

Country Name	The Project for Improvement of Equipment for the National Training Center for Agricultural Mechanization
Moldova	

I. Project Outline

Project Cost	E/N Grant Limit: 530 million yen	Contract Amount: 483 million yen
E/N Date	November, 2007	
Completion Date	December, 2008	
Implementing Agency	Project Implementation Unit of 2KR (PIU-2KR) of Ministry of Agriculture and Food Industry (MAFI)	
Related Studies	Basic Design Study: February, 2007 - September, 2007	
Contracted Agencies	Consultant(s)	Unico International Corporation
	Contractor(s)	-
	Supplier(s)	Itochu Corporation, Toyota Tsusho Corporation
Related Projects	Japan's cooperation <ul style="list-style-type: none"> Grant Assistance for Underprivileged Farmers (2KR) (2000-2011) 	
Background	<p>During 2001-2006, Moldova acquired more than 2,700 pieces of agricultural machinery under 2KR, including the machinery that were purchased using revolving funds (proceeds from the cycle of procurement and sales of machinery), but O&M techniques were not sufficient.</p> <p>MAFI used the revolving funds under 2KR to establish the National Training Center for Agricultural Mechanization under the Ministry. The construction of the Center was completed by Moldovan side in March 2007, but budgetary constraints limited the ability of the Government of Moldova to acquire machinery needed for training and the equipment for the Center workshops.</p>	
Project Objectives	<p>Outcome</p> <p>To ensure training of sufficient quantity and quality provided by the National Training Center for Agricultural Mechanization located in Chisinau by development of workshop equipment and on-farm agricultural machinery.</p>	
	<p>Outputs(s)</p> <p>Japanese Side</p> <ul style="list-style-type: none"> Procurement of workshop training equipment (e.g. lifts, testers, etc.) and on-farm agricultural machinery (e.g. combines, tractors, etc.). <p>Moldova Side</p> <ul style="list-style-type: none"> Procurement of communication facilities and computers, preparation works for installation of the equipment 	

II. Result of the Evaluation

Summary of the Evaluation

In Moldova, the diffusion of appropriate technology for operation and repair of agricultural machinery was indispensable for the ongoing process of agricultural mechanization. The National Training Center was established to provide training for agricultural students, producers, mechanics and repair persons and educators in the use of new agricultural machinery and the technology for the operation, maintenance and repair. Through this project, it was expected to develop human resources for immediate mobilization in agriculture in Moldova by improving the training provided to the diverse levels of personnel who are to use or work with agricultural machinery.

This project has largely achieved the securement of the training provided by the National Training Center for Agricultural Mechanization located in Chisinau due to the fulfillment of producing the expected number of trainees in most of the training courses, which would have been impossible without the development of workshop equipment and on-farm agricultural machinery. As for sustainability, there was no problem observed in the project because machinery and equipment are well-maintained and income and expenditure are balanced.

For relevance, the project has been highly relevant with Moldova's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be highly satisfactory.

1 Relevance

This project has been highly relevant with Moldova's development policy "promoting agricultural mechanization as set in the Agricultural and Food Sector Development Strategy (2006-2015)" and "training of qualified labor force as set in Moldova 2020 as a national development plan", development needs of providing trainings in modern agricultural technologies, as well as Japan's ODA policy "development of market economy system" at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved its objectives of securement of the training provided by the National Training Center. The target numbers of trainees were mostly achieved in 2010 (target year) and 2011. The reason for the non-achievement of some targets is that it took time to establish the practical functional scheme of the training courses and relationship between the center and the related parties including farmers and machine producers. These issues are solved at the time of this ex-post evaluation, and it is expected to achieve the target value in 2012. The survey with the ex-trainees (people involved in

agricultural machinery repair/maintenance and agricultural production) showed their high satisfaction with the training courses they took.

By observation of the facilities and training, the project machinery and equipment, which constitutes almost all equipment of the Center, are quite well maintained and in use. Besides the main training courses (see the table below), the Center organizes seminars, roundtables, workshops in subjects related to agricultural mechanization using the project machinery and equipment in collaboration with other organizations (as recommended in the design stage of this project).

According to MAFI and the Center, the ex-trainees spread to the regions in Moldova, and utilize the output of the trainings. The expected impacts of the project, such as shortening of time for farm work and reduction of mechanical breakdowns, are widely felt by ex-trainees though it is difficult to show it statistically. It was also heard that the trainees become confident of utilizing the modern equipment and changed their reluctant attitude to the new technologies and to buy new equipment themselves. In addition, as an unexpected positive impact, the Center provides technical know-how to the five Regional Centers that were open after 2009 as branch centers of the (National) Center and provide on-farm training to farmers in respective regions during agricultural seasons¹.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	baseline value (2007) (year of BD)	target value (2010) (target year)	actual value (2010) (target year)	actual value (at ex-post evaluation) 2011
indicator 1 No. of persons trained (total of indicator 2 to 4)	(actual value) 0	(planned value) 1,655	1,600 (total)	1,848
indicator 2 No. of farmers trained in Farm Management/ Preventive Maintenance course (Module 1)	(actual value) 0	(planned value) 648	670	592
indicator 3 No. of students, farmers, etc. trained in Machinery Operation course (Module 2)	(actual value) 0	(planned value) 309-557	312	594
indicator 4 No. of students (Module 3-1), mechanics (Module 3-2) and teachers (Module 3-3) trained in Repair & Maintenance course	(actual value) 0	(planned value) 72 students 348 mechanics 30 teachers	250 students 320 mechanics 48 teachers	310 students 350 mechanics 2 teachers

Source: National Training Center for Agricultural Mechanization

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were within the plan (ratio against the plan: 91%, 98%). Therefore, efficiency of this project is high.

4 Sustainability

The equipment provided by the project are very well maintained by the staff of the Center and PIU-2KR², the implementing agency, which supervises the Center.

It was observed that the organizational structure of the Center and PIU-2KR are well elaborated with sufficient number of capable staff members who are trained on permanent basis by the machinery and equipment manufacturer or supplier. On the financial side, income (mainly consisting of usage fees for training facilities (allocated from 2KR revolving fund) and training service fees) and expenditure is balanced every year, and the required cost for operation and maintenance are all funded from the income. Also, the machinery and equipment are very well-maintained carefully utilized.

Therefore, this project has no problem in structural, technical and financial aspects, and the current status of operation and maintenance of the implementing agency, and sustainability of the project effect is high.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

For more effective management for the training provided of the Centers, it would be good to draw up annual activity plan which include the target number of trainees and the measures or actions.

Lessons learned for JICA

From this project, it is learned that in a new project, JICA should encourage the implementing agency to plan and implement their own activities by utilizing and further promoting the result and output of JICA project from the beginning to even after the project completion. In this project, we can see synergy between JICA's former 2KR cooperation and new project, and implementing agency's self-development effort. The National Center, the target of this project, functions as the

¹ The Regional Centers are financially independent from the National Center, and use machinery that were procured under 2KR (not from this project).

² Ministry of Agriculture and Food Industry intend to keep PIU-2KR as the responsible organization of the Center.

training center for the instructors in Regional Centers, which was not expected at the beginning by JICA, and the instructors conduct trainings in the Regional Center, using the equipment from former 2KR cooperation. In Moldova, executing agency, PIU-2KR is active and this contributed to the good synergy but it may not be the case with other countries/executing agency.



(Training course on agricultural machinery)



(Provided electric welder, equipped with the manual made by the staffs)