

Summary of Evaluation Results

1. Outline of the Project	
Country: The Republic of Iraq	Project Title: The Project for Spreading Water Users Association for Efficient Use of Irrigation Water
Sector: Agriculture and Rural Development	Cooperation Scheme: Technical Cooperation Project
Division in charge: Rural Development Department,	Total Cost (at the time of evaluation): 410 Million Yen
Period of Cooperation (M/D): April 29, 2012-April 28, 2015 (3 years)	Partner Country's Implementation Organization: Ministry of Water Resources (MoWR)
	Supporting Organization in Japan: N/A
<p>1-1. Background of the Project</p> <p>Agriculture, especially irrigated agriculture, under the jurisdiction of the Ministry of Water Resources, Government of Iraq (GOI), is a very important sector for Iraq. However, the productivity of agriculture in Iraq remains low due to many reasons, including deterioration of agricultural infrastructure, salt accumulation in the irrigated land, and lack of knowledge and techniques on agriculture. The situation has become even worse due to reduced in-flow into rivers in Iraq, as neighboring countries recently constructed large dams and developed vast areas of irrigated agricultural land. Reduced water availability due to inappropriate water management has become increasingly an urgent issue to be tackled.</p> <p>Therefore, measures to facilitate more efficient use of water include: strengthening capacity for operation and maintenance of irrigation and drainage infrastructure; fair and optimal water distribution; raising awareness for water conservation; and introducing water saving technology. It is said that the agriculture sector uses 90 % of water, so it is essential to improve the efficient use of water in the agriculture sector and to take a comprehensive view of water resource management.</p> <p>In response to this situation, the Japan International Cooperation Agency (JICA) carried out “Karbala Project”. Between 2006 and 2008, training programs were conducted under this project on water users associations (WUAs) systems and techniques of water-saving irrigation.</p> <p>GOI acknowledged significant achievements of the Karbala Project, as well as issues to be solved, requested further cooperation in order to disseminate the achievements and good practices of the project with key stakeholders in other governorates in the country. The GOI’s official request for a new technical cooperation project was formally accepted by JICA in June 2011 and the Detailed Design Study was conducted in October 2011. The Minutes of Discussion on the Project were signed on 13 December 2011, in which it was decided to implement the project with the Ministry of Water Resources as the GOJ’s counterpart (CP).</p> <p>As a result, “The Project for Spreading Water Users Association for Efficient Use of Irrigation Water (The Project)” was commenced on April 29, 2012, with the cooperation period of 3 years.</p> <p>In November 2014, approximately 6 months prior to the termination of the cooperation period, Terminal Evaluation was conducted.</p> <p>1-2. Project Overview</p> <p>(1) Overall Goal: Efficient irrigation water management by Water Users Associations (WUAs) is conducted in the pilot project site</p>	

(2) Project Purpose: Relevant agencies on irrigated agriculture develop their capacity for irrigation water management by WUAs in the pilot project site.

(3) Outputs:

Output 1: Relevant agencies on irrigated agriculture develop their capacity for managing and monitoring projects for promoting efficient water management by WUAs.

Output 2: Relevant agencies on irrigated agriculture develop their capacity for facilitating the activities of WUAs.

Output 3: Relevant agencies on irrigated agriculture develop their capacity for extension of improved farming practices under irrigated conditions.

(4) Inputs (at the time of evaluation (2014.11))

Japanese Side

Dispatch of Experts: For the work in Iraq, Jordan, Egypt and Turkey, five Japanese experts have been assigned (41 trips, 17.46 person-month). For the work in Japan, seven experts, including the aforementioned five experts, were assigned (25.75 person-month).

Provision of Equipment: Approximately 3.7 million yen.

Local Cost: Approximately 27.8 million yen

Iraqi Side

Allocation of CPs: 4

Land and Facility: Meeting rooms in MoWR, etc.

Operation Cost: Salary of CPs, airfare from Baghdad to Amman, etc.

2. Evaluation Team

Team Members

(1) **Mr. Takeaki SATO** (Leader), Visiting Senior Advisor, Japan International Cooperation Agency

(2) **Mr. Ryosuke MURAKAMI** (Planning and Management), Team 2, Agricultural and Rural Development Group 1, Rural Development Department, JICA

(3) **Dr. Hideaki HIGASHINO** (Evaluation Analysis), Senior Consultant, RECS International Inc.

Period of Evaluation	November 27-December 5, 2014 in Amman, Jordan)	Type of Evaluation: Terminal Evaluation
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3. Results of Evaluation

3-1. Project Performances

(1) Summary of the Project Purpose Achievements

Project Purpose: *Relevant agencies on irrigated agriculture develop their capacity for irrigation water management by WUAs in the pilot project site.*

Indicator 1: *60% of the approved WUAs in the pilot project sites implement their action plans as planned.*

-Indicator 1 has been almost achieved, and will be fully achieved in January 2015.

-By the end of November 2014, 12 WUAs have been approved. Out of them, seven WUAs have started implementing their action plans as planned (election of WUA board members, etc.), and the rate of achievement is approximately 58.3 % (7WUAs/12 WUAs).

-The indicator will be fully achieved before the end of the cooperation period, as WUA activities will start

shortly in other 2 sites, according to relevant PMT (Project Management Team) members.

Indicator 2: 80% of PMTs of Phase 1 and Phase 2 implement their water extension plans as planned.

-At the moment, the Indicator 2 has not been fully achieved yet, but will be almost achieved in January 2015.

-PMT in a pilot project site (Wasit) has already started awareness raising activities (meetings with farmers, distribution of posters, and pamphlets).

-According to hearings from PMT members, six more PMTs will start to implement their water extension plans in January 2015. Therefore, the ratio of implementation will reach almost 80% ($7/9=77.8\%$).

(2) Summary of Outputs Achievements

Output 1: Relevant agencies on irrigated agriculture develop their capacity for managing and monitoring projects for promoting efficient water management by WUAs

Indicator 1-1: 80% of PMTs monthly update the progress of their pilot projects.

Indicator 1-1 was achieved. Submission of the monthly monitoring sheet improved significantly in the 3rd year (annual average: 75.5 % in 2014 from May through October). In particular, in October 2014, the submission rate was 100%.

Output 2: Relevant agencies on irrigated agriculture develop their capacity for facilitating the activities of WUAs

Indicator 2-1: At least one WUA is organized in 80 % of the pilot project sites.

Indicator 2-1 has been almost achieved at the time of the Terminal evaluation. By the end of November 2014, 12 WUAs have been approved in 11 pilot project sites.

As WUAs were organized in 11 pilot project sites, the ratio of WUA establishment, according to the Indicator 2-1 is, approximately 78.6% (11 sites/14 sites). Therefore, the indicator is almost achieved at the time of the terminal evaluation.

Meanwhile, two WUAs in other pilot project sites are under the process of approval, namely, Thi-Qar (Phase 2) and Maysan (Phase 3) and expected to be organized shortly. When these WUAs are approved, almost all (13 sites/14 sites, 92.3%) other pilot project sites will have WUAs.

Indicator 2-2: An action plan is prepared by each organized WUA in the pilot project sites, and a projected activity plan for a WUA to be organized is made by each PMT.

The achievement of Indicator 2-2 is expected to be achieved by the end of the project. All the 17 PMTs already prepared the projected activity plans during the training in Jordan (Training 1: Establishment and Management of WUAs).

Those projected activity plans were supposed to be used as the actions plan of WUAs after being presented to and agreed by WUAs. The process was completed for seven WUAs/PMTs by the end of November 2014. In addition, four more PMTs are planning to discuss with WUAs shortly to prepare WUA action plans.

Indicator 2-3: Each PMT makes its action plan of operation and maintenance of irrigation facilities.

Indicator 2-3 has been achieved. All the 17 PMTs prepared the action plans of operation and maintenance of irrigation during the training in the Training 6 (Water Management and O&M of Facilities by WUA).

Indicator 2-4: 80% of participants in Training 3 pass the evaluation.

Indicator 2-4 has been almost achieved. As for Training 3 (On-Farm Irrigation), 27 ex-trainees took an examination for assessment of the understanding of the subject in November 2014 in Baghdad, and it was reported that all of them successfully passed the examination. The total number of the ex-trainees was 39. However trainees from Anbar and Kirkuk could not take the examination due to deteriorated security

conditions, road conditions, etc.

Output 3: Relevant agencies on irrigated agriculture develop their capacity for extension of improved farming practices under the irrigated conditions.

Indicator3-1: Each PMT makes its water extension plan.

Indicator 3-1 has been almost achieved. All the 17 PMTs have already prepared the water extension plans, and already submit them to MoWR for approval. Therefore the Indicator 3-1 has been almost achieved.

3-2 Summary of Terminal Evaluation Results

Evaluation results based on 5 evaluation criteria are as follows:

(1) Relevance: High

The Project was evaluated highly relevant with Iraqi development policy, Japan's aid policy and strategy, and the needs of local farmers, at the time of Terminal Evaluation.

(2) Effectiveness: Relatively High

Effectiveness of the Project was evaluated relatively high. The Project Purpose: "capacity development of the relevant agencies on irrigated agriculture" has been reasonably achieved as various trainings were conducted as scheduled under the Project during the past two and a half years. The number of the total trainees amounted to 377 so far.

(3) Efficiency: Relatively High

Efficiency of the Project is considered relatively high too. Input was appropriately made by both the Japanese and Iraqi sides, and contributed to the progress of the Project.

(4) Impact: Relatively High

The Project encouraged MoWR to forward the procedure of WUA law enforcement from the start of the Project. Once the law was enforced in April 2014, the Project has been assisting MoWR in preparing the instructions (detailed implementation rules). As for technical impact, WUAs outside the pilot project sites were also organized with the guidance of the PMTs.

(5) Sustainability: Moderate

Sustainability of the Project was evaluated Moderate. It is reported that security conditions became significantly deteriorated after June 2014 in western part of the country, and Sustainability of the Project will be greatly subject to the security conditions in Iraq.

3-3. Factors promoting the production of effects

(1) Strong Commitment of the Iraqi Side

Karbala Project was implemented from 2006-2008 by the assistance of JICA and successfully achieved various training activities. The performance was highly acknowledged by the Iraqi side, and led to the implementation of WUA project by the Iraqi government in 2010. The participants of "Karbala Project" conduct trainings as lecturers in Iraq to develop the relevant persons' ability, in parallel with constructing/rehabilitating irrigation facilities.

With the performances of these preceding projects, the Iraqi side virtually regards “the Project for Spreading Water Users Association for Efficient Use of Irrigation Water (the Project)” as a part of their own project, and has taken part in it with strong commitment. The timing of implementation of the Project was appropriate to activate and maintain the motivation of the Iraqi side to forward WUA project and reciprocally enhance the progress of the Project.

(2) Trainings in Jordan

While all of the trainings to the target group were appropriately conducted in Japan, Jordan, Turkey, and Egypt, the main provider of the training was NCARE in Jordan throughout the cooperation period.

Lectures by experienced instructors of the center, discussion among participants, field visit to irrigation facilities in Jordan valley, etc. were executed in an organized manner and were effective for Iraqi trainees to obtain knowledge and skills necessary to implement the Project activities in Iraq.

Trainings were even more effective as they were implemented with Arabic language and under similar environment in a neighboring country of Iraq.

(3) Employment of a Monitoring Consultant

Submission of reports and provision of other information by PMTs were not at a satisfactory level against the plan in the 1st and 2nd years. To deal with this, an Iraqi monitoring consultant was employed in May 2014 and has contributed to the improvement of the submission of monitoring worksheets and provision of other information.

3-4. Factors inhibiting the production of effects

(1) Delay of the WUA Law Enforcement

In April 2014, WUA law was enforced, which legally enabled establishment of WUA, management of the irrigation system by WUA and also ensured the legal legitimacy of the Project. However, the enforcement was realized 2 years after the commencement of the Project, and delayed a part of the Project activities to be conducted by WUAs.

(2) Security Conditions

Security conditions in Iraq deteriorated by the invasion of so called ISIL, particularly after June 2014, in the western part of Iraq: Salah Al-Deen, Diyala, Kirkuk, Ninawa and Anbar, and Baghdad. In these governorates, farmers evacuated to avoid insecurities, and some MoWR offices were closed. Under the situation, WUA activities were significantly hampered.

(3) Understanding of the Project Design

In the project period, the project design (PDM) has been significantly changed many times. Therefore, a part of Iraqi side’s members have insufficient understanding of the project design. The above situation partially inhibited the efficient progress of the project.

3-5. Conclusion

Based on the results of the evaluation, the Evaluation Team concludes that it is appropriate to terminate the Project on 31 March 2015, as described in M/D, since it is expected that the Project Purpose will be fully achieved by the end of the cooperation period.

3-6. Recommendations (Details are in the Chapter 5 of the Joint Evaluation Report)

3-6-1. Recommendation to the Project Team

(1) Basic Information of Each Pilot Project Site and WUA Action Plans

The Project Team is required to summarize the basic information of the pilot project sites, PMTs, and WUA action plans.

(2) Preparation of the List of Ex-trainees

In order that MoWR and PMTs will utilize the knowledge and experiences of the training systematically in the future, the Project team is required to summarize the status of each ex-trainees.

(3) Examination on Training 3

Out of 39 ex-trainees of Training 3, 27 took an examination in November 2014, and successfully passed it. The Project Team is recommended to offer an opportunity for the remaining 12 ex-trainees to take the examination to assess the degree of their understanding on the subject of the Training 3.

3-6-2. Recommendation to MoWR

(1) Follow-up Activities for WUAs

In some of the pilot project sites, election of board members was already conducted according to the WUA action plan, and some PMTs recently started water extension activities in the pilot project sites, too. In order to continue these activities effectively, MoWR is required to conduct monitoring, technical assistance and site training for WUAs by utilizing the resources developed through the Project. For this purpose, the Water Extension Units of each governorate should be established as soon as possible.

(2) Guidance to WUAs on the Operation and Maintenance of Irrigation Facilities

The cost of operation and maintenance of irrigation facilities in the pilot project sites will be borne by MoWR in the meantime. However, WUA will take responsibilities of operation and maintenance of the facilities including water fee collection in the future. Therefore, it is necessary that MoWR will conduct appropriate guidance to them so that they will have sufficient capability to execute the tasks.

(3) Acceleration of Construction of Irrigation Facilities

In some pilot project sites, the construction of the irrigation facilities is delayed. Since the irrigation facilities are essential for implementing activities of WUAs aiming at efficient use of irrigation water, MoWR is required to accelerate the construction of irrigation facilities in the pilot project sites.

3-7. Lessons Learned

3-7-1. Project management by Remote Control

Due to the deterioration of security conditions in Iraq, the Japanese experts managed the Project without site visits. Alternatively they convened the stakeholders to hold workshops in Baghdad and Amman in order to monitor the progress of the project activities. These workshops were held twice a year in the 1st year, three times in the 2nd year, five times in the 3rd year, and efficiency of monitoring has improved year by year. By implementing monitoring workshops at an appropriate interval, project management can be executed efficiently even through remote control.

3-7-2. Implementation of a Project at Appropriate Timing

The Karbala Project was implemented from 2006 to 2008 and successfully achieved capacity development of CPs in Karbala governorate. In order that this outcome in Karbala is disseminated to other governorates, the Project has been implemented from 2012 to 2015 in the fifteen governorates including Karbala. By virtue of continuous and timely implementation of the Project, the outcome of Karbala Project was maintained and CPs in Karbala took the leading role in the Project; for example, gathering other CPs, conducting field training in the pilot project sites in Karbala, etc. As such, it is considered that seamless implementation of projects is useful in the case that the outcome in particular area is disseminated throughout the country.