reshuffling and preparations for the new sector plan. Training of extension workers was decentralized to the DPAs from DERD, but DPAs are not able to implement training because the budget is not yet available. CFMA members are all IAV staff and might not consider CFMA activities as their core business. Lack of their commitment to CFMA could hinder its sustainability.

4-2. Factors that have promoted project

(1) Impact

1) Thanks to the competence of CFMA members from IAV, the CFMA training courses were highly appreciated by the extension workers. The extension sessions conducted by the participants have improved farmers understanding of agricultural machinery, and the farmers were able to improve their usage of machines, with additional benefits such as increased yields.

(2) Sustainability

None.

(3) Others

None.

4-3. Factors that have inhibited project

(1) Impact

None.

(2) Sustainability

1) The Project did not give enough consideration to CFMA's management, budget, and measures to ensure sustainable participation of CFMA members in its activities, whereas all members are IAV staff with stable salaried positions and work responsibilities. Furthermore, the uniqueness of CFMA compared to other institutions was not adequately identified and promoted.

2) The Project did not include activities to strengthen CFMA's management capacity.

(3) Others

None.

4-4. Conclusions

CFMA training courses were highly appreciated by the extension workers who have used what they learned from the course in their extension activities. The farmers have improved their understanding of agricultural machinery and its actual use. They also experienced positive benefits such as increased crop yield. On the other hand, CFMA has not been very active since 2008 largely due to the reshuffling of the Ministry of Agriculture. The fact that CFMA is not a fully autonomous organization is another reason for its lack of activity.

4-5. Recommendations

CFMA needs to strengthen its capacity in organizational management. CFMA should identify their strengths compared to other institutions and establish its roles, and should consider how to approach clients (DPAs) effectively. It is also recommended they appoint a member of staff to be responsible for management.

It is recommended that CFMA establish a new system of training management from recruitment of trainees to the implementation of training. Since 2008, CFMA has to contact to the DPAs directly, whereas in the past DERD used to recruit trainees.

4-6. Lessons Learned

1) When a technical cooperation project works with a newly established organization, aspects such as management and budget, how to ensure sustained and active participation of counterparts when the project activities are not included in their original job description, and how to differentiate the new organization from other existing organizations should be considered to ensure sustainability. .

2) Technical cooperation projects with training institutions should include activities on capacity development in management in addition to the development and implementation of training courses.