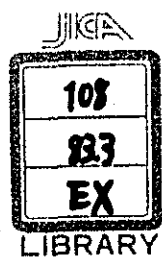


**SURVEY REPORT
ON TECHNICAL COOPERATION IN IRRIGATION
IN INDONESIA**

APRIL 1976



**IRRIGATION ADVISORS TEAM
JAPAN INTERNATIONAL COOPERATION AGENCY**

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国際協力事業団	
受入 月日	84.3.22
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PREFACE

We have the pleasure of presenting a report on the technical cooperation (between the Government of Japan and the Government of the Republic of Indonesia since 1970) in the field of irrigation.

We had discussions with the Indonesian authorities concerned and had study tours in the project sites in order to grasp the actual situation of water resources development, review past cooperation, and formulate a future cooperative program in Indonesia.

We wish to express our sincere gratitude to the Government of the Republic of Indonesia for the whole-hearted assistance rendered to us during our stay in their country.

April, 1976

K. Imoto

Koichi Imoto
Leader, Irrigation Advisors
Team

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(1) Members of the team

- Koichi Imoto (leader) : Chairman, Association of Agricultural Engineers, Japan
- Toshiyuki Takasu : Director of Land Improvement, National Research Institute of Agricultural Engineering, Ministry of Agriculture and Forestry
- Tatsuo Asahara : Director of Design Division, Bureau of Agricultural Structure Improvement, Ministry of Agriculture and Forestry
- Tatsuo Hoshi : Expert Assignment Department, Japan International Cooperation Agency

(2) Indonesian officials with whom the team had discussions

- Mr. Suyono Sosrodarsono: Director General of Water Resources Development, Ministry of Public Works and Electric Power
- Mr. Oesman Djojoadinoto: Director of Irrigation, D.G.W.R.D.
- Mr. Sarwoko : Secretary of the Directorate of Irrigation, D.G.W.R.D.
- Mr. Mashudi : Chief of First Planning Division, Sub-directorate of Design and Planning, Directorate of Irrigation, D.G.W.R.D.
- Mr. Azis Bocking : Staff Member of the Foreign Aid Administration, D.G.W.R.D.
- Mr. Muhammad Nur : Project Officer of the Directorate of Irrigation, D.G.W.R.D.
- Mr. Sigit Rahardjo : Director of D.P.U., Prop. Lampung

Mr. A. Ashari : Vice-Director of D.P.U., Prop.
East Java

Mr. Tjokorde G. Agung : Director of D.P.U., Prop. Bali

Mr. Pramodo : Assistant Chief of the Bengawan
Solo Project Office

(3) Itinerary

April 7 (Wed.) Tokyo - Jakarta

8 (Thur.) Greeting at the Embassy of Japan and
the JICA office
(afternoon) Jakarta - Cihea - Bandung

9 (Fri.) Meeting with Mr. Sarwoko (Secretary of
the Directorate of Irrigation)
Visit to D.P.M.A.
(afternoon) Bandung - Jatiluhur

10 (Sat.) Visit to Jatiluhur Dam - Curug - Curug
Barrage
Visit to Pilot Tertiary Block - Jakarta

11 (Sun.) Jakarta - Telukbetung
Visit to Mitsugoro Farm No.4

12 (Mon.) Meeting with Mr. Sigit Rahardjo
(Director of D.P.U., Prop. Lampung)
Visit to Way Jepara Project Site and
Rawa Seragi

13 (Tue.) Visit to Way Seputih Project Site, and
Tani Makmur Project Site
Telukbetung - Jakarta - Surabaya
Meeting with Mr. A. Ashari (Vice-
Director of D.P.U., Prop. East Java)

14 (Wed.) Visit to Brantas Delta Rehabilitation
Project Site, Fish Ponds, and Lengkong
Dam
Surabaya - Dengpasar

15 (Thur.) Meeting with Mr. Tjokorde G. Agung
(Director of D.P.U., Prop. Bali)
Visit to Irrigation Project Sites in Bali

April 16 (Fri.) Denpasar - Yogyakarta - Solo

17 (Sat.) Visit to Wonogiri Dam Site and
Parangjoho Dam
(afternoon) Meeting with Mr. Pramodo
(Assistant Chief of the Bengawan Solo
Project Office)
Solo - Yogyakarta

18 (Sun.) Yogyakarta - Jakarta

19 (Mon.) Meeting in the Directorate General of
Water Resources Development, Ministry
of Public Works and Electric Power

Indonesian side:

Mr. Suyono Sosrodarsono: Director General of Water
Resources Development

Mr. Oesman Djojoadinoto: Director of Irrigation

Mr. Azis Bocking : Staff Member of the Foreign Aid
Administration

Mr. Muhammad Nur : Project Officer, Directorate of
Irrigation

Mr. Mashudi : Chief of First Planning Division,
Sub-Directorate of Design and
Planning, Directorate of Irriga-
tion

Japanese side:

Members of the team

Mr. Tomaru : First Secretary, Embassy of
Japan

April 20 (Tue.) Preparing the report

21 (Wed.) Jakarta - Tokyo

(4) Report

1. Result and Evaluation of Technical Cooperation

1) Current status of the dispatch of irrigation experts

Dispatch over a long period of irrigation experts as one of the programs of technical cooperation to the Government of the Republic of Indonesia has been carried out continuously since 1970, and at the time of the present survey, the Japanese irrigation experts present in Indonesia number 12 which is about one half of the whole irrigation experts dispatched from Japan to the overseas countries.

These irrigation experts in Indonesia are assigned as stated below.

a. Directorate General of Water Resources Development, Ministry of Public Works and Electric Power

Directorate of Irrigation

Restoration Sub-Directorate (Jakarta)	1
Second Construction and Implementation Sub-Directorate (Jakarta)	1
Design and Planning Sub-Directorate (Bandung)	5
Bengawan Solo Development Office (Surakarta)	2
b. D.P.U., Prop. Lampung (Tandjungkarang)	2
c. D.P.U., Prop. East Java (Surabaya)	1
<u>Total</u>	<u>12</u>

2) Activities of experts and evaluation

These Japanese experts are contributing to the development in the field of irrigation in Indonesia through direct participation in, or advice on, the investigation, planning, design and execution of the irrigation, drainage, reclamation and other projects, or guidance of the local engineers as required by the Indonesian Government, and their activities are highly evaluated generally. However, the local evaluation of the individual experts is not always the same, and there will be room for further study for application of the principle of the right person in the right place.

2. Problems as Seen from the Current Status of Technical Cooperation

1) Problems posed from the Indonesian side

- a) Continuation and intensification of the technical cooperation particularly with respect to the local development projects in the Provinces of South Kalimantan and Lampung.
- b) Improvement of the linguistic faculty (in English) of the Japanese experts to serve for transfer of the technology and mutual understanding.
- c) Shortage of the reference materials in English of the irrigation technology in Japan.
- d) Assignment of an expert of the character of a general consultant in the Ministry of Public Works and Electric Power.

- 2) Responses of and problems raised from the Japanese side
- a) Significance and requirement of the technical cooperation are fully understandable. But, in view of the progress of the agricultural base improvement program as well as the trend of the Government personnel retrenchment in Japan on one hand and the requests for technical cooperation from the other foreign countries on the other, it is difficult to increase the experts dispatched to Indonesia.
 - b) The problem in the English knowledge of the Japanese experts is understandable. The Japanese side will, of course, exert efforts for improvement but, at the same time, desire similar efforts of the counterpart.
 - c) With respect to the English materials concerning the technology of irrigation in Japan, the Japanese side is not prepared to comply with the request immediately but will consider the issue positively.
 - d) In order for the cooperation to be successful, it will be appropriate to assign a leader of the Japanese experts in the Ministry of Public Works and Electric Power so that the Japanese experts are able to work as a team when such is required.
 - e) Improvement of the irrigation facilities is one of the basic requirements for increase of the agricultural production but is not the objective itself. There should be a close linkage between the improvement of facilities and the guidance in agricultural management.

3. Desirable Form of Technical Cooperation in the Future

- 1) For maximum display of the effect of cooperation within the framework of a limited number of personnel, it will be important to clearly set forth the priority works requiring the Japanese experts and thus redistribute the current assignments. For example, it is a recommendable measure to reduce the personnel assigned to the Sub-directorate of Design and Planning, Directorate of Irrigation, in Bandung and dispatch an expert or experts newly to the Province of South Kalimantan where they are urgently called for.
- 2) Japanese irrigation engineers are generally trained to act as a team. As the experts dispatched to Indonesia now number ten and some, it is considered to be appropriate for furtherance of the effect of technical cooperation to place an able leader at the center so that they will be able to perform their task in a teamwork.
- 3) It is preferable to set the terms of tour of the dispatched experts to three years so that they will execute their tasks deliberately within the terms of tour and be changed. Customary extension of the terms of tour is not desirable.
- 4) For dispatch of the experts, it is, of course, important to choose the persons who are technically competent and, at the same time, are willing and healthy and entertain the human relationship.

- 5) The experts should apply a technology of the level in match with the social and economical conditions of the locality and should by no means attempt to enforce the updated technology in Japan.
- 6) For achievement of the final object of increasing the agricultural production, it is prerequisite for the technology of irrigation facilities to be closely tied up with the agricultural technology, and while the cooperation of both is required within the Government of the Republic of Indonesia, harmony of the irrigation and agricultural engineers within the dispatched experts is none the less important.

