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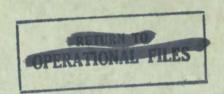
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Irrigation and Rehabilitation Project - Indonesia - Credit 0127 - P003702 -

Negotiations - Volume 1

THIS FILE IS CLOSED AS OF SEPTEMBER 2, 1968

FOR FURTHER CORRESPONDENCE, PLEASE SEE Administration I

General Files and Communications Section

FOR IMMEDIATE RELEASE

LC 3160 DA

INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H STREET, N.W., WASHINGTON D. C. 20433 TELEPHONE: EXECUTIVE 3-6360

£

IDA Press Release No. 68/21 September 3, 1968 Subject: Indonesia receives first IDA credit

Announcing the first step in the World Bank's program for assisting in rehabilitation and development in Indonesia, the Bank's President Robert S. McNamara said:

"When I visited Indonesia last June I promised that we would start to help the country as soon as we could, and that our first efforts would be to help them grow more rice. Today, the International Development Association (IDA) has approved its first credit ever to Indonesia, \$5 million for the rehabilitation of irrigation systems.

"This should help to increase domestic production of rice, and thus reduce the heaviest drain on Indonesia's scarce foreign exchange reserves."

Indonesia's three largest and most important irrigation systems will be the first to be rehabilitated. They are located on the island of Java. Although Java comprises only 7% of the total land area -- 3,000 islands stretching 3,100 miles along the equator -- almost 70% of the people live there. It is intensively cultivated but does not produce enough craps, particularly rice, the staple diet, to feed the population. The Government has to import large quantities of rice to avert actual hunger in the cities. This situation has developed as a result of the rapid population increase and because of long-neglected maintenance and inefficient operation of the irrigation systems. Two-thirds of Java's total irrigated area of 7 million acres need to be rehabilitated. IDA funds will also be used to complete a new irrigation system under construction on Sumatra at the site

of a government resettlement scheme for landless or unemployed Javanese. The total area involved in the four systems is about 490,000 acres.

As a direct result of the project, rice production should increase by almost 40,000 tons annually or about 15% of the present level in the project area, reducing the need for rice imports by \$6.6 million a year. Furthermore, once the areas concerned have adequate irrigation and drainage, it will be economical to use fertilizers, pesticides and improved seeds which will increase yields even further.

The IDA credit of \$5 million will be for a term of 50 years, including a 10-year grace period. It will be free of interest, but a service charge of 3/4 of 1% will be made to meet IDA*s administrative costs.

The project is expected to take five years to complete at a total cost equivalent to \$8.8 million. The Government of Indonesia is financing the equivalent of \$3.5 million of the local currency costs and farmers are contributing voluntary labor valued at about \$300,000.

In view of the great urgency for speedy execution, the project has been approved for financing although an engineering study and the preparation of detailed plans still remain to be carried out. The Government is engaging consultants for this purpose and the IDA credit includes funds for their services. In the meantime the necessary equipment and machinery can be ordered and put to work on the most urgent and obvious tasks without delay.

The consultants, working with the Directorate General of Water Resources and Indonesia's engineering staff responsible for irrigation, will make an engineering survey and inventory of the systems included in the project. They will then prepare a detailed plan for the rehabilitation of the systems and subsequent operation and maintenance, and assist in its execution. They will set up, and supervise initially, maintenance schedules and accounting and control systems for equipment, materials, spare parts and supplies, and provide in-service training to supervisory staff. In early 1969 they will begin to prepare projects for the rehabilitation of other high priority irrigation areas.

Ind . - 127

Files

August 30, 1968

H. J. Ziegler

INDONESIA: Irrigation Rehabilitation Project - Negotiations

Negotiations were held in Washington between August 5 and August 9, 1968 with representatives of Indonesia. The following participated in negotiations:

For the Indonesian Government!

Tr. Sujuno Soerodarsono - Director-General of Water
Resources Development
Ministry of Public Works and
Power

Dr. Saleh Afiff - Chief, Agriculture Division
National Economic Development
Council (BAPPENAS).

Drs. S. Sundaru - Director of International Affairs
Ministry of Finance

Mr. Rachadi Iskandar - Second Secretary (Economic)
Embassy of Indonesia

For the Association:

Messrs. Brakel - Asia Department (Chairman)

ffrench-Mullen - Projects Department

Grosvenor - Treasurer's Department

T. Jones - Legal Department

J. Malone - Projects Department

McCarthy - Treasurer's Department

Ziegler - Asia Department

Also participating in certain sessions were Messrs. Schebeck and Tims from Asia Department, Mr. C.H. Walser from the Legal Department and Mr. A. Dahlan Ibrahim, First Secretary (Economic), Embassy of Indonesia.

Conclusions

Complete agreement was reached on all parts of the Credit Agreement and side letters during negotiations. It was agreed that if the Association does not hear from Djakarta within a week, it may be assumed that these documents may be proposed to the Board with the consent of the Indonesian

Government. The Association's team suggested to present this Credit to the Board at its meeting on September 3 subject to Indonesia becoming a member of IDA before that time. Mr. Sundaru promised to expedite steps to be undertaken by Indonesia to become an IDA member (90% deposit in local currency) and other steps required for this Credit (sending of legal opinion and information needed for Supplementary Letter No. 4). The letter of authority for signature of the Credit Agreement was in the hands of the Indonesian Ambassador during negotiations.

Participants from the Projects Department suggested to send the following letters to Indonesia:

- 1. Agreeing to the specifications of equipment after receipt from the Indonesian Government.
- 2. Operation of equipment (2,000 hours)
- 3. Agreeing to the List of Consultants proposed by Indonesia, which has already been done.

The following points were discussed in more detail:

Auditing - Section 4.01 (e)

The Indonesian delegation proposed that auditing should be done by the Indonesian Government's Office concerned to avoid unnecessary expenditures. The Association's delegation, however, convinced the Indonesian team that the present staffing of the Auditing Office is not sufficient for prompt audits and, therefore, an independent auditing firm would have to be appointed. It was pointed out however that the Government's Auditing Office could be employed for future IDA projects if the Association would be convinced of the efficient operation of that office.

The Indonesian delegation has been advised to seek the consultants' advice on the choice of an auditing firm. It was agreed that a letter concerning the acceptance of an auditing firm would have to be sent by the Indonesian Government to the Association before the beginning of works in Spring 1969 and the first auditing report would be due in June or July 1969, bearing in mind that the new Indonesian financial year ends at 31st of March.

Consultants - Section 6.01

The Indonesian delegation was very much aware of the urgency to place orders this October and to start work in May 1969. The Association's delegation pointed out that appointment of consultants would be a condition of effectiveness of this Credit, in order to counter the Indonesian delegation's preoccupation that this could delay the ordering of equipment. It was explained by the representatives of the Association that to save time the Indonesian Government could send out tenders for equipment on the basis of the agreed list, and with the proviso that the credit is obtained. If the consultants arrive in the field in October, they might be in time to assist the Director-General of Water Resources in evaluating the tenders.

Tertiary Canals - Section 4.03(b)

The Indonesian delegation tried to rephrase or eliminate this section. It feared that the various regions would not yet be able to honor the commitment to maintain the tertiary canals. After explanation of the importance of this section by the Association, the Indonesian delegation has been prepared to accept this paragraph without changes.

Water User Charges - Sections 4.02(b), (c) and (d)

The Indonesian delegation mentioned that a Presidential decree on water user charges is under preparation. This decree would introduce immediate water charges for all systems. The water rates of the project area could be adjusted later, if considered advisable. In order to adjust to this situation, Sections 4.02(b), (c) and (d) have been slightly reworded. It has been stressed, however, that contribution should be based as far as possible on future full recovery of costs.

Use of Machinery - Section 3.03

After the Association team's explanation, the Indonesian delegation accepted that Indonesia could only use the machinery supplied under this Credit for work connected with this project.

Supervision Missions - Section 4.08

The Indonesian delegation was concerned about the possible financial contributions by Indonesia for visits of project areas by the Association personnel. This paragraph was readily accepted after proper explanation.

Extension Services - Section 4.10

Because of the Indonesian team's suggestion that enough personnel is available, it was agreed to eliminate the phrase on salaried employees for extension services.

Supplementary Letter No. 1

To take care of current developments and bring this letter up-to-date to the time of signing, it has been agreed to redraft it slightly.

Supplementary Letter No. 2

Because of the Indonesian delegation's fear that firmers might be charged twice through fees and contributed labor, it was agreed to reword partly this letter.

Supplementary Letter No. 3

The Indonesian delegation promised to notify, after its return to Djakarta, the Association if the Debt Letter and its Annex would have to be amended.

a EC - Fiel

Mr. M. M. Mendels

August 30, 1968

B. Chadenet B. Chadenet

Board Meeting - Tuesday, September 3, 1968

Projects Department will be represented by the following:

Agriculture Division

Mr. Chadenet

Mr. Wapenhans

Mr. Move

Mr. Walden

Ecuador - Fisheries

Mesers. Howe and Walden will be prepared to answer questions.

Indonesia - Irrigation

Messre. Waponhans and Malone will be prepared to answer questions.

BChadenet: jfh

c.c. Mr. Knapp

Mr. Aldewereld

Mr. Friedman

Mr. Alter

Mr. Cargill

Hr. Wapenhans

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

IND-grad

OUTGOING WIRE

TO: CHRISTENSEN

INBAFRAD 62164

PARIS

DATE: August 29, 1968

CLASS OF

SERVICE: Telex

COUNTRY: FRANCE

TEXT:

Cable No.: 791

Whi:

Following change Indonesia irrigation draft dated August fifteenth: paragraph two, line four delete "made" substituting the word "approved". Please notify London Bonn Rome. Scheduled for release mid-day Tuesday Noon EST. Confirmation will follow.

LIND

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MESSAGE AUTHORIZED BY:

NAME Mr. Lars J. Lind

DEPT. Information & Public Affairs

SIGNATURE.

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

LJL:esp

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

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Checked for Dispatch:

FROM: The Secretary

FOR EXECUTIVE DIRECTORS' DECLASSIFIED MAY 2 9 2018 WBG ARCHIVES

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For consideration on September 3, 1968

IDA/R63-47-L

August 23, 1968

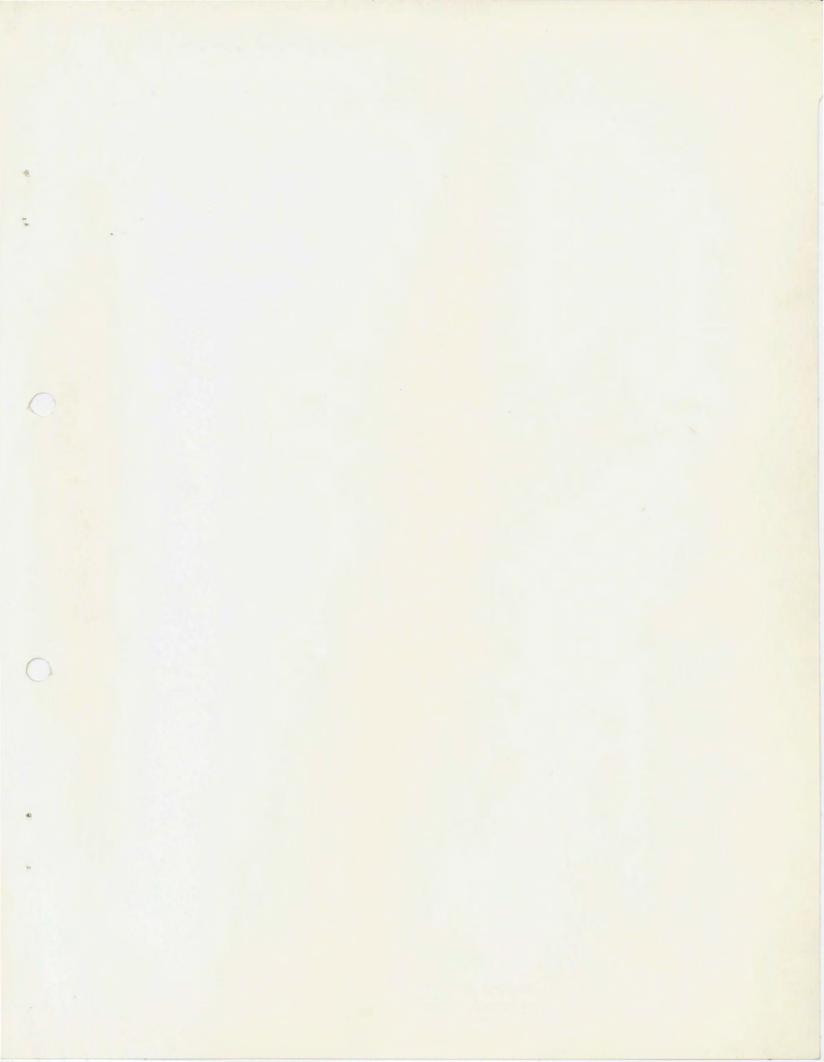
INDONESIA

In connection with the President's Report and Recommendation (P-629) on a proposed development credit to the Republic of Indonesia for an irrigation rehabilitation project, one copy of each of the following legal documents is attached:

- 1. Draft Development Credit Agreement
- 2. Recommendation of the Statutory Committee.

Distribution:

Executive Directors and Alternates President President's Council Executive Vice President, IFC Vice President, IFC Department Heads, Bank and IFC



IND

August 9, 1968

DEVELOPMENT CREDIT AGREEMENT
(Irrigation Rehabilitation Project)

Between

REPUBLIC OF INDONESIA

And

INTERNATIONAL DEVELOPMENT ASSOCIATION

Dated 1968

DEVELOPMENT CREDIT AGREEMENT

AGREEMENT, dated , 1968, between REPUBLIC OF INDONESIA (hereinafter called the Borrower) and INTERNATIONAL DEVELOPMENT ASSOCIATION (hereinafter called the Association):

ARTICLE I

Credit Regulations; Special Definitions

Section 1.01. The parties to this Agreement accept all the provisions of Development Credit Regulations No. 1 of the Association dated June 1, 1961, as amended February 9, 1967, with the same force and effect as if they were fully set forth herein (said Development Credit Regulations No. 1 being hereinafter called the Regulations).

Section 1.02. Unless the context otherwise requires, the following terms wherever used in the Development Credit Agreement have the following meanings:

- (a) "Ministry" means the Ministry of Public Works and Power of the Borrower;
- (b) "Directorate" means the Directorate General of Water Resources Development, an agency of the Borrower within the Ministry, and includes any successor to such agency.

ARTICLE II

The Credit

Section 2.01. The Association agrees to make available to the Borrower, on the terms and conditions in the Development Credit Agreement set forth or referred to, a development credit in an amount in various currencies equivalent to five million dollars (\$5,000,000).

Section 2.02. (a) The Association shall open a Credit Account on its books in the name of the Borrower and shall credit to such Account the amount of the Credit.

(b) The amount of the Credit may be withdrawn from the Credit Account as provided in, and subject to the rights of cancellation and suspension set forth in, this Agreement and the Regulations and in accordance with the allocation of the proceeds of the Credit set forth in Schedule 1 to this Agreement, as such allocation shall be modified from time to time as provided in such Schedule or by further agreement between the Borrower and the Association.

Section 2.03. (a) The Borrower shall be entitled to withdraw from the Credit Account in respect of the reasonable cost of goods required for the Project and to be financed under this Agreement:

(i) such amounts as shall have been paid (or if the Association shall so agree, as shall be required to meet payments to be made) in currencies other than that of the Borrower, for expenditures under Categories 1 through 5 of the allocation of the proceeds of the Credit set forth in Schedule 1 to this Agreement; and

- (ii) the equivalent of seventy-five per cent (75%) of such amounts as shall have been expended by the Borrower on the operation and maintenance described under Category 6 of such Schedule 1; provided, however, that if there shall be a change in the estimate of such expenditures or in the total amount of the proceeds of the Credit allocated to such Category, the Association shall by notice to the Borrower adjust the above percentage as required in order that withdrawals of the amount of the Credit then allocated to such Category and not withdrawn may continue pro rata with the expenditures to be made under such Category.
- (b) Except as shall be otherwise agreed by the Association, no withdrawals shall be made on account of expenditures made prior to the date of this Agreement.

Section 2.04. The Borrower shall pay to the Association a service charge at the rate of three-fourths of one per cent (3/4 of 1%) per annum on the principal amount of the Credit withdrawn and outstanding from time to time.

Section 2.05. Service charges shall be payable semi-annually on April 1 and October 1 in each year.

Section 2.06. The Borrower shall repay the principal amount of the Credit in semi-annual installments payable on each April 1 and October 1 commencing October 1, 1978 and ending April 1, 2018, each installment to and including the installment payable on April 1, 1988 to be one-half of one per cent (1/2 of 1%) of such principal amount, and each installment thereafter to be one and one-half per cent (1-1/2%) of such principal amount.

Section 2.07. The currency of the United States of America is hereby specified for purposes of Section 3.02 of the Regulations.

ARTICLE III

Use of the Proceeds of the Credit

Section 3.01. The Borrower shall apply the proceeds of the Credit in accordance with the provisions of this Agreement to expenditures on the Project, described in Schedule 2 to this Agreement. For the purpose, such proceeds shall be made available to the Ministry for use by the Directorate.

Section 3.02. Except as the Association shall otherwise agree,

(i) goods, other than consulting services, to be financed out of the

proceeds of the Credit shall be procured on the basis of international

competitive bidding in accordance with the Guidelines for Procurement

under World Bank Loans and IDA Credits published by the Association

in February, 1968 and in accordance with such other procedures supple
mentary thereto as shall be agreed between the Borrower and the Asso
ciation, and (ii) contracts for the procurement of all goods shall

be subject to the approval of the Association.

Section 3.03. Except as the Borrower and the Association shall otherwise agree, the Borrower shall cause all goods financed out of the proceeds of the Credit to be used exclusively in the carrying out of the Project.

ARTICLE IV

Particular Covenants

Section 4.01. (a) The Borrower shall carry out the Project with due diligence and efficiency and in accordance with sound agricultural, engineering, economic and financial policies and practices and shall make available, or cause the regional administrations to make available, promptly as needed the funds, facilities, services and other resources required for the purpose.

- (b) In carrying out the Project the Borrower shall employ consultants acceptable to the Borrower and the Association to work with the Directorate. The nature and scope of the responsibilities of such consultants and the other terms and conditions of their employment shall be determined in respect of each part of the Project by agreement between the Borrower and the Association.
- (c) Upon request from time to time by the Association, the Borrower shall promptly furnish to the Association the plans, specifications and work schedules for the Project, and any material modifications subsequently made therein, in such detail as the Association shall request.

- (d) The Borrower shall maintain or cause to be maintained records adequate to identify the goods financed out of the proceeds of the Credit, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect in accordance with consistently maintained sound accounting practices the expenditures and availability of funds in respect of the works and facilities included in the Project, of any agency or regional administration of the Borrower responsible for the construction, operation or maintenance of such works and facilities or any part thereof and shall enable the Association's representatives to inspect the Project, the operation of the works and facilities included therein, the goods and any relevant records and documents.
- (e) The accounts relating to the Project to be kept pursuant to paragraph (d) above shall be audited annually by an independent auditor acceptable to the Association, and copies of the reports of such auditor shall be furnished promptly to the Association.

Section 4.02. (a) The Borrower shall cause the works and facilities included in the Project, and the machinery and equipment to be financed out of the proceeds of the Credit, to be operated and maintained, and to be renewed from time to time as necessary, in accordance with sound agricultural, engineering, economic and financial policies and practices and shall take such action as shall be reasonably required to ensure the economic use of the water made available by such works for agricultural development.

- (b) In order to assist in the provision of funds for the operation and maintenance of the facilities included in the Project, the Borrower shall obtain, from the users of such facilities, a substantial contribution towards the cost of such operation and maintenance.
- (c) For the Way Seputih system, the Borrower, through the regional administration, shall establish, maintain and enforce the collection of charges which, upon completion of the system, will enable the recovery on an experimental basis from the users of the irrigation system of the full costs of operation and maintenance of such system;
- (d) With the assistance of the consultants, the Borrower shall study the actual costs of operation and maintenance of all systems included in the Project, and will submit to the Association its proposals for methods for the financing of such costs, including the proportions thereof to be borne by the users of the systems.
- Section 4.03. (a) In carrying out and operating the Project the Borrower shall coordinate the activities of its ministries, departments, regional administrations and other agencies in accordance with sound administrative policies and practices and under experienced and competent personnel.
- (b) To ensure such coordination in the rehabilitation of the irrigation systems included in the Project, including the

tertiary canals, the Directorate shall charge the regional Directors of Public Works with the responsibility for such rehabilitation, and the Borrower shall ensure, through the regional administration, that all district and village authorities follow the directives of such Directors in matters relating to the carrying out of the Project.

Section 4.04. (a) The Borrower and the Association shall cooperate fully to ensure that the purposes of the Credit will be accomplished. To that end, the Borrower and the Association shall from time to time, at the request of either party, exchange views through their representatives with regard to the performance by the Borrower of its obligations under the Development Credit Agreement, and to the administration, operations and financial condition with respect to the Project, of the Ministry, the Directorate, the regional administrations and any other agency of the Borrower responsible for the carrying out of the Project or any part there-of, and other matters relating to the purposes of the Credit.

(b) The Borrower shall furnish or cause to be furnished to the Association all such information as the Association shall reasonably request concerning the Credit and the maintenance of the service thereof, the expenditure of the proceeds of the Credit, the goods financed out of such proceeds, the Project, and the administration, operations and financial condition with respect to the Project, of the Ministry, the Directorate, the regional administrations and any other agency of the Borrower responsible for

the carrying out of the Project or any part thereof. Such information shall include information with respect to financial and economic conditions in the territories of the Borrower and the international balance of payments position of the Borrower.

(c) The Borrower shall promptly inform the Association of any condition which interferes with, or threatens to interfere with, the accomplishment of the purposes of the Credit, the maintenance of the service thereof or the performance by the Borrower of its obligations under the Development Credit Agreement.

Section 4.05. The principal of, and service charge on, the Credit shall be paid without deduction for, and free from, any taxes, and free from all restrictions, imposed under the laws of the Borrower or laws in effect in its territories.

Section 4.06. This Agreement shall be free from any taxes that shall be imposed under the laws of the Borrower or laws in effect in its territories on or in connection with the execution, issue, delivery or registration thereof.

Section 4.07. Except as the Association and the Borrower shall otherwise agree, the Borrower undertakes to insure the imported goods to be financed out of the proceeds of the Credit against marine, transit and other hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable by the Borrower to replace or repair such goods.

Section 4.08. The Borrower shall afford all reasonable opportunity for accredited representatives of the Association to visit any part of the territories of the Borrower for purposes related to the Credit.

Section 4.09. The Borrower shall ensure the optimum rate of utilization of the earth-moving machinery and equipment to be financed out of the proceeds of the Credit for use in carrying out the Project.

Section 4.10. The Borrower shall take such action as shall be necessary to provide adequate supporting services in each area benefitting from any part of an irrigation system rehabilitated as part of the Project, including the offering to farmers of agricultural inputs and extension services under the plans currently known as BIMAS or INMAS, or under similar plans subsequently introduced.

ARTICLE V

Remedies of the Association

Section 5.01. (i) If any event specified in paragraph (a) or paragraph (c) of Section 5.02 of the Regulations shall occur and shall continue for a period of thirty days, or (ii) if any event specified in paragraph (b) of Section 5.02 of the Regulations shall occur and shall continue for a period of sixty days after notice thereof shall have been given by the Association to the Borrower, then at any subsequent time during the continuance thereof, the Association, at its option, may declare the principal of the Credit then outstanding to be due and payable immediately, and upon any such declaration such principal shall become due and payable immediately, anything in this Development Credit Agreement to the contrary notwithstanding.

ARTICLE VI

Effectiveness

Section 6.01. The following event is specified as an additional condition to the effectiveness of this Agreement within the meaning of Section 8.01(b) of the Regulations, namely, that the consultants referred to in Section 4.01(b) of this Agreement shall have been employed.

Section 6.02. If this Development Credit Agreement shall not have come into force and effect by *, this Development Credit Agreement and all obligations of the parties hereunder shall terminate, unless the Association, after consideration of the reasons for the delay, establishes a later date for the purposes of this Section. The Association shall promptly notify the Borrower of such later date.

^{*} A date about 90 days after signing will be inserted.

ARTICLE VII

Miscellaneous; Termination

Section 7.01. The Closing Date shall be June 30, 1974, or such later date as may be agreed between the Borrower and the Association.

Section 7.02. The Linister of Finance of the Borrover is designated for the purposes of Section 7.03 of the Regulations.

Section 7.03. The following addresses are specified for the purposes of Section 7.01 of the Regulations:

For the Borrower:

Ministry of Finance Post Office Box 21 Djakarta, Indonesia

Cable address:

Ministry Finance Djakarta For the Association:

International Development Association 1818 H Street, N. W. Washington, D. C. 20433 United States of America

Cable address:

INDEVAS Washington, D. C.

IN WITNESS WHEREOF, the parties hereto, acting through their representatives thereunto duly authorized, have caused this Development Credit Agreement to be signed in their respective names and to be delivered in the District of Columbia, United States of America, as of the day and year first above written.

REPUBLIC OF INDONESIA

By		
Authorize	ed Representa	ative
INTERNATIONAL	DEVELOPMENT	ASSOCIATION
Des		
By	President	
	riestaent	

SCHEDULE 1

ALLOCATION OF PROCEEDS OF CREDIT

Cat	egory	US Dollar Equivalent
1.	Dredgers	400,000
2.	Draglines	400,000
3.	Tractors, Scrapers, Graders and Dump Trucks	800,000
4.	Vehicles, Equipment Transporters, Concrete Mixers, Compressers, Pumps and Equipment for Stationary Repair Shops; Mobile Repair Shops; Materials	
	and Supplies	800,000
5.	Consultants' Services	1,250,000
6.	Operation and Maintenance of above- listed Machinery and Equipment	1,000,000
7.	Unallocated	350,000
	TOTAL	5,000,000

Reallocations upon Changes in Cost Estimates

- 1. If the estimate of the cost of items under any of Categories 1 through 5 shall decrease, the amount of the Credit allocated to, and no longer required for, such Category will be reallocated by the Association to Category 7. Any amount remaining in such Category 7 after all required reallocations to any of Categories 1 through 5 shall be reallocated to Category 6.
- 2. If the estimate of the cost of items under any of Categories 1 through 5 or of expenditures under Category 6, shall increase, the Association will, at the request of the Borrower, reallocate from Category 7 to the appropriate Category an amount

equivalent to the portion, if any, of such increase to be financed out of the proceeds of the Credit; subject, however, to the requirements, as determined by the Association, for contingencies in respect of the cost of the items in the other Categories.

SCHEDULE 2

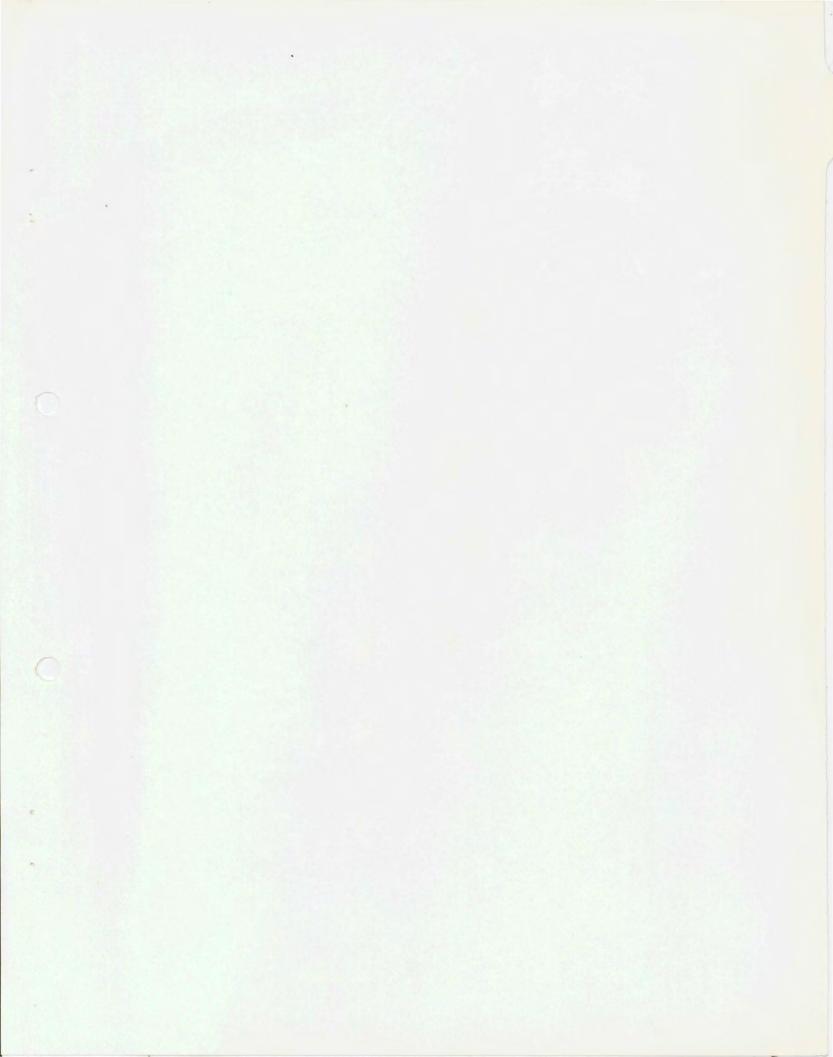
DESCRIPTION OF THE PROJECT

The Project includes the rehabilitation of the East Semarang, Rentang and Tjisedane irrigation systems in Java and the completion of the Way Seputih irrigation system in Sumatra Within a five-year period, using earth-moving machinery and materials financed cut of the proceeds of the Credit, together with manual labor. The Project also includes the following:

- (a) <u>Technical Assistance</u>: an engineering study by consultants of the rehabilitation problem in the areas concerned, the drawing up of a detailed plan for the execution of the project as well as rules for the future operation and maintenance of the systems, including the financing thereof, and the preparation of a further project for irrigation rehabilitation in other areas.
- (b) Training and Procurement: the training of operators and mechanics and the procurement of earthmoving machinery and equipment, spare parts, repair shops and materials.
- (c) Pilot Area for Improved Irrigation Management: the establishment of the Way Seputih irrigation system as a pilot area for unified irrigation management.

* * *

The Project is expected to be completed by December, 1973.



RECOMMENDATION OF STATUTORY COMMITTEE

To: The President, International Development Association

Recommendation of the Committee under Section 1(d) of Article V of the Articles of Agreement on the proposed Development Credit (Irrigation Rehabilitation Project) to the Republic of Indonesia.

The undersigned Committee constituted under Section 1(d) of Article V of the Articles of Agreement of International Development Association (the Association) hereby submits its recommendation pursuant to said Section in respect of the proposal that the Association grant to Republic of Indonesia a development credit in an amount in various currencies equivalent to U. S. \$5,000,000. The purpose of said development credit is to assist the Borrower in financing the rehabilitation of three existing irrigation systems in the provinces of Central and West Java and the completion of a new irrigation system in Lampung Province, southern Sumatra.

- 1. The Committee has carefully studied the merits of the proposal to grant such a development credit, and of the purposes to which the proceeds of the development credit are to be applied.
- 2. The Committee is of the opinion that the project toward the financing of which the proceeds of such development credit are to be applied comes within the purposes of the Association as set forth in Article I of said Articles of Agreement, and that said project is designed to promote the economic development of Indonesia and is of high developmental priority in the light of the needs of Indonesia.

3. Accordingly, the Committee finds that said project merits financial assistance from the Association, and hereby recommends said project for such assistance.

COMMITTEE

IND - druit

FOR EXECUTIVE DIRECTORS' MEETING MAY 2 9 2018
WBG ARCHIVE:

CONFIDENTIAL

For consideration on September 3, 1968

IDA/R68-47

August 22, 1968

FROM: The Secretary

INDONESIA

- 1. Attached is the President's Report and Recommendation (P-629) on a proposed development credit to the Republic of Indonesia for an irrigation rehabilitation project.
- 2. Attached to the President's Report and Recommendation is a report entitled "Irrigation Rehabilitation Project Indonesia" (TO-658a).
- 3. A report entitled "Economic Development of Indonesia" (AS-132a) was distributed to the Executive Directors on February 21, 1968 (R68-29).
- 4. A draft Development Credit Agreement and the Recommendation of the Statutory Committee are being distributed as report IDA/R68-47-L.
- 5. Questions on these documents should be referred to Mr. Ziegler (extension 2495).

Distribution:

Executive Directors and Alternates President President's Council Executive Vice President, IFC Vice President, IFC Department Heads, Bank and IFC

IND - dry

Form No. 27 (7-61)INTERNATIONAL DEVELOPMENT **ASSOCIATION**

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO:

SUNDARU

DATE:

AUGUST 22, 1968

MINISTRY OF FINANCE DJAKARTA

CLASS OF

SERVICE:

MI FULL RATE

COUNTRY:

INDONESIA

RRA

TEXT: Cable No.:

REHABILITATION PROJECT STOP LETTER PROVIDES TO RECEIVE INFORMATION

Bui

MENTIONED IN SECTION FOUR BY SEPTEMBER 30 1968 UNDERSTAND

INFORMATION REQUESTED COULD BE AVAILABLE END AUGUST STOP WOULD

APPRECIATE RECEIVING MATERIAL BEFORE DIRECTORS MEETING SEPTEMBER 3

BRAKEL INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

Gordon M. Street

DEPT.

SIGNATURE

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

HJZiegler/GMStreet:epa

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

cc: Messrs. ffrench-Mullen, Grosvenor/ McCarthy, TJones/Walser, JMalone, Schebeck, Tims

Checked for Dispatch:

For Use by Archives Division

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL FINANCE CORPORATION

IND-day

OUTGOING WIRE

TO:

DIRECTOR GENERAL

WATER RESOURCES DEVELOPMENT

DJAKARTA

AUGUST 20, 1968 DATE:

CLASS OF

L.T. SERVICE:

ROH

COUNTRY:

Cable No.:

INDONESIA

TEXT:

REFERENCE YOURLET AUGUST EIGHT NO OBJECTIONS YOUR LIST CONSULTANTS

BARTSCH

INDEVAS

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME L.W. Bartsch

PR.

DEPT. Projects - Agriculture

SIGNATURE.

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

MDfM/asg

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

Cleared with H. Ziegler

cc: Messrs. Brakel, Ziegler, Walser, Grosvenor, Malone, Files

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Checked for Dispatch: .

INTERNATIONAL FINANCE

AUGUST 28, 1968

OUTGOING WIRE

DIRECTOR GENERAL

WATER RESOURCES DEVELOPMENT

CLASS OF .T.J

INDOMESTA

REPERBUGE YOURLET AUGUST EIGHT NO ORJECTIONS YOUR LIST CONSULTANTS

Cable No.s

TEXT:

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME L.W. Bartson

DEPT. Projects - Agricultapres

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE) RECEIVED

(IMPORTANT: See Secretaries Guide for praparing form)

COMMODISCATIONS
COLEMES with Happegler
co: Wester Draken Maler, Walser,

BISELTCHED

Mr. Viggo Christensen, Paris Office

August 21, 1968

Lars J. Lind

Change in Indonesian irrigation credit draft

The following change should be made in the draft press release on a \$5 million IDA credit for the rehabilitation of Indonesia's irrigation system: Paragraph 5, line 2 after "present level" add "in the project area".

I will telex the timing of this release after the Board meeting on September 3. Fort likely to be at noon that was.

cc: Mr. H. R. Hayles, London Mrs. Erika Andres, Heppenberg, Germany Signora Vittorianna Simoni, Rome

LL;esp

IND - dry

August 20, 1968

Ir. Sujono Sosrodarsono Director General Water Resources Development c/o Ministry of Public Works and Power Djakarta, Indonesia

Dear Sir:

With reference to your letter of August 8, submitting a list of consultants whom you intend to approach in connection with the IDA credit for the Irrigation Rehabilitation Project, I confirm that we have no objection to your list of five consultants.

This confirms my cable of even date which read as follows:

"Reference yourlet August eight no objections your list consultants".

Yours sincerely,

PP. L.W. Bartsch Chief, Irrigation Section Agriculture Division Projects Department

MDfM/asg IDA

cc: Messrs. Brakel Ziegler Walser Grosvenor Malone Files

CONFIDENTIAL

CONFIDENTIAL

LOAN COMMITTEE

DECLASSIFIED

MAY 2 9 2018

WBG ARCHIVES

August 19, 1968

MEMORANDUM TO THE LOAN COMMITTEE

Indonesia - Irrigation Rehabilitation Credit

Attached for information is a memorandum from the Deputy Director of the Asia Department to the Chairman of the Loan Committee, dated August 19, 1968, transmitting for approval the draft Report and Recommendation of the President on a proposed credit for the first irrigation rehabilitation project.

Mark Cherniavsky Secretary Loan Committee

- DISTRIBUTION -

Committee:

Mr. J. Burke Knapp, Chairman
Mr. S.R. Cope, Deputy Chairman
Mr. S. Aldewereld, Vice President
Directors, Area Departments
Director, Projects Department
General Counsel
Director, Economics Department
Director, Development Services Department
Treasurer

Copies for Information:

President
The Economic Adviser to the President
Sir Denis Rickett, Vice President
Mr. M. Shoaib, Vice President
Directors, other Departments
Special Adviser to the President
Executive Vice President (IFC)
Vice President (IFC)

OFFICE MEMORANDUM

TO: Mr. J. Burke Knapp

August 19, 1968

FROM:

Raymond J. Goodman

SUBJECT: INDONESIA: Irrigation Rehabilitation Credit

- 1. Attached for your approval is a copy of the draft Report and Recommendation of the President on a proposed Credit to Indonesia for the first Irrigation Rehabilitation Project. Also attached is the draft Development Credit Agreement with Indonesia in which are incorporated all matters of substance, together with four Supplementary Letters on consultants, operation and maintenance of the irrigation systems, procurement and external debt. The supplementary letters contain only routine matters and will not be presented to the Board.
- 2. We are planning to distribute the Credit Documents to the Executive Directors not later than August 22 for consideration at the meeting of September 3, 1968. Indonesia is expected to complete formalities for IDA membership well before September 3.
- 3. The draft Appraisal Report (TO-658) was distributed to the Loan Committee on June 5, 1968 and was considered by the Committee without meeting. It recommended an IDA Credit amounting to US\$3.5 million equivalent. You subsequently agreed to increase the Credit to US\$5.0 million, of which \$500,000 are for additional consultants' services for the preparation of further projects of the same type, and \$1 million for local currency financing. As a result, IDA would now be financing 57 percent of the total project cost of \$8.8 million. No major changes have been made in the Appraisal Report other than those resulting from the increase of the Credit and therefore the revised version is not attached.
- 4. Negotiations, which went quite smoothly, did not result in any substantive changes. The information required in the external debt letter should be available before the signing of this Credit, with the Association giving a helping hand through the use of material compiled by a Fund staff member who was in Indonesia recently.
- 5. We would like to draw your attention to Sections 4.02(b),(c) and (d) and 4.09 on charges for the use of irrigation water and on the optimum usage of machinery and equipment, which are more flexible than the original recommendations of the Appraisal Report and thus more suitable to the organizational and administrative framework under which Indonesia operates.
- 6. The oral presentation to the Board on September 3 could probably best be used for a brief description of the present economic situation in Indonesia and the current aid picture, using as a basis the preliminary findings of the economic mission which has just returned from

Djakarta. The Board meeting which will deal with the \$2 million technical assistance credit, probably to be presented in October, will offer a better occasion for a presentation on Bank group activities in Indonesia, including the work of the Resident Mission.

- 7. The economic paragraphs in the President's Report and Recommendation have been approved by Mr. Kamarck.
- 8. This memorandum and the documents mentioned herein have been cleared with the Working Party.
- 9. I would appreciate your giving any comments you may have to Mr. Ziegler (Ext. 2495) by 10:00 a.m. on Wednesday, August 21.

Attachments

cc: Mr. McNamara Loan Committee (no attachments)

August 15, 1968

Letter No. 36

Mr. Alfred E. Matter c/o Hotel Indonesia Djalan Thamrin, Box 54 Djakarta, Indonesia

Dear Alfred,

I am attaching a copy of a letter of August 14 to the UNDP in New York regarding the tin exploration project. This letter, of course, draws heavily on what you wrote to me on this subject. IFC had little, if anything to add and George Naylor is not yet back.

As you may know, the designation of a project as one of "special interest" (see the last paragraph of Vincent Riley's letter) means that the Bank has an active interest in being kept informed and be given a chance to comment on further developments including proposed terms of reference, list of consultants if any, etc.

There is nothing much to report of a more general nature. As you know we successfully concluded our negotiations on the US\$5 million Irrigation Rehabilitation credit last week. The project will, unless last minute hitches occur, be discussed in the Board meeting of September 3 assuming that Indonesia completes formalities in time for becoming an IDA member; on that point, fortunately, it seems that the last hurdles have now been taken. You must already have received Mr. McDiarmid's back-to-office report and must also have seen Mr. Bell's memorandum to Mr. McNamara on a proposed Bank Group lending program to Indonesia for 1969 adding up to some US\$180 million or so. Excusez du peu! Finally we are arranging another Working Party meeting, this time in the presence of Bernie Bell and Ray Goodman on the proposed US\$2 million line of credit for Technical Assistance (see my memorandum to the members of the Loan Committee of August 14 - copy attached).

With best regards,

Sincerely yours,

Willem Brakel Asia Department

Enclosure WBrakel/rf ing - ant

August 15, 1968

Dr. Max Mueller c/o The Directorate General of Water Resources Djakarta, Indonesia

Dear Dr. Mueller:

Now that the Indonesian delegation has left Washington, I have time to gatch up with my correspondence and should like to take this opportunity of thanking you for the assistance which you gave to me during my recent visit to Indonesia.

I enjoyed your company on my tour to East Java, Kalimantan, North and South Sumatra, and was most grateful for the information which you were able to give me on the situation in provincial public works, offices, etc.

The negotiations went very well and you will be interested to know that the draft terms of reference for the consultants were accepted by our experts here. They suggested to Ir. Sujono an expansion of the background information as well as more detail for the duties of the consultants. Copies of these suggestions were made available to Ir. Sujono. The equipment specifications were also found acceptable. The problem is now to find suitable consultants, and Ir. Sujono has a group of six or seven firms which I understand he will approach following his return to Indonesia.

Thanking you again for all your assistance.

With kind regards,

Yours sincerely,

M.D. ffrench-Mullen Projects Department

MDfM/asg IBRD the assistance you gave to me during my recent visit to Indonesia, and trust that, in due course, you will consider the time well-spent. I did appreciate your cooperation in providing data and yet more data on possible projects, as well as your accompanying me during my tour of East Java, Kalimantan, and North and South Sumatra.

You will be interested to learn that the draft machinery specifications were found acceptable, as well as the terms of reference for the consultants. In the case of the latter, our experts here suggested some modifications in regard to the duties of the consultants, a matter of greater detail, and these Ir. Sujono has with him.

I should be grateful if you would convey my thanks for their assistance to the other members of your staff.

With kind regards,

Yours sincerely

M.D. Iftench-Mullen Projects Department

MDfM/asg IBRD

prob-aWI August 15, 1968 Ir. Suroso Director of Technical Division Bureau of Rehabilitation and Production Estates Department Djakarta, Indonesia Dear Ir. Suroso: Now that I am back in Washington and negotiations with the Indonesian delegation in connection with the IDA credit for the rehabilitation of irrigation systems have been completed, I have the opportunity to write and thank you most sincerely for all the assistance you gave to me during my recent visit to Indonesia. I enjoyed your company on our travels, and did appreciate your remaining in Medan in order to obtain the data the mission required on rubber, oil palm and tea, which should be most valuable in connection with possible future projects in these sectors. If I have again the pleasure of working in Indonesia, I trust that I shall be able to renew my working association with you on the many problems associated with the rehabilitation of estate agriculture in the country. Thanking you again for all your assistance. With kind regards, Yours sincerely. M. D. French-Mullen. Projects Department. MDfM/asg IBRD

August 15, 1968

Ir. Sujono Sosrodarsono Director General Water Resources Ministry of Public Works and Power Djakarta, Indonesia

Dear Ir. Sujono:

It was indeed pleasant seeing you in Washington, and I was glad to have the opportunity of showing you a little of the countryside before your departure. I trust you had a pleasant and uneventful journey back home via Europe, and that you will have no difficulty in securing suitable consultants for the IDA rehabilitation project.

During my recent visit to Indonesia, I did appreciate the time you and your staff gave me and the information which you supplied. Please convey my thanks to your staff. It is indeed a pleasure working with Water Resources.

Thanking you for all your assistance.

With kindest regards,

Yours sincerely,

M.D. Tfrench-Mullen Projects Department

MDfM/asg IBRD

IND-dui August 15, 1968 Mr. Alhambra Rachman Ministry of Agriculture Djakarta Indonesia Dear Mr. Alhambra: Now that the Indonesian delegation to Washington, in connection with the IDA credit for the rehabilitation of certain irrigation systems in Java have been completed, I am able to write and thank you for all the assistance you gave to me during my recent visit to I did appreciate your efforts in securing information that I required, and in setting up appointments for me to see various organizations. If I return to Indonesia in the future, I shall look forward to continuing our association. I trust that it will be possible to forward, in the near future, the additional information I was promised by the Director General of Fisheries. Again, many thanks for your assistance. With kind regards, Yours sincerely, M.D. ffrench-Mullen Projects Department MDfM/asg IBRD

AGRAR- UND HYDROTECHNIK GMBH · 43 ESSEN · POSTFACH 60

To the International Development Association

TELEFON: (02141) 227751*

TELEGRAMM: AGRARTECHNIK ESSEN

TELEX: 857 557 aht d

1818 H Street N.W.

Washington D.C. 20433

U. S. A.

IHR ZEICHEN

IHR SCHREIBEN VOM

UNSER ZEICHEN

43 ESSEN, HUYSSENALLEE 66-68

v.T-Kb

August 14th, 1968

Subject: Irrigation rehabilitation in Indonesia

Gentlemen,

We have been informed that your Organization is negotiating with the Government of Indonesia the financing of an irrigation rehabilitation project.

Being a company of consultants with experience especially in the field of irrigation and drainage we should appreciate if our firm will be put on the list of consultants asked for tender concerning the above mentioned project.

This kind of projects we have already executed in different parts of the world and we dispose of all the staff necessary. More information about our company please find in the brochure and the list of references which will be sent to you under separate cover. In these documents are also enlisted some of the projects we have executed in the field of irrigation and drainage.

We are registered with the World bank. All necessary information about our company and a complete questionair have been sent to Washington.

Sincerely Yours

UND HYDROTECHNIK GMBH

Dr. H.F. Bollmann

Director

BANKVERBINDUNG: BANKHAUS BURKHARDT & CO., ESSEN NR. 10180 FRANKFURTER BANK, FRANKFURT, KONTO-NR. 2735

IND-chin

AGRAR- UND HYDROTECHNIK GMBH

TELEFON: (02141) 227751*

TELEX: 857 557 aht d

TELEGRAMM: AGRARTECHNIK ESSEN

BERATENDE INGENIEURE

AGRAR- UND HYDROTECHNIK GMBH · 43 ESSEN · POSTFACH 60

To the International Development Association

1818 H Street N.W.

Washington D.C. 20433

U. S. A.

IHR ZEICHEN

THR SCHREIBEN VOM

UNSER ZEICHEN

V.T-Kb

43 ESSEN, HUYSSENALLEE 06-68 August 14th, 1968

Subject : Irrigation rehabilitation in Indonesia

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We are registered with the World bank. All necessary information about our company and a complete questionair have been sent to Washington.

Sincerely Yours

AGRAR- UND HYDROTECHNIK GMBH

Dr. H.F. Bollmann

Director

GESELLSCHAFTER DER DEUTSCHE PROJEKT UNION GMBH. BENN

BANKVERBINDUNG, BANKHAUS BURKHARDT & CO., ESSEN NR. 10180 FRANKFURTER BÄNK, FRANKFURT, KONTO-NR. 2786 MAY 2 9 2018
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IDA/SecM68-84

August 13, 1968.

FROM: The Secretary

STATUS OF NEGOTIATIONS

INDONESIA - IRRIGATION REHABILITATION PROJECT

Negotiations have been completed, and credit documents are expected to be submitted to the Executive Directors for consideration on September 3, 1968, assuming that Indonesia will have completed formalities for becoming a member of IDA by that time.

The following is a description of the proposed Credit:

Borrower: - Republic of Indonesia

Purpose: __ The rehabilitation of three irrigation systems

in Java and the completion of a new irrigation system in South Sumatra with a total area of about 198,000 hectares, and the preparation of further projects for irrigation rehabilitation

in other areas.

Amount: - Various currencies equivalent to US\$5 million.

Amortization: - The Development Credit would be for a period

of 50 years, repayable in semi-annual installments commencing October 1, 1978, and ending April 1, 2018; each installment up to and including payment due on April 1, 1988, to be 1/2 of 1 percent of such principal amount and each installment thereafter to be 1-1/2 percent

of such principal amount.

Service Charge: - 3/4 of 1%.

Distribution:

Executive Directors and Alternates President President's Council Executive Vice President, IFC Vice President, IFC Department Heads, Bank and IFC INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE

IDA credit 127 IND authoryptern

INCOMING WIRE

DATE OF WIRE:

AUGUST 9, 1968

2100

ROUTING

LOG NO.:

EG 28/9

.

ACTION COPY: MR. BRAKEL

- TO:

INDEVAS

INFORMATION MR. CARSTLL

FROM:

DJAKARTA

DECODED BY:

TEXT:

ASSOCIATION FOR INDONESIA, I HEREBY NOTINATE HONORABLE SUDJATIONO A MARKER OF A COMMITTEE PROVIDED FOR IN PARAGRAPH D OF SECTION 1 OF ARTICLE V OF THE ARTICLE OF AGREEMENT OF THE ASSOCIATION IN CONNECTION WITH THE PROPOSES FINANCING OF THE IRRIGATION REHABILITATION PROJECT IN INDONESIA.

ATH WARDHAMA

FINANCE MINISTER

MPB

IND-dung

Mr. Raymond J. Goodman

August 9, 1968

Willem Brakel

Indonesia: Irrigation Rehabilitation Project

Negotiations with the Indonesian delegation on the proposed \$5.0 million credit for irrigation rehabilitation were completed this morning. There were no further complications and the delegation confirmed that, unless we hear to the contrary from their Government before the end of next week, we can assume that the documents as finally agreed upon (copies will be sent around this afternoon) can form the basis for our presentation to the Executive Directors.

There remains the matter of IDA membership. According to our lawyer (Tenley Jones) all the documents the delegation took along on that matter have now been reviewed and have subsequently been approved by the Secretary's Department. There is one matter still outstanding however. Indonesia has paid in the 10% in gold or convertible currency, ut it still has to deposit the 90% local currency contribution, in the form of a note. This note together with an appropriate legal opinion has to be forwarded to and approved by the Association, before Indonesia can sign up (for which the Ambassador already has full powers of authority). The delegation has cabled their Government on this matter and Mr. Sundaru from the Ministry of Finame will follow up on it immediately upon his return to Djakarta around the middle of next week. He promised to cable us immediately about the degree of progress made and the exact date when the documents concerned will be mailed to us.

Altogether, a delay of at least two weeks seems likely (probably more if past history is any guidance) before Indonesia will be formally an IDA member. As a result it may not be possible to present the credit to the Board in time for the September 3 meeting (although once the documentation still required has been received, reviewed and approved very quick action is possible), unless we were to decide to present the credit before membership formalities are completed.

WBrakelicj

cc: Mr. Ziegler

File: IN-la; IN-ll

Washington, D.C.

August 8, 1968

International Development Association 1818 H Street Washington, D.C.

Dear Sirs:

Referring to the Development Credit Agreement between the Republic of Indonesia and the International Development Association, we herewith submit the list of consultants to whom the invitations for bid will be issued.

We would appreciate it very much if you could approve the attached list the somest possible.

Sincerely yours,

Sujeno Sosrodarsono Director General of Water Resources Development Republic of Indonesia

Attachment

of my 30

List of Consultants

- 1. Grontmy
- 2. Ilaco
- 3. Sir Alexander Gibb & Partners
- 4. Harza Engineering
- 5. Tams

August 8, 1968

Ir. Sujono Sosrodarsono
Head of the Indonesian Delegation
to the International Development
Association for negotiations on an
Irrigation Rehabilitation Credit
Washington, D.C.

Dear Ir. Sujono:

This is to confirm what we explained to you during credit negotiations regarding the purposes of Section 2.03(a) of the draft Development Credit Agreement for the proposed Irrigation Rehabilitation Project.

This section refers to the contribution the Association is prepared to make towards the costs of the project and sets forth the methods for disbursement of the proceeds of the credit to cover such costs. Paragraph (i) is restricted to costs in foreign currency of items 1 through 5 of Schedule 1 and therefore provides that the Association will pay the full c.i.f. costs of such items.

In order that withdrawals from the credit account for the purpose of covering Item 6 of the Schedule, Operation and Maintenance Expenditures, be spread over the entire five-year period of work on the project, they have been expressed in paragraph (ii) as a percentage of the expenditures now estimated to be needed to operate and maintain the machinery and equipment to be purchased abroad under the credit and used in the project. Such expenditures will, of course, be virtually all in local currency (Rupiahs). It is for this reason that, while Section 2.03 (a)(i) refers to amounts paid in currencies "other than that of the Borrower", Section 2.03 (a)(ii) does not make mention of any particular currencies and therefore does not contain any restrictions as to the type of currency involved (other than the standard requirement of Section 4.01 of the Credit Regulations that the Association can only disburse for expenditures in member countries of the Bank and in Switzerland).

The amount allocated under Item 6 of Schedule 1 for the operation and maintenance of the machinery and equipment concerned is \$1.0 million. Actual expenditures for this purpose are estimated at this stage at the equivalent of about \$1.4 million. This leads to the percentage of 75% mentioned in Section 2.03 (a)(ii). In order to ensure that the full amount available in the credit for this purpose will indeed be used and that at the same time payments by the Association for this purpose be spread out as evenly as possible throughout the time of the execution of the project, it is necessary that the percentage of 75% be subject to adjustment if either the actual expenditures on operation and maintenance would be different from the \$1.4 million equivalent estimated now, or if there would be an increase in the amount of \$1.0 million now allocated

under Item 6 of Schedule 1 due to additions to Category 6 made from savings resulting from actual c.i.f. costs of items in Categories 1 through 5 being less than now estimated, as specified in the last sentence of paragraph 1 at the bottom of Schedule 1.

In summary, the provisions of Section 2.03 (a) and of Schedule 1 are designed first to ensure that the entire amount of the credit, \$5.0 million, will be disbursed, even if the items in Categories 1 through 5 of Schedule 1 cost less than anticipated; and second, to ensure that some percentage of operation and maintenance costs under Category 6 will be reimbursed periodically throughout the entire period of work on the project, with no amount remaining undisbursed under such Category at the end of such period.

Sincerely yours,

Willem Brakel Asia Department

WBrakel:cj

Cleared w/and cc: Mr. T. Jones

Mr. J. Malone

August 6, 1968

J. Dumoulin

INDONESTA - Irrigation Rehabilitation - Government Draft Terms of Reference

- 1. The Directorate General of Water Resources Development (DWR) has done a good job in preparing the draft terms of reference. There are, however, minor remarks to be made.
- We should ask DWR to expand somewhat the background information on irrigation rehabilitation by including the major problems and constraints to be overcome, such as siltation, flood control, repair of structures, etc.
- 3. The part of the terms of reference for the proposed feasibility studies (2.2.1.; from April 1969 onward) are not given in enough detail. This is particularly true for engineering, agricultural, economic and financial, and organizational aspects.
- h. We should ask the Indonesian delegation to consider with attention the preliminary draft terms of reference which have been prepared within Agriculture Division. It seems to me that a combination of the two documents the Indonesian's and the Bank's would be satisfactory. I would, therefore, suggest to hand over to the Indonesians, copies of our preliminary draft terms of reference.

cc: Mr. T.C. Creyke

JDumoulinsvr 7 . D .

IDA condit 127 END. authorogation - consist agreement



REPUBLIK INDONESIA

No.: B. 44/M/IV/8/1968

Djakarta, 3 Agustus 1968.

FULL POMERS

Pursuant to Government Decree No. 25 of the year 1968 (Official Gazette No. 41) jo Law No. 3 of the year 1968 (Official Gazette No. 26) Honorable SUDJATLOKO, Ambassador of the Republic of Indonesia to the United States of America is authorized

- (a) to undertake negotiations with the International Development Association for a development credit to finance the irrigation rehabilitation program;
- (b) to sign the agreement with the International Development Association for implementing said development credit and which signature constitutes the valid and binding obligations of the Republic of Indonesia in according with their terms.

In testimony whereof, hand and scal of office are affixed at the City of Djakarta, this second of August, Hineteen Hundred and Sixty Bight.

THE HIMISTER OF FINALCE OF MIDORESIA,

Prof. Dr. Ali Wardhana



1 por higher () Op. files

BADAN PERENTJANAAN PEMBANGUNAN NASIONAL

(BAPPENAS)

DJALAN TAMAN SDEROPATI 2, DJAKARTA TELEPON: DG. 49321, DG. 49322, DG. 49328.

DJAKARTA. August 2, 1968.

LAMPIRAN

NO.

PERIHAL

Mr. I.P.M. Cargill Director, Asia Department International Bank for Reconstruction and Development Washington, D.C., U.S.A.

Dear Mr. Cargill :

I am pleased to inform you that the Indonesian Government has agreed to the seven points that you mentioned in your letter of June 13, 1968. Pending the passing of a bill concerning water-management we are at present drafting a Presidential Instruction which will include, among others, rules concerning a unified water-management system and concerning the cost of maintenance and operation of the irrigation system to be horn by the benefactors.

The Indonesian representatives to the formal negotiations in Washington are authorized to make decisions concerning the points mentioned in your letter.

With kind personal regards.

Sincerely yours,

Widjojo Nitisastro

Mr. W. Brakel

July 30, 1968

J.M. Malone, Jr.

INDONESIA - Irrigation Rehabilitation

I attach a copy of a letter from the Managing Director of Grontmij to Mr. Evans, informing the Bank of Grontmij's recent participation in a reconnaissance survey of irrigation rehabilitation and development in the Semarang area as well as a draft reply which, as you will see, says that we will request a copy of Grontmij's report through Dr. Lieftinck. Please let me know if this procedure and the attached draft letter are acceptable.

cc: Mr. Bartsch

JMMalone: fh

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

IND- during

OUTGOING WIRE

TO:

KEIKI OWADA

DATE: JULY 29, 1968

MINISTRY OF AGRICULTURE & FORESTRY

CLASS OF

UCHISAIWAICHO

SERVICE: LT

TOKYO

nT.

COUNTRY:

(JAPAN)

177

TEXT: Cable No.:

LESTER BARTSCH CHIEF WORLD BANK IRRIGATION SECTION ARRIVING TOKYO PAA 845
AUGUST 7 LEAVING AUGUST 10 STAYING OKURA HOTEL STOP WOULD APPRECIATE IF YOU
OR MR. UCHIMURA COULD ARRANGE INTERVIEWS FOR MR. BARTSCH WITH IRRIGATION
ENGINEER CANDIDATES FOR BANK EMPLOYMENT INCLUDING MESSRS. NAKAHARA AND
KUNIHIRO INTERVIEWED IN JULY WITH MR. OHTO'S HELP STOP LOOKING FOR MATURE
IRRIGATION ENGINEERS WITH BROAD EXPERIENCE PARTICULARLY IN PLANNING
CONSTRUCTION AND OPERATION OF IRRIGATION PROJECTS STOP THANKING YOU FOR
YOUR ASSISTANCE AND REGARDS

TAKAHASHI

INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME S. Takahashi

DEPT. Projects - Agriculture

SIGNATURE

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

ST:at IBRD

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

cc: Messrs. Suzuki, Denton

For Use by Archives Division

Checked for Dispatch: .

12

JULY 29, 1968

AUGUST 7 LEAVING AUGUST 10 STAYING OKUMA HOTEL STOP WOULD APPRECIATE IF YOU OR MR. UCHIMURA COULD ARRANGE INTERVIEWS FOR MR. BARTSCH WITH IRRIGATION ENGINEER CANDIDATES FOR BANK ENPLOYMENT INCLUDING MISSES. NAKAHARA AND RIVISIRO INTERVISMED IN JULY WITH MR. OHTO'S HELP STOP LOOKING FOR MATURE

NOT TO BE TRANSMITTED

M SO 2 20 64 1608

Projects - Agriculture

ST:RE

cc: Massrs. Suguld, Denton

Mrs. Evelyn E. Steed

July 26, 1968

H.J. Ziegler

Indonesia: Irrigation Rehabilitation Project - Negotiations

In connection with my memo of July 2h, 1968 on the above subject, please be advised that the negotiations scheduled for July 29 was postponed to August 5 and will continue through the end of the week as necessary. The conference room and office space for the negotiators remain the same.

cc: Mrs. Gilmore
Miss Deister
Mr. E.J. Donovan
Mr. C. Both
Gorrespondence (2)
Mr. Nott

HJZiegler:epa

FORM No. 26 (6-65)

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE CORPORATION

INCOMING CABLE

DATE AND TIME

OF CABLE:

JULY 26, 1968

1300

LOG NO.:

RC 22/29

TO:

INTBAFRAD

FROM:

DJAKARTA

ROUTING

ACTION COPY:

MR. BRAKEL

MR. CURTIN

INFORMATION COPY:

MR. CARGILL

DECODED BY:

TEXT:

V

19 FOR BRAKEL

Oc: W.P GOI NOW PROPOSES NEGOTIATIONS FOR IRRIGATION REHABILITATION CREDIT
TO START AUGUST 5. TEAM PREVIOUSLY MENTIONED WILL ARRIVE WASHINGTON
AUGUST 3. THIS ADDITIONAL TIME IS NEEDED FOR FURTHER CABINET DISCUSSION OF BANK CONDITIONS AND FINAL APPROVAL OF INDONESIAN NEGOTIATING
POSITION

SECUNDO FOR CURTIN

HOLDEN CAR ARRIVED TODAY IN GOOD ORDER

MATTER

MT

THE . MI. COMMISS.

TO START MUNCT 5. TIME PROPERTY PROPERTY OF THE ALLEY SEED TO START OF AUGUST 3. VAIS ALBIMONAS AND AND HOLDEN FOR FURTHER SERVER FILE

Working Party Members*

July 2h, 1968

Willem Brakel

INDONESIA: Negotiations for the US\$5 million Irrigation Rehabilitation Credit

The Indonesian Embassy confirmed today that the Indonesian delegation will be here in time to start negotiations on the aforementioned Credit on July 29, 1968. The team will consist of the following members:

Messrs. Ir. Soejono Sosrodarsono Saleh Affif Sundaru

The first meeting with the Indonesian delegation will be held on July 29 at 11:00 a.m. in Room 647, during which copies of the draft Gredit Agreement and other draft Gredit documents will be handed to the negotiating team.

There will be no meeting on Monday afternoon. The next session will be held on July 30, probably at 10:00 a.m. in Room 647.

HJZiegler/Whrakel:epa

Messrs. T. Jones

J. Malone

P. McCarthy

H.J. Ziegler

July 24, 1968

Mrs. Evelyn E. Steed

H.J. Ziegler

Indonesia: Irrigation Rehabilitation Project - Negotiations

1. Negotiations on an Irrigation Rehabilitation Project will begin on July 29, 1968 and continue through the end of the week as necessary. The representatives from the Indonesian Government will consist of:

Mesers. Ir. Soejono Sosrodarsono Saleh Affif Sundaru

The Bank team will consist of:

Messrs. Brakel, Asia Department
T. Jones, Legal Department
J. Malone, Projects Department
McGarthy, Treasurer's Department
Ziegler, Asia Department

- 2. Tea/coffee service for approximately 8 people will be required both in the morning and in the afternoon in Conference Room 647 (ext. 2756) and requests for this will be made by Estrella Angeles each day as needed.
- 3. Office space has been made available to Messrs. Soejono, Affif and Sundaru for the duration of the negotiations in Room 663 (extension 2630).

oc: Mrs. Gilmore
Miss Diester
Mr. E.J. Donovan
Mr. C. Both
Correspondence (2)
Mr. Nott



nr.

agricultural and civil consulting engineers reclamation and development projects

niects Dept. Correspondence

BBY wan

BD 8028 Ref.:BA/G1/DdW. Mr. L. J. C. Evans,
Deputy Director,
Projects Department,
International Bank for
Reconstruction and Development,
1818, H. Street N. W.,
WASHINGTON D.C. 20433,/USA.

de bilt, 22nd July, 1968.

Dear Mr. Evans,

Re: Indonesia.

In accordance with the telephone call, which our Mr. Bausch was able to have with you from Curacao on July 8th with regard to the Bank's possible activities in Indonesia, we have the pleasure to inform you as follows.

As Mr. Bausch told you, Grontmij has been requested some months ago by the Nederlands Government, Directorate for International Technical Assistance of the Ministry of Foreign Affairs, to participate in a reconnaissance survey in Central Java concerning the possibilities of rehabilitation and development of the irrigation in the area of Semarang and Demak.

The fieldwork had been completed on July 15th, when we were informed by the Director General of the Department of Water Resources Development of the Ministry of Public Works at Djakarta about the Bank's loan for equipment and consultant services in connection with the rehabilitation of irrigation in four areas in Indonesia, of which the Semarang-Demak area is to be one.

We confirmed to Mr. Sujono, the Director General, that in our report on the reconnaissance survey, which will be completed in October, the necessity of rehabilitating the existing irrigation system would be indicated as the first step required for the development of the area which, however, could be started immediately without waiting for the report on the merits and priorities of further development possibilities.

We also officially informed him and the Minister of Public Works, that Grontmij is very much interested in rendering the required consultants'services for the rehabilitation, for which especially in the case of the Glapan- and Sedadi - region around Demak, our company is particularly favourably situated because of the recent survey in which three of our senior experts participated.



If the Indonesian Government does propose our Company for the performance of consultants' services in connection with the World Bank's loan, we should like to let know also your Organization about our keen interest in this work which would indeed be the logical first step after the reconnaissance survey which has been made.

-2-

If you are interested in the report on the survey before it is completed, we feel confident that it would be possible to obtain permission from the Directorate for International Technical Assistance in The Hague to inform you about its contents and conclusions, and we would be willing to send one of our team members to Washington for this purpose.

Awaiting further decisions both from the Indonesian Government and your Organization, we remain,

> yours faithfully, GRONTMIJ N. V.,

Ir. I. Wiechers, Managing Director.



If the Indonesian Government does propose our Company for the performance of consultants' services in connection with the World Bank's loan, we should like to let know also your Organization about our keen interest in this work which would indeed be the logical first step after the reconnaissance survey which has been made.

If you are interested in the report on he survey before it is completed, we feel confident that it would be possible to obtain permission from the Directorate for International Technical Assistance in The Hague to inform you about its contents and conclusions, and we would be willing to send one of our learn members to Washington for his purpose.

Awaiting further decisions both from the Indonesian Government and your Organisation, we remain,

yours faithfully, GRONTMIJ N. V.,

Tr. I. Wiechers,

1968 JUL 26 AH 8: 42

SHOLLVOUPERDO

I ND - dring

Form No. 27
(7-61)
INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO:

MATTER

INTBAFRAD

DJAKARTA

DATE:

JULY 19, 1968

CLASS OF

SERVICE: LT

COUNTRY:

INDONESIA

TEXT:

Cable No.:

. 28

Chris

REURCAB SIXTEEN PLEASE INFORM WIDJOJO ASSOCIATION AGREEABLE TO START NEGOTIATIONS JULY 29 AND PREPARED TO INCLUDE IN CREDIT ONE MILLION DOLLARS LOCAL CURRENCY FINANCING BRINGING TOTAL TO FIVE MILLION STOP LAST BOARD MEETING BEFORE RECESS AUGUST 13 FIRST MEETING AFTER RECESS SEPTEMBER 10 STOP SIGNING FEW DAYS AFTER BOARD APPROVAL STOP AUGUST 13 NOW OUT BUT SEPTEMBER 10

LOOKS SAFE REGARDS

GOODMAN

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

R.J. Goodman

DEPT.

Asia

SIGNATURE.

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

HJZiegler/WBrakel:epa

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION: Cleared with Mr. W. Brakel

cc: Messrs. Foster, TJones, JMalone, McCarthy, Bell

For Use by Archives Division

Checked for Dispatch: _

JULY 19, 1968

OUTGOING WIRE

SHITTAM

REUBCAR SIXTEEN FLEASE INFORM WIDJOJO ASSOCIATION ACRESABLE TO START MEGOTIATIONS JULY 29 AND PREPARED TO INCLUDE IN CREDIT OME MILLION DOLLARS LOCAL CURRENCY FINANCING BRINGING TOTAL TO FIVE MILLION STOP LAST BOARD MEETING BEFORE RECESS AUGUST 13 FIRST MENTING AFTER RECESS SETTEMBER 10 STOP SIGNING FEW DAYS AFTER BOARD AFFROVAL STOF AUGUST 13 NOW OUT BUT SEPTEMBER 10

. J. J.

Asta

HJERelor/ Wrakel :opa

M 10 || uchpade

Heared Without.

co: Messrs, Poster, Plones, Julone,

McCarthy, Bell.

Letter No. 1

July 18, 1968

Mr. Wouter Tims c/o Hotel Indonesia Djalan Thamrin, Box 54 Djakarta, Indonesia

As you probably know, negotiations for the irrigation rehabilitation credit - meanwhile tentatively increased to \$5 million to include some local currency expenditures - are due to start on July 29. This means that, contrary to our expectations, it will not be possible to have the credit approved by the Executive Directors before the recess.

As to most things, there is at least one good side to this however. The Indonesians will have to provide us with the latest information on the external debt before the signing of the credit and they will now have more time to put their minds to this! Nevertheless, I am afraid they will still need help to come up with what we really require. For that purpose, I am enclosing copy of the draft external debt letter which we will have to the negotiating team. As you will see (end of point 2) we expect them to present a list of external public debt contracted since June 30, 1967 in an Annex (A) to the letter; also (point 4), we want them to undertake to provide before September 15 a good deal of other information on their debt position.

Assuming that all of this reaches you in time, could you please try to make sure that Annex A be prepared properly and in time. The best thing would be if you could take it along to Washington or extract a firm promise - preferably with Matter in the know - that somebody would send the Annex concerned to Washington before at the latest the end of August. Secondly, are we realistic to assume that they can indeed before September 15 supply all the information under point 4 of the external debt letter? If not, what other date should we insert which would give them enough time without however taking away all of the pressure?

All is well here. We are going to have a few heefic weeks coming up with two new loans to Malaysia to be negotiated starting next Monday in addition to the Indonesian negotiations. I hope you have had a reasonably pleasant time in Djakarta. I am sure it has been interesting and useful. Did you have a chance to see something of the outer-islands end of the rest of Java as well? Anyhow, I am looking forward to your return here and all the news you are bound to bring along with you.

8081

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL FINANCE CORPORATION

INCOMING CABLE

DATE AND TIME OF CABLE:

LOG NO.:

TO:

JULY 17, 1968

RC 9/18

INTBAFRAD

DJAKARTA

1930

ROUTING

ACTION COPY:

MR. VON HOFFMANN

IND - drug

MR. GOODMAN

INFORMATION

COPY:

MR. CARGILL

DECODED BY:

love peacods

TEXT:

FROM:

16

REURCAB 22 AND BETA MYCAB 15. NEGOTIATORS WILL BE SOEJONO FROM

IRRIGATION, AFFIR FROM BAPPENAS AND SUNDARU FROM MINFIN.

July 7

CAN ARRIVE WASHINGTON EARLIEST JULY 28. PLEASE ADVISE DATES

OF BOARD RECESS AND EARLIEST DATES FOR BOARD CONSIDERATION AND

SIGNING IF NEGOTIATIONS START 29

MATTER

NA

ado calle July 19

MENCHE ES THE BELL MICHE TO: LOCALINGSE MIET BY CONTONO SHOW

OW ARRIAM ANGLINGION EVENTIONS SOFT STREET VALUE MARKET ISBECARION, AFFIR TROM DATESTAS AND SCHOOL MAN MANAGEMENT. MAN

COUNTY NE CAMETAL

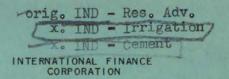
10" AUR HOLENWINE

WILLIA COSTA - DE. COCCEDE

JUL 18 10 18 AM 1968 GENERAL FILES COMMUNICATIONS

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT



INCOMING CABLE

DATE AND TIME OF CABLE:

JULY 17, 1968

LOG NO.:

RC 16/17

TO:

INTBAFRAD

FROM:

DJAKARTA

TEXT:

15

ROUTING

ACTION COPY:

PROJECTS - 342

INFORMATION

COPY:

DECODED BY:

"URCAB 20 ARRIVED HERE DAY AFTER TWO IMPORTANT MEMBERS OF NEGOTIATING TEAM
LEFT WITH FFRENCH-MULLEN FOR 10 DAYS VISIT TO EAST JAVA. GOI UNABLE
THEREFORE TO MEET YOUR 22 JULY DEADLINE.

MATTER

CROSS REFERENCE SHEET

COMMUNICATION:

SENIOR STAFF MEETING SSM/M/68-28

DATED:

July 16, 1968

TO:

FROM:

JILED UNDER:

SENIOR STAFF MEETING

SUMMARY:

AREA OPERATIONS

Asia

11. Mr. Bell, apropos of a report by Mr. Cargill that the Bank had invited Indonesia to send representatives to Washington the following week to negotiate a proposed \$4 million credit to cover the foreign exchange costs of an irrigation rehabilitation project, said that he hoped that it would be possible to increase the credit by about \$1 million to help to finance the local currency expenses of the project, which he feared Indonesia might otherwise have difficulty in meeting.

Ding - ant

Form No. 27 (7-61) INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO:

PROFESSOR WIDJOJO

BAPPENAS

DJAKARTA

DATE:

JULY 16, 1968

CLASS OF

SERVICE:

KY FULL RATE

COUNTRY:

INDONESIA

PO H

TEXT: Cable No.:

REOURCAB JULY 12 CAN CONFIRM THAT ASSOCIATION NOW READY TO START

NEGOTIATIONS ON IRRIGATION REHABILITATION CREDIT BEGINNING
THIS
JULY 22 STOP PLEASE ADVISE BY RETURN CABLE WHETHER/DATE SUITABLE

COMMA IF NOT WHAT LATER DATE YOU PREFER AND NAMES OF NEGOTIATORS

REGARDS

GOODMAN INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

R.J. Goodman

DEPT.

Asia

SIGNATURE

SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

HJZiegler/WBrakel:epa

ORIGINAL (File Copy)

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Checked for Dispatch:

lias

ME FULL RATE

JULY 16, 1968

RECURCAS JULY 12 CAN CONFIRM THAT ASSOCIATION NOW READY TO START NEGOTIATIONS ON IRRIGATION REHABILITATION CREDIT ESSIGNATION JULY 22 STOP PLEASE ADVISE BY RETURN CASLE WHETHER DATE SUITABLE

COMMA IF NOT WHAT LATER DATE YOU FREEER AND NAMES OF MECOTIATORS

HOT TO BE TRANSMITTED

R.J. Goodman

Markeyler/Warshell:epa

Form No. 27 (7-61) INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO:

MATTER

INTBAFRAD

DJAKARTA

DATE:

JULY 16, 1968

CLASS OF

SERVICE:

FULL RATE

COUNTRY:

INDONESIA

ROH

TEXT:

Cable No.:

26

HAVE CABLED WIDJOJO TODAY QUOTE REOURCAB JULY 12 CAN CONFIRM THAT
ASSOCIATION NOW READY TO START NEGOTIATIONS ON IRRIGATION
REHABILITATION CREDIT BEGINNING JULY 22 STOP PLEASE ADVISE BY RETURN
CABLE WHETHER THIS DATE SUITABLE COMMA IF NOT WHAT LATER DATE YOU
PREFER AND NAMES OF NEGOTIATORS REGARDS UNQUOTE PEEASE FOLLOWUP

BRAKEL

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

Willem Brakel

DEPT.

NAME

Asia

SIGNATURE

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

HJZiegler/WBrakel:epa

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

For Use by Archives Division

Checked for Dispatch: __

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hay

9961 '91 AIR.

INTBAFFAR

ATEMPOORE

HAVE CARLED WIDJOJO TODAN QUOTE RECURCAS JULY 12 CAN CONFIRM THAT ASSOCIATION NOW READY TO START MEGOTIATIONS ON IRRIGATION REMARKILITATION CREDIT BEGINNING JULY 22 STOP PLEASE ADVISE BY RETURN CARLE WHETHER THIS DATE SUITABLE COMMA IF NOT WHAT LATER DATE YOU PRISTER AND NAMES OF MEGOTIATORS RECARDS UNQUOTE PERASE FOLLOWUP

Willem Brakel

HUZLerler/Whrakel :ena

Form No. 27 (7-61) INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: PROFESSOR WIDJOJO
BAPPENAS
DJAKARTA

DATE: J

July 12, 1968

CLASS OF LT

SERVICE:

RCA

COUNTRY: INDONESIA

TEXT:

Cable No.:

EXPECTS TO BE

REFERENCE MR CARGILL'S CABLE AND LETTER JUNE 13 BANK READY TO START

NEGOTIATIONS ON IRRIGATION REHABILITATION PROJECT JULY 22 SHEWECT

TOXONEXEDETHER COMPLEMENT ON NULT X TO REGARDS

GOODMAN

INTBAFRAI)

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

Mr. R. J. Goodman

DEPT.

Asia

SIGNATURE

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

For Use by Archives Division

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(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: .

25

Mr. T. Jones Mr. W. Brakel

TO FROFTSSOR WIDJOJO

DJAKARTA

July 12, 1968

COUNTRY: IMPONESIA

EXPECTS TO BE REFERENCE MR CARCILL'S CARLE AND LETTER JUNE 13 BANK KLADY TO START

MEGOTIATIONS ON IRRIGATION REMARKLITATION PROJECT JULY 22 SEPRETET

TO OUR TURNER COMPINE THE TEST COST IN RECARDS

GOCHMAN

COMMUNICATION with and oc: Mr. T. Jones Mr. W. Brakel

8961 Hd 60 g

DISPATCHED

21 700

Mr. R. J. Goodman

Asia

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL FINANCE CORPORATION

nodo pino - CUI

OUTGOING WIRE

TO: MATTER INTBAFRAD DJAKARTA

July 12, 1968 DATE:

CLASS OF SERVICE:

RCA

COUNTRY: INDONESIA

Cable No.:

HAVE TODAY CABLED WIDJOJO AS FOLLOWS QUOTE REFERENCE MR CARGILL'S CABLE

EXPECTS TO BE AND LETTER JUNE 13 BANK/READY TO START NEGOTIATIONS ON IRRIGATION

REHABILITATION PROJECT JULY 22 SUBJECT TO OUR FURTHER CONFIRMATION

JULY 15 REGARDS UNQUOTE FINAL CONFIRMATION WILL BE SENT UPON CLEARANCE OF CREDIT DOCUMENTS STOP IF INDONESIANDELEGATION UNABLE TO MEET THIS DATE PROPOSED CREDIT COULD NOT BE PRESENTED TO BOARD BEFORE SUMMER RECESS

REGARDS

GOODMAN

NOT	TO	DE	TDAL	MOM	ITT	En
1401	10	DE	IRA	LEIL	ш	EL

MESSAGE AUTHORIZED BY:

NAME

Mr. R. J. Goodman

DEPT.

Asia

SIGNATURE

(SIGNATURE O INDIVIDUAL AUTHORIZED TO APPROVE) CLEARANCES AND COPY DISTRIBUTION:

Cleared with cc: Mr. TJones

cc: Mr. WBrakel

For Use by Archives Division

HZiegler:hy //

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch:

OUTGOING WIRE

TO: MATTER INTRAFRAD DJAMARTA

TJ

July 12, 1968

INDONESTA

HAVE TODAY CARLED WIDJOJO AS FOLLOWS QUOTE REFERENCE MR CARCILL'S CABLE AND LETTER JUNE 13 BANK READY TO START NEGOTIATIONS ON IRRIGATION RIMABILITATION PROJECT JULY 22 SUBJECT TO ONE FURTHER CONFIRMATION JURY TE RECEPTS UNQUOTE FINAL CONFIRMATION WILL BE SENT UPON CLEARANCE OF CREDIT DOCUMENTS STOP IN INDOMESIA DELECATION UNABLE TO MEET THIS DATE PROPOSED CREDIT COULD NOT BE PRESENTED TO BOARD BEFORE SUMMER RECESS

GOODMAN

Mr. R. J. Goodman

SigA

INDIVIDUAL AUTHORIZED TO APPROVE)

21 700

8961 Hd 60 9

BISPATCHED

HZieglerthy //

CLEARANCES AND COPY DISTRIBUTION:

cc: Mr. WBrakel

COMMUNICATIONS CENERAL FILE Schered with cc: Mr. Tiones

INTERNATIONAL FINANCE

FO % No. 75 INTERNATIONAL BALL FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMEN

aom omitton	ASSOCIATION		
ROUTING SLIP	7-3-68		
NAME	ROOM NO.		
1. Ma Carmio	hall 492		
1. An Carmic	23AUG 68. 236		
To Handle	Note and File		
Appropriate Disposition	Note and Return		
Approval	Prepare Reply		
Comment	Per Our Conversation		
Full Report	Recommendation		
Information	Signature		
Initial	Send On		
REMAKKS			

From

C. Finne

IND-drug July 3, 1968 Mr. Robert F. Seedlock President Yuba Industries Inc. 612 Howard Street San Francisco, California 94105 Dear Mr. Seedlock! It gives me pleasure to acknowledge receipt of your letter, dated June 5, 1968 (which only arrived in the Bank on June 24), addressed to Mr. McNamara. It is not customary for the Bank to concern itself with any questions of equipment procurement in connection with the projects it finances. This responsibility is left to the borrower and the borrower generally carries it out with the assistance of consulting engineers. In principle, therefore, the proper approach for equipment suppliers who have an interest in the requirements of Bank projects is through the owner or its consultants. I am attaching copy of a small booklet entitled "Guidelines for Procurement under World Bank Loans and IDA Credits" which illustrates the main procedures followed by the Bank in this context. Before replying to your letter, however, I have circulated it and the attachments to those of the Bank staff who may be concerned with work in Indonesia and I am sure that if any special requirements should come to their attention in this particular field the information you have so kindly sent us will be referred to. Sincerely yours, Mario Piccagli Assistant Director - Projects Department in charge of Engineering Enclosure cc: Messrs. McNamara Chadenet MP:bli Inc.filed Mr.Finne

Landon-in June 25, 1968 Mr. K. H. L. Cooper Imperial Chemical Industries Limited Agricultural Division - Cetter June 113 P.O. Box No. 1 Billingham Co. Durham, England Dear Mr. Cooper: When Dr. Heinemann visited the Agricultural Division of IBRD we indicated that we were interested in the development activities of other organizations including CEA in Indonesia and also that we would be pleased to give the CEA some general information on the Irrigation Rehabilitation Program which the Bank has under consideration since the Bank Group Project and the FFHC, fertilizer program were both associated with the BIMAS program. The project which the Bank Group has under consideration for IDA credit of some \$4 million entails the rehabilitation of the irrigation system in East Semarang, Rentang and Tjisedane in Java and the completion of the Way Seputih irrigation system in Sumatra. The total cost of the project is estimated at about US\$8 million and is expected to reduce the need for rice imports by some \$7 million per amum. The eventual increase in rice production is expected to be substantially greater, however, since the rehabilitation of the irrigation systems will facilitate adequate and timely application of water which, in turn will enable farmers to make more effective use of modern agricultural inputs such as improved seeds, fertilizers and pesticides. The project will include an amount for technical assistance, consisting of an engineering study by consultants of the rehabilitation problem in the areas concerned, the drawing up of a detailed plan for the execution of the project as well as rules for the future operation and maintenance of the systems and the preparation of further projects for irrigation rehabilitation in other areas. The Agriculture Division would welcome information on the CEA's agricultural development activities in Indonesia as they become available. cc: Mr. L.W. Bartsch Mr. W. Brakel OTWPrice/vg Bank

Ind- vrig

June 19, 1968

Mr. J. Malone

T.C. Creyken

INDONESIA - Irrigation Rehabilitation Project

At my request, Peter Naylor read through the Green Cover of your report, and I attach hereto his comments for your consideration.

INTERNATIONAL DEVELOPMENT ASSOCIATION

RECONSTRUCTION AND DEVELOPMENT CORPORATION

INCOMING CABLE

DATE AND TIME

OF CABLE:

JUNE 19, 1968

1910

LOG NO.:

RC 13/20

TO:

CARGILL INTBAFRAD

FROM:

DJAKARTA

ROUTING

Indon-Res adu

ACTION COPY: MR. CARGILL

INFORMATION

COPY:

DECODED BY:

TEXT:

REURCAB JUNE 13 TO BAPPENAS WIDJOJO AND SALIM PRESENTLY IN TOKYO AND OTHER KEY MEMBERS ABSENT FROM DJAKARTA. BAPPENAS WOULD THERE-FORE PREFER JONES TO ARRIVE ABOUT JUNE 27

MATTER

MT

AUTICA COPY: MIR. CARRILL

AND OCHUR SEY MERCHES ANGERT FROM DALKAMES. BEFFERAR FOUR CHICKS

JUN 20 8 29 AM 1968

Indon-irrig.

June 13, 1968

Professor Widjojo Nitisastro Chairman National Economic Development Council (BAPPENAS) Djakarta, Indonesia

Dear Professor Widjojo:

In confirmation of my cable dated June 13, 1968, we have now completed our appraisal of an irrigation rehabilitation project and expect to be ready to negotiate a proposed Development Gredit equivalent to US\$4 million for this project during July. We shall cable the exact date later.

We found it necessary to depart somewhat from the project originally discussed in March between the Government and Appraisal mission, and the revised project would now cover rehabilitation of existing irrigation systems at East Semarang, Rentang and Tjisedane in Java as well as the completion of the new irrigation system Way Seputih in Sumatra, thus serving an area of about 198,000 hectares compared with the 228,000 hectares originally considered by the Appraisal mission. The project has been expanded to include substantial funds to finance the technical assistance which we believe you require for planning and implementing this project, as well as for the preparation of a further irrigation rehabilitation project which could be ready for appraisal by 1969/1970. Thus, this project would be the first step in the preparation and implementation of a well-planned program for the rehabilitation and subsequent operation and maintenance of Indonesia's irrigation systems.

We propose to make the Credit to the Government of Indonesia. Since this would be the first Credit to Indonesia, we feel it desirable that Mr. Tenlby Jones from our Legal Department visit your country at about June 25, in order to clarify constitutional and other legal questions concerning this Credit and to familiarize appropriate officials with the legal aspects of the transaction and with the forms of IDA credit documents. This would also give you the opportunity to discuss with him the terms of the proposed Credit before formal negotiations take place in Washington. We would expect negotiations to take place about ten days following Mr. Jones' return to Washington.

1968 JUN 19 PM 5: 18

COMMUNICATIONS

out aux 2

Indep- wing.

Ause 13, 1968

Professor Widjojo Wibisastro Chriman National Booncate Development Gennell (EAFPEMAS) Bjakarta, Indonesia

pear Professor Midjojo:

In confirmation of my cable dated Jume 13, 1968, we have now completed our appraisal of an irrigation rehabilitation project and expect to be ready to negotiate a proposed Davelopment Oredit equivalent to USSH million for this project during July. We shall cable the exect date later.

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the revised project would now cover rehabilitation of existing irrigation
systems at Mass Samarang, Mentang and Tilsedsne in Jeva as well as the
completion of the new irrigation system May Sepatih in Samatre, thus serving
an eras of about 198,000 heaters compared with the 228,000 heaters originally considered by the Appraisal mission. The project has been expanded to
include substantial funds to finance the technical senistance which we
believe you require for planning and implementing this project, as well as
for the preparation of a further irrigation rehabilitation project which
could be ready for appraisal by 1969/1970. Thus, this project would be the
first step in the preparation and implementation of a well-planned progress
for the rehabilitation and subsequent operation and mintensace of
independate irrigation systems.

We propose to make the Cradit to the Government of Indonesia. Since this reals be the first Gredit to Indonesia, we feel it desirable that Mr. Tenkly Jones from our legal Department visit your country at about June 25, in order to clarify constitutional and other legal questions concerning this Gradit and to familiarise appropriate officials with the legal aspects of the transaction and with the forms of IBA cradit documents. This would also give you the opportunity to discuss with him the terms of the proposed Gradit before formal negotiations take place in Mashington. We would appear negatiations to take place about ten days following Mr. Jones' return to Mashington.

1968 JUN 19 PM 5: 18

ENTITLES COMMUNICATIONS

My Chully 2

During negotiations we wish to reach particular agreement on the following points:

- (a) That any equipment to be financed under the project would be fully and efficiently utilized and properly maintained;
- (b) That the Government would retain the services of a consulting firm, acceptable to the Association;
- (c) That project accounts would be audited annually by an independent auditor mutually acceptable to the Government and the Association:
- (d) That District authorities would be responsible to and follow instructions from the provincial Directors of Public Works in all matters relating to the project, particularly the rehabilitation of the tertiary canals;
- (e) That the irrigation systems included in the project would be properly maintained and operated in the future and that the farmers benefiting from the project would contribute a share of the costs of operation and maintenance;
- (f) That in Way Seputih a new procedure would be instituted on an experimental basis which would permit the full recovery of the costs of operation and maintenance of the irrigation system; and
- (g) That in the part of each irrigation system rehabilitated or completed during each successive dry season, the BIMAS package would be made available.

Mr. Jones will be in a position to explain to you why we would wish to obtain these assurances during negotiations in Washington and your representatives should be vested with the authority to make decisions in respect to the points mentioned above.

Sincerely yours,

I.P.M. Gargill Director Asia Department

cc: Mr. A. Tazi

Cleared with & cc: Messrs. Brakel, Crosvenor, T. Jones, J. Malone

cc: Messrs. ffrench-Mullen, Foster, Schebeck, Tims, Matter, Goodman/Street

HJZiegler/JFoster/WBrakel:epa



Imperial Chemical Industries Limited

AGRICULTURAL DIVISION

P.O. Box No. 1, Billingham, Co. Durham

Telephone: STOCKTON-ON-THES 53601 Telex: 58523 ICHBILL, STOCKTN

Dr. O. T. W. Price, International Bank for Reconstruction and Development, 1818 H Street, N.W., WASHINGTON, D.C., 20433 U.S.A.

Your Ref.

Our Ref. PLC/DJH/CJB Tel.Ext.3269

13th June 1968

Projects Dept. Correspondence

ANS'D BY _____

.

Dear Owen,

I have been asked by Mr. K. H. L. Cooper to let you know that the Centre d'Etude de l'Azote has recently agreed to a proposal to support an FAO FFHC Fertilizer Programme in Java (Indonesia). Details have still to be worked out between the Centre, FAO and the Indonesian Government, but the general idea is that an expert should be assigned to this programme for a period of 3 years to organise trials and demonstrations on rice, limited in the first instance to the province of Jogjakarta in Central Java, and working in close collaboration with the existing BIMAS Scheme. If you would like further information as the Programme develops, please let me know.

You may also be interested to know that the FFHC Fertilizer Programme in India (Unnao/Lucknow, U.P.) is proceeding satisfactorily and that we have just had an order on behalf of H.M. Government for a second consignment of urea for use in this Programme.

With best regards,

Yours sincerely,

Airling.

D. J. Halliday

Planning Co-ordination Department

ach you 2 5

ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

IND - Anga

OUTGOING WIRE

TO: PROFESSOR WIDJOJO

BAPPENAS

DJAKARTA

DATE: June 13, 1968

CLASS OF

SERVICE: LT

ROH

COUNTRY: INDONESIA

TEXT:

Cable No.:

EXPECT TO BE READY TO NEGOTIATE PROPOSED CREDIT TO INDONESIA FOR
DOLLARS FOUR MILLION FOR IRRIGATION REHABILITATION PROJECT DURING
JULY AFTER MEMBER LEGAL DEPARTMENT TENLEY JONES HAS VISITED DJAKARTA
ABOUT JUNE 25 TO DISCUSS LEGAL ASPECTS INCLUDING CONSTITUTIONAL AND
PROCEDURAL REQUIREMENTS FOR BORROWING BY INDONESIA AND RELATIONSHIP
BETWEEN CENTRAL AND PROVINCIAL GOVERNMENTS AND TO REVIEW WITH APPROPRIATE
OFFICIALS IDA STANDARD FORMS OF CREDIT DOCUMENTS TO ENABLE SUBSEQUENT
NEGOTIATIONS PROCEED SMOOTHLY STOP AIRMAILING TODAY LETTER SUMMARIZING
MATTERS ON WHICH WE WISH REACH AGREEMENT DURING NEGOTIATIONS STOP
PLEASE CABLE WHETHER PROPOSED TIMING OF JONES VISIT CONVENIENT STOP
REGARDS

CARGILL INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

Mr. I. P. M. Cargill

DEPT.

Asia

SIGNATURE

(SANATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

Cleared with & cc: Messrs. Brakel,

Grosvenor, T. Jones, J. Malone

cc: Mr. A. Tazi

Messrs, ffrench-Mullen, Foster,

Schebeck, Tims, Matter,

Goodman/Street
For Use by Archives Division

Checked for Dispatch:

ROH

DATE June 13, 1968

CLASS OF SERVICE LT

OUTGOING WIRE

EXPECT TO BE READY TO NEGOTIATE PROPOSED CHEDIT TO INDONESIA FOR DOLLARS FOUR MILLION FOR TREIGHTION REHABILITATION FROJECT DURING JULY AFTER MEMBER LEGAL DEPARTMENT TEMBEY JOHNS HAS VISITED DIAMETA ABOUT JUNE 25 TO DISCUSS LIMIAL ASPECTS INCLUDING CONSTITUTIONAL AND PROCEDURAL REQUESTMENTS FOR BORROLING BY INDOVERSE AND REALTIONSHIP BETWEEN CENTRAL AND PROVINCIAL GOVERNMENTS AND TO REVIEW WITH AFFROTEITATE OFFICIALS IDA STANDARD FORMS OF CRUTOIT DOCUMENTS TO ENABLE SUBSEQUENT MERCHATIONS PROCESS SMOOTHLY STOP AIRMAILING TODAY LEFTER SUMMARIZING MATTERS ON WHICH WE WISH REACH AGREEMENT DURING NEGOTIATIONS STOP

FLEASE CARLE WHETTER PROPOSED TIMING OF JONES VISIT CONVENIENT STOP

CAPTASTWI

TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

Bisa

CLEARANCES AND COPY DISTRIBUTION: Cleared with & co: Mesers. Brakel, Grosvenor, T. Jones, J. Melone

Mr. A. Tazi 200 Mesers. Ffrench-Mullen, Foster, Schebeck, Time, Matter, Goodman/Street

ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL FINANCE CORPORATION

IMO - Duigalia

OUTGOING WIRE

TO:

BERNARD BELL

CARE HOTEL INDONESTA INHOTELCOR

DJAKARTA

DATE:

JUNE 13, 1968

CLASS OF

SERVICE: LT

COUNTRY:

INDONESIA

RCA

TEXT: Cable No.:

HAVE JUST CABLED WIDJOJO AS FOLLOWS QUOTE EXPECT TO BE READY TO NEGOTIATE PROPOSED CREDIT TO INDONESIA FOR DOLLARS FOUR MILLION FOR IRRIGATION REHABILITATION PROJECT DURING JULY AFTER MEMBER LEGAL DEPARTMENT TENLEY JONES HAS VISITED DJAKARTA ABOUT JUNE 25 TO DISCUSS LEGAL ASPECTS INCLUDING CONSTITUTIONAL AND PROCEDURAL REQUIREMENTS FOR BORROWING BY INDONESIA AND RELATIONSHIP BETWEEN CENTRAL AND PROVINCIAL GOVERNMENTS AND TO REVIEW WITH APPROPRIATE OFFICIALS IDA STANDARD FORMS OF CREDIT DOCUMENTS TO ENABLE SUBSEQUENT NEGOTIATIONS PROCEED SMOOTHLY STOP ATRMATLING TODAY LETTER SUMMARIZING MATTERS ON WHICH WE WISH REACH AGREEMENT DURING NEGOTIATIONS STOP PLEASE CABLE WHETHER PROPOSED TIMING OF JONES VISIT CONVENIENT UNQUOTE REGARDS

CARGILL

NOT TO BE TRANSMITTED

BIGHTLUNE

MESSAGE AUTHORIZED BY:

CLEARANCES AND COPY DISTRIBUTION:

NAME

I.P.M. Cargill

DEPT.

SIGNATURE_

Asia

SGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

HJZiegler/WBrakel:epa

For Use by Archives Division

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: _

JUNE 13, 1968

OUTGOING WIRE

CARD HOUSE ENDOMISSEA DJAKARTA

THE

INDONESIA

FOUR

HAVE JUST CARLED WILLOJO AS FOLLOWS QUOTE EXPECT TO BE READY TO NEGOTIATE PROPOSED CREDIT TO INDONESIA FOR DOLLARS FOUR MILLION FOR IRRIGATION REHABILITATION PROJECT IURING JULY AFTER MEMBER LEGAL DEPARTMENT TENLEY JONES HAS VISITED DIAKARTA ABOUT JUNE 25 TO DISCUSS LEGAL ASPECTS INCLUDING CONSTITUTIONAL AND PROCESURAL REQUIREMENTS FOR BORROWING BY INDONESIA AND RELATIONISHIP BETWEEN CENTRAL AND PROVINCIAL GOVERNMENTS AND TO REVIEW WITH APPROPRIATE OFFICIALS IDA STANDARD FORMS OF CREDIT DOCUMENTS TO ENABLE SUBSEQUENT NEGOTIATIONS PROCEED SMOOTHER STOP ATRMAILING TODAY LETTER SUMMARIZING MATTERS ON WHICH WE WISH REAGH AGREGATIVE INTING VEGOTIATIONS STOP PLEASE CARLE WHETHER PROPOSES TIMING OF JONES VISIT CONVENIENT UNQUOTE RECERBS

COMMUNICATIONS CENERAL FILES

8381 M 8 B E I NOL

I.P.M. Cargill

HJZiegler/WErakel:eps

SCHETURE OF INDIVIDUAL AUTHORIZED TO APPROVED

BISPATCHED

Mr. L.W. Bartsch

John M. Malone, Jr. 701

June 13, 1968

INDOMESIA - Irrigation Rehabilitation Project

Mr. Tenley Jones of the Legal Department will be arriving in Djakarta on June 25 for about a week for pre-negotiations of the proposed USSA million IDA Credit for the Irrigation Rehabilitation Project. The Indonesians are being notified by cable today of this visit and of the fact that we expect to be ready to negotiate the proposed credit during July. A letter is being issued also, giving a list of assurances we hope to obtain during negotiations. In view of the exceptional circumstances, particularly the fact that this is our first lending operation in Indonesia, the working party recommends that Mr. Jones be authorized to pass a few copies of the Green Cover Appraisal Report informally to the appropriate individuals in Djakarta and to discuss the contents of the report with them. It is felt that negotiations will proceed much more smoothly if we put all our cards on the table in this way.

co: Mesers. Brakel Jones, T. Grosvenor

Jillalone: fh

IND-chigatio

Mr. Tanley Jones

John M. Halone, Jr. +M

June 13, 1968

INDONESIA - Irrigation Rehabilitation Project

This is just a note to provide some briefing for your forthcoming visit to Indonesia. It seems to me that the crucial question which the appraisal mission was unable to answer is the extent to which the provincial district and village authorities can be bound by and held responsible to the Central Government, in any agreement between the latter and the Association governing the execution of the project in the field and the various assurances which relate thereto. The best authority on this matter is Mr. Sumarman, the Secretary of Internal Affairs. I had a long conversation with Mr. Sumarmen during our visit at which time he told me that he was preparing, for the consideration of the Cabinet, a proposal which would give the Central Government more control over the execution of such things as development projects. At the time, however, it was not clear how responsibility and control was allocated. In some cases provincial governments appear to be having direct dealings with foreign entities while in others, the Central Government was operating development projects directly from the center in Djakarta. There are advantages and disadvantages on both sides and until we become more familiar with the situation I am afraid that we will have to play by ear.

The other key individuals you will want to see in the Government are Professor Widjojo, Head of the National Development Flaming Council (BAPPENAS); Ir. S. Sujono Sosrodarsono, Director General of Water Resources Development; and of course Alfred Matter, who will be very helpful in putting you in touch with these people as well as in explaining your presence and views both before and after you see them yourself. I imagine Stokes Tolbert can also provide a lot of useful information as well as a cool drink on his versada.

As far as providing sample credit documents is concerned, I imagine you yourself are more familiar than I am with the documents which may be appropriate. There is no operation that I know of which is similar to the one we are contemplating in Indonesia. However, the Bank has made loss for irrigation rehabilitation to Mexico and the Seyhan project in Turkey with which you are already familiar is somewhat similar in that it involves the procurement of earthmoving machinery. I am happy to obtain clearance from our front office for you to give the Indonesians a few copies of the Appraisal

hoping

Report and to discuss it freely with them. If this can be done and if the "boiler plate" can be carefully explained to them I anticipate no great difficulty during final negotiations.

Please let me know if I can give you any more information.

cc: Messrs. Brakel Grosvenor Ziegler

JMMalone: fh

Noti: No report niceriary descussed by Mensis. Expas & B. Bell chining fully OFFICE MEMORANDUM Program Review. I was not present 12.7.68

FROM:

I.H. Ergas, Director FAO/IBRD Cooperative Programme

Number: 00293

SUBJECT:

Indonesia: Rehabilitation and Increased Rice Production in Existing Irrigation Schemes in Indonesia

- There are about 7 million hectares planted with rice in Indonesia. About 2.6 million hectares of these are irrigated, 1.6 million hectares being on Java and Madura. The 1966 production of paddy was 14 million tons with an average yield of 1.8 tons paddy per hectare.
- From the outbreak of the second world war up to the present, the maintenance of irrigation schemes has been neglected and there is at present urgent need for a programme of rehabilitation, since these schemes were previously producing 2.8 - 3.0 tons of paddy per hectare.
- For purposes of rehabilitation which carries a high priority with the Government, a phased programme of improvement of these schemes be drawn up, comprising: (a) a first-phase of rehabilitation of existing distribution systems enabling the canals, field ditches and drains to be restored to their original carrying capacity; (b) a second-phase introducing additional ditches and drains where necessary for delivery of water to farm gate; and (c) a third-phase involving organization and supply of other inputs including the use of high yielding fertilizer responsive rice varieties.
- This programme, although necessary for the entire irrigated area can only be undertaken in steps in view of the limited available resources in Indonesia and of outside assistance. The investment on this three-phase programme per hectare could amount to about \$300, and by its sheer extent the total cost of the programme could be in the order of \$800 million. It is therefore proposed that in the first instance, a few basins be considered, having a strategic location from the point of view of the markets for rice. They are the following:

Tji:Tarum (near Djakarta), Progo, Ello and Seraju in Central Java, and Sedang in Celebes near Pare-Pare, a rice exporting harbour.

It is against this background that we propose the sending of a preliminary exploratory mission to Indonesia to assess the present situation and identify projects. The mission should be in the field for about three weeks and would consist of an agronomist and an irrigation engineer. Its terms of reference would be to:

7/18/4.0

BK 3/2.9 INS LTK/cg

cc: Mr. Bhattacharjee

Mr. de Lusignan

Mr. Clarke

Mr. T.A. Jones

L. Tempelman-Kluit

CP REG 3

.../2

- i. review the possible projects on the basis of available data as well as through field visits and determine as far as possible their technical, economic, institutional and administrative viability;
- ii. review data already collected and the depth of their analysis and suggest what further data would be needed and what arrangements could be made for their collection and analysis;
- iii. ascertain from the Government its wishes, priority and timing in respect of formulation and implementation of the projects and discuss with it possible future needs for preparing the project, including eventual outside assistance; and,
 - iv. if possible, assist in setting up arrangements for future preparation and suggest to the authorities concerned the requirements for a feasibility report.
- 6. This mission should be followed by another mission which will assist the Government in the preparation of the loan request.

June 12, 1968

Letter No. 13

Mr. Alfred E. Matter c/o Hotel Indonesia Djalan Thamrin, Box 54 Djakarta, Indonesia

Dear Alfred:

Today the Loan Committee agreed without comments to the US\$4 million Irrigation Rehabilitation Project for Indonesia. As you see US\$500,000 have been added for further technical assistance mainly to speed up the preparation of another irrigation rehabilitation project.

I am enclosing the green cover report (No. T0-658, Copy #50) of this project as well as a copy of the Area Memorandum to the Loan Committee for your information.

As you will know by now from our cables, Tenley Jones from the Legal Department will arrive in Djakarta around June 25 in order to clarify constitutional and other legal questions concerning this Credit and to familiarize appropriate officials with the legal aspects of the transaction and with the standard provisions of IDA credit documents. Peter Cargill would appreciate your giving him (Jones) a helping hand on all matters where your knowledge of the Indonesian scene and of the operational work of the Bank can be of use to him.

Best regards,

Sincerely,

Willem Brakel Asia Department

Enclosures

HJZiegler/WBrakel:epa File: IN-11

1968 JUN 14 PM 5: 57

SUSCEMBINICATIONS

Ino - genedagen

June 12, 1968

Letter No. 13

Mr. Alfred E. Matter c/o Hotel Indonesia Djalan Thearin, Box 54 Djalarta, Indonesia

Mear Alfred:

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I am enclosing the green cover report (No. TO-658, Copy #50) of this project as well as a copy of the Area Manarandan to the Loan Committee for your information.

As you will know by now from our cables, Tenley Jones from the legal Department will arrive in Bjakarta eround June 25 in order to clarify constitutional and other legal questions conserving this Gradit and to familiarise appropriate officials with the legal appears of the transaction and with the standard provisions of 1DA credit documents. Feter Cargill would appreciate your giving him (Jones) a helping hand on all matters where your knowledge of the Indenesian scene and of the operational work of the Eank can be of last to him.

Best regards,

Sincerely,

Willem Brakel Asia Department

Enclosures HJZiegler/WErskel:epr File: IM-11

1968 JUN 14 PM 5:57

COMMUNICATIONS

Indon-irrig

Mr. Mark Cherniavsky

June 12, 1968

Willem Brakel

INDONESIA - Irrigation Rehabilitation Project

Will you please arrange for the following notice to be circulated today to the Executive Directors:

"The Association is planning to invite the Government of Indonesia to send representatives to Washington to negotiate a proposed loan of \$4 million for an irrigation rehabilitation project in Indonesia."

HJZiegler:epa IN-11 DECLASSIFIED

JUN 0 5 2018 WBG ARCHIVES RESTRICTED

IDA/SecM68-51

June 12, 1968.

FROM: The Secretary

NOTICE OF INTENTION TO NEGOTIATE

INDONESIA - IRRIGATION REHABILITATION PROJECT

The Association is planning to invite the Government to send representatives to Washington to negotiate a proposed credit of \$4 million for an irrigation rehabilitation project.

Distribution:

Executive Directors and Alternates President President's Council Executive Vice President, IFC Vice President, IFC Department Heads, Bank and IFC

ASSOCIATION

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE

OUTGOING WIRE

TO: MR. MCNAMARA

CAREOF HOTEL INDONESIA

DJAKARTA

DATE:

JUNE 10, 1968

CLASS OF

SERVICE:

LT

COUNTRY:

INDONESIA

TEXT:

Cable No.:

TWO

Ka

DOLLARS FOUR MILLION IDA CREDIT FOR IRRIGATION REHABILITATION

SUBMITTED TO LOAN COMMITTEE FOR COMMENTS BY JULY 12 STOP EXPECT

THEREFORE AFTER HAVING NOTIFIED EXECUTIVE DIRECTORS AND ASSUMING

IDA MEMBERSHIP INDONESTA SUFFICIENTLY ADVANCED TO CABLE

INDONESTAN GOVERNMENT JULY 13 INVITING THEM TO SEND A DELEGATION

FOR CREDIT NEGOTIATIONS PRECEDED BY VISIT OF STAFF MEMBER LEGAL

DEPARTMENT ARRIVING INDONESTA AROUND JUNE 23 TO DISCUSS LEGAL

ASPECTS OF CREDIT DOCUMENTS SO THAT SUBSEQUENT NEGOTIATIONS CAN

PROCEED SMOOTHLY AND QUICKLY RECARDS

CARGILL

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

I.P.M. Cargill

DEPT.

Asia

WBrakel:cj

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

For Use by Archives Division

CLEARANCES AND COPY DISTRIBUTION:

cc: Mr. McNamara's office

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch:

1

OUTGOING WIRE

MR. MONAMARA CARROT HOTEL INDONESTA

TURE 20, 1968

DOLLARS FOUR MILLION IDA CREDIT FOR IRRIGATION RIMABILITATION SUBMITTED TO LOAN COMMITTEE FOR CONTENTS BY JULY 12 STOP BIRDST INDONESIAN GOVERNOUNT JULY 13 INVITING THEM TO SEND A DELEGATION TOR CREDIT NEGOTIATIONS PRECEDED BY VISIT OF STAFF MINERS LEGAL DEPARTMENT ARRIVING INDOMESIA AROUND JUHE 23 TO DISCUSS LEGAL ASPECTS OF CREDIT DOCUMENTS SO THAT SUBSECIENT NECOTIATIONS CAN BEHALLER PROCEED SMOOTHLY AND QUICKLY

I.P.M. Cargill OM

BiaA

CURNING OF INDIVIDUAL AUTHORIZED TO AFFROVE)

ORIGINAL (File Copy)

CLEARANCES AND COPY DISTRIBUTION:

cc: Mr. MeMamara's ogribbe 1888

Indon-urie

MR. A.G. EL EMARY

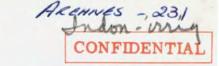
JUNE 11, 1968

MR. M.A. BURNEY

INDONESIA: IRRIGATION REHABILITATION PROJECT

The project looks very attractive yielding very high returns. However, it is not clear from the description of the organisation and management aspects of the project given in paras. 5.01 - 5.03 of the appraisal report whether the problem of jurisdictions between the central and the provincial governments in the execution of the project has been fully taken care of. It is stated in para. 2.08 of the appraisal report that "Due to the decentralized form of administration inherent in the Indonesian constitutional framework, the Central Government does little more than the overall planning, coordination and budgeting, while most of the decision-miking and initiative in the day-to-day management of irrigation is retained by the provincial governments, whose budgets pay a share of the expenses of the irrigation staff in the field." The responsibility for the execution of the project is to rest with the Directorate General of Water Resources Development within the Central Ministry of Public Works, but the responsibility for the day-to-day work of rehabilitation would be delegated to the provincial Directors of Public Works who are presumably appointed by the Provincial Governor. It may be necessary to ensure, during the nggotiations, that for the execution of this particular project the provincial Directors will work as the sole agents of the central government.

R.H.Khandker/jb



LOAN COMMITTEE

JUN 0 5 2018

WBG ARCHIVES

June 10, 1968

MEMORANDUM TO THE LOAN COMMITTEE

Indonesia - Irrigation Rehabilitation Project

- The Committee is requested to consider, without meeting, the attached memorandum of June 10, 1968 from the Asia Department, entitled "Indonesia - Irrigation Rehabilitation Project" (LC/0/68-46).
- Comments, if any, should be sent to reach Mr. Ziegler
 (ext. 2495) by 5:00 p.m. on Wednesday, June 12.
- 3. It is planned then, if the Committee approves, to inform the Government that the Association is prepared to begin negotiations for the proposed credit.

Mark Cherniavsky Secretary Loan Committee

- DISTRIBUTION -

Committee:

Mr. J. Burke Knapp, Chairman
Mr. S. R. Cope, Deputy Chairman
Mr. S. Aldewereld, Vice President
Directors, Area Departments
Director, Projects Department
General Counsel
Director, Economics Department
Director, Development Services Department
Treasurer

Copies for Information:

President
The Economic Adviser to the President
Sir Denis Rickett, Vice President
Mr. M. Shoaib, Vice President
Directors, other Departments
Special Adviser to the President
Executive Vice President (IFC)
Vice President (IFC)

JUN 0 5 2018 WBG ARCHIVES

CONFIDENTIAL

LC/0/68-46

June 10, 1968

LOAN COMMITTEE

Memorandum from Asia Department

Indonesia - Irrigation Rehabilitation Project

- 1. There is attached for the consideration of the Committee an Appraisal Report "Indonesia Irrigation Rehabilitation Project" (TO-658) dated June 5, 1968. The report recommends that an IDA Credit of US\$3.5 million equivalent be made to Indonesia to cover the foreign exchange cost of rehabilitating over a five-year period three existing irrigation systems East Semarang, Rentang and Tjisedane in Java and completing a new irrigation system Way Seputih in Sumatra. The total area served would be about 198,000 hectares amounting to about 10% of the total area needing rehabilitation.
- 2. At a Loan Committee Meeting on May 6 (LC/M/68-12) the Chairman concluded that the Area Memorandum (LC/O/68-27) dated April 15 provided an acceptable basis for working towards an IDA lending program for Indonesia. The proposed credit would be the first ever made to Indonesia by the Association and is in line with this proposed lending program. The Association also has under immediate consideration a line of credit of US\$2.0 million to finance a program of technical studies (see LC/M/68-12 paragraph 6).
- The project would be the first step in the preparation and implementation of a program for rehabilitation of Indonesia's neglected irrigation systems. Because of the urgency of the Indonesian situation, the Appraisal Report had to be prepared without an engineering study of the project areas or a detailed plan for the execution of the project, which have to be done as soon as consultants are retained. However, in anticipation of this, the Government, on the basis of the appraisal mission's estimate of the amount of work to be done, can begin ordering the necessary equipment and put it to work on the more urgent and obvious tasks without delay.
- 4. The credit would finance technical assistance and imported equipment and materials. The technical assistance, with a foreign exchange cost of about \$0.8 million, would provide consultants to prepare the engineering study and the detailed plan for execution mentioned above, as well as guidelines for the future operation and maintenance of the systems, and preparation of a second project for irrigation and rehabilitation in other areas which might be ready for appraisal by 1970 or 1971.

- The total cost of the project is estimated at US\$8.0 million equivalent including import duties. The total cost would be financed by the Government's development budget (US\$4.2 million), by farmers' voluntary labor (US\$0.3 million), and by the proposed credit (US\$3.5 million). The project is exactly what Indonesia needs at this stage and deserves highest priority. It provides urgently needed technical assistance in one of the most important economic sectors, is quick disbursing and is estimated to have a very high rate of return. It would lead directly to an increase in production of 39,000 tons of rice p.a., thereby easing the food shortage and reducing rice imports by about US\$6.6 million p.a.; and by restoring an adequate supply of water, it would enable farmers to use fertilizers and pesticides effectively, leading to an even greater increase in production.
- Speedy execution of this project as well as preparation of further irrigation rehabilitation projects are of the greatest importance to ease Indonesia's rice and food shortage. To expedite the preparation of a second project by one year, the consulting services would need to be strengthened as mentioned in Paragraph 4.04 of the Appraisal Report. I have therefore been advised by the Chairman of the Committee that a further US\$500,000 will be made available to finance the requisite technical assistance as an addition to the credit proposed in this report.
- 7. I agree with the conclusions of the Appraisal Report, modified by the addition of US\$500,000 to the credit to provide for further technical assistance (see paragraph 6). I recommend that we invite the Government of Indonesia to send representatives to Washington to negotiate a credit of US\$4.0 million. Since this would be the first credit to Indonesia, it would be advisable for a staff member of the Legal Department to discuss the terms of the credit in Djakarta before formal negotiations take place, to smooth their course.

I.P.M. Cargill
Director
Asia Department

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL FINANCE CORPORATION

Mr. Bell:

Mr. Piccagli brought this in and said before he sends his usual reply, do you have any suggestions since it concerns Indonesia.

Lil

Nothing should BAB

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL FINANCE CORPORATION

ROUTING SLIP	Date June 24, 1968
OFFICE OF THE	PRESIDENT
Name	Room No.
Mr. Chadenet	
Hz Piccagli	
Please aunter	unthe Copin BC
	97c1U
To Handle	Note and File
Appropriate Disposition	Note and Return
Approval	Prepare Reply
Comment	Per Our Conversation
11 Report	Recommendation
unformation	Signature
Initial	Send On

Remarks

You may wish to handle on behalf of Mr. McNamara.

R.B. Steckhan

From

JUN 24 REC'D

YUBA INDUSTRIES, INC.

YUBA

to alpha

612 HOWARD STREET . SAN FRANCISCO, CALIFORNIA 94105

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MAJOR GENERAL ROBERT F. SEEDLOCK, USA (RET.)
PRESIDENT

June 5, 1968

Honorable Robert S. McNamara President World Bank 1818 H Northwest Washington, D. C.

Dear Mr. Secretary:

Please accept my sincere congratulations on your election to the Presidency of the World Bank. I never realized when we were struggling last year to open more housing near Ft. Belvoir for our negro servicemen under your magnificent leadership that this year I would be communicating with you on business.

Since my retirement from the Corps of Engineers, I have been elected President of Yuba Industries, Inc., and one of our many capabilities is the manufacture of both suction dredges and bucket line dredges. Recently, we have had direct inquiries from Indonesia relative to our manufacturing capability in the bucket line dredge field.

I would like to take the liberty to apprise you of Yuba's present and past capability in this highly selective field, and mention some of Yuba's qualifications.

Yuba has had some seventy-three (73) years experience in the bucket line dredge field; not only the manufacturing, but also the actual operation. Yuba has also manufactured large suction dredges and for many years held the record for the largest in the world -- the thirty inch "Franciscan" which still operates on the West Coast. As a matter of fact, in recent years we have operated as many as three dredges on a 24 hour shift basis. As the cost of operation has consistently gone up over the years and the price of gold has remained static, we have discontinued the use of two of our dredges and are operating one at a digging depth of over 110 feet. Yuba's reputation was such that upon retiring several of these dredges, they were immediately purchased for shipment to South America where one is now in full use. Another is presently being redesigned for a different type of mining.

and July 3

Yuba still has several dredges which could be dismantled, modified as required, and be productive many months before any organization in the world could fabricate a new dredge.

I am enclosing a catalog giving a very condensed version of Yuba's history in the dredge field and specifications on three dredges together with pertinent comments pertaining to each. Regardless of any operating conditions, we can be and have been competitive with any dredge manufacturer in the world.

In summary, Yuba has manufactured the largest mineral dredges in the world which has helped to make the United States the world center for the mineral dredge industry. Buyers and engineers from Amsterdam, London, and Moscow have in the past come to the United States to purchase equipment and study the latest developments in design. As a matter of interest, in a twenty-four (24) year period, Russia purchased eleven large bucket line dredges from Yuba.

We still remain one of the largest suppliers of dredge parts and equipment and our engineering and manufacturing competence is known throughout the world.

It would seem logical that as Indonesia seems to be contemplating the rehabilitation of the many dredges they now own and the possible addition of other dredges, Yuba would be eminently qualified to be of service.

The manufacture of new dredges based on the existing and proven design could be undertaken immediately. In the event modifications are necessary, we have dredge design engineers with the capability to design units to suit specific mineral recovery conditions. We also have available the services of one of the foremost mineral dredging consultants in the world.

With every best wish for your continued success.

Most sincerely,

Robert F. Seedlock

RFS:pc Enclosures Mr. I.P.M. Cargill June 3, 1968 Willem Brakel INDONESIA: Irrigation Rehabilitation Project Attached is a memorandum on the Working Party meeting which discussed the draft appraisal report on the above-mentioned project, as well as a revised version of the Appraisal Report on the aforementioned project which takes into account the comments of the Working Party. We intend to clear the present version of the report and to prepare the Loan Committee Memorandum this week so that it will be in the hands of Mr. Knapp not later than June 7. If everything goes well, we would like to start negotiations early July. If negotiations are held in Washington, it would mean that pre-negotiations would have to be conducted by Mr. Matter or by somebody else going to Djakarta for this purpose (see point 3 of the attached memorandum).

Attachments

WBrakel: HJZiegler/cj

May 31, 1968

Files

H.J. Ziegler

INDONESIA: Working Party Meeting on the Irrigation

Rehabilitation Project

The meeting was held on May 29, 1968 in Mr. Brakel's office to discuss the draft Appraisal Report. It was attended by Messrs. Brakel, ffrench-Mullen, Foster, Grosvenor, T. Jones, J. Malone, Schebeck, Tims and Ziegler.

The Working Party agreed that the project is very good and deserves highest priority. It provides urgently needed technical assistance, is quick disbursing, and produces very high returns.

Comments on the Annexes, which were not discussed during this meeting, will be passed on separately by the Working Party members to the Projects Department.

Apart from some minor amendments which the Projects Department undertook to make, the following points emerged from the meeting:

1. Mr. Malone distributed the attached note from Mr. Bell dated May 29, 1968 which advocates (a) that the credit cover more of the project cost, including in particular a local currency component, (b) that, if possible, the over-all time to execute the project should be reduced to less than 5 years, and (c) that, more importantly, the preparation of a second project be speeded up as much as possible.

The Working Party agreed that, if there were more funds available, - which would be up to the Loan Committee to determine - it would be important to include some local currency cost, if only because of the extreme budgetary tightness in Indonesia. The Working Party also agreed that if the execution of the project could be expedited, this should be done. However, prospects for this are limited and would require a substantial increase in imported equipment. There was general support for the idea that the preparation by the consultants of a second project be speeded up to the maximum extent. It was agreed that the Working Party would advise the Loan Committee to increase, if at all feasible, the amount of the credit by \$500,000 to make possible the increase in consultant services required for this purpose.

- 2. Projects Department mentioned that the US AID had expressed some interest in linking their "Food For Work Program" to this project; the Working Partythought that this might be explored at a later stage after the project at its present form was off the ground, so as not to unduly complicate matters at this stage.
- 3. Since it is the first credit to be made to Indonesia and complex constitutional and administrative questions might arise which could require the Government negotiators to be in close contact with their administrators, it was suggested that it might have an advantage to hold them in Djakarta. Mr. Jones pointed out that the Legal Department would find difficulty in sparing a lawyer full time for negotiations away from Washington, for what might be a rather long period. It was agreed to reach decision on this before June 15.
- 4. It was agreed that the Legal Department will have to investigate further whether, in addition to the Credit Agreement, Project Agreements with the provincial governments are required and how the problem of delegation of responsibilities can be solved.
- 5. Several changes were agreed upon which have been embodied in the revised draft that has meanwhile been prepared by the Projects Department.
- 6. A tentative timetable could be as follows:

June 7

Week of June 10 June 21 June 24 Early July Presentation of the green cover
Appraisal Report to the Chairman of the Loan Committee
together with the Area
Memorandum.
Loan Committee Meeting
Finalization of Loan Documents
Clearance of Loan Documents

Negotiations

Attachment

HJZiegler/JFoster/WBrakel:epa

cc: Messrs. ffrench-Millen, Foster, Grosvenor, T. Jones, J. Malone, Schebeck, Tims Messra. Evans, Wepenhans, Bartsch, Malone

Bernard R. Bell

DEDONESIA - Irrigation Rehabilitation roject

- This is a good project and a very good report.
- We ought, if this is possible, in terms of the planning and work input required, to think in terms of a schedule of less " than five years for completion. (See page 9.) At the least we should say that if additional funds can be made available, either immediately or in the future (next year) the time period could be shortened. I am confident that if this point is made to the President, he will find the funds, now or next year.
- We ought not to contemplate (see page 1) planning of work on other systems at a pace which puts the next appraisal in 1971 or 1972. This is one of Indonesia's highest priorities, it gives a handsome return, and we obviously should not be thinking of, or proceeding on a schedule which will rehabilitate the 1.9 million hectare systems only after 30 years. This is when we ought to be urging and planning all due speed - and a larger consulting team effort at the earliest, if that is what it takes - and you seem to indicate that.
- We ought to cover more of the cost including some of the local currency cost. There is emple economic justification - as the Recommic Committee and the President will, I am sure, rule, if you give them a chance. They will do so at the green cover stage even if you do not.
- 5. Please do two things for me:
 - (a) Give Bernard Chadenet a copy of this entire note.
 - (b) Call Engelmenn's (Transport) and Piccagli's attention to the admirahly clear terms of reference you have set out in Amer 2. It would be helpful to Engelmann in drafting terms of reference for highway consultanta which he is currently doing.
- See my marginal amotations which may cover some point not mentioned above - and the one attempt at editing in Para. 8.01 - which I think is of some importance. We should not regret but should explain in positive terms the way we are here proceeding.

ce: Mr. Chadenat

BRBallefh

Ind-Aria Messrs. Evans, Mapenhans, Bartsch, Malone May 29, 1968 Bornard R. Bell THEOMESTA - Irrigation Rehabilitation Project 1. This is a good project and a very good report. We ought, if this is possible, in terms of the planning and work input required, to think in terms of a schedule of less than five years for completion. (See page 9.) At the least we should say that if additional funds can be made available, either immediately or in the future (next year) the time period could be shortened. I am confident that if this point is made to the President, he will find the funds, now or next year. We ought not to contemplate (see page 1) planning of work on other systems at a pace which puts the next appraisal in 1971 or 1972. This is one of Indonesia's highest priorities, it gives a handsome return, and we obviously should not be thinking of, or proceeding on a schedule which will rehabilitate the 1.9 million hectare systems only after 30 years. This is when we ought to be urging and planning all due speed - and a larger consulting team effort at the earliest, if that is what it takes - and you seem to indicate that. We ought to cover more of the cost - including some of the local currency cost. There is ample economic justification - as the Reconcute Committee and the President will, I am sure, rule, if you give them a chance. They will do so at the green cover stage even if you do not. 5. Please do two things for me: (a) Give Bernard Chadenet a copy of this entire note. (b) Call Engelmann's (Transport) and Piccagli's attention to the admirably clear terms of reference you have set out in Amex 2. It would be belpful to Engelmenn in drafting terms of reference for highway consultants which he is currently doing. See my marginal amnotations which may cover some point not mentioned above - and the one attempt at editing in Para. 8.01 - which I think is of some importance. We should not regret but should explain in positive terms the way we are here proceeding. oc: Mr. Chadenet BRBell:fh

Indon-Irria

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

TO: Mr. W. Brakel

May 27, 1968

FROM: L.W. Bartsch

SUBJECT: INDONESIA - Irrigation Rehabilitation Project

- 1. Attached for the consideration of the Working Party is the draft Appraisal Report on the Irrigation Rehabilitation Project.
- The Project reflected in this report differs somewhat from that which formed the basis of the Government's request for IDA assistance. The Government had hoped to purchase imported equipment with a cif cost of approximately US\$3 million to cover five irrigation systems totalling about 228,000 ha in area. After consideration of this request within the Agriculture Division it was felt that substantial technical assistance would be required for the planning and implementation of irrigation rehabilitation in the areas concerned as well as for the preparation of a second phase project covering other areas. On the other hand, due to the scarcity of IDA funds and to the fact that a US\$2.0 million line of credit for technical assistance is being considered for Indonesia also, it was not possible to earmark more than US\$3.5 million for irrigation rehabilitation at this time. Therefore. we have departed from the Government's request by eliminating one of the five areas (the one which yielded the lowest economic rate of return) and by re-allocating the foreign exchange which would have been required for this area, together with the additional US\$0.5 million earmarked, to provide for consultants! services over a five year period with an estimated foreign exchange cost of US\$750.000. The Government should be informed of these changes if and when an invitation to negotiate is sent.

JMMalone/fh IDA

cc: Messrs. Chadenet
Bell
Sadove
Piccagli
Lipkowitz
Evans
Wapenhans
Miss Van Gasse
Op Files

JUN 0 5 2018 CONFIDENTIAL WBG ARCHIVES DRAFT

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL DEVELOPMENT ASSOCIATION

INDONESIA

IRRIGATION REHABILITATION PROJECT

APPRAISAL REPORT

May 27, 1968

Currency Equivalents

Because of the rapid inflation and floating exchange rate of the Indonesian rupiah, all amounts in this report are expressed in U.S. dollars.

Weights and Measures

Metric Units I millimeter (mm) 1 meter (m) 1 kilometer (km) 1 cubic meter (m³) 1 million m³ (Mm³) 1 m³ per second (m³/sec) 1 kilogram (kg) 1 metric ton (m ton) 1 hectare (ha)	= 0.039 inch (in) = 39.37 in = 0.62 miles = 35.31 cubic feet = 810.7 acre feet = 35.31 cubic feet per second (cusec) = 2.204 pounds (1b) = 2204 lb = 0.98 dong ptonved by: (Section) L.W. Barts Cl = 2.47 acres	
Projects Department	Report Prepared by: T.M. Malone M.D. Hench Mulle	In
	Date: May 27 1968	

INDONESIA

IRRIGATION REHABILITATION PROJECT

APPRAISAL REPORT

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This report is based on the findings of a mission consisting of Messrs. J.M. Malone and M.D. ffrench-Mullen (of the Bank) and Messrs. R.M. Fagerberg and C.J. Hoffman (consultants to the Bank) which visited Indonesia in March 1968.

INDONESIA

IRRIGATION REHABILITATION PROJECT

SUMMARY

- i. The Government of Indonesia has requested an IDA Credit of US\$3.5 million to assist in financing the rehabilitation of three existing irrigation systems in the provinces of Central and West Java and the completion of a new irrigation system in Lampung Province, southern Sumatra. The IDA funds would be used to provide technical assistance for the detailed planning of the work to be done and imported equipment and materials to enable the work to be carried out. The total area served would be about 198,000 ha. The project would be the first step in the preparation and implementation of a well planned program for the rehabilitation and subsequent operation and maintenance of Indonesia's neglected irrigation systems.
- ii. Because of the urgency of the Indonesian situation the appraisal of the proposed project took place before an engineering study or detailed plan for the execution of the project could be prepared. It will be necessary as soon as possible to retain consultants to make a proper engineering study and detailed plan for the execution of the project. Meanwhile the appraisal mission's estimate of the amount of work to be done is adequate to enable the Government to begin ordering the necessary numbers and types of equipment for each system included in the project as soon as an IDA credit is approved. After the preparation of the first year's work plan by the consultants equipment can be deployed and put to work on the more urgent and obvious tasks without delay.
- iii. In spite of a chronic shortage of foreign exchange the Government continues to import large quantities of rice in an effort to prevent hunger in urban consuming centers while attempting to combat the continuing rapid inflation. In this situation, measures to increase domestic rice production are being urgently sought. The basic requirement of rice production is an adequate water supply. Because of the lack of maintenance over the years, however, the existing irrigation schemes can no longer supply the water requirements to the areas they were designed to serve. As a result yields are decreasing. To arrest this deterioration and return yields to their previous levels it is urgently necessary to rehabilitate the irrigation systems. Once this is done considerable further benefits can be obtained from the use of other inputs such as fertilizers, which are not presently economic due to the poorly regulated supply of water to the crop.
- iv. The project would consist of the rehabilitation and completion of the irrigation systems over a five-year period and would include technical assistance in the form of consultants' services, the procurement of machinery and equipment and the training of operators and mechanics; and the execution of the project works using the machinery and equipment together with manual labor.

- v. The total cost of the project including import duties is estimated at about US\$8 million. It would be financed by farmers (US\$0.3 million), by the Government (US\$4.2 million) and by the proposed IDA Credit (US\$3.5 million). The proposed credit would cover the estimated foreign exchange costs, or 44 percent of the total cost.
- vi. The project, which would have an economic rate of return of about 50 percent, would lead directly to an increase in production of 39,000 tons of rice annually thereby easing the food shortage and reducing rice imports by about US\$6.6 million a year. Equally important, the rehabilitation of the systems, by restoring adequate and timely water supply to the rice crop, would enable farmers to make effective use of fertilizers and pesticides, which would produce an even greater increase in production.
- vii. The project has a high economic priority. It would enable the Indonesian Government, who would be the borrower, to make a start with some of the more urgent works of rehabilitation and completion, while drawing up on a sound engineering basis, an expanded program for the future. The project is suitable for an IDA Credit of US\$3.5 million.

INDONESIA

IRRIGATION REHABILITATION PROJECT

I. INTRODUCTION

- 1.01 The Government of Indonesia has requested an IDA Credit of US\$3.5 million to assist in financing the rehabilitation of three existing irrigation systems in the provinces of Central and West Java, and the completion of a new irrigation system in Lampung Province, southern Sumatra. The IDA funds would be used to provide technical assistance for the detailed planning of the work to be done and imported equipment and materials to enable the work to be carried out. The total area served would be about 198,000 hectares (see Map 1). The project would be the first step in the preparation and implementation of a well planned program for the rehabilitation and subsequent operation and maintenance of Indonesia's neglected irrigation systems.
- 1.02 This report is based on the findings of a mission consisting of Messrs. J.M. Malone and M.D. ffrench-Mullen (of the Bank) and Messrs. R.M. Fagerberg and C.J. Hoffman (consultants to the Bank) which visited Indonesia in March 1968.
- The rehabilitation and completion of irrigation systems in Indo-1.03 nesia has been recommended as a matter of the highest priority by both the IBRD Economic Mission and the Asian Development Bank Technical Assistance Mission which visited Indonesia in late 1967. 1/ Because of the urgency of the situation, the appraisal of the proposed project took place before an engineering study or a detailed plan for the execution of the project could be prepared. Engineering data were lacking in most cases, but the Bank's consultants were able to visit some of the more important irrigation systems in Indonesia and, on the basis of personal observation, combined with the few data which were available, to make a "windshield estimate" of the work which has to be done. While it will be necessary as soon as possible to make a proper engineering study and detailed plan for the execution of the project, the mission's estimate is sufficiently accurate to permit the Government to begin ordering the necessary numbers and types of earthmoving equipment for each system included in the project as soon as an IDA credit is approved so that, following a preliminary engineering survey and the preparation of a first year's working plan by consultants, the equipment can be deployed and some of the more urgent and obvious tasks can be started at the beginning of the next dry season in early 1969. At the same time the engineering survey and the preparation of detailed working plans would proceed over another year or two, staying one jump ahead of the actual project works. Finally, the consultants would prepare a second phase project for the rehabilitation of other areas. This second phase could be ready for appraisal in three or four years so that the vital task of irrigation rehabilitation could proceed uninterrupted after the completion of the initial project.

^{1/} See the latest Bank economic report on Indonesia, Number AS 132a, dated February 12, 1968, and the report of the Asian Development Bank Technical Assistance Mission to Indonesia to advise on the Production and Availability of Foodstuffs, dated December 30, 1967.

II. BACKGROUND

General

2.01 Comprising more than 3,000 islands, totalling about 190 million ha in area and stretching along the equator for some 5,000 km, Indonesia possesses a wide variety of climates and soils. Its population of 115 million is growing at a rate of about 2.5 percent a year. The island of Java, consisting of only seven percent of the total land area, supports almost 70 percent of the total population and has an average population density of more than 560 per sq km.

Agriculture and the Food Situation

- 2.02 Agriculture accounts for more than half of Indonesia's national income and provides the livelihood of about 75 percent of the population, but, like most sectors of the economy, per capita agricultural production has been virtually stagnant during the last 30 years. About 50 percent of the total population is largely self-sufficient with respect to food. About 75 percent of the cultivated area of Java is devoted to food production but, in spite of this, the island is not self-sufficient in food, particularly rice, the staple food of the people. Imports from the Outer Islands are unable to fill the deficit. In spite of a chronic shortage of foreign exchange, the Government continues to import large quantities of rice from abroad in an effort to prevent actual hunger in urban consuming centers while holding down domestic rice prices in order to minimize the continuing rapid inflation.
- 2.03 In such a situation, measures to increase domestic food production, particularly rice, are being urgently sought. A basic requirement of rice production is an adequate water supply. Because of the lack of maintenance over the years, the existing irrigation schemes can no longer supply the water requirements of the areas they were designed to serve. As a result, yields are decreasing. To arrest this deterioration, it is urgently necessary to rehabilitate the irrigation systems. Once this is done and yields return to normal, considerable further benefits can be obtained from the use of other production inputs which are not presently economic due to the poorly regulated supply of water to the crop.
- 2.04 The farmers of Java are responsive to improve techniques, inputs and incentives and have demostrated their ability to maximize their yields, given the means at their disposal. Four basic problems have beset the Government's efforts to increase food production, however:
 - (a) a lack of foreign exchange to import and the physical means to efficiently distribute the necessary inputs;
 - (b) the lack of an assured market at remunerative nonfluctuating prices for the farmers' produce, justifying the use of purchased inputs;

- (c) the inadequacy of supporting Government services, particularly the provision of agricultural extension and irrigation; and
- (d) the absence of a sound credit system for the millions of farmers who are unable to purchase inputs for cash.

The BIMAS Program

In 1963 the Government began the BIMAS 1/ Program, a mass package program for the intensification of rice production designed to eliminate these bottlenecks. The program provides for extension advice and the application of a package of subsidized inputs of improved seed, fertilizers, insecticides, rodenticides and spraying equipment on credit. It is limited to groups of good farmers in villages where full irrigation is available. Adequate irrigation is a basic prerequisite for BIMAS. After a year with BIMAS, the farmers are able to take advantage of a follow-up program, known as INMAS, in which the same package of subsidized inputs is available to them, but without Government credit or extension advice. The area under BIMAS has increased from 138,000 ha in the 1965/66 wet season to 400,000 ha in 1967/68. In the latter year, the INMAS program covered 375,000 ha. The yield benefits that accrue from the BIMAS and INMAS program, as a result of improved varieties, fertilization and pest control are conservatively estimated to be more than half a ton of rice per ha. In 1967/68 these programs have probably resulted in about a four percent increase of Indonesia's ten million ton total annual rice output. For further information on these programs, see Annex 1.

Irrigation, Drainage and Flood Control

- Since the BIMAS and INMAS program can only operate with optimum efficiency in areas which receive adequate irrigation and are not subject to flooding, a serious constraint on their extension is imposed by the present run-down condition of Indonesia's irrigation, drainage and flood protection systems. Adequate and efficient irrigation is the basic requirement for optimum rice yields and, in consequence, the rehabilitation of the irrigation systems is of paramount importance to Indonesia, especially Java, there the irrigated area of 2.9 million ha comprises one-third of the total cropped area. Of this area, it is estimated that 1.9 million ha requires rehabilitation. All irrigated land in Java grows at least one rice crop each year, accounting for about 75 percent of the total area under wet rice cultivation. During the dry season, enough water is available in an average year to properly irrigate a second rice crop on only about a fourth of the area served during the wet season.
- 2.07 Until recently virtually no budgetary funds were available for the maintenance or rehabilitation of the irrigation systems. Beginning in 1967, with the allocation of 13 percent of the development budget to irrigation, the new Government demonstrated its concern with the state of the irrigation

Abbreviation for "Bimbingan Massal Swa Sembada Bahan Makanan", literally "mass guidance for self-sufficiency in foodstuffs".

systems in the country. The Government has neither machinery, equipment nor experienced personnel for this work, however, and it will be difficult, if not impossible, even to maintain the present capacity of the irrigation and drainage systems, much less reduce the accumulated backlog of deferred maintenance of the last 30 years with hand labor alone. Furthermore, no engineering study of the problem has been made, nor has any systematic planning preceded the work that has been started. Thus, rehabilitation efforts to date have had little impact on the problem.

- 2.08 Coupled with the budgetary problem and the lack of planning is the present inefficient organizational set up for irrigation management. The Ministry of Public Works, acting through its provincial offices, is responsible for the construction, operation and maintenance of irrigation systems from the source of water down to the end of the secondary canal. The responsibility for the construction, operation and maintenance of the tertiary canals and turnouts fall upon village officials, responsible through the district and provincial governments to the Ministry of Internal Affairs. Due to the decentralized form of administration inherent in the Indonesian constitutional framework, the Central Government does little more than the overall planning, coordination and budgeting, while most of the decision-making and initiative in the day-to-day management of irrigation is retained by the provincial governments, whose budgets pay a share of the expenses of the irrigation staff in the field.
- 2.09 Water management is extremely poor in most irrigation systems, partly because of the need for rehabilitation, but also because of the shortage of funds and trained staff and the division of responsibility between different agencies, with little overall coordination. Moreover, there is widespread corruption in the distribution of irrigation water, beginning at the village level. In spite of these failings, the Ministry of Public Works and particularly its Directorate General of Water Resources Development, with their provincial counterparts, are presently among the most effective and well organized agencies of the Indonesian Government.
- 2.10 Apart from bribes paid to village irrigation officials, farmers make no payment for irrigation water, although they are expected to contribute their labor voluntarily for the construction, rehabilitation and maintenance of the tertiary canals. Also, farmers pay a land tax averaging about 5-10 percent of the harvest under which irrigated land pays a higher tax than non-irrigated land, although there is no systematic use of revenues generated by this tax for irrigation purposes. As a comparison, an adequate provision for irrigation operation and maintenance would be about four percent of the harvest.

Transmigration

2.11 In addition to the recent efforts to intensify rice production in Java, the Government has for many years pursued a policy of extending rice production by resettling landless or unemployed Javanese and demobilized servicemen on the Outer Islands. Rice production on the Outer Islands now accounts for 40 percent of the total and the area harvested has been

increasing at a rate of three percent annually. Because the new settlers from Java are usually unfamiliar with the dry-land shifting cultivation indigenous to these islands and because the Government is anxious to increase rice production for export to Java, a number of schemes have been started to provide irrigation water to the new settlement areas.

III. THE PROJECT AREAS

A. General Description

3.01 The project areas comprise four irrigation systems covering some 198,000 ha as follows:

Scheme	Location	Area (000 ha)	
East Semarang	Central Java	42	
Rentang	West Java	91	
Tjisedane	West Java	40	
Way Seputih	South Sumatra	25	
Total:		198	

Of the four systems, three (East Semarang, Rentang and Tjisedane) are long established systems on the northern, alluvial plains of Central and West Java, and one, Way Seputih, is a new system under construction in a transmigration area in southern Sumatra (see Map 1). The schemes in Java were selected because they are the largest, most important existing irrigation systems in Indonesia. At Way Seputih, 10,000 families have been settled, the major capital works of the weir and most of the primary canals have been completed and 1,000 ha of land are already receiving water. A relatively small additional investment would have the effect of bringing another 24,000 ha of land under irrigation.

Climate, Topography and Soils

3.02 The schemes are situated in the wet, humid, insular tropics, south of the equator with a distinct wet season from November/December to April/May and a dry season for the remainder of the year. The schemes in Java are situated on the flat estuaries of rivers. The Way Seputih scheme is situated on a gently undulating peneplain. The soils are very suitable for wet rice cultivation and with good land and water management and the application of a nitrogenous fertilizer, are capable of producing good yields of rice.

Population, Land Tenure and Communications

3.03 The Way Seputih scheme has a ratio of population to cultivated land of less than five persons per ha, while the Java schemes have a density of more than ten. Way Seputih is a transmigration settlement

which is under direct Government management pending the completion of the irrigation system, following which the titles to the farms of two and one-half hectares, of which one hectare will be irrigated land, will be handed over to the settlers. All land in the Java schemes is freehold and is farmed either by the owner, on a share cropping basis or by tenants paying a fixed rent. Land rents are equivalent to about half a ton of rice per ha and the average holding is about two-thirds of a hectare. While all the schemes have good access to the urban consuming centers, the road systems within the schemes are inadequate.

Cropping Patterns and Yields

The cropping pattern on Way Seputih differs that on the Java schemes. The latter are designed primarily for the production of wet rice with irrigation while, at Way Seputih, each farm is designed to provide the farmer with one ha of irrigated land and one and one-half ha of land suitable for dry farming on which maize, root and tree crops can be grown. On the Java schemes, a dry season crop of irrigated rice, of about 40,000 ha, is presently being cultivated. In the present state of the irrigation systems, this crop is not getting sufficient water and yields are accordingly depressed. Similarly, the wet season rice crops suffer generally from water stress, which results in about a 15-20 percent reduction in yield, save for those areas near headworks which receive adequate water. More than sufficient water is available in the wet season at the intake of each scheme, but this cannot be moved to the field because the canals are silted up through lack of maintenance. Yield data supplied for each scheme varied considerably. Yields in Java are estimated presently to average 1.35 m tons of rice per ha in the wet season, and 1.1 m tons in the dry season. In Way Seputih the yield of rainfed rice is about one ton per ha.

Marketing, Credit and Transportation

- 3.05 The producer sells his crop either as stalk paddy 1/ or as rice, after retaining sufficient for his own requirements. Stalk paddy is transported from the field to the farmer's house by those harvesting the crop, either on their backs, on carry poles, by bicycle or by cart. Transport from the farm to the rice mill is by similar means. There is adequate road and rail transport from the schemes to the consuming centers.
- 3.06 There is a conspicuous lack of credit facilities available to the peasant farmer, together with a lack of an assured market for his crop at remunerative, non-fluctuating prices. If a farmer is fortunate enough to be selected for a BIMAS project, he gets seven months' credit for the BIMAS inputs and subsequently can obtain inputs from the INMAS program.

Stalk paddy, or <u>padi kering</u>, consists of the head of rice, cut off by hand, with about 15 cm of the stalk left attached, so that the paddy can be tied in bundles and slung over carrying poles. Stalk paddy, when dry, is equivalent to about 50 percent milled rice by weight.

There is no other institutional source of credit available to him. Interest rates are three percent per month under BIMAS, and even higher from private moneylenders.

Supporting Services

- 3.07 In general, the supporting services available to the farmer are poor and inadequate. Credit is very limited and what is available is restricted with high interest rates. The supply of fertilizers and insecticides is limited by lack of foreign exchange. The extension services in agriculture and irrigation are short of adequately trained and experienced staff and of tools with which to work. The effectiveness of those available is further reduced by a lack of transportation coupled with poor roads within the schemes.
- 3.08 A more detailed discussion of agriculture in the project areas is contained in Annex 1.

B. The Irrigation System

3.09 With the exception of the Way Seputih system, which is still under construction, the irrigation systems in the project areas have been in operation for many years, some of them for more than a century. Before World War II they were properly managed and maintained and were extremely productive. While the lack of maintenance combined with a rapid increase in the rate of siltation and flooding, occasioned by severe deforestation and erosion in the catchment areas, has been the main factor in the physical deterioration of these systems since the war, the absence of effective irrigation management has been equally responsible for their loss in productivity.

Water Supply

3.10 All of the systems depend on direct diversion of river flows during bothe the wet and dry seasons. Storage capacity is virtually non-existent except in the Semarang area (45 million m³) where it is of only minor consequence. The diversion rates and designed capacities of the systems are based on the approximate water requirement formula of one liter/sec/ha for the area served during the wet season. This is a reasonable average requirement for rice production under the continuous flooding type of irrigation used in Indonesia. There is more than enough water available to fully irrigate all the systems in the wet season but not in the dry season, when the average water available for irrigation is only about 15 percent of the total designed capacities of the systems.

Loss of Capaciy

3.11 Insufficient information was available to confirm the official estimates of reduction in canal capacities. However, it was obvious that many of the canals were badly silted up and in some areas there was evidence

of flooding or the danger of floods. In some areas, the operation of the systems appeared to be influenced by the condition of the tertiaries. When the tertiaries had not been properly maintained, the water level in the primary and secondary canals had to be raised unduly high to force water through the silted-up tertiaries. This has reduced the amount of water that could be by-passed to fields at the lower ends of the canals and has resulted in more rapid siltation of the primaries and secondaries themselves.

- 3.12 Most of the irrigation structures and mechanical devices, such as gates, have been neglected for many years and in some cases are no longer operative, so that there is no adequate means of controlling the distribution of the water in the system. A number of gates have been sabotaged, obviously many years ago, and can no longer be closed or even adjusted. These structures will have to be repaired at the same time as the canals are cleared of silt.
- 3.13 In some areas there have been efforts to maintain canal capacities by the hand removal of silt. In none of the Java areas was there any earthmoving equipment earmarked specifically for irrigation. When local funds recently became available for maintenance of the irrigation systems, an immediate start was made with the use of hand labor on an ad hoc basis but without systematic planning of the works. Most of the canal cleaning to date has been at or near the system headworks, rather than in the secondaries and tertiaries, thus creating settling basins in the primary canals.
- 3.14 It is evident that the three critical shortages affecting the rehabilitation effort, as well as the effort to complete the Way Seputih system, are the lack of budget funds, which has been remedied somewhat since 1967; the lack of equipment to speed up the work, permit a reduction in the backlog of deferred maintenance, and operate in places which hand labor cannot reach; and the lack of planning and programming of the work to be done.

IV. THE PROJECT

A. General Description

- 4.01 The project for which IDA assistance is required is the rehabilitation of the East Semarang, Rentang and Tjisedane irrigation systems in Java and the completion of the Way Seputih irrigation system in Sumatra. These systems are basically sound and there is adequate water available in the wet season at the points of diversion for the areas served. The project would include the following:
 - (a) <u>Technical Assistance</u>: an engineering study by consultants of the rehabilitation problem in the areas concerned, the

drawing up of a detailed plan for the execution of the project as well as rules for the future operation and maintenance of the systems and the preparation of further projects for irrigation rehabilitation in other areas.

- (b) Training and Procurement: the training of operators and mechanics and the procurement of earthmoving machinery and equipment, spare parts, repair shops and materials.
- (c) Execution of Project Works: the rehabilitation and completion of the systems included in the project over a five-year period using the earthmoving machinery and materials purchased together with manual labor. Most of the work would go on during the dry season and would not interfere with crop production.

Technical Assistance

In view of the urgency of the need for rehabilitation and completion of the major irrigation systems in Indonesia, combined with the lack of experienced personnel in the Directorate General of Water Resources Development in both planning and execution of irrigation rehabilitation and in the operation and maintenance of dredgers, draglines and tractors used in such work, it is essential to provide for the services of experienced engineering consultants to assist the Government in planning and implementing the project. These consultants would be employed by the Director General of Water Resources and would work closely with the engineering staff responsible for irrigation. The consultants would make an engineering survey and inventory of the systems included in the project on the basis of which they would prepare a detailed plan for their rehabilitation and subsequent operation and maintenance, redesigning them wherever necessary. On the basis of these plans, they would assist the Government in supervising the execution of the project. They would set up, and supervise initially, maintenance schedules and accounting and control systems for equipment, materials, spare parts and supplies and would provide in-service training to supervisory project staff in the operation and maintenance of the equipment and the irrigation systems. Finally, after two or three years, they would prepare a further project for the rehabilitation of other high priority irrigation areas. The consultants' work would require a total of about 20 man-years; suggested staffing and draft terms of reference are given in Annex 2.

Project Works

4.03 Assuming that the consultants began their work in August-September of 1968, a preliminary field survey and inventory of all the systems plus a detailed plan of operation for the first year's work could be ready before the beginning of the dry season in April 1969 when equipment could be on site and work on some of the more urgent and obvious tasks could commence. In the Way Seputih area, the detailed engineering is already satisfactory and would permit construction to proceed on the basis of the existing plans.

4.04 Even in the absence of an engineering study of the amount of rehabilitation work to be done it was possible for the Bank's consultants to make a rough estimate of the quantities of excavation involved, sufficiently accurate, however, to permit the procurement of the apropriate numbers and types of standard earth-moving machinery and equipment required for each system. These quantity estimates also permit a rough calculation of the cost of the project works in each system (equipment operation and direct labor). These latter estimates would have to be revised by the project consultants on the basis of their engineering study and detailed plan of operation when they became available. This revision, however, would not affect the equipment requirements.

4.05 The project works which would be carried out over a five-year period, are described in detail in Annex 3 and are summarized below:

Length of Canals (km)	East Semarang	Rentang	Tjisedane	Way Seputih	Total
Primary	68	119	88	49	324
Secondary	93	545	105	78	821
Tertiary	200	700	200	150	1,250
Total:	361	1,364	393	277	2,395
Number of Structures	181	393	119	105	798
Total Excavation Required (m3 millions)	2.2 <u>a</u> /	3.7	2.4 <u>b</u> /	3.3	11.6
Estimated Total Cost (US\$ millions)	1.4	1.8	1.4	2.3	6.9

a/ Includes 1.3 million m³ estimated silt removal required to rehabilitate an old inland waterway used as a drainage channel.

Equipment and Service Facilities

4.06 The Ministry of Public Works has hardly any earthmoving equipment available for irrigation use. Furthermore, the little equipment available is used on a single shift due to lack of operating funds. The Government should endeavor to ensure that any equipment to be financed under the project would be in operation a minimum of ten hours a day for 200 days of each year, either on a double shift or a single shift with a bonus incentive. While this is a heavy schedule, it would make the optimum use of the minimum amount of equipment required for each irrigation system, which otherwise would be doubled.

b/ Includes 0.4 million m³ annual canal maintenance over the last three years of the five-year period.

Assuming that the earthmoving equipment would operate at least 2,000 hours a year and that a substantial share of the work would continue to be done by hand, particularly in the tertiaries, execution of the project works over a five-year period would require four dredgers, eight draglines, eight bulldozers, four scrapers, 30 dump trucks and three motor graders. In addition, the project would need ancillary equipment, such as inspection cars, equipment transporters, concrete mixers, compressors, pumps, etc. It is estimated by the Ministry of Public Works that imported materials, such as steel, chains, wire mesh, etc., required to repair hydraulic structures would cost about US\$475,000. These estimates were accepted after examination in the field. To ensure adequate maintenance of the equipment, provision is made in the project cost estimates for spare parts and repair facilities. Each irrigation system would have a fully equipped mobile repair shop and each of the three provincial public works repair shops would receive additional equipment. A detailed list of equipment is given in Annex 3. Table 1.

4.08 The successful tenderers for the supply of field and workshop equipment would be required to undertake the training of a sufficient number of equipment operators and mechanics, immediately following the delivery of equipment to each scheme or to the workshops. It is necessary that the training take place at the job site and not at a central school to minimize wastage of trainees on the completion of training. The training provided must be such that the operators are not only efficient at their job but are also capable of undertaking any maintenance normally carried out by the operator when in the field. In the case of mechanics, they must be trained to strip, maintain and repair the project equipment and be taught the use of the workshop equipment supplied. The duration of training would be two to three months. This initial training would be supervised by the consultants who would themselves set up in-service training programs within the Ministry of Public Works.

B. Project Costs

4.09 The total project during the five-year period is roughly estimated at about US\$8.0 million equivalent. Details are given in Annex 4, Table 1 and are summarized below.

		Foreign Exchange Cost	Local Cost Inc. Duties	Total
		(US\$	thousands)	
1.	Machinery & Equipment in- cluding Spares.	2,026	757	2,783
2.	Materials.	365	110	475
3.	Operation and Maintenance of Machinery and Equipment	-	1,356	1,356
4.	Direct Labor		1,035	1,035
5.	Consultants' Services	750	250	1,000
6.	Contingencies	361	1,000	1,361
	Total:	3,502	4,508	8,010

4.10 Foreign exchange costs amount to US\$3.5 million, 44 percent of the total. The cost of imported machinery and equipment is based on normal sources of supply and includes a 20 percent allowance for spare parts and the training of operators and mechanics. The cost of materials is based on information supplied by the Ministry of Public Works. The cost of consultants' services is based on a team of four or five men provided by a consulting firm working for five years at an all-in cost of approximately US\$40-50,000 per man year, 75 percent payable in foreign currency.

4.11 A contingency of approximately 10 percent was added to foreign costs to allow for price escalation. In view of the very rough nature of the estimates of the quantity of work to be done, a contingency of about 30 percent has been added to local costs, which are expressed in US dollars because of the rapid inflation and floating exchange rate of the rupiah. The overall average allowance for contingencies is 20 percent. To the extent that rupiah costs respond less than proportionately to possible future devaluations of the exchange rate, the estimate may be on the high side. The cost estimates include import duties amounting to about US\$500,000.

Financing

4.12 The US\$8.0 million total cost of the project would be met from the following sources:

	Foreign Exchange Cost	Local Cost -US\$ mil	Total Cost lions	Per- centage
Proposed IDA Credit	3.5	-	3.5	44
Farmers' Voluntary Labor	-	0.3	0.3	3
Government Development Budget		4.2	4.2	_53
Total:	3.5	4.5	8.0	100

The borrower of the proposed US\$3.5 million IDA credit would be the Government of the Republic of Indonesia, which would finance the project through the annual development budget. The proposed credit would finance the foreign exchange costs of the project, US\$3.5 million or 44 percent of the total cost. Rehabilitation of the tertiary canals would be achieved by voluntary self-help labor at an imputed cost of US\$274,000. The remainder of the cost would be met by the Government. In view of the previous Government's past history of poor performance in providing budgetary funds for irrigation maintenance and rehabilitation, the standard assurance that the Government would provide all the necessary Rupiah funds, equivalent to US\$4.2 million, is not enough, and a special assurance should be obtained during negotiations that the timely appropriation of the necessary local currency required to carry out the project would receive priority under the annual development budget.

Expenditures

4.13 The estimated annual expenditures (including contingencies) on the project are as follows: (further details are given in Annex 4, Table 2).

		1	2	Year -US\$ th	4 ousands	5	Total a/
1.	Machinery and Equipment	3,232	-	-	-	-	3,232
2.	Materials	233	98	83	71	65	548
3.	Cleaning of Tertiaries	63	63	49	49	49	274
4.	Direct Labor on Force Account	364	197	174	164	156	1,056
5.	Operation & Maintenance of Machinery and Equipment	365	360	363	363	292	1,743
6.	Consultants' Services	231	232	231	232	231	1,157
	Total: a/	4,488	950	900	879	793	8,010
	of which, Foreign Exchange	2,600	240	230	220	210	3,500
	Foreign Exchange Percentage	58	25	26	25	26	44

a/ Inconsistencies due to rounding.

Procurement and Disbursement

- 4.14 All imported machinery, equipment, materials and supplies would be obtained by international competitive bidding. Assurances should be obtained that the Government would retain an international consulting firm, acceptable to the Association, whose duties and terms and conditions of employment would be agreed between the Government and the Association during negotiations. (See para 4.02).
- 4.15 Withdrawals from the credit account would cover, against documents, 100 percent of the cif cost of identifiable imported goods and services, totalling about US\$3.5 million. Undisbursed amounts would be available for cancellation.
- 4.16 The Government would establish and maintain for the project appropriate separate accounts, which would be audited annually by an independent auditor mutually acceptable to the Government and the Association.

V. ORGANIZATION AND MANAGEMENT

Directorate General of Water Resources Development

- 5.01 Execution of the project would be the responsibility of the Directorate General of Water Resources Development within the Ministry of Public Works (see organization chart). The present Director General and the three provincial Directors of Public Works are capable and hard-working, and their staffs are among the best of any of the government services in Indonesia. The Directorate General consists of four directorates (the Directorate of Irrigation, the Directorate of Rivers and Swampy Areas, the Directorate for Survey and Planning and the Directorate for Logistical Affairs) and the Institute of Water Resources Development, a group of engineers and hydrologists working closely with the various government consulting engineering firms and the Engineering Faculty in Bandung.
- 5.02 The Directorate General in Djakarta would be responsible for procurement, training, studies and planning with the advice of the consultants. The responsibility for the actual day-to-day work of rehabilitation in the field would have to be delegated to the three provincial Directors of Public Works. Assurances should be obtained during negotiations that the manager of each irrigation system in the project, who would be responsible for the execution of the project works in the field, would report directly to his Provincial Director of Public Works.
- 5.03 In view of the present lack of coordination in the field between the provincial Public Works Departments, who are responsible for diversion structures and primary and secondary canals, and the district and village authorities, who are responsible for the tertiaries, it is essential that responsibility for the rehabilitation of the entire systems to be included in the project to be unified, so that the voluntary efforts of the villagers can be coordinated with the other project works. Assurances should be obtained during negotiations that district authorities would be responsible to and follow instructions from the provincial Directors of Public Works in all matters relating to the project, particularly the rehabilitation of the tertiary canals.

Irrigation Management

5.04 The present unsatisfactory system of irrigation water management in Java should be improved. However, the system has been established in its present form for more than a hundred years and it would not be practicable to attempt to change it until a thorough study has been made. Nor are the field irrigation staff ready to assume the increased burden of managing the systems in their entirety. In Sumatra, however, there is no well-established structure for irrigation management, and it should be possible to build improvements in management into the new irrigation systems being constructed there. Assurances should be obtained during negotiations, therefore, that the Way Seputih irrigation system would be set up as a pilot area for improved irrigation management, with the provincial Department of Public Works

responsible for the construction and management of the entire system, including the tertiary canals. In the meantime the consultants would study the existing system of water management in Java and would recommend improvements for introduction as early as possible.

Recovery of Costs

5.05 There is no uniform method of recovering the costs of irrigation maintenance and rehabilitation from the beneficiaries. Farmers have generally contributed labor during the dry season for the maintenance of the tertiary systems and, in some areas, have made cash contributions for the purchase of materials needed to repair small structures. However, in the absence of any noticeable effort on the part of the Government to rehabilitate the primaries and secondaries, the farmer's willingness to contribute his labor has understandably diminished. Moreover, political dissidents in the villages have been urging farmers not to cooperate with the Government and to refuse to do any work on the irrigation systems unless they are paid in full for their labor. Finally, although part of the land tax revenues are supposedly earmarked for irrigation in many areas, the salaries of the large staffs employed by the village and district authorities have accounted for almost the entire amount of tax revenue retained at the local level. In view of the recent lack of irrigation maintenance and the need for rehabilitation that has resulted, this situation is unsatisfactory. While the ideal method of recovering the costs of irrigation would be through a water charge paid by the farmer it would not be politically feasible to institute such a charge in Java, given the present circumstances. Nonetheless, the authorities must begin now, even if only in a small way, to make routine provisions for the future maintenance of the irrigation systems, in order to prevent a recurrence of the present situation. An adequate average provision for the routine operation and maintenance of the irrigation systems would be about US 8 per ha, or approximately 50 kg of rice per ha, if the maintenance of the tertiaries is done by the farmers themselves. This is roughly half of the amount collected under the land tax. Assurances should be sought during negotiations, therefore, that in each district included in the project, a minimum of 25 percent of the land tax revenues (see Annex 5 for systems of taxation in use) would be not only earmarked but actually spent for the maintenance of the irrigation system concerned and that the Central and Provincial Governments would match these local funds with an equal provision from their own budgets. This would provide for the full costs of operation and maintenance. Further assurances should be obtained that the Government would institute in Way Seputih a water charge which would permit the full recovery of the costs of operation and maintenance of the irrigation system.

Supporting Services

5.06 Assurances should be obtained during negotiations that as the rehabilitation of a part of a scheme was completed, the area concerned would be provided with the BIMAS package of inputs, extension services and credit for the first wet season crop following rehabilitation. These inputs should be repeated thereafter for both the wet season and dry season crops - only for the latter if full technical irrigation is available - for the duration

of the project and at least one year thereafter. For this purpose, the staff of the extension services, presently available for each scheme, should be increased to give a coverage of at least one Government salaried employee to 250 ha. Where a scheme contains more than one district within its borders, the extension service leaders of each district should meet frequently during the rice season to coordinate the arrival and distribution of inputs and standardize their approach to the farmers.

VI. INCREASE IN PRODUCTION AND FARMERS' INCOMES

6.01 The project would lead to an increase in rice production of about 39,000 m tons annually, or about 15 percent of the present level, as shown below: (Details are given in Annex 5).

Α.	Area presently receiving irrigation (ha)	170,500
	Present rice yield (kg/ha) Rice yield expected after rehabilitation Increase	1,350 1,500 150
В.	Area presently rainfed (ha)	26,500
	Present rice yield (kg/ha) Rice yield expected after irrigation Increase	1,000 1,500 500
C.	Increase in rice production (metric tons)	
	Rehabilitation Completion	26,000 13,000
	Total:	39,000

In projecting these increases no account has been taken of any inputs other than improved supply of water to the crop. 1/ Moreover, no account has been taken of the future decline in production which would take place without the project. Except for a small extension of the Tjisedane system, the increased production in the Javanese rehabilitation areas would result entirely from more efficient irrigation, both in quantity and timeliness of application, and improved surface drainage, reducing flood losses. At Way Seputih, the increase would be entirely due to the supply of irrigation water to an area presently producing rainfed upland rice.

6.02 This increased production would result in foreign exchange savings of about US\$6.6 million a year by reducing the need for imported rice. This compares favorably with the project's total foreign exchange cost of only US\$3.5 million.

If the BIMAS package were applied to all these areas a minimum additional yield increase of 0.5 m tons/ha would be obtained.

Prices and Farm Incomes

- 6.03 For a number of years the price of rice in Indonesia has been kept at an average level considerably below world prices by the importation and distribution of rice to consumers at less than cost. In recent months the price of rice has risen rapidly and now has generally approached world price levels in major markets. The present farm-gate price is US\$160 per metric ton, while the price of imported rice, cif Djakarta, has risen above US\$200 a ton. In this report a price of US\$170 per m ton, cif Djakarta, is used to value the economic benefits. This price is less than current prices, which have risen sharply due to the war in Viet Nam, and is in line with the projected long-run peacetime average of US\$140 a ton fob Bangkok, which is equivalent to about US\$170 a ton, cif Djakarta.
- 6.04 The present net return per hectare, after deducting all on-farm production costs and land taxes, is about 0.75 m tons of rice in the rehabilitation areas and 0.45 m tons in Way Seputih. Thus the net rice production per family is about one half ton per year, equivalent to about US\$80 at farm-gate prices. About US\$150 is derived from other crops, livestock and the return to the family's labor, both on the farm and off, making the total family income roughly US\$230 a year, including subsistence.
- 6.05 As a result of rehabilitation, the net return per hectare in Java would increase by roughly 20 percent, while in Way Seputih it would double. Thus, family incomes would increase by about seven percent in Java and 35 percent in Way Seputih. Detailed costs of production are given in Annex 5.

VII. ECONOMIC JUSTIFICATION

- 7.01 The project, which would increase food production and reduce imports, is of high economic priority. The net economic benefits of the project consist of the projected increase in the production of rice, valued at the cif price of imported rice, US\$170 a ton, less the additional production, processing and transportation costs necessary to obtain the increase and the investment costs required to rehabilitate and complete the irrigation systems. Details of costs and benefits, year by year, are shown in Annex 6.
- 7.02 In view of the assurances to be obtained regarding provisions for the maintenance of the irrigation systems included in the project, it is very unlikely that the new Government would permit them, once rehabilitated, to revert to their present condition. However, assuming for simplicity's sake that the systems were not maintained but were allowed to gradually fill with silt, so that benefits would decrease and finally disappear altogether fifteen years after the completion of the project, the internal rate of return to the economy would still be about 50 percent. The rates of return on individual systems would range from 37 percent to 71 percent.

- 7.03 These high rates of return reflect the nature of the investment, i.e., eliminating the backlog of deferred maintenance and thus breaking the bottleneck which has been steadily choking off rice production in these areas. If, as is expected, the Indonesian authorities will not allow the systems to revert to their present condition, but will henceforth embark on an effective program of irrigation maintenance in these areas, the benefits would continue indefinitely and the return to the economy would be even higher. On the other hand, even if the execution of the project fell behind schedule for some reason, say due to failure to achieve the machine operation target of 2000 hours a year, the rate of return would still be high.
- 7.04 Equally important, however, is the fact that, once these areas are provided with adequate irrigation and drainage systems, it will then become economically feasible to employ other modern inputs, such as those contained in the BIMAS package. In this way the direct benefits of the project may lead to other even greater benefits by making it worthwhile and possible for farmers to use a variety of purchased inputs to complement the irrigation water and further increase their yields.

VIII. CONCLUSIONS AND RECOMMENDATIONS

- 8.01 Unfortunately the appraisal of the proposed project could not await the kind of information which is normally available at a more advanced state of project preparation; much of this information will become available only after the proposed credit is signed. The project, however, undoubtedly has a very high economic priority. It would enable the Indonesian Government to make a start with some of the more urgent works of rehabilitation and completion, while drawing up, on a sound engineering basis, an expanded program for the future. The project is suitable for an IDA credit of US\$3.5 million.
- 8.02 During negotiations assurances should be obtained that:
 - (a) The appropriation of the local currency required to carry out the project would be given priority in the annual development budget (para 4.12);
 - (b) The Government would retain an international consulting firm, acceptable to the Association (para 4.14);
 - (c) The manager of each irrigation system in the project would report directly to his provincial Director of Public Works (para 5.02);
 - (d) District authorities would be responsible to and follow instructions from the provincial Directors of Public Works in all matters relating to the project, particularly the rehabilitation of the tertiary canals (para 5.03);

- (e) The Way Seputih irrigation system would be set up as a pilot area for improved irrigation management, with the provincial Department of Public Works responsible for the construction and management of the entire system, including tertiary canals (5.04);
- (f) In each district included in the project, a minimum of 25 percent of the land tax revenues would be spent for irrigation operation and maintenance, and the Central and Provincial Government would match these local funds with an equal provision from their own budgets (para 5.05);
- (g) In Way Seputih a water charge would be instituted on an experimental basis which would permit the full recovery of the costs of operation and maintenance of the irrigation system (para 5.05); and
- (h) As the rehabilitation of a part of a scheme was completed, the area concerned would be provided with the BIMAS package of inputs, extension services and credit (para 5.06).

IRRIGATION REHABILITATION PROJECT

AGRICULTURE

A. BIMAS and INMAS

- Low rice yields are the principal problem of peasant agriculture in Indonesia. The present estimated yield is 1.35 m tons of rice per hectare, equivalent to half a ton per acre. These low yields are of particular importance in Java with its dense rural population and small size of individual rice holding. There is substantial evidence that on at least 1.9 million ha of irrigated rice in Java yields have fallen over the past thirty years, as a result of the deterioration of the irrigation systems through lack of maintenance, and these yields are still slowly falling. In Java, there is no idle rice land which could be brought into cultivation to offset declining yields. The problem is therefore how to increase productivity per hectare.
- 2. A prerequisite for optimum rice yields is an adequate supply of water in sufficient quantity at the right time. Yields can then be further increased by the application of further inputs such as improved varieties, fertilizers, insecticides, fungicides, rodenticides, and adequate extension advice.
- 3. With the aim of increasing productivity per hectare the Indonesian Government has developed a scheme to increase rice production on areas where there is an adequate water supply throughout the growing season of the crop, popularly known as the BIMAS scheme. The scheme involves extension advice and the application of a package of inputs consisting of seed of improved varieties, 75 kg per ha of urea, 50 kg per ha of double superphosphate or 100 kg per ha of fused magnesium phosphate, 2½ liters of Endrin per ha, 100 gm per ha of zinc phosphide and spraying equipment, financed by a crop loan for seven months at an interest rate of three percent per month. The package is only applied to selected groups of farmers who have rice land that is adequately watered. Extension advice is given by agricultural students, theoretically at a rate of one for every 50 ha. The students have more than made up in their enthusiasm for what they lack in experience, and their advice has been generally well received by farmers.

- BIMAS developed from the "Paddy Centra" program which was organized in 1960 to increase rice yields in Java and which was abandoned in 1964. The lessons learned in this failure were taken into account by the organizers of BIMAS, namely the need to concentrate inputs where land and water conditions were most promising. The under-lying idea behind BIMAS is that with proper care and attention plus adequate irrigation, the package of inputs will result in increasing yields by one m ton of rice per ha. This theory was tested in numerous field trials which confirmed its technical soundness. As the area under BIMAS has been expanded to 400,000 ha in the 1967/68 wet season, the expected increased yield has decreased somewhat owing to greater variation in soils and irrigation efficiency as the area expanded. In consequence, a minimum increase in yield of half a ton of rice per ha, as a result of BIMAS inputs, has been assumed in this report.
- 5. The composition of the BIMAS package and its application in each Province is the responsibility of a Provincial committee, chaired by the Dean of the Faculty of Agriculture of the Provincial University. Other members include representatives of agriculture, public works, local government and credit organizations but not marketing.
- 6. In order to demonstrate to farmers the benefits of BIMAS, the policy has been to provide any one group of selected farmers with BIMAS for one year and then to move to another area. Since 1967, groups of farmers who have received BIMAS can then participate in the follow-up program, which is known as INMAS. In this program, the package of inputs remains the same as for BIMAS, the cost of the fertilizers being subsidized, as in BIMAS, by Government, but without Government credit for the package and without extension advice. The INMAS program is a logical step forward following BIMAS, credit, where necessary, being supplied from sources other than Government. There is no need for specific extension advice as the lessons are demonstrated to the farmer in the BIMAS program. If necessary, the farmer can always obtain advice from the normal district extension service. Yields from the INMAS program are similar to that for BIMAS. The area under INMAS in 1967/68 wet season was 375,000 ha.
- 7. The effect of the BIMAS and INMAS programs for the 1967/68 wet season should be at least 400,000 m tons of rice, an increase of four percent on an estimated crop of ten million m tons.
- 8. There is no doubt that provided the irrigation systems in Java were rehabilitated and BIMAS followed by INMAS were applied throughout, following rehabilitation, the present shortfall of rice

could be turned at least into self-sufficiency. The yield benefits of BIMAS and INMAS cannot, however, be applied on a large scale to the irrigation systems in their present state without losing some of the potential yield increase because of water stress in the crop.

B. Agriculture in the Project Areas

Climate, Topography and Soils

The schemes are situated in the wet, humid, insular tropics, south of the equator with a distinct wet season from November/December to April/May and a dry season for the remainder of the year. The Way Seputih and East Semarang schemes are located in the 2,000 - 3,000 mm rainfall belt, the remainder in the 1,000 - 2,000 mm zone. Rainfall in the wettest month, January, is 300-400 mm falling to 25-80 mm in August. The schemes in Java are situated on the flat estuaries of rivers, and contain alluvial and hydromorphic alluvial soils, there being some black cotton soils in the East Semarang scheme. The soils are very suitable for wet rice cultivation and with good land and water management and the application of a nitrogenous fertilizer are capable of producing good yields of rice. The Way Seputih scheme is situated on a gently undulating peneplain; the soils are an easily cultivated red-yellow podsolic sandy-silt, with a sub-soil that becomes mere impermeable with time, under irrigation. These soils will produce good crops of rice with adequate irrigation water and good field lay-out. The application of fertilizers will be necessary for optimum yields of rice as well as for dry farming crops of maize, roots and tree crops. The soils would also benefit from the incorporation of crop residues and farmyard manure.

Population, Land Tenure and Communications

10. The Way Seputih scheme has a ratio of population to cultivated land of less than five persons per ha, while the Java schemes have a density of more than ten. Way Seputih is a transmigration settlement which is under direct Government management pending the completion of the irrigation system, following which the titles to the farms of 2½ ha, of which 1 ha will be irrigated land, will be handed over to the settlers. All lands in the Java schemes are freehold and are farmed either by the owner, on a share cropping basis or by tenants paying a fixed rent. Land rents are equivalent to about one ton of stalk paddy per ha. The average holding size is two thirds of a hectare. The road systems within the schemes are inadequate both in quantity and quality as are the means for getting about the schemes, other than on foot.

Cropping Pattern and Yields

- The cropping pattern on Way Seputih differs from that on the Java schemes. The latter are designed primarily for the production of wet rice with irrigation while, at Way Seputih, each farm is designed to provide the farmer with 1 ha of irrigated land and 1-1/2 ha of land suitable for dry farming on which maize, root and tree crops can be grown. On the Java schemes, a dry season crop of rice of about 40,000 ha is presently being cultivated. In the present state of the irrigation systems, this crop is not getting sufficient water and yields are accordingly depressed. The question arises as to whether the cultivation of a dry season crop of swamp rice is the best use that can be made of the limited irrigation water available. The soils on all the Java schemes are suited to the cultivation of irrigated crops of maize, legumes, vegetables, melons, etc., all of which would require less irrigation water per ha than rice. Similarly, in Way Seputih, the growing of crops, other than rice, in the dry season would permit a larger area to be irrigated. With Government's preoccupation with rice production, such a development might occur once the domestic rice market is fully supplied by wet season crops. Similarly, the wet season rice crops suffer generally from water stress, which results in about a 15-20 percent reduction in yield, save for those areas near headworks which receive adequate water.
- 12. The main, wet season rice crop is planted in November to January, depending on the rains. Because of the danger of flooding, the planting season may extend to late March. This spreading of the planting season undoubtedly depresses yields, as late planted crops suffer from lack of water. The spreading of the harvest also aggravates the pest and rat control problems.
- 13. As a result of the BIMAS program, farmers are generally aware of the benefits that will accrue from the use of recommended varieties, nitrogenous and phosphatic fertilizers, insecticides and rodenticides. This program is only being applied to very limited areas on each scheme included in the project, however, because a prerequisite is an efficient irrigation system.
- 14. The Javanese peasant is a skilled rice cultivator and goes to infinite pains to prepare his land, plant and tend his crop. Under present conditions he is unable to obtain the yields which the land is capable of producing because of lack of sufficient water in the field at the right time. This deficiency also prevents him from taking advantage of the still greater yields that he could obtain by using fertilizers, insecticides, etc. Yield data supplied for each scheme varied considerably. Yields in Java are estimated presently to average 1.35 m tons of rice per ha in the wet season, and 1.1 m tons in the dry season. The yield of rainfed rice in Way Seputih is about one ton per hectare.

Marketing, Credit and Transportation

- 15. It is estimated that over 70 percent of the paddy produced in Indonesia is hand-pounded, 20 percent is milled in rice hullers and ten percent in rice mills. The Government's policy is to reduce the amount of hand-pounded paddy thereby reducing the ten percent losses incurred in this method of milling. The producer sells his crop either as stalk paddy or as rice, after retaining sufficient for his own requirements. The crop is stored at his house and losses arising from such on-farm storage are estimated to be as high as 20 percent. Many rice mills are in need of repair and adjustment and a feature of rice in country markets is the high percentage of brokens. The rice mills would benefit from modernization, centralization and improvement of drying facilities, particularly in regard to seed paddy and early harvested wet season crops.
- 16. There is a conspicuous lack of credit facilities available to the peasant farmer together with a lack of an assured market for his crop at remunerative, non-fluctuating prices. If a farmer is fortunate enough to be selected for a BIMAS project, he gets seven months' credit for the BIMAS inputs and subsequently can obtain inputs from the follow-up program. There is no other institutional source of credit available to him. Interest rates are three percent per month under BIMAS. There is no doubt that given adequate market incentives, irrigation facilities and credit to purchase fertilizer and other inputs, a major breakthrough in rice production could be achieved under present conditions.
- 17. Stalk paddy is transported from the field to the farmer's house by those harvesting the crop, either on their backs, on carry poles, by bicycle or by cart. Transport from the farm to the rice mill is by similar means. There is adequate road and rail transport from the schemes to the consuming centers.

Supporting Services

18. In general, the supporting services available to the farmer are poor and inadequate. The supply of fertilizers and insecticides is limited by lack of foreign exchange. The extension services in agriculture and irrigation are short of adequately trained and experienced staff and of tools with which to work. The effectiveness of those available is further reduced by a lack of transportation coupled with poor roads within the schemes.

19. Both the Central Agricultural Research Institute and the Soils Research Institute require strengthening both in trained staff and financially to enable applied research work on all aspects of the rice crop to be intensified, particularly rice breeding, field testing of promising varieties and the production of seed paddy, fertilizer requirements of the major soil types and the economics of pest and rodent control.

May 24, 1968

IRRIGATION REHABILITATION PROJECT

CONSULTANTS' SERVICES

- 1. The Government would as soon as possible retain a firm of consultants for the duration of the project. The duties and services rendered by the consultants would be as follows:
 - (a) To review and analyze the design of the existing irrigation systems, to redesign the systems where necessary and to propose detailed procedures, equipment needs, material requirements and cost estimates required for the rehabilitation of each of the three schemes in Java and for the completion of the Way Seputih scheme.
 - (b) To advise on and supervise the rehabilitation work, in direct association with Provincial Directors of Public Works.
 - (c) To study and advise on management, operation and maintenance of each scheme and to make recommendations for improving these functions and for recovering the costs of operation and maintenance; and to assist in implementing desired changes.
 - (d) To advise on and to review organizing, managing, equipping and operating mobile and fixed workshops in each of the three Provinces, to make recommendations for improvement and to assist in implementing desired reorganizations.
 - (e) To organize and supervise in-service training of personnel at all levels, both in the field and in the workshop, and in spare parts and material stores.
 - (f) To devise, organize and supervise suitable accounting systems, for the work of rehabilitation, including operation of workshops, equipment and maintenance and spare parts and material procurement, stocking and disbursement.

- (g) To identify other irrigation schemes in urgent need of rehabilitation, particularly on Java, review each scheme, redesign same as may be necessary and submit detailed plans for their rehabilitation together with estimates of equipment, materials and costs with an economic appraisal of each scheme.
- (h) To establish stream rating surveys and measuring stations and to initiate techniques for assessing, measuring and recording flows in rivers, canals and drainage channels for each of the schemes in the project, including the setting up of recording stations and training local personnel in their use, as well as for schemes identified for future rehabilitation.
- Because of the urgent need to assist Indonesia in increasing its rice production, it will be necessary to proceed with the purchase of basic equipment, such as small dredgers, draglines, crawler tractors, etc., before the consultants have had time to review the systems in detail, if a start is to be made on the more obvious rehabilitation work in the 1969 dry season, which extends from April to November. In consequence, the consultants will have to be in the field in October/November 1968 if they are to have sufficient time to prepare a preliminary plan for the rehabilitation work to be undertaken by the equipment in the 1969 dry season.
- 3. All the rehabilitation work on the systems will perforce have to be carried out in the dry season if there is to be no interference with rice production in the main crop season. After the first year, it should be possible to utilize certain of the equipment in the wet season on cleaning drainage outlets, dikes, etc., without interfering with rice production.
- the consultants will decide on the number and types of staff required to carry out their assignment. However, it is considered essential that their staff in the field should include, for the duration of the project, an operation and maintenance expert with broad experience of surface irrigation systems and an experienced economist. A technical engineer with experience of earthmoving machinery and workshop operation is also essential as well as a design engineer experienced in surface irrigation works.

IRRIGATION REHABILITATION PROJECT

PROJECT WORKS

- 1. The estimates of the work required for the various systems were prepared on the basis of very limited data and verbal information. The Mission's observations contributed to the estimate of the condition of the canals and structures for the portions of the systems visited. The estimates represent, at best, only an educated guess of the magnitude of the work required.
- The selection of the amount and kinds of equipment for handling the work and the means for performing the excavations were based on the expected magnitude of the job, on the sizes of the canals and drainage channels to be cleaned, on the accessibility and working space for operating the equipment and on the availability of workers for doing the excavation by hand labor. The amount of equipment allotted to each area was determined from the type of operation expected to be employed and on the total silt, etc. to be removed. It was contemplated that the machines would be put to efficient use on a double shift basis, with at least ten hours per day and a 200 day per year operating schedule. This would require trained and skilled operators and competent supervisory direction of the work together with good operation and maintenance and repair facilities.
- Quantity estimates were based on stated lengths of each of the various sized canals in the system and on the estimated amount of silt deposit now in each of the canals or on estimated rates of silt deposition supplied. Other work items were estimated from observed conditions and on the basis of facts and figures provided by the Directorate of Irrigation as to the work requirements for constructing flood control dikes and revetments, making structure repairs or replacements, etc.
- 4. Unit prices for machine excavations were determined from a breakdown of hourly equipment charges, operator and supervisory personnel costs, administrative overhead costs, etc. Unit prices for hand labor were determined from prevailing wage rates, or from cost evaluations based on Food for Work programs, self help programs, etc.
- 5. A brief description and estimate of the earthwork program for each of the Project areas follows: (A list of equipment is contained in Table 1.)

A. The East Semarang Systems

- 6. The area is located in the Province of Central Java on the plain between the rivers Tuntang and Serang (see Map 2). There are two sub-divisions of this area, Sedadi (22,600 ha) and Glapan (20,000 ha).
- 7. The Sedadi unit diverts its water from the Serang River whose average daily flow is 27 m³/second in the wet season and 4 m³/second in the dry season. There are 22,600 ha of land irrigated in the wet season and no land irrigated in the dry season. Water was first applied to the land in 1859.
- 8. The Glapan system diverts from the Tuntang river, whose average daily flow is 27 m³/second in the wet season and 4 m³/second in the dry season. The total irrigated area of Glapan is 20,000 ha during the wet season and 4,000 ha during the dry season. Water was first applied to land in Glapan Timur in 1853 and Glapan Barat in 1875. This Project comprises some of the oldest irrigated land on Java.
- 9. There is a total of 68 km of primary canals, 93 km of secondary canals and 200 km of tertiary canals. For the purpose of this report the primary and secondary canals were estimated to have only 30 percent of their original capacity. There is an estimated 755,000 m³ of silt removal required in primary and secondary canals, including 130,000 m³ of excavation by hand labor. The tertiary system is estimated to require 100,000 m³ of excavation. It is estimated that 1,300,000 m³ of excavation will be necessary to enlarge a waterway channel, used as a drainage outlet.

B. The Rentang System

- 10. The Rentang System is located in the north-eastern portion of West Java (see Map 3). The system receives its water from the Tjimanuk River, whose average daily flow is 250 m³/second in the wet season and 5-10 m³/second in the dry season. Water was first placed on the land in 1914, and the system was one of the more productive rice areas of Java before its deterioration. The irrigated area comprises 91,000 ha. The deterioration of the system has resulted in flood damage to large areas of rice planting as well as endangering life in the city of Indramaju.
- 11. The regulating controls of the diversion dam are in poor condition and do not control flood flows, thus endangering the entire dam. The present system of using stop logs with lifting chains is not only dangerous but basically too slow a control for passing flood flows. The present condition of the stop logs and chains is such that it is

almost impossible to raise or lower the water surface in cases of emergency. They must be replaced by a more reliable control system.

- 12. Canal freeboards did not appear to be badly encroached, but flows have obviously been restricted by silt deposits. Control devices on turnouts were in poor condition and the system flow appeared to be restricted by structure design.
- 13. The Tjipelang primary canal's original capacity was 31 m³/second but it is now estimated to have a capacity of 20 m³/second or 65 percent and the full technical irrigated area has been reduced from 35,000 ha to 22,500 ha. The Sindupradja primary canal's original capacity was 56 m³/second but it is now estimated to have only 45 percent of the capacity or 25 m³/second thus reducing the irrigated area from 56,000 ha to 33,500 ha.
- 14. There is a total of 119 km of primary canal, 545 km of secondary canal and an estimated 700 km of tertiary canal. For rehabilitation of the system it is estimated that 3,675,000 m³ of excavation over a five-year period will be required, including 350,000 m³ of excavation by manual labor on the tertiary system.

C. The Tjisedane System

- 15. The Tjisedane System is located on the northern coast of West Java only 40 km from Djakarta (see Map 4). Water was first placed on the land in 1932. The ultimate development envisions 40,000 ha of which 33,500 ha are now being irrigated. An additional 6,500 ha can be added to the present system by removal of an earth slide in one of the primary canals, construction of 4 km of new canal and cleaning 4 km of the existing primary canal. Of the 6,500 ha, 4,000 ha are presently being irrigated by water from another source. By extending the Tjisedane system, water for 4,000 ha can be released for other development and an additional 2,500 ha of land can be brought in.
- 16. Water is diverted from the Tjisedane River and the average daily flow is 60 m³/second in the wet season and 18 m³/second in the dry season. The diversion dam is 122.5m long and regulates the river flow by use of ten 10m x 9m lift gates. There is a total length of 88 km of primary canal (including the 4 km of new construction) varying in capacity from less than 5 m³/second to 24 m³/second. In addition there is an estimated 105 km of secondary canals and an estimated 200 km of tertiary canals.

17. The canal system was estimated to be 30 percent silted with an average loss of 40 percent of canal capacity. To rehabilitate the system will require removal of 1,236,000 m³ of silt, 34,000 m³ new construction and an annual program of 380,000 m³ of silt removal to maintain the system. By use of two draglines and one dredger, the rehabilitation of the earth sections of canal can be completed in a two-year period and the equipment will be sufficient for a continuing program of maintenance for three additional years. Gates on the dam need repair in the form of wheels, bearings, and skin plates. There is need for a standby generator to provide power to the lift gates.

D. The Way Seputih System

- 18. This system is located in Lampung Province in southern Sumatra and receives its water from the Way Seputih river (see Map 5). The project is now under construction and designed to serve the settlement of transmigrants from Java. The total area to be irrigated under the present design is 25,000 ha. The design capacity of the primary canal is 25 m³/second and the average daily flow of the river is 60 m³/second in the wet season and about 4.5 m³/second in the dry season. The present system is so far using only 1.0 m³/second to irrigate about 1,000 ha.
- 19. Most of the previous excavation work has been done by hand labor with help of some earthmoving equipment. The work on the project began in 1956. The diversion dam and intake were finished four years ago. The main canal construction has been completed for 15 km. Sufficient equipment has been requested to construct 4.5 km of primary canal and 7 km of secondary canal entailing the moving of 650,000 m³ of excavation in one season. This construction would serve 2,000 ha of land.
- 20. To complete the system 29.5 km of primary canal and 71.0 km of secondary canal must be constructed. The total system will require 3,310,000 m3 of excavation including an estimated 100,000 m3 of tertiary canal excavation.

IRRIGATION REHABILITATION

LIST OF EQUIPMENT (all amounts US\$)

Item of Equipment	Unit Cost CIF Djakarta Including 20% Spare Parts	E. Semarang	Rentang	Tjisedane	Way Seputih	Total Number of Pieces of Equipment	Total Cost CIF Djakarta	Impo	ort Duty Cost	Inland Delivery to Job Site	Cost Including Duty and Inland Delivery
DREDGER - 8" cutter	100,000	100,000	200,000	100,000	-	4	400,000	10%	40,000	80,000	520,000
DRAGLINES											
5/8 c.y. w/to' Boom 3/4 c.y. w/55' Boom 1 c.y. w/70' Boom	40,000 48,000 58,000	148,000 58,000	18,000 58,000	40,000 48,000	96,000	1 5 2	40,000 240,000 116,000	20% 20% 20%	8,000 48,000 23,200	8,000 48,000 23,200	56,000 336,000 162,400
TRACTOR-DOZER											
Crawler - 120 Hp/winch Crawler - 160 Hp Crawler - 160 Hp w/Push plate/	43,000 53,000 /Ripper 53,000	43,000	43,000	43,000	212,000 53,000	3 4 1	129,000 212,000 53,000	20% 20% 20%	25,800 42,400 10,600	25,800 42,400 10,600	180,600 296,800 74,200
PULL SCRAPERS											
12 - 17 c.y.	24,000	-	-	-	96,000	l ₄	96,000	20%	19,200	19,200	134,400
DUMP TRUCKS											
3.5 c.y. w/8 Ton Hoist	7,000	84,000	42,000	42,000	42,000	30	210,000	10%	21,000	42,000	273,000
PATROL-MOTOR GRADER											
Tandem drive - 120 Hp	29,000	29,000	29,000	-	29,000	3	87,000	20%	17,400	17,400	121,800
INSPECTION CARS											
4 x 4 3/4 Ton	3,600	7,200	10,800	7,200	7,200	9	32,400	40%	12,960	6,480	51,840
EQUIPMENT TRANSPORTER											
Tractor Lowboy Diesel - 25T	30,000	30,000	1.0	-	30,000	2	60,000	10%	6,000	12,000	78,000
CONCRETE MIXER											
250 L - Gas	4,200	8,400	8,400	4,200	8,400	7	29,400	20%	5,880	5,880	41,160
COMPRESSORS											
105 CFM/with Tools	4,800	9,600	9,600	4,800	9,600	7	33,600	10%	3,360	6,720	43,680
PUMPS											
3" intake - 4" Discharge	3,000	6,000	6,000	3,000	3,000	6	18,000	10%	1,800	3,600	23,400
MOBILE SHOP											
4 x 6 - 2 Ton Complete	30,000	30,000	30,000	30,000	30,000	4	120,000	30%	36,000	24,000	180,000
STATIONARY SHOP											
Mechanical Equipment	50,000	50,000	-	50,000	50,000	3	150,000	20%	30,000	30,000	210,000
MATERIALS	-	60,000	110,000	80,000	115,000		365,000	10%	36,500	73,000	474,500
TOTAL:		563,200	594,800	452,200	781,200		2,391,400		388,100	478,280	3,257,780
TOTAL IMPORT DUTY - INLAND DELIV	VERY	200,760	206,320	162,340	296,960				Transfer N	200.000	
TOTAL ALL COSTS		763,960	801,120	614,540	1,078,160		2,391,400		388,100	478,280	3,257,780

IRRIGATION REHABILITATION

PROJECT COST ESTIMATE (all amounts in US\$ '000)

	Foreign Exchange Costs	Local Curr ency Costs	Total Cost Excluding Contingencies	Contingencies	Total Cost Including Contingencies
Machinery and Equipment					
(including spares and service):					
Dredgers	400	120	520	80	600
Draglines	396	158	554	91	645
Tractors	394	158	552	90	642
Scrapers	96	38	134	22	156
Trucks	210	63	273	1,2	315
Graders	87	35	122	20	142
Inspection Cars	32	19	52 78	9	61
Equipment Transporters Concrete Mixers	60 29	18 12	41	12	90 48
Compressors	34	10	44	7	51
Pumps	18	5	23	14	. 27
Mobile Repair Shops	120	60	180	31	211
Stationary Repair Shops	150	. 60	210	34	244
Total:	2,026	757	2,783	149	3,232
Materials and Supplies	365	110	475	73	548
Operation and Maintenance of					
Machinery and Equipment	-	1,356	1,356	387	1,743
Direct Labor					
Force Account	-	822	822	234	1,056
Tertiary Canals		213	213	61	274
Total:	-	1,035	1,035	295	1,330
Consultants' Services	750	250	1,000	157	1,157
Total Excluding Contingencies	3,141	3,508	6,649	*	
Contingencies	361	1,000		1,361	
Total Including Contingencies	3,502	4,508			8,010
Percentage	44	56	83	17	100

Note: Discrepancies due to rounding. May 24, 1968

IRRIGATION REHABILITATION

SCHEDULE OF EXPENDITURE INCLUDING CONTINGENCIES (all amounts in US\$ '000's)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
East Semarang: Machinery and Equipment Materials Cleaning of Tertiaries Direct Labor on Force Account Operation of Machinery and Equipment Total:	796 45 9 73 49 972	15 9 35 48 107	12 9 29 48 98	9 9 26 48 92	9 9 26 48 92	796 90 45 190 240 1,361
Rentang: Machinery and Equipment Materials Cleaning of Tertiaries Direct Labor Force Account Operation of Machinery and Equipment Total:	763 105 31 159 105 1,163	23 31 48 105 207	20 31 39 105 195	12 31 33 105 181	6 31 25 35 97	763 165 157 304 456 1,845
Tjisedane: Machinery and Equipment Materials Cleaning of Tertiaries Direct Labor on Force Account Operation of Machinery and Equipment Total:	593 48 22 70 66 799	26 22 51 63 162	17 9 43 66 135	15 9 42 66 132	15 9 42 66 132	593 120 72 247 326 1,358
Way Seputih: Machinery and Equipment Materials Direct Labor on Force Account Operation of Machinery and Equipment Total:	1,080 35 63 145 1,323	35 63 144 242	35 63 144 242	35 63 144 242	35 63 144 242	1,080 173 315 721 2,289
All Systems: Machinery and Equipment Materials Cleaning of Tertiaries Direct Labor on Force Account Operation of Machinery and Equipment Total: Consultants' Services Total Cost:	3,232 233 63 364 365 4,257 231 4,488	98 63 197 360 718 232 950	83 49 174 363 669 231	71 49 164 363 647 232 879	65 49 156 292 562 231 793	3,232 548 274 1,056 1,743 6,853 1,157 8,010

Note: Discrepancies due to rounding.

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IRRIGATION REHABILITATION PROJECT

PRODUCTION, INPUTS AND FARMERS' INCOME

- The yield data supplied for these schemes showed considerable variation, and as a result, it has been necessary to conservatively estimate the present rice yields per hectare, which are 1.35 m tons per ha of rice for wet season crops, 1.1 m tons per ha for dry season crops, and 1.0 m tons per ha for the rainfed crops in Way Seputih. Once the schemes are rehabilitated it is estimated that they should produce average yields of 1.5 m tons of rice per ha in the wet season and 1.35 m tons per ha in the dry. The application of the BIMAS inputs should result in average yields of not less than 2 m tons of rice per ha in the wet season and 1.75 m tons per ha in the dry.
- 2. Bearing in mind the current area being planted to rice in the dry season and the limited water available, it is considered that the increase in production in the dry season crop can be discounted when calculating the changes in yield and in production following rehabilitation and for the table only wet season crop yields have been used.

Increases in Yield

The rehabilitation of the three schemes in Java and the completion of Way Seputih, totalling 198,000 ha will lead to an increase in production of rice of the order of 15 percent and to an increase of 53 percent, if the BIMAS inputs are added following rehabilitation. The increase in production in Java will result from more efficient irrigation, both in quantity and time of application, while in Way Seputih, the increase will be entirely due to the supply of adequate irrigation water to an area presently producing upland rice or other crops. The changes in yields and production following rehabilitation are illustrated below:

Table 1

AREA, YIELDS AND PRODUCTION

Present Production

	Present Pi	Odde of off	
Scheme	Area (1000's)	Yields Rice m tons/ha	Production Rice m tons ('000's)
 East Semarang Rentang Tjisedane Way Seputih 	42.0 91.0 37.5 2.5 24.0	1.35 1.35 1.35 1.00 1.00	57.0 123.0 51.0 2.5 24.0
TOTAL:	198.0	er Rehabilitation	259.0
	I COLO VIOL RI GO	TIONEDILL OR OLO	•
1. East Semarang 2. Rentang 3. Tjisedane 4. Way Seputih TOTAL:	42.0 91.0 40.0 25.0 198.0	1.5 1.5 1.5 1.5	63.0 137.0 60.0 37.5 297.5
Total Benefit of Reh	abilitation:		38.5

Production After Rehabilitation with BIMAS Inputs

1. East Semarang	42.0	2.0	84.0
2. Rentang	91.0	2.0	182.0
3. Tjisedane	40.0	2.0	80.0
4. Way Seputih	25.0	2.0	50.0
TOTAL:	198.0		397.0
Gross Benefit of Rehal Plus BIMAS Inputs	138.0		

Inputs and Costs of Production

- It is estimated that the cost of production at farm-gate for an owner-cultivator producing rice on the schemes under consideration is equivalent to 44 percent of the gross value of the crop which, on the average yield in Java of 1.35 m tons per ha, results in a net return to the owner-cultivator of 0.75 m tons per ha. In Java, the additional harvesting cost following rehabilitation amounts to ten percent of the increase in production, and, with a yield increase of 0.15 m tons per ha, the additional net return to the farmer is 0.135 tons per ha. In Way Seputih, the cost of production at farm-gate is equivalent to 55 percent of the gross value of the crop, the net return to the farmer being 0.45 m tons of rice per ha; after rehabilitation, the additional harvesting cost is equivalent to ten percent, as in Java, and the additional net return to the farmer is 0.45 m tons per ha. If the BIMAS inputs are added following rehabilitation, the farm-gate production cost will fall to only 40 percent of the gross value of the crop in both Java and Way Seputih, giving an overall net return of 1.2 m tons of rice per ha. Details are given in Table 2.
- 5. In Java, the schemes are farmed by two basic types of farmers, the owner-cultivator and the share cropper. In share cropping, the harvest is shared on a basis of 50:50. The landlord provides the land, seed, fertilizers, insecticides, rodenticides, and pays the land tax; the share cropper provides all other services and the crop at harvest is divided as stalk paddy. At Way Seputih, the scheme will be farmed by owner-cultivators. In the following tables, the estimated costs of production of rice for both types of farmer are given together with the net return per hectare:

Table 2

COST OF PRODUCTION
(in rice equivalents)

		JAVA		WAY SEPUTIH	
Cui	Owner- ltivator ce kg/ha	Share Cropper Rice kg/ha	Landowner Rice kg/ha	Owner- Cultivator Rice kg/ha	
Present Situation:					
Gross Return	1,350.0	675.0	675.0	1,000.0	
Cost of Production:					
Nursery	30.0	17.5	12.5	30.0	
Land Preparation	175.0	175.0	-	175.0	
Transplanting	30.0	30.0	-	30.0	
Weeding	62.5	62.5	-	62.5	
Irrigation	37.5	37.5	-	37.5	
Bird Scaring	19.0	19.0	44	19.0	
Harvest (10%)	135.0	135.0		100.0	
Total Cost:	489.0	476.5	12.5	454.0	
Land Tax	100.0	-	100.0	100.0	
Total Cost Including Ta	x 589.0	476.5	112.5	554.0	
Not Dotum non Hostone	767 0	708 5	r60 r	446.0	
Net Return per Hectare	761.0	198.5	562.5	440.0	
After Rehabilitation:					
Gross Return	1,500.0	750.0	750.0	1,500.0	
Cost of Production					
(see above)	489.0	476.5	12.5	454.0	
Add. Harvest Costs (10%		15.0		50.0	
Total Cost:	504.0	491.5	12.5	504.0	
Land Tax	100.0		100.0	100.0	
Total Cost Including Ta	x 604.0	491.5	112.5	604.0	
Net Return per Hectare	896.0	258.5	637.5	896.0	
After Rehabilitation with	BIMAS In	puts:			
Gross Return	2,000.0	1,000.0	1,000.0	2,000.0	
Cost of Production					
(see above)	489.0	476.5	12.5	454.0	
Add. Costs:			40.4		
Fertilizers	77.5	25.0	52.5	77.5	
Pest Control	38.0	15.0	23.0	38.0	
Rodent Control	27.0	25.0	2.0	27.0	
Transport of Inputs	0.5	•	0.5	0.5	
Interest on Inputs	16.5	65.0	16.5	16.5	
Add. Harvest Costs (10% Total Cost:		65.0	707.0	100.0	
Land Tax	713.5	000.5	107.0	713,5	
	100.0	40K F	100.0	NAME AND ADDRESS OF THE OWNER, OF TAXABLE PARTY OF TAXABL	
Total Cost Including Ta	STREET, STREET	606.5	207.0	813.5	
Net Return per Hectare	1,186.5	393.5	793.0	1,186.5	

- 6. The estimated cost of transport to the mill and milling charges are equivalent to two and three and three-quarters percent of the crop respectively, the miller retaining the bran and fine brokens.
- Some difficulty was experienced in obtaining information on the taxes paid by farmers. The tax paid by all cultivators was devised by the Central Government and is known as I.P.D. It is administered by the Province for the benefit of the Province. The tax collected is divided up between the Province, a Regional Development Bank, or some such organization, the District and the Village. In South Sumatra and Central Java the respective allocations are ten percent, ten percent, 40 percent and 40 percent. In West Java, the District receives only 20 percent and the Village's share is increased to 60 percent. The amount of the annual tax is determined by the Provincial legislature each year as are the proportions allocated to the District and Village. Similarly, the tax received at the Village and District levels can be allocated to various works each year. No fixed allocations appear to be made for the maintenance of irrigation systems. As from this year, the tax is to be paid in cash. The rate of tax is determined by the class of land, first quality paddy land paying more. The rates in each area vary, but are usually five to ten percent of the value of production. Tax is also collected on other cultivated land, unproductive land and house lots.
- 8. As an illustration, in Indramaju, the tax paid was claimed to be about ten percent of production per ha and the tax rates in 1967 were as follows:

	Tax					
Class of Land	Kg Dry Stalk Paddy Per Ha					
lst	200					
2nd	175					
3rd	150					
4th 5th	125					
6th	100 7 5					

There was provision for exemption from tax following a disaster, such as a flood, or a reduction in tax following a bad crop.

INDONESIA

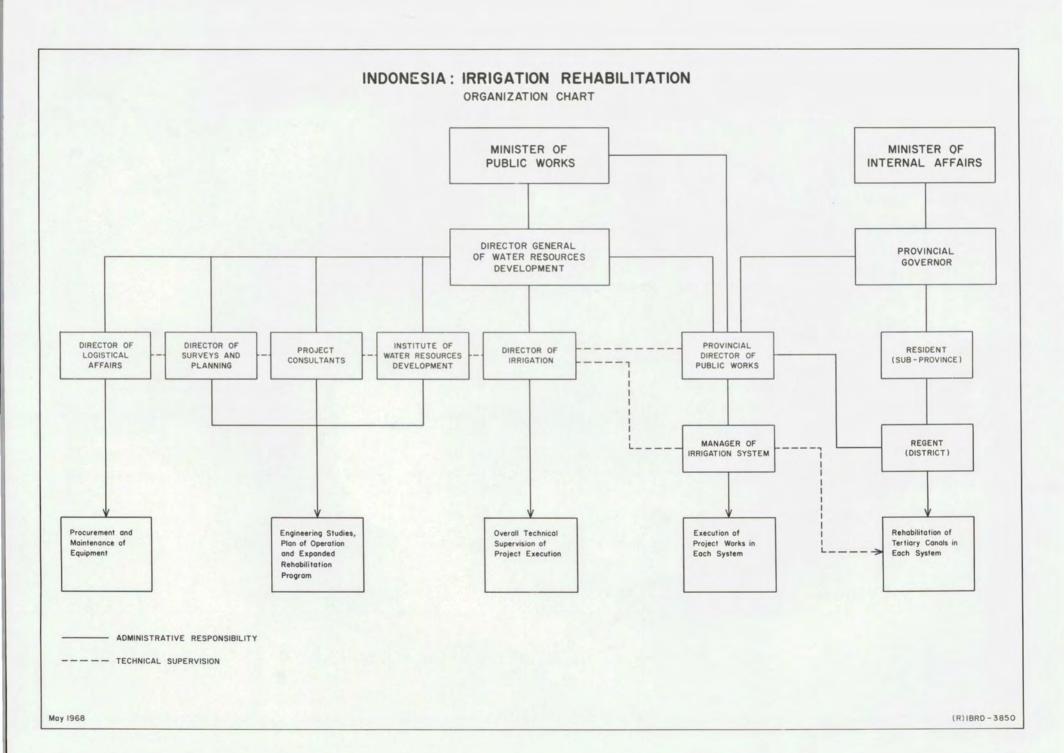
IRRIGATION REHABILITATION

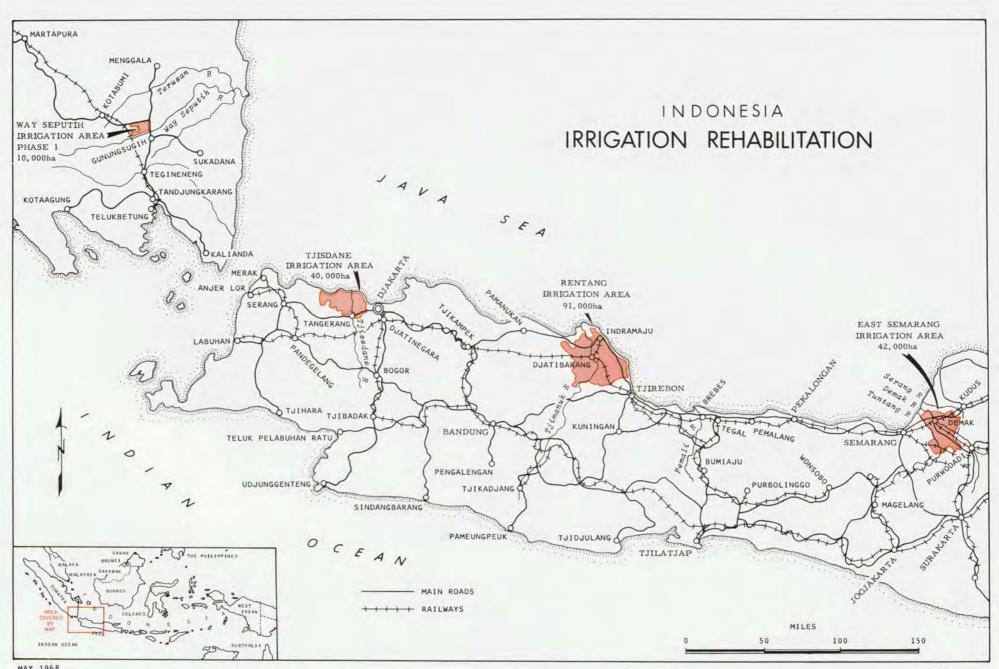
ECONOMIC COSTS AND BENEFITS (all amounts in US\$ '000's)

	East Seman	2/	Net 1	tang 2/	Tjiseda Net <u>l</u>	2/	Way Sept	tih 2/	All Sys	tems 2/
Year	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Internal	161 321 482 642 803 675 562 458 377 297 233 161 112 56	887 106 97 91 91	347 694 1,041 1,388 1,735 1,258 824 434 130	1,080 205 194 180 97	381 887 887 887 643 421 222 67	732 160 134 131 131	303 606 908 1,211 1,514 1,347 1,196 1,060 954 848 757 669 605 530 469 424 378 333 303	1,191 240 240 240 240 -	1,192 2,508 3,318 4,128 4,939 3,923 3,003 2,174 1,528 1,145 990 830 717 586 469 424 378 333 303	3,890 711 665 642 559
Rate of Return (percen	nt) 37		56		71		47		51	

^{1/} Assuming a price of US\$170 per m ton of milled rice, cif Djakarta. $\overline{2}/$ Excluding import duties.

N.B. The benefits decrease annually after the completion of the project. It is assumed that no maintenance is performed on the canals and that the annual rate of siltation is seven per cent of the cross-section area.





MAPS 2, 3, 4 and 5

(to be included in the Green Cover Report)

May 22, 1968 Ir. Sujono Sosrodarsono Director General of Water Resources Development Ministry of Public Works Djalen Pattimura No. ? Kebajoran Baru Djakarta Indonesia Dear Engineer Sujono: I would like to acknowledge your letter of April 23, 1968 (Ref. Dirdjen 2/4/14) enclosing the revised list of equipment, which I received on May 21. While your list and that prepared by the appraisal mission are generally in agreement there are a few minor differences which, I believe, can be dealt with better during negotiations rather than by correspondence. Our report has been written and is presently being reviewed within the Bank. When the Bank's consideration of the project is more advanced we hope to be in a position to correspond with you further. In the meantime let me assure you that this project is receiving the highest possible priority. With best regards. Sincerely yours, John M. Malone, Jr. Agriculture Division Projects Department Cleared with & cc: Messrs. Brakel Bartsch JMalone: fh

Ind-Irrig.

Mr. I. P. M. Cargill

May 15, 1968

Willem Brakel

Indonesia: Size of Credit for Irrigation Rehabilitation

When Mr. Knapp first agreed to use some of the remaining old IDA funds for a small credit to Indonesia, he mentioned, if I remember correctly, a figure of between \$2-4 million. As a result the amount of the credit was first put at \$3 million.

When the mission was in Indonesia they came to the conclusion that an additional \$500,000 would be needed to pay for consulting services considered to be indispensable for arriving at a wall-formulated and well-executed project. As a result it was agreed internally between Asia and Projects to add this amount to the credit and in the next document to the Board in which mention was made of the proposed credit a figure of \$3.5 million was incorporated.

It now appears - after the mission has written its preliminary report - that higher levels in the Projects Department feel that more funds are needed for the required consultant services which might add up to a total of approximately \$1 million in foreign exchange. This raises the question whether we should add another \$500,000 to the credit, making it \$1 million in total, or whether we should reduce some other part of the project so as to keep the figure down to \$3.5 million. The latter can rather easily be done by simply removing from the project that area (among the five or six separate areas) which is estimated to produce the lowest (though still quite high) economic return.

Since meanwhile the decision has been reached to use an additional \$2 million of old IDA funds in order to provide Indonesia with a line of credit for technical assistance, I doubt whether we would remain within the scope of Mr. Knapp's original thinking if we just went up to \$4 million for irrigation without checking back with him. My personal inclination is to stay at \$3.5 million; after all we would hope to follow this first credit with others in the same field so that the inclusion or exclusion of one particular area at this moment does not really make much difference in substance.

One could, I suppose, consider to use part of the proposed \$2 million line of credit for technical assistance for the consultant services required under the irrigation project; however, not only would this reduce the \$2 million quite substantially at the very beginning, but it also would make the irrigation project which now has all the essential elements neatly included in one package less tidy and perhaps less manageable. The Projects Department, Mr. Matter, and I agree that it would therefore be better to keep payments for the consultants' services needed for this particular project, which, of course, would not just be for the preparation of future projects but primarily to help in setting up and executing the present project in the right manner, within the framework of the irrigation credit.

Vyell Indo-T. A

Files

May 13, 1968

Willem Brakel

Indonesia: Timing of IDA Credits

In a telephone talk with Mr. Hilken, we discussed the following tentative schedule for the two IDA credits to Indonesia now under consideration:

- (1) It is intended that the irrigation rehabilitation credit of \$3.5 million will be discussed in the Working Party in the week beginning May 20 in order to be ready for approval by the Loan Committee say in the first week of June. Since there are several rather difficult legal problems to be solved with respect to this project which involves both the Contral Government and some of the provinces and since this is the first credit ever to Indonesia, it can be expected that the preparation the Indonesians will need for the credit negotiations as well as the negotiations itself will take some time. As a result the credit is not likely to be ready for presentation to the Board before say late July or early August.
- (2) Once the memorandum to the Board on technical assistance drafted by Mr. Cargill has been discussed and accepted by the Executive Directors it should be relatively simple to draw up a credit agreement for the \$2 million line of credit particularly since some of the internal preliminary discussions on the content of such an agreement have already taken place. Presumably the agreement could then be cleared with the Loan Committee in early June and could subsequently be negotiated by Mr. Matter in Indonesia as far as the substance is concerned; whether or not thereafter formal negotiations in Washington will still be required is not yet certain. At any rate, the earliest date before which this credit is likely to be ready for submission to the Board should be some time in July.

In both cases, of course, things would inevitably be delayed if Indonesia does not become a member of IDA in time.

ce: Mr. Cargill Mr. Ziegler

WBrekel:cj Filo: IN-5; IN-11

^{1/} If so they could presumably be combined with those on the irrigation credit.

Ind-irrie



REPUBLIK INDONESIA DEPARTEMEN PEKERDJAAN UMUM

DIREKTORAT DJENDERAL PENGAIRAN DASAR

DJALAN PATTIMURA NO. 20/PERC. 7. KEBAJORAN BARU DJAKARTA

Ref. Dirdjen. 2 /4/ 14.-

Djakarta, April, 23 rd, 1968.

Mr. John M. Malone Jr. c/o : World Bank 1818 H Street, N.W. Washington D.C. 20433 U.S.A.

> Subject: List of equipments about agroeconomic and technical information .-

Dear Sir,

We have the pleasure to offer you a revised list of equipments and its justifications on Way Seputih (Lampung), Tjisadane, Rentang, Pemali, Sedadi, Nglapan projects.

We are very keen to get some comments and further guidance from you to speed up the realization of the projects .-

INDONA

DIREKTOR

Your faithfully,

Director General of Water Resources

Development.

Ministry of Public Works.

DIENDE

ijono Sosrodarsono) . -

Mr. Abderrahman Tazi

April 19, 1968

Robert S. McNamara (Signed) Robert S. McNamara

INDONESIA: IDA Financing

I read your memorandum of April 17 with interest. In fact, my thinking has been running very much along the lines that you suggest.

I am hoping to recommend shortly to the Executive Directors proposals for a very substantial technical assistance program for Indonesia and I have no doubt that, after IDA replenishment, IDA will provide Indonesia with substantial project assistance.

IPMCargill/RSMcNamara:mek

INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: April 17, 1968

FROM: Abderrahman Tazi // WWW/5

SUBJECT: INDONESIA - IDA Proposed Projects -

According to the Monthly Operational Summary of Bank and IDA Proposed Projects (SecM68-96, April 11, 1968), provision is made for an IDA credit of \$3.5 million to Indonesia for financing a modest irrigation rehabilitation project. In my memorandum to Mr. Woods, dated March 12, 1968, copy of which was made available to you, I expressed the hope that considering the reasonably good prospects of IDA replenishment, a substantial portion of the resources made available to this institution would be earmarked for high priority projects in Indonesia, and be made available as soon as practicable.

I note that the Bank has earmarked substantial amounts of IDA funds, "subject to replenishment," for various African member countries, as well as for Ceylon, India and Pakistan, and in some cases is preparing appraisal reports. It would seem that Indonesia is entitled to no less favorable treatment, and that the Bank could, as soon as feasible, commence the appraisal of high priority projects to be financed "subject to IDA replenishment". In any event, the Indonesians are not likely to be impressed by the argument that only \$3.5 million of IDA funds are presently available.

In the same aforementioned memorandum, I emphasized also the willingness of the Indonesian Government to work "under the umbrella" of the appropriate international institutions, as well as the expectations of the members of the Inter-Governmental Group on Indonesia that the Bank would take the lead in the development field. As you know, the Inter-Governmental Group will be meeting in Rotterdam early next week. I hope that the Bank representative at the Inter-Government Group meeting will be in a position to take a more positive attitude, e.g. by indicating that the Bank is prepared to provide additional financial assistance to Indonesia, as well as technical assistance for the identification and preparation of suitable projects.

I would be grateful if the Bank could keep me informed of its decision regarding this important member country and, if possible, prior to the scheduled meeting in Rotterdam.

ack apriring.

Indonesia-Irria

April 16, 1968

Ir. Sujono Sosrodarsono Director General of Water Resources Development Ministry of Public Works Djakarta

Dear sir:

I wish to acknowledge and thank you for your letter of the 2nd of April addressed to Mr. Malone and for the attached replies to the agro-economic questionnaire for Way Seputih, Pemali and Sedadi/Glapan irrigation systems.

The information provided has been most useful.

Yours faithfully,

L.J.C. Evans
Assistant Director - Projects Department
In charge of Agriculture

MDffMullen:ag

Ind-wrie

Files

April 11, 1968

H. J. Ziegler

INDONESIA - Working Party Meeting on Irrigation Rehabilitation Project

The Working Party met on April 5, 1968. Present were: Messrs. Brakel (Chairman), Bartsch, ffrench-Mullen, Grosvenor, Malone, Matter, Tims and Ziegler. The purpose of the meeting was to find out where we stand on this project.

It was pointed out that there is a wide range of possibilities between a mere equipment loan and a more perfect and complex irrigation project. There are indications that some people in the Projects Department may be in favor of a more complex irrigation project than that outlined in the Mission's Back-to-Office Report dated March 28, 1968 and in Mr. Malone's more detailed description of the project handed out to the Working Party members (copy attached). The additional work involved in a more complex project would have to be countered by a reduction in the area to be covered.

The project, as outlined in Mr. Malone's paper, would take five years for completion. There would be two phases, the first of which would last two years and would include 40 to 50% of the project work. Disbursements for this project could start at the end of 1968 and, since it would primarily be for equipment, it would be quite rapid.

Indonesia's total irrigation system needing improvement covers an estimated area of about 2 million hectares. Not a single piece of equipment is presently available for the work to be done. The project, as outlined in the Mission's proposal, takes care of only 10% of the total.

Quick action will be required, if only to avoid the high cost of deferred maintenance. Under the present project, suppliers of equipment can train the necessary operators during the project period and consultants could prepare an expanded program for further rehabilitation of irrigation in other areas while assisting the present project.

By executing this project quickly, the Bank can demonstrate its goodwill at a time when nothing else is available for immediate financing, while quick results are also important for economic and political reasons. A more complex project would inevitably take a longer time for preparation.

The Indonesians are good rice farmers and work laboriously under present adverse conditions. They would certainly make the best of additional water supply. Presently, tertiary supply canals have not been sufficiently cleared because secondary and primary canals were not properly maintained by the Government.

The discussions of the Working Party clearly favored the Mission's approach presenting a relatively simple project covering a rather large area. Arguments in favor of this position included the following:

- 1. Higher returns on a project which is covering a larger area. The project in its present form would allow an increase in rice production of an estimated 50,000 tons a year through the effects of increased irrigation only. This would mean a saving of about US\$1 million a year to Indonesia.
- Spreading the project over a larger area and more people would reduce the risk involved, because unforeseen shortcomings in the operation or use of one system may be compensated by another.
- 3. The Indonesians would not be capable at this moment to do a neat more complex project but would need help in every single aspect as demonstrated by the Karang Kates project in East Java assisted by the Japanese Government.
- 4. The purchase of equipment is quick disbursing and, therefore, limits possibilities for corruption; quick disbursement does not seem to be a drawback as far as leverage is concerned because the real leverage will be future credits or loans.
- 5. Greater involvement of the Indonesian Government in the case of the coverage of a larger area and thus wider impact and increased possibility of influencing the Indonesian administration, including the offices of provincial administration which are, in many cases, more competent than the central administration.

After considering the advantages of the project outlined by Mr. Malone, it was thought that it might be possible to add another half-a-million dollar for technical assistance and training.

It was found that the solution of the erosion problem in Indonesia is a long-term project and should not be immediately linked to this irrigation project.

Enclosure

HJZiegler:epa

Cleared with and co: Mr. Brakel

cc: Messrs. Bartsch ffrench-Mullen Grosvenor Malone Matter Tims

IV. THE PROJECT

A. General Description

h.Ol The project for which IDA assistance is required is the rehabilitation of the Glapan-Sedadi, Penali, Rentang and Tjisedane irrigation systems in Java and the completion of the Way Seputih irrigation system in Sumatra. The first phase of the project would consist of the training of operators and mechanics and the purchase of earth-moving equipment, spare parts, repair shops and materials; an engineering study of the rehabilitation problem in the four areas concerned; the drawing-up of a detailed plan of operation and the preparation of an expanded program for further rehabilitation of irrigation in other areas. This phase would require about two years. The second phase, which would overlap the first, would consist of the use of the equipment and materials, together with Wanual labor, to execute the project works. The entire project would take about five years to complete.

Ind-irria

REPUBLIK INDONESIA DEPARTEMEN PEKERDJAAN UMUM DIREKTORAT DJENDERAL PENGAIRAN DASAR

DJALAN PATTIMURA NO. 7 KEBAJORAN BARU DJAKARTA -0-

Projects Dept. Correspondence

ANS'D BY M. Seuch I

Djakarta, April 2nd, 1968 .-

Mr. John M. Malone Jr.

c/o: World Bank 1818 H Street. N.W.

Washington D.C.

20433

U.S.A.

Subject: Questionnairs about agro-economic and technical information.

Dear Sir,

Jother Feb 16 In response to your request herewith we have the pleasure to submit the answers to the questionnairs on agro-economic and technical information of Way -Seputih (Lampung), Pemali and Glapan/Sedadi irrigation system in Central Java.

Yours faithfully,

INDOA rector General Of Water Resources

Development

of Public Works Ministry ENGAIRAN DA

EN PEKERD

Ir Sujono Sosrodarsono

april 16, 1968

DIREKTORAT DJENDERAL PENGAIRAN DASAR

DIALAN PATTIMURA NO 7 KEBASORAN BARU DIAKARTA

Projects Dress Correspondence

ANS'D av

DATE

DATE

Djakarta, April 2nd, 1968.-

REGISTERED 1 8

Mr. John M. Malone Jr. c/o: World Bank
1818 H Street, N.W.
Washington D.C.
20433

Subject: Questionnairs about agro-economic and technical information.

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Yours faithfully,

Director General Of Water Resources

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of Public Works

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COMMUNICATIONS
GENERAL FILES
RECEIVED

2-28-68

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

OFFICE MEMORANDUM

March 28, 1968

TO: Mr. L.J.C. Evans

FROM: J.M. Malone, M.D. ffrench-Mullen, R.M. Fagerberg, C. Hoffman

SUBJECT: INDONESIA - Irrigation Rehabilitation Project Appraisal
Back-to-Office Report

- 1. In accordance with our terms of reference dated February 20, 1968, we visited Indonesia to prepare and appraise a project for the rehabilitation and completion of irrigation systems. We spent two and a half weeks in Indonesia. We met for two days with the Government authorities in Djakarta and then visited a number of irrigation systems in the field. In addition to inspecting the systems on the ground, we were able to see them from the air. After spending ten days in the field, we returned to Djakarta where we held a final series of discussions with the authorities for three days and reached tentative agreement with them on the form the operation might take and the measures which the Government would probably be expected to take in connection with its execution.
- 2. The Indonesians have not prepared a project as such; nor was there time for the mission to do more than make a very rough estimate of the overall need and the kind of work required to rehabilitate some of the largest and most important irrigation systems. The mission is satisfied however that, under the existing conditions, a small amount of equipment could be used effectively. The project would thus be an equipment financing scheme with the use of the equipment for rehabilitation specified by regions rather than a well prepared and fully integrated rehabilitation project. Such an operation would enable the Indonesians to begin some of the more urgent work in a few of the most important irrigated areas. This would be a first phase and as such should be accompanied by the preparation of detailed plans for carrying on the work in these areas as well as by the preparation of proper rehabilitation projects for future consideration.
- 3. The operation would consist of the rehabilitation of four exisiting irrigation systems in Java and the completion of a new irrigation system in South Sumatra. The area to be served by these systems is approximately 200,000 ha. The work would be accomplished by a combination of hand labor and earth moving equipment and would take several years to complete. The equipment would be financed by a proposed IDA credit while the running cost of the equipment and the cost of the work done by hand labor would be contributed by the Government and would, in fact, account for more than half of the total cost.
- 4. While the work would be executed by the provincial public works departments, the technical aspects would be the responsibility of the Directorate General of Water Resources Development within the Ministry of Public Works.

This agency has better capability than many Government agencies in Indonesia. However, in view of the fact that, until recently, virtually no maintenance or rehabilitation of irrigation had been done since the Second World War, most of the staff lack experience and it will be necessary to provide considerable assistance both in planning the work to be carried out under the project and in supervising its execution as well as in the training of operators and mechanics and the establishment of service and repair facilities for the equipment and inventory control for spare parts. In order to ensure that this work is done properly, consideration would need to be given to the provision of essential consultants' services.

- 5. Aside from the need for planning and supervision, the following require careful attention:
 - a) adequate budgetary provision for both investment and maintenance expenditures;
 - administrative and organizational responsibilities for the rehabilitation of the irrigation systems and their operation and maintenance;
 - c) the arrangements to be made for the recovery of operation and maintenance expenditures from beneficiaries;
 - d) the provision and expansion of extension programs and credit for the intensification of rice production.
- 6. A full appraisal report is under preparation.

JMMalone:cm IDA

cc: Mr. Chadenet

Mr. Bell

Miss Van Gasse

Mr. Sadove

Mr. Lipkowitz

Mr. Piccagli

Mr. Lind

Mr. Brakel

Mr. Bartsch

Mr. Reid (Rome) (2)

Operational Files

copy T. of Ref

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL DEVELOPMENT ASSOCIATION

OFFICE MEMORANDUM

TO:

Messrs. J.M. Malone, M.D. ffrench-Mullen and Robert M. Fagerberg and Carl J. Hoffman

Date: February 20,1968

(consultants)

FROM:

L.J.C. Evans

SUBJECT: INDONESIA - Appraisal of Irrigation Rehabilitation Project Terms of Reference

- On or about March 2, 1968, you should arrive in Indonesia for a visit of approximately three weeks to prepare and appraise a project consisting of the reconstruction, rehabilitation and completion of existing irrigation projects and systems in Indonesia, roughly in accordance with the suggestions contained in Mr. Rowe's memorandum of January 12, 1968 to Mr. Brakel, and further elaborated in the agricultural annex of the latest economic report on Indonesia.
- The project should aim at the optimum balance between the use of scarce foreign exchange and the use of local resources, particularly self-help labor.
- Mr. Malone will be mission leader and will be responsible for the overall formulation of the project, the economic and financial appraisal and the coordination of the work of the other mission members.
- Mr. ffrench-Mullen will appraise the agricultural aspects of the project, concentrating particularly on costs of production and yields. He will also appraise the adequacy of the agricultural extension service, and will assist Mr. Malone in appraising the availability of farm inputs; supporting services for marketing, credit and transportation; and the adequacy of incentives to the farmer.
- 5. Mr. Fagerberg will appraise the need for equipment and staff to carry out the project and the adequacy of the Directorate General of Water Resources Development to act as executing agency. He should concentrate on the provisions for continuing operation and maintenance of the systems included in the project after its completion, and the provisions for maintaining and servicing any equipment which might be purchased under the project.
- Mr. Hoffman, as engineer, will be responsible for assessing the adequacy of the engineering services of the Directorate General of Water Resources Development and for evaluating the engineering priorities of the systems or subprojects proposed to be included in the project and their needs in terms of the amount of work to be done and its cost. The project should be confined to those systems which can be rendered productive at relatively little cost to the economy per hectare.
- On your return to headquarters, you should submit a brief back-to-office report, followed by a full appraisal report. Messrs Fagerberg and Hoffman will remain in Washington until April 5 to assist in the preparation of the report.

JMMalone: cm

cc: Mr. Chadenet

Cleared with and cc: Mr. Brakel

Mr. Bartsch

Mr. Bell

Mr. R.E. Grosvenor

Mr. Williams Miss Van Gasse (2) Operational Files (2)

cc: Mr. T. Jones

Mr. Reid (Rome) (2)

Ind-Trig.

Mr. L. V. Q. Evans

February 19, 1968

L. W. Bartsch

INDONESIA - Schedule for Irrigation Rehabilitation Project

In the light of your comments on my memo of February 13, we now propose the following schedule for the Indonesian Irrigation Rehabiliation Project:

HALD Dates

Appraisal - Merch 3 - 21 (field debes)
Yellow cover - April 29
Green cover - May 13

Negotiations - May 27 Board - June 27

This is a somewhat ambitious program which would be conditional, inter alia, upon fairly prompt response by the Indonesians to our invitation for negotiations. I do not believe that it would be realistic to expect this appraisal mission to be able to complete their work in the field in much less than three weeks, bearing in mind that only one of the four members of the mission, of which two are consultants, has any experience on Bank missions.

KGuinness/2g (UG.

cc - Messrs. Creyke Malone

Ind-gen regs

Mr. L.J.C. Evans

February 13, 1968

L.W. Bartsch

Schedule for IDA Projects

We have prepared the following provisional timetable for the three IDA Irrigation Projects in Turkey, Ceylon and Indonesia:

Turkey - Seyhan II

Technical discussions have been held in Washington with Government Authorities.

Invitations to negotiate have been outstanding for some time.

The Government has yet to decide whether they can agree to international competitive bidding for all construction contracts.

We should be able to go to the Board one month after the start of negotiations.

Staff Assigned:

Messrs. Douglass and Golan.

Ceylon - Lift Irrigation

This timetable is subject to the Government agreeing to the revised project.

Yellow cover circulated to Working Party February 13.

Working Party meeting scheduled for February 1h.

Green cover March 1 - negotiations Merch 25 (the Celonese are notorious for taking weeks, if not months, to arrive for negotiations) - Board April 23.

Staff Assigned:

Messrs. Douglass and Golan

Indonesia - Irrigation Rehabilitation

Appreisal February 28 - March 25.

Subject to the mission finding a project they can recommend:

Yellow cover May 15.

Green cover May 31 - negotiations June 17 - Board July 16.

Staff Assigned:

Messrs. Malone and ffrench-Hullen

c.c. Mr. Creyke

KGuinness:mc IDA FORM No. 26 (6.65)

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL BANK FOR INTERNATIONAL FINANCE RECONSTRUCTION AND DEVELOPMENT CORPORATION

INCOMING CABLE

DATE AND TIME

OF CABLE:

FEBRUARY 9, 1968

1017

ROUTING

LOG NO.:

RC 19 / 9

TO:

CARGILL INTBAFRAD

FROM:

DJAKARTA

ACTION COPY:

MR. CARGILL

INFORMATION COPY:

DECODED BY:

Ind- gregs

TEXT:

NO 095/KET/VT/1968

HIGHLY APPRECIATE IDA ASSISTANCE FOR REHABILITATION OF IRRIGATION SYSTEM. AT PRESENT BAPPENAS AND MINISTRY OF PUBLIC WORKS DISCUSS SPECIFICATIONS OF PROJECT WITH BRAKEL AND MATTERS. APPRECIATE EARLY ARRIVAL OF SURVEY TEAM. KIND REGARDS AND HOPE FOR YOUR SPEEDY RECOVERY. WIDJOJO BAPPENAS SENT

DEPLU

INCOMING CABLE

OF CABLE:

FEBRUARY 6, 1968

2130

ROUTING

LOG NO.:

RC 13/9

TO:

INTBAFRAD

FROM:

DJAKARTA

ACTION COPY:

MR. STREET

INFORMATION

MR. CARGILL

COPY:

DECODED BY:

TEXT:

3

ALPHA YOURCAB TWO PROPOSED PROJECT AGREEABLE TO GOVERNMENT AND APPRAISAL MISSION TIMING ACCEPTABLE TO AUTHORITIES CONCERNED WHO ALREADY ARE BEGINNING WORK ON SELECTION OF AREAS AND COLLECTION RELEVANT DATA AFTER DISCUSSIONS WITH MATTER AND ME. PLEASE SEND SOONEST TO BAPPENAS ATTENTION MR AFFIFF LIST OF INFORMATION AND MATERIAL MISSION WILL NEED ADDING IF AVAILABLE A FEW SAMPLES OF PREVIOUS APPRAISAL REPORTS OF SIMILAR PROJECTS.

BETA WILL WRITE VAN HELDEN RESULTS SATISFACTORY DISCUSSIONS UNDP ROAD STUDY TO BE COMPLETED TOMORROW

BRAKEL

NOTE: REASON FOR DELAY IN DELIVERY - CORRECTED COPY AWAITED

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Form No. 27 (7-61)INTERNATIONAL DEVELOPMENT **ASSOCIATION**

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE CORPORATION

OUTGOING WIRE

TO:

BRAKEL

HOTEL INDONESIA

DJAKARTA

#

DATE:

LT

JANUARY 30, 1968

CLASS OF

SERVICE:

COUNTRY:

Cable No.:

INDONESIA

TEXT: 2

APPRAISAL MISSION IRRIGATION REHABILITATION PROJECT CONSISTING OF

MALONE COMMA FRENCH-MULLEN AND CONSULTANTS HOFFMAN AND FAGERBERG

SCHEDULED TO ARRIVE DJAKARTA MARCH 2 FOR ABOUT 3 WEEKS STOP PLEASE

CABLE WHETHER PROPOSED TIMING ACCEPTABLE TO GOVERNMENT AND ALSO

WHETHER GOVERNMENT HAS ANY COMMENTS OUR LETTER JANUARY 19 REGARDING

THIS PROJECT

STREET

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME

Gordon M. Street

DEPT.

(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

JMJentgen/rf

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

cc: Mr. Malone

For Use by Archives Division

Checked for Dispatch:

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JANUARY 30, 1968

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OUTGOING WIRE

THIS PROJECT

AFFIALSAL MISSION IRRIGATION REMARKLITATION PROJECT CONSISTING OF MALONE, COMMA FERNICH-MULLEN AND CONSULTANTS HOTPELM AND TAGERESERG SCHEDULED TO ARRIVE DJAMARTA MARCH 2 FOR ABOUT 3 WHERE STOP PLEASE CABLA WIGHTER PROPOSED TIMING ACCEPTABLE TO COVERNMENT AND ALSO INTEREST COVERNMENT HAS ANY COMMENTS OUR LISTEER JANUARY 19 RESARDING

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Ind-gennessiani

Mr. P. Geli

January 25, 1968

L.J.C. Evans

INDONESIA - Consultant Services for Irrigation Appraisal Mission

We would like the Personnel Division to secure the services of Mr. Carl J. Hoffman, whose file is attached, as a consultant on the mission which is scheduled to go to Indonesia on February 28 to appraise an irrigation project. Mr. Hoffman would serve as an engineer on the team and his services would be required for a period of about six weeks, beginning February 26.

Please get in touch with Mr. Hoffman as soon as possible and keep us advised. Mr. Bartsch has already spoken to him on the telephone and believes that he will be available for the period mentioned above.

Attachment

JMMalone: cm

Cleared with and cc to Mr. Bartsch

cc: Messrs. Brakel Rowe

Ind-genrogs (irrig)

Mr. P. Geli

January 25, 1968

L.J.C. Evengo

INDONESIA - Consultant Services for Irrigation Appriasal Mission

Attached is a copy of a letter from Mr. Bartsch to
Mr. Robert M. Fagerberg requesting his services as a consultant
on the Indonesia irrigation appraisal mission. Mr. Fagerberg
has already been contacted by telephone and believes that the
will be available and has requested that the Bank send him a
letter which he can show to his irrigation Board when asking
them to release him from his duties. The letter is selfexplanatory, and you will notice that we say in the last
paragraph that we will await his reply before contacting him
about the terms and conditions of his employment. As soon
as we hear from Mr. Fagerberg, I will let you know.

Attachment

JMMalone: cm

Cleared with and cc Mr. Bartsch cc: Mesars. Brakel Rose

January 25, 1968

Mr. Robert M. Fagerberg Shoshome and Heart Mountain Irrigation Districts P.O. Box 822 Powell, Wyoming 82435

Dear Bobs

The Bank is planning to send a mission to Indonesia starting late in February and extending through a period of four to six weeks. The purpose of the mission will be to appraise the need of rehabilitating several existing irrigation systems in Java and possibly the appraisal of a new irrigation project already underway in Southern Sumatra. This is the World Bank group's first lending operation in Indonesia and, therefore, the Bank's management attaches considerable importance to the mission's operations.

The mission would consist of one or two members from the Bank staff and possibly an engineering consultant and you. We feel that you are ideally suited to assist this mission, particularly in the rehabilitation and operation and maintenance aspects of the projects the mission will review.

I would like to hear from you very soon as to whether you will be able to be released from your duties with the Irrigation District for a period starting the last week in February and extending through to the first of April, or preferably a week or two beyond that. As a minimum, to participate in this mission, you would probably have to be away from Wyoming for not less than four or five weeks. From our viewpoint, it would be desirable if you could extend this for a week or two longer. However, within these ranges there is some flexibility.

I am sending a copy of this letter to the Bank's personnel division, who, after your reply, will contact you directly regarding your availability and the terms and conditions under which you would be employed.

Best regards,

JiMalone:cm

L. W. Bertsch Agriculture Division Projects Department

Cleared with and co

Messrs. Brakel. Rose Geli. January 19, 1968

Professor Widjojo Nitisastro
Chairman
National Economic Development
Council (BAPPENAS)
Djakarta, Indonesia

Dear Professor Widjojo:

When I last met you in Amsterdam in November, I could not promise any financial assistance from the Bank group to Indonesia as long as there had been no replanishment of IDA funds. I take pleasure in informing you by this letter that we now see our way to consider making a small contribution — some \$3 million — towards Indonesian rehabilitation and development out of the very limited amount of old IDA funds that is not yet committed.

We suggest that for this purpose a project in the agricultural sector be taken. We are thinking particularly of the rehabilitation of irrigation on Java. A number of suitable areas in Java could, we believe, be selected where the needs for general rehabilitation of the existing irrigation system are particularly urgent and where total requirements for imported equipment and materials - on the basis of lists of the Department of Water Resources - would not exceed some \$2.5 million. To these areas which have a general need for rehabilitation work we could possibly add the East Semarang irrigation system where a more concentrated effort of rehabilitation is needed which would require imported equipment to an amount of approximately \$500,000, or possibly the Way Seputih project in S. Sumatra.

If this proposal is acceptable to your Government, we would endeavor to send out a mission to examine the prospects within the next six to eight weeks. You will appreciate, of course, that the final outcome of all of this is dependent on the results of the detailed investigation which would be made by the mission as well as on the ultimate approval of a possible credit by our Executive Directors.

I am looking forward to receiving your reaction to this proposal as early as possible. If you agree with it, it would be an advantage if you would inform us of the irrigated areas to which you afford the highest

priorities for rehabilitation, and the priorities of the East Semarang and Way Seputih projects in relation to these. This will enable us both to plan the staffing of the mission and to send to you in advance a list of the information and material to which the mission would wish to have access.

With kindest regards,

Yours sincerely,

I.P.M. Cargill Director Asia Department

cc: His Excellency
Frans Seda
Minister of Finance
Djakarta, Indonesia

cc: Messrs. Knapp, Tazi, Chadenet, Grosvenor, T. Jones, Guinness

Cleared with and cc: Messrs. Evans, Rowe

WBrakel/RRowe:cj IDA:lh File: IN-6

Ind-irrig

January 12, 1968

Mr. W. Brakol THRU: L.J.C. Evens R.E. Rowe

INDOMESIA: Possible Agricultural Projects

- 1. In your memorandum dated December 27 you inquired about the possibilities of the early identification and appraisal of a project in the Indonesian agricultural sector.
- 2. Then you raised this matter some weeks ago I told you that in my opinion a project could be found with both a high foreign exchange component and the capacity to generate early benefits in terms of foreign exchange earnings or import savings. I qualified my statement, however, by saying that if the Bank/IDA wished to support a project in Indonesia, it would have to insure that management could be improved to an acceptable level. In short, most public sector agencies are in a mess, and we cannot expect them to be completely reorganized in the immediate future. An IDA credit in the range suggested by you probably would not provide us with adequate leverage to insist on sweeping changes in current arrangements.
- 3. Viable projects probably can be found in two areas. The Government owned estates and the irrigation sector.

Estates

- h. Both oil palm and tea production and exports could be increased within a period of two to three years by the employment of satisfactory fertilizer
 programs. I am aware that the Bank/IDA has found it difficult to finance current
 imports of fertilizers. In the case of the Government owned estates, however,
 fertilizer use has been weel below optimum since nationalization of the estates
 in 1957. As a result, now capital is now required to build up estate revenue
 generating capacities to levels where satisfactory fertilizer programs could
 be maintained in subsequent years.
- In the case of the oil palm estates, management, processing and marketing arrangements are generally adequate; and I believe that it would be possible to select estates with about 30,000 ha of oil palm which could reasonably be expected to respond economically to a carefully prepared fertilizer program. Sufficient experimental evidence is available to Indonesia to allow a mission, supported by a consultant with recent Malaysian experience, to produce an interim fertilizer program for the next three years. The Dutch Government is supplying the Indonesians with foliar analysis equipment and technical assistance to perate this. Thus, by the end of three years at the latest, the extates would be able to avail themselves of more detailed and accurate fertilizer recommendations. Financing a program on 30,000 ha for

three years would cost about US\$4.5 million, and should result in yields up to h0% higher than present levels by the end of the fifth year. Possibly we could liase with the Dutch Government in the case of a project of this type.

- 6. With tea the situation is rather different: again a substantial area . of Government comed tea could be identified which would respond economically to fertilizers, in fact more rapidly than oil palms. In the case of tea however improvements in processing and marketing arrangements would be required. Prices that the Indonesians have been receiving for their tea in recent years have boom declining steadily in comparison with other teas; and in 1964 Indonesian teas fetched about 50 percent of the average price obtained in the London suctions. In 1957 when the estates were still under Dutch management the proportion was 72 percent and in 1954, 92 percent. In the case of the tea it would be desirable to combine funds for fertilizer with the provision of technical assistance in processing. I would envisage the employment of two or three skilled tea processors for a period of two to three years to actually run some of the tea factories, and in the course of this to provide training for Indonesian managers. A full investigation is also required of the present marketing arrangements for Indonesian tea, and I believe that part of an IDA credit could be most usefully used to obtain the services of a consulting firm forthis purpose. The Indonesians are fully aware of the processing and marketing problems involved and I gothered that they would not be adverse to employing exports to assist in resolving these.
- Recent changes in the taxation arrangements for estate produce, although actual taxation is still rigorous, probably could allow both toa and oil palm estates to develop as sound financial entities. Yields, however, are so low currently that insufficient working capital can be generated even under the new and more favorable arrangements. In its 1968 budget the Government has been unable to allocate any new capital for its estates, and in the absence of this there is no expectation of either oil palm or tea production increasing.
- 8. In order to give you more background on the oil palm and tea situation I attach copies of the drafts of two annexes that I am preparing for the Economic Report.

Irrigation

- 9. There are 4.3 million ha of irrigated land in Indonesia, and of these 2.9 million ha are on Java and comprise 32 percent of the islands' cultivated land. Since 1940 maintenance of irrigation systems has been entirely inadequate and for much of the area non-existent. The result has been a deterioration in water supplies, in some cases their termination. In other cases crop losses by flooding result from the silting of irrigation and drainage canals.
- 10. At present 1.9 million ha on Java require rehabilitation, and in 1968 the Government will attempt to rehabilitate 120,000 ha. For this purpose the Department of Water Resources (DPR) of the Ministry of Public Works possibly has sufficient local currency, but has inadequate foreign exchange to purchase

- 11. DPR has drawn up comprehensive lists of required equipment and materials for specific irrigation areas, and there is no question that an IDA credit could be employed economically for the financing of necessary purchases in selected areas and would result, in particular, in increased rice production and import savings. Important considerations would be the provision of adequate personnel to conduct the programs, local currency support, and servicing arrangements for equipment; currently the latter are bad and probably expatriate supervision of servicing arrangements would have to be a feature of any IDA financed project. DPR is possibly one of the best Government agencies, and I, personally, foresee no problems in obtaining their cooperation in making operational arrangements satisfactory to IDA or in providing required information. Financing could be phased over three years on thebbasis of an expanding program.
- 12. In addition to general rehabilitation work there are two other specific projects which in my epinion could qualify for IDA consideration. These are the Way Seputih and East Samarang projects. The former is an engoing new project and the latter the rehabilitation of an irrigated area.

Way Seputih Irrigation Project (Lampung Province, Sumatra)

- 13. This project will provide water for 10,000 ha which at present are not irrigated. It is the first stage of a project of 38,000 ha. The area served by the project is a transmigration area which has been settled over the last ten years. Irrigation water will allow cultivation of one irrigated crop per year. Double cropping would be dependent upon the construction of reservoirs upstream. Surveys indicate that such water storage would be possible. No plans, however, have been developed in detail.
- Ih. The first stage project entails diversion of water from the Seputih River by means of a weir, intake and main canal of 19 km in length. Secondary canals totalling 12 km would also be constructed as would a total of 11 necessary hydraulic structures.
- 15. The progress of work to date and the schedule until completion is shown in the following table:

Percent Progress

	End 1967	1968	1969	1970
Weir and intake	100	100	100	100
Main canal	70	100	100	100
Secondary canals	0	30	60	100
Hydraulic structures	0	50	80	100

Subsequent to 1970 the main canal will be extended to serve the second stage project.

- 16. The weir and intake were completed in 196, but since that time progress has been slow due to shortages of serviceable equipment and problems in rupish financing. Prosently of 25 major pieces of equipment at the site 24 are unserviceable, of which nine pieces are irrepairable.
- 17. Project expenditures in 1967 is estimated at 8.4 million rupichs, and costs to completion of the final stage are projected as Rp 640 million. (1968-Rp 40m, 1969 Rp 300 m and 1970 Rp 300 m.)

In 1968 the following equipment would be required:

7.27.3	Quantity	USS
Bulldozors	4	80,000
Power shovels	6	80,000
Serapors	30	75,000
Vibrating compactors	10	30,000
Spare parts for existing Service equipment	equipment	35,000 150,000
	Witnessell	****
	Total	450,000

18. Benefits are already being generated by the project and will increase as construction continues. The following table indicates the possible magnitude of these benefits for the period 1968 to 1970.

	2,0,00,00	Production	
Irrigated		(Rice at	Value at
Aroa		1.4 tons/ha)	US\$200/ton
(ha)	47	(tons)	(USS million)
1,500			•42
4,000		5,600	1.12
6,000	lin.	8,400	1.68
10,000		14,000	2.80
	Aroa (ha) 1,500 4,000 6,000	Area (ha) 1,500 4,000 6,000	Irrigated (Rice at Area 1.h tens/ha) (ha) (tens) 1,500 2,100 4,000 5,600 6,000 8,400

Rehabilitation of the East Samarang Irrigation System (Central Java)

- 19. The E. Samarang irrigation area consists of 20,000 ha, on which irrigation allowed originally the cultivation of one irrigated rice crop each year. The system was constructed in 1928, but since 1945 virtually no funds have been available for maintenance. As a result many hydraulic structures are damaged and silting is a major problem in the case both of irrigation canals and drains. Floods occur annually and with increasing intensity and the time is rapidly approaching when the majority of the area will be lost to cultivation.
- 20. Rehabilitation work commenced in 1967, but funds and equipment have been in short supply. Thus, despite the willingness of local farmers to provide labor for such tasks as digging out the main canal, progress has been slow.

- 21. The major rehabilitation works required are:
 - (a) digging out and normalizing the heavily silted main canal;
 - (b) digging out the secondary canal and widening it from 4.5m to 8m;
 - (c) repair of all hydraulic structures;
 - (d) strengthening all dikes; and
 - (e) improvement of the drainage system.
- 22. The equipment required to implement the work which would be completed by the end of 1969 is estimated as follows:

			Q	uanti.	ty	USS	
Bulldozers			Sec.	4		80,000	
Draglines	10011			2		80,000	
Scrapers	144	1 1 12	IX The Day	5		75,000	
Compactors				10		30,000	
Dump trucks	1.6		100	7	1	35,000	
Spare parts						50,000	
Service equipment	4	A				150,000	
		400	5				
			Total			500,000	

- 23. Probably a composite project comprising the latter two projects and some rehabilitation work could be developed. I would like to point out, however, that the data I have quoted would need to be verified by a subsequent appraisal mission.
- 24. I believe that excluding the possible projects outlined above there is little else that we could do quickly in agriculture. Apart from BIMASI, where IDA participation would be most difficult, the Ministry of Agriculture has thought through no detailed projects, although there is no question that it could use additional funds. The Ministry of Estates has nothing lined up for cash crop smallholders, although in the long run there is much that could be done in this sector.
- 25. I have an appreciable amount of additional information should you require it.

^{1/} BIMAS, a mass guidance program in which farmers are supplied with fortilizers and insecticides on credit terms.

Ind-genneggin Java Mr. I.P.M. Cargill January 5, 1968 Willem Brakel Indonesia: IDA Project The only IDA project in Indonesia which has a chance to be appraised and ready for signature before June 30, 1968 is a project still to be defined in more detail - regarding the rehabilitation and completion of certain irrigation works in Java at a total foreign exchange cost of perhaps \$2 or \$3 million; the amount of IDA funds to be used for this project has been preliminarily put at between \$2 and \$h million. An appraisal mission should be in the field not later than February 1968. WBrakel:cj File: IN-1

Ind-viring

Mr. Roger E. Rowe

December 27, 1967

Willen Brakel

Indonesia: IDA Lending for Agriculture

This is to confirm what I told you today over the telephone namely that Mr. Cargill has obtained agreement to use part of the remaining unallocated IDA funds - to an amount in the order of \$ 2 to 4 million - for a quick lending operation in Indonesia. As you know our purpose is to do something for Indonesia at the earliest moment purtially with a view to acquainting them with the way the Bank works before we embark on more embitious lending operations after IDA funds have been replenished. It is therefore essential that the project be a simple one which can be apprecised quite quickly and which is not likely to lead to difficult and time consuming investigations and negotiations on complicated issues such as the setting up of new institutions or organizations. You indicated that in the field of irritation there appeared to be very good prospects for such a relatively simple operation which you stould discuss further with various staff members in the Projects Department including, I hope, Mr. Evans.

Please let me know the results of your further explorations as soon as possible. Mr. Cargill is anxious that an appraisal mission gets into the field at an early date and that the whole matter be handled as expeditiously as possible. Many thanks so far.

ce: Mr. McDiarmid

WBrakel/rf

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Ind-gen nego (iving projects)

Mr. Gordon M. Street

November 30, 1967

Willem Brakel

Indonesia: Use of IDA Funds

Further to my memorandum of yesterday, Roger Rowe, the agricultural man on the recent mission to Indonesia, tells me that there are two small but very straightforward irrigation projects - Sempor and Lampung, both on Java, I believe - which will require together some \$2 million in foreign exchange in order to complete them. In both cases, a good deal of investment has already taken place in the past; they would have a high rate of economic return and there would be no complications about the training of farmers, the setting up of extension services, etc.

An appraisal would be the work of one or two weeks only and could very quickly be followed by a report, assuming that the Projects Department would be prepared to take the two projects for what they are without going too deeply into their historical background, etc. Rowe believes that a somewhat unorthodox approach can be fully justified in this case and he doesn't expect difficulties from the side of his Front Office, if we were to pursue this matter further.

I am still waiting to hear further from van Helden, but I do not really expect much to come from the transportation sector because of the managerial and organizational complications; there may be some scope there, however, for a technical assistance grant as we discussed this morning. Anyhow, the above shows that if one wants to do something fast, there are apparently possibilities which I will explore in more detail if you can give me a preliminary green light - after having talked to Mr. Knapp.

cc: Mr. McDiarmid

File: IN-1

WBrakel:cj