# **Terminal Evaluation**

# Asia

1. Outline of the Proje	ct		
Country:		Project title:	
China		The Integrated Development Project in the Waterlogged Area in the Four-Lake Area of Jianghan Plain, Hubei Province in the People's Republic of China	
Issue/Sector:		Cooperation scheme:	
Agriculture/Forestry/Fisheries		Project-type Technical Cooperation	
Division in charge:		Total cost:	
Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department		843 Million Yen	
Period of Cooperation	10 January 1997 - 9	Partner Country's Implementing Organization:	
	January 2002	Hubei Provincial Development engineer Research Center for Lake Wet lands Development Project	
		Supporting Organization in Japan:	
		Ministry of Agriculture, Forestry and Fisheries of Japan	

#### **Related Cooperation:**

#### 1-1 Background of the Project

In China, the income disparity between coastal areas and inland areas was one of the major problems. In the National Plan, the Government of China made the development of inland areas one of the important issues. The Jianghan Plain, located in an inland area of China, consists of sedimentary layers of the earth from Chang Jiang and its tributaries. The Four-Lake area is in the center of the Jianghan Plain, and the waterlogged area is concentrated in the Four-Lake area. As the area was waterlogged, there were limitations to the utilization of the land, and the methods of cultivation which were being used were not optimal. As a result of these characteristics and the bad soil, the potential for agricultural production was not fully exploited. In order to make optimum use of this area, the Chinese Government saw that it was necessary to develop a drainage system within the agricultural field and establish the farming techniques in the area.

Under these circumstances, the Government of China requested the Government of Japan to provide Project-type Technical Cooperation with the aims of introducing the Japanese techniques, facilities and equipment related to the development of waterlogged areas, increasing the crop production of the Jianghan Plain, and demonstrating the model of development of the freshwater swamp area.

#### **1-2 Project Overview**

To foster personnel, the Project, together with Hubei Provincial Development engineer Research Center for Lake Wet lands Development Project (hereinafter referred to as "the Center") which was settled in the Hubei Agriculture Institute and its agricultural test field as activity bases, improved techniques for the land utilization plan necessary to develop submerged land, transferred techniques to the engineers in Hubei and established a human resources development system through the experimental proof at two pilot areas (one area each at Jingsha and Shenjiang).

(1) Overall Goal

Developed techniques in the Project disseminated in Jingsha and Shenjiang.

#### (2) Project Purpose

The personnel engaged in the development of freshwater swamps are fostered through the experimental proof of utilization methods of submerged land development at the two pilot areas within the Four-Lake Area.

(3) Outputs

1) The techniques necessary for development of the freshwater swamp are established through the tests and experimental validations at the pilot agricultural land and the pilot areas.

2) Human resources development system necessary for the development of a freshwater swamp is established.

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Japanese side:

Long-term Experts	13	Equipment	159 Million Yen
Short-term Experts	16	Local Cost	37 Million Yen
Trainees received	23		
Chinese side:			
Counterparts	24		
Local Cost	32.09 Mil	llion Yuan (515 Million Yen)	

#### 2. Evaluation Team

Members of Evaluation Team	of Agriculture, Forestry and Fisheries of Japan Land Use Planning/Drainage Project; Takashi IIJIMA, Japanese Institute of Irrigation and Drai Agriculture; Hatsuo MIYASAKA, Deputy Director, International Office, Administration Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries of Japan Planning Evaluation; Kenjiro FUTAGAMI, Staff, Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department, JICA Evaluation Analysis; Naomi OKADA, Foundation for Advanced Studies on International Development Interpreter; Hisako AOYAMA, Japan International Cooperation Agency	
Period of Evaluation	11 November 2001 - 25 November 2001	Type of Evaluation: Terminal Evaluation

#### 3. Results of Evaluation

#### 3-1 Summary of Evaluation Results

#### (1) Relevance

The Project Purpose and its orientation are still appropriate at the final evaluation. The Chinese National Policy "the 10th Five Year Plan for national economic development in Peorple's Republic of China" and "The 10th Five year Plan for national economic Development in Hubei Province" emphasized the importance of the Project Purpose.

#### (2) Effectiveness

The techniques necessary for the freshwater swamp development were established and were published in the form of training textbooks and guideline/technique manuals, such as manuals providing drainage plan guidance. The Chinese counterparts who developed the techniques or organized training/dissemination materials, together with the Japanese experts, became the training instructors and developed the training curriculum in which lectures, practices and on-site visits were effectively

combined. With these outputs, the Training was implemented at the Center. Some ex-participants utilized the acquired techniques at their works, and that the Project Purpose was accomplished. The personnel will be continuously fostered at the Center, and they will be engaged in the development of the waterlogged area.

#### (3) Efficiency

The Inputs from the Japanese side were utilized quite efficiently to attain the outcomes. However, some activities were delayed, because a long-term expert had a health problem and had to return home. What's more, there was no replacement for this expert in the next group of experts to arrive. The delivery and installation of some of the equipment were behind schedule, which delayed the experiments related to the equipment. The maintenance and management of equipment at the Center appropriate. The development of the attached facilities and drainage pump station/drainage ditch at the experimental agricultural site at the Center were delayed. The distance between the sites was one of the problems. The Project implementation administrative office was located at Wuhan, while the two pilot areas were located in distant cities, Jingsha and Shenjiang (both locations were one-hour away by car), and the Center was located at Hubei Agricultural College (Three-hours from Wuhan by car). Because of the distance separating Project implementing locations, it was difficult to discuss issues among the related persons, and the command structure was unclear, which negatively impacted on Project activities.

#### (4) Impact

The Overall Goal was not surveyed quantitatively. However, the ex-participants disseminated the attained techniques in the Project to the farmers and related persons and applied those techniques to achieve certain results. The multiple effects of the Project are likely to be larger as the training program progresses and the pilot areas are developed in the future.

There were other positive impacts: The Center published many research papers based on the research and survey results of the Project, which enhanced the academic reputation to Hubei Agricultural College. At the pilot areas, some farmers adopted the cropping system established in the Project, and this improved agricultural productivity. The agricultural land at the Center was developed, and its water management was well prepared. The agricultural land was cleaned up, and a clean living environment was developed, illustrating that the importance of environmental cleanness was recognized by the related persons.

#### (5) Sustainability

The Center is the official provincial organization approved by Hubei and will continue to exist as a technical development/training organization. The necessary budget to run the Center will be allocated from the official budget as well. The techniques attained in the Project in each field reached a level where they can be maintained and further developed by related personnel on the Chinese side. Further development of techniques is expected through the renewal and revision of the manuals and continuing research.

## 3-2 Factors that promoted realization of effects

(1) Factors concerning Planning

N/A

(2) Factors concerning the Implementation Process

N/A

## 3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

## N/A

(2) Factors concerning the Implementation Process

1) The delays of the expert dispatch and the equipment delivery lowered the efficiency of the Project.

2) The fact that the counterparts were not full time workers for the Project, and that they could not concentrate fully on Project activities, lowered the efficiency of the Project.

3) The Project implementation administrative office was located at Wuhan, and the implementing locations were separated by a considerable distance, which prevented good communications. Transportation access was not good for a pilot agricultural land project. These factors seriously lowered the efficiency of Project activities.

4) The collaboration with related organizations, especially with Water Resources Department, though essential for the development of waterlogged area was insufficient.

### **3-4 Conclusion**

There were some major Project disruptions, such as an unexpected change in Japanese experts and Chang Jiang's massive flood, but through the enthusiastic efforts of related personnel on both the Japanese and Chinese sides, the Project Purpose is likely to be accomplished.

#### **3-5 Recommendations**

(1) To expand the Outcomes of the Project, it is necessary for the Center to continue to foster middle-class engineers as well as to disseminate the techniques to the farmers through training courses and other activities.

(2) It is essential to collaborate with other sections and related organizations in the field for effective dissemination of the acquired techniques and their training.

(3) To promote the effects and outcomes of the Project, it is necessary for the Center to periodically report its activities and business plan to the Hubei Provincial Sciences Academy and JICA Chinese Office.

#### 3-6 Lessons Learned

(1) It is recommendable that the counterparts be full time workers to promote the Project more effectively.

(2) For smooth Project implementation, it is necessary to maintain communication with the project leader of counterparts. Therefore, it is desirable that the head office of the project and the pilot areas be located for easy access by the related persons. It is also desirable that the pilot agricultural land be for easy access by the related persons so that the actual status of the agricultural land can be readily understood.

(3) It is necessary to implement a project such as this after having built up a system of collaboration with the related organizations in order to maximize efficiency of the project and dissemination of project outcomes.

#### 3-7 Follow-up Situation

N/A