

資 料

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資料 1. 要請書

Project Digest

1. Project title : Integrated Agricultural Development
in Highland Areas
2. Location : West Java Province
3. Executive Agency : Directorate of Land Rehabilitation and
Development
Directorate General of Food Crops and
Horticulture
4. Project Objectives : -to increase quantities and qualities of
production of upland crops
-to stabilize upland agriculture especially in
dry season
-to increase farmers' income and welfare and to
contribute to alleviate rural poverty
5. Project Description : (1) To grasp the present situation of upland
agriculture in the study area.
(2) To grasp the potential on upland
agriculture development
(3) To formulate the feasibility study for
promoting upland agriculture
(4) To formulate the detailed plan and design
to develop small scale water resources and
utilize upland effectively, and to prepare the
project implementation.
6. Scope of Assistance
Required : Expert Service 80M/M : US\$ 800,000
Survey & Investigation : US\$ 200,000
Equipment : US\$ 100,000
Fellowship : US\$ 100,000
Total : US\$ 1,200,000
7. Duration of Study : Eighteen (18) months
8. Related to Project Aid : None

TERM OF REFERENCE

I. BACKGROUND AND SUPPORTING INFORMATION

A. Justification of the Project

There is about thirteen million ha of upland in Indonesia. It plays a significant role in meeting country's food requirements and in supporting lives of the rural population. The investment for upland, however, was comparatively small in the past and productivity of upland remains low. Especially during dry season, farmers often suffer disaster by drought because of lacking of stable water resources and facilities. Therefore it is necessary to take measures to stabilize upland agriculture and raise the productivity.

On the other hand, from a viewpoint of national agricultural development, maintain self-sufficiency in food is one of the most important matters. And besides this, taking measures to diversify food production in accordance with demand is also.

According to the sixth Five-Year Development Plan (Pelita-VI), it is described that development in agriculture is directed not only to increase quantities and qualities but also to diversify production, intensify, expand and rehabilitate farmland.

To promote upland agriculture through improving conditions of upland is one of the effective measures to maintain self-sufficiency in food and diversify food production.

By the way, West Java Province is one of the biggest provinces in Indonesia on horticulture crops production. Through upland agriculture is unstable due to some reasons such as lack of stable water resource and insufficient agricultural support system, and is a province with great potential on upland agriculture.

Therefore, this Study intend to promote upland agriculture in West Java Province to increase agricultural production, improve its qualities and raise living standard of farmers through improving condition of upland.

B. Name of Project

Integrated Agricultural Development in Highland Areas

C. Project Location

The Project will be implemented at West Java Province. The feasibility study is implemented at the sites which are chosen by preparatory investigation.

D. Institutional Frame Work

Directorate of Land Rehabilitation and Development (DLRD) of Directorate General of Food Crops and Horticulture (DGFCH) in Ministry of Agriculture will be the executing agency for study. The Study will be carried out by foreign expertise and the counterpart personnel to be nominated by DLRD.

E. Government Follow Up

By the termination of the study implementation, the expected benefit from this study are as follows:

1. Formulation of the comprehensive upland agriculture development program
2. Preparation of the detailed plan and design for the project implementation
3. Implementing the project according to the detailed plan and design prepared
4. Constructing a monitoring system of the project operation and maintenance, farm extension services and environmental conservation
5. Preparation of project plans for other development areas.

II. OBJECTIVES OF THE PROJECT

A. Immediate Objectives

1. To grasp the present situation of upland agriculture in the study area
2. To grasp the potential on upland agriculture development
3. To formulate the feasibility study for promoting upland agriculture
4. To formulate the detailed plan and design to develop small scale water resources and utilize upland effectively, and to prepare the

project implementation.

B. Long Range Objectives

1. To increase the quantities and the qualities of production of upland
2. To stabilize upland agriculture especially during dry season
3. To contribute in food crops and horticulture crops self-sufficiency support
4. To create new employment opportunities
5. To alleviate rural poverty and to raise living standard of farmers

III. PLAN OF OPERATION

The activities to be undertaken by study team will consist of following Feasibility Study for implementation.

1. Data collection and analysis

- a. Topographic data including topographic maps, areal photos, satellite images, etc.
- b. Meteorological data including rainfall, humidity, evaporation, sunshine hours, etc.
- c. Hydrological data including water level records, stream flow and water quality of existing rivers.
- d. Data on geological and groundwater including necessary maps, and necessary groundwater survey
- e. Socio-economic data on rural society including population, gross domestic products, social series, background of society and rural inhabitant, etc.
- f. Agro-economic data including farming population, farm households, land tenure, labor forces, marketing, market prices, farmers' financial situation, farmers group and organization, etc.
- g. Agricultural data including soils, land capability, agricultural land use, crops, cropping patterns, farming practices, crop yields and productions, species and number of livestock, agro-industry, etc.
- h. Existing irrigation and drainage facilities available water sources and intake water, etc.
- i. Existing infrastructure such as road networks, domestic water supplies, electric supplies, etc.
- j. Other necessary data and information on rural environment.

2. Upland water management and farming system in study area
 - a. Identification of land resources potential for agricultural development
 - b. Identification of water resources potential and study on the possibility of their efficient exploitation groundwater or surfacewater
 - c. Study on strategy crops which should be introduced
 - d. Formulation of farming program
 - e. Formulation of institutional strengthening program such as training for staffs of agricultural services at provincial, district, rural extension staffs, P3A and other farmer's group
 - f. Study on the necessity of improvement of infrastructures such as roads, village water supply ,etc.
 - g. Formulation of upland water management and farming system
 - h. Formulation of project implementation program
 - i. Formulation of project scheme
 - j. Estimation of project cost and benefit
 - k. Project evaluation

3. Study Schedule

The period required for the study is estimated at 18 months in total.

IV. EXTERNAL AND GOVERNMENT INPUTS

1. External Inputs

It is hopeful of the donor country to provide the technical assistance (grant) about US\$ 1,110,000 for implementation of the study which consists of;

a. Expert Service	80M/M	:	US\$	800,000
b. Survey & Investigation		:	US\$	200,000
c. Equipment		:	US\$	100,000
d. Fellowship		:	US\$	100,000
Total			US\$	1,200,000

2. Government Inputs

The Government of Indonesia will provide the counter budget for supporting

the implementation of the study which consist of counterpart staff, office space, tax and exemption of the equipment and other facilities.

SCOPE OF WORK
FOR
THE FEASIBILITY STUDY
ON
THE INTEGRATED AGRICULTURAL AND RURAL DEVELOPMENT
IN
HIGHLAND AREA
IN
THE REPUBLIC OF INDONESIA

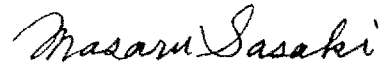
AGREED UPON
BETWEEN
DIRECTORATE GENERAL OF FOOD CROPS AND HORTICULTURE
MINISTRY OF AGRICULTURE
THE REPUBLIC OF INDONESIA
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

Jakarta, February 24, 1999



for

Dr. Chairil Anwar Rasahan
Director General,
Directorate General of Food Crops
and Horticulture,
Ministry of Agriculture



Mr. Masaru Sasaki
Leader,
Japanese Preliminary Study Team,
Japan International Cooperation
Agency (JICA)

I. Introduction

In response to the request of the Government of the Republic of Indonesia (hereinafter referred to as "Government of Indonesia "), the Government of Japan (hereinafter referred to as "Government of Japan ") has decided to conduct the Feasibility Study on the integrated agricultural and rural development in highland area in the Republic of Indonesia (hereinafter referred to as "the Study"), in accordance with the relevant laws and regulations in force in Japan.

Accordingly, Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of the Government of Indonesia.

The present document sets forth the Scope of Work with regard to the Study.

II. Objectives of the Study

The objectives of the Study are;

1. to conduct the Feasibility Study for selected model areas on the integrated agricultural development in highland area as a model for further upland agriculture development including maintenance of small scale upland irrigation facilities and farming plan to develop upland agriculture by promoting upland field cropping, and
2. to carry out, in course of the Study, technology transfer to the Indonesian counterpart personnel concerned.

III. Study area

The Study area consists of eight (8) model areas. These areas are listed on the following:

- 1.Mekarjaya (100ha), 2.Langensari (72ha), 3.Tugumukti (50ha), 4.Gekbrong (50ha), 5.Cisurupan (300ha), 6.Tanjunkarya (80ha), 7.Mekarmukti (167ha) and 8.Chisantana (250ha). (Refer to the ANNEX I)



IV. Scope of the Study

In order to achieve the above objectives, the Study will cover the following items:

1. Model areas will be mapped and general profiles of these will be reviewed. And typical model areas will be selected.

1-1. To collect and analyze existing data and information and to carry out field survey and investigation of each model area on the following:

(1) natural condition

- location, area and topography
- meteorology and hydrology
- water quality
- geology
- soils
- vegetation
- others

(2) socio-economic condition

- economic indices
- social infrastructure
- gender
- others

(3) agricultural condition

- seedling preparation and distribution system
- present land use
- farming practices
- research , extension services and training
- supporting services
- agricultural economy
- post-harvest and processing system
- marketing system and analysis
- agro-infrastructure and maintenance
- farmers' organization
- agricultural machinery
- others



(4) agricultural infrastructure

- irrigation and drainage facilities
- farm road networks

(5) environmental condition

- natural aspects
- social, economical and cultural aspects

1-2. To prepare topographic map for each model area.

1-3. To prepare the drafting agricultural development plan considering natural condition, land use and other features for each model area.

1-4. To select several typical model areas from the listed model areas.

1-5. To conduct Initial Environmental Examination.

2. Formulation of the Integrated Agricultural and Rural Development plan for selected typical model areas.

2-1. To conduct supplementary field survey and investigation for selected typical model areas.

2-2. Formulation of the optimum improvement plan (s) considering following items:

- (1) Agriculture
- (2) Agricultural and Rural Infrastructure
- (3) Operation, Maintenance and Management

2-3. Environmental Impact Assessment, if necessary

2-4. Preparation of implementation schedule

2-5. Estimation of the project cost and benefits

2-6. Overall evaluation of the project



V. Study schedule

The Study will be carried out in accordance with the attached tentative schedule. (Refer to the ANNEX II)

VI. Reports

JICA shall prepare and submit the following reports in English to the Government of Indonesia.

1. Inception Report

Thirty (30) copies at the commencement of the field study in Indonesia.

2. Interim Report

Thirty (30) copies at the two months later from the beginning of the field study in Indonesia.

3. Draft Final Report

Thirty (30) copies at the end of the work in Indonesia. The Government of Indonesia will provide JICA with its comments on the Draft Final Report within one (1) month after receipt of the Draft Final Report.

4. Final Report

Fifty (50) copies within two (2) months after receipt of the Government of Indonesia's comments on the Draft Final Report.

VII. Undertakings of the Government of Indonesia

1. To facilitate smooth conduct of the Study, the Government of Indonesia shall take necessary measures:

- 1-1. to secure the safety of the Japanese study team.

- 1-2. to permit the members of the Japanese study team to enter, leave and sojourn in the Republic of Indonesia for the duration of their assignment therein, and exempt them from foreign registration requirements and consular fees,



- 1-3. to exempt the members of the Japanese study team from taxes, duties, fees and other charges on equipment, machinery and other materials brought into the Republic of Indonesia for the conduct of the Study,
 - 1-4. to exempt the members of the Japanese study team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese study team for their services in connection with the implementation of the Study,
 - 1-5. to provide necessary facilities to the Japanese study team for the remittance as well as utilization of the funds introduced into the Republic of Indonesia from Japan in connection with the implementation of the Study,
 - 1-6. to secure permissions for entry into private properties or restricted areas for the implementation of the Study, when it is required,
 - 1-7. to secure permission for the Japanese study team to take all data and documents (including photographs and maps) related to the Study out of the Republic of Indonesia to Japan and
 - 1-8. to provide medical services as needed. Its expense will be chargeable on the members of the Japanese study team.
2. The Government of Indonesia shall bear claims, if any arises, against the members of the Japanese study team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Japanese study team.
3. Directorate General of Food Crops and Horticulture (DGFCH), Ministry of Agriculture shall act as counterpart agencies to the Japanese Study Team and also as the coordinating body in relation with other governmental organizations and non-governmental organizations concerned for smooth implementation of the Study.
4. DGFCH shall, at it's own expenses, provide the Japanese study team with the following, in cooperation with other organizations concerned:
- 4-1. available data and information related to the Study,
 - 4-2. counterpart personnel,
 - 4-3. suitable office spaces with necessary equipment and furniture in Jakarta and Bandung
- and,



- 4-4. credentials or identification cards.

VIII. Undertaking of JICA

For the implementation of the Study, JICA shall take the following measures:

1. to dispatch, at its own expense, study team to the Republic of Indonesia, and
2. to pursue technology transfer to the Indonesian counterpart personnel in the course of the Study.

IX. Consultation

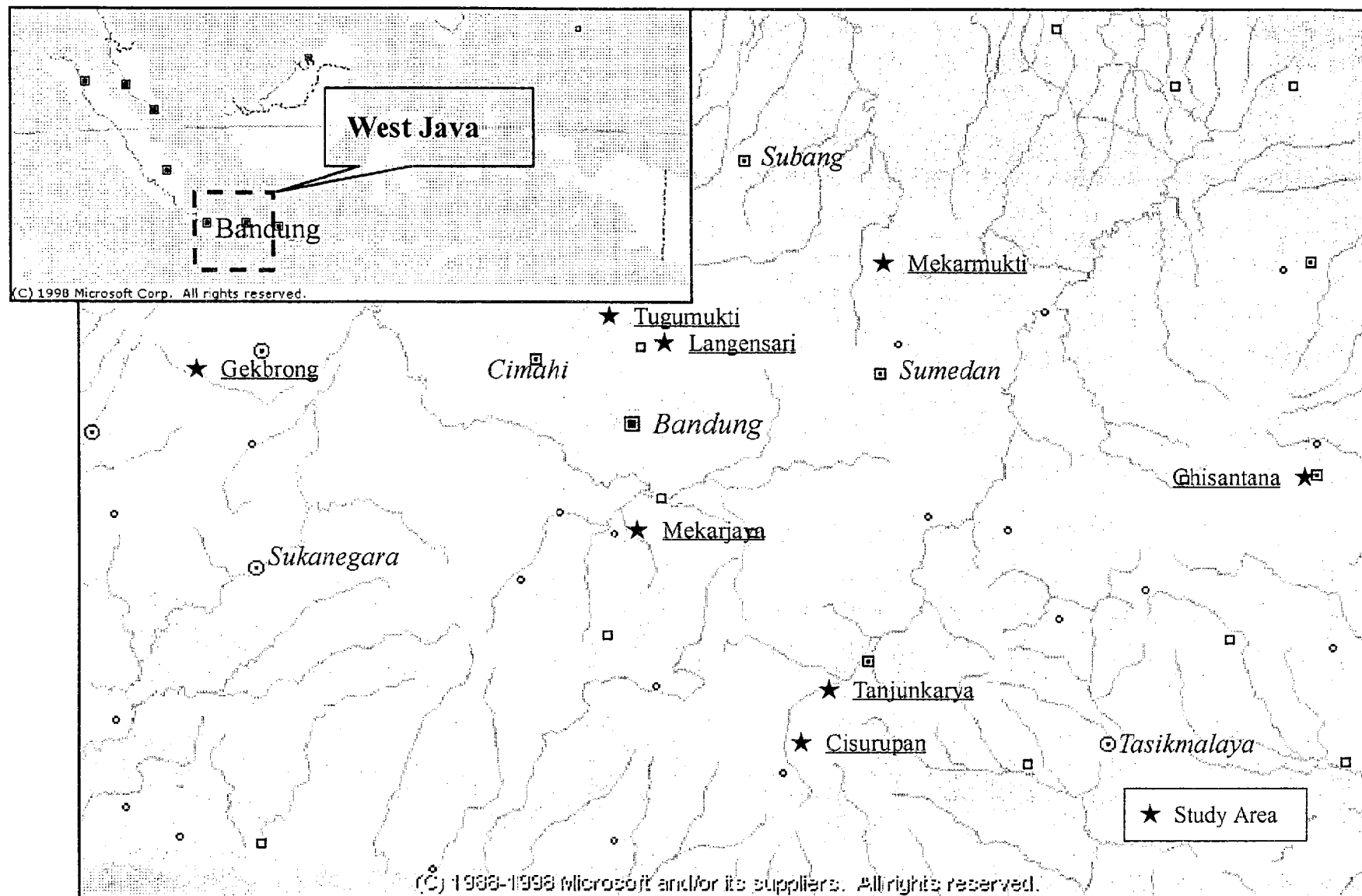
JICA and DGFCH shall consult with each other in respect of any matter that may arise from or in connection with the Study.

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M.S

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ANNEX I LOCATION MAP



8/11

ANNEX II

TENTATIVE SCHEDULE

Month	1	2	3	4	5	6	7	8	9	10	11	12	13
Item													
Works in Indonesia													
Works in Japan													
Reports	▲Ic/R ▲It/R Df/R▲ ◎ ▲F/R												

(Remarks)

Ic/R : Inception Report
 It/R : Interim Report
 Df/R : Draft Final Report
 F/R : Final Report
 ◎ : Comments on Df/R by Indonesian side

MINUTES OF MEETING
ON
SCOPE OF WORK
FOR
THE FEASIBILITY STUDY
ON
THE INTEGRATED AGRICULTURAL AND RURAL DEVELOPMENT
IN
HIGHLAND AREA
IN
THE REPUBLIC OF INDONESIA

AGREED UPON
BETWEEN
DIRECTORATE GENERAL OF FOOD CROPS AND HORTICULTURE
MINISTRY OF AGRICULTURE
THE REPUBLIC OF INDONESIA
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

Jakarta, February 24, 1999



for

Dr. Chairil Anwar Rasahan
Director General,
Directorate General of Food Crops
and Horticulture,
Ministry of Agriculture



Mr. Masaru Sasaki
Leader,
Japanese Preliminary Study Team,
Japan International Cooperation
Agency (JICA)

In response to the request of the Government of the Republic of Indonesia, the Government of Japan decided to dispatch through Japan International Cooperation Agency (hereinafter referred to as "JICA"), which is responsible for the implementation of technical cooperation programs of the Government of Japan, the preliminary study team (hereinafter referred to as "the Team") headed by Mr. Masaru Sasaki, to the Republic of Indonesia from February 14 to March 3, 1999 so as to discuss and exchange views for the Feasibility study on the Integrated Agricultural and Rural Development in Highland area in the Republic of Indonesia (hereinafter referred to as "the Study"), with the Directorate General of Food Crops and Horticulture, Ministry of Agriculture (hereinafter referred to as "DGfCH") and officials concerned of the Government of the Republic of Indonesia for the implementation of the Study.

DGfCH and the Team have mutually agreed to the Scope of Work on the Study.

The following minutes were prepared to confirm the main issues to be discussed and matters to be agreed upon by both of Japanese and Indonesian side. The list of participants in a series of meetings is attached to ANNEX I.

1. As to paragraph 1-4 of section IV, "select " shall conduct based on the result of paragraph 1-1, 1-2 and 1-3 of section IV. It is taking criteria mentioned below into consideration, and would be clarified in the Interim Report.
 - (1) To select the area in which the necessity of the project is highly understood among farmers and the potential for organizing farmers highly exists,
 - (2) To select the area in which the potential of agricultural development for upland crops highly exists,
 - (3) To select the area in which the demonstration effect are expected, and
 - (4) To select the area in which rehabilitation and construction of agricultural infrastructures (irrigation facilities, etc.) are urgently required.
2. For the effective and efficient implementation of the Study, both sides agreed that it is necessary to utilize the Joint Coordinating Committee of the 3rd Umbrella Cooperation.
3. Equipment and furniture for offices of the Japanese study team to be provided would be limited to essential furniture, such as desks, chairs, external telephone line and air-



conditioner.

4. The Team strongly requested Indonesian side to provide the necessary number of counterpart personnel, who are qualified governmental officials, during the whole period of the Study. The Indonesian side promised to be responsible for the assigning. The Indonesian side explained that they would make effort to allocate the traveling cost for counterpart personnel in the Study, however, due to the current limited budget condition, it will be difficult to do that.
5. The Team strongly requested that, whenever necessary, Indonesian side would provide referential data and information no later than March 10, 1999. In order for Indonesian side to do as mentioned above, it was agreed that the Team would prepare the list by March 3, 1999.
6. The Indonesian side promised that the Ministry of Agriculture would strongly requested the budget for implementing this study's F/S plans to BAPPENAS by utilizing international organization's scheme.
7. The Indonesian side requested to hold the workshop, which explains the result of the Study, at the end of the work in Indonesia.
8. The Indonesian side requested that Japanese side would be responsible for the counterpart personnel training in Japan related to the Study in order to promote an effective technology transfer. The Team promised to convey this request to the Government of Japan.
9. The final report of the Study should be opened to public whenever requested.



ANNEX I

LIST OF PARTICIPANTS

1. Indonesian Side

1) Ministry of Agriculture

Directorate General of Food Crops and Horticulture (DGFCH)

Dr. Ir. Chairil Anwar Rasahan	Director General of Food Crops and Horticulture
Dr. Ir. Rudi Wibowo MS	Secretary for Directorate General of Food Crops and Horticulture
Dr. Ir. Edward Napitupulu	Director of Planning and Programming, DGFCH
Ir. Ngentem Malem Sinulingga,	Director, Directorate of Land Rehabilitation and Development, DGFCH
Ir. Achmad Fuadi	Head of Sub Directorate of Foreign Cooperation
Ir. Richard Karim,	Head, Section, Farm and Water Management, Directorate of Land Rehabilitation and Development
Martha Soelaksmi, B.Sc	Staff, Sub Directorate of Foreign Cooperation, Directorate of Planning and Programming
Ir. Sarlistyaningsih, M.Sc,	Staff, Sub Directorate for Foreign Cooperation, Directorate of Planning and Programming
Ir. Wijayanti Yusuf M Sc,	Staff, Sub Directorate of Foreign Cooperation, Directorate of Planning and Programming
Ir. Tangkas Pandjaitan M Sc,	Staff, Directorate of Land Rehabilitation and Development
Ir. Wahyu Marno,	Staff, Directorate of Land Rehabilitation and Development
Mr. Yutaka Sugii,	JICA Expert
Mr. Kuraji Kato,	JICA Expert
Mr. Hironori Ogata,	JICA Expert
Mr. Hirofumi Hoshi,	JICA Expert

Secretary General

Ir. Yandri	Staff, Bureau of Foreign Cooperation
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2) Ministry of Public Works

Dr. Sutardi	Directorate General of Water Resources Development
Mr. Nakano Minoru	JICA Expert

3) West Java Province

Ir. Dady Mulyadi M Agr. Sc.	Head of West Java Provincial Agricultural Service
Ir. Abubakar,	Head, Section, Farm and Water Management, Agriculture Service in West Java



2. Japanese Side

1) Preliminary Study Team

Mr. Masaru Sasaki,	Leader
Mr. Masahiro Tamura,	Agriculture
Mr. Jun Yamada,	Agricultural and Rural Infrastructure
Dr. Katsumi Chida,	Environment
Mr. Kazuya Suzuki,	Coordinator

2) JICA Indonesia Office

Ms. Yasue Yoshinari,	Assistant Resident Representative
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資料 4 . 調査対象地区概要

位置	州名	西ジャワ		Jawa Barat									
	県名	バンドン		Bandung									
	郡名	アルジャサリ		Arjasari									
	村名	ムカルジャヤ		Mekarjaya									
農業生産	面積計：638 ha												
	時期	作物	面積(ha)		生産(kg)		収量(t/ha)						
	乾季 4月～9月	トマト	5		4.6		0.92						
		甘藷	25		17.5		0.7						
		赤唐辛子	15		67.5		4.5						
		Kc. Merah	50		250		5						
		サインゲン	35		210		6						
		トウモロコシ	50		350		7						
	雨季 10月～3月	水稲	114		490		4.30						
		陸稲	45		90		2.00						
		サインゲン	35		210		6.00						
		Kc. Merah	50		250		5.00						
		トウモロコシ	50		350		7.00						
		唐辛子	5		22.5		4.50						
地域条件	全農民		Petani Pemilik			Petani Penggarap							
	741人		435人			男性	153人		女性	153人			
	農用地条件		丘陵										
	農道		土 石										
	村道		土 石 アスファルト その他										
	飲料水源		泉（湧水）										
	下水道施設												
	農機具等		鋤、散布器、水牛、ハール、鋤										
灌漑	水源	ダム、河川（流域名は未確認）、泉											
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計

位置	州名	西ジャワ		Jawa Barat									
	県名	バンドン		Bandung (DT II)									
	郡名	レンバン		Lembang									
	村名	ランゲンサリ		Langensari									
農業生産	面積計：48.90 ha												
	時期	作物	面積(ha)	生産(kg)	収量(t/ha)								
	乾季 4月～9月	トマト	20	450									
		キャベツ花?	18	360									
		サインゲン	8.9	106									
		唐辛子	2	66									
	雨季 10月～3月	トマト	10.7	225									
		キャベツ花	26	400									
		サインゲン	9.2	111									
		??	3										
	全農民	Petani Pemilik		Petani Penggarap									
	73人	73人	男性	67人	女性	6人							
地域条件	農用地条件												
	農道	土											
	村道	アスファルト その他											
	飲料水源	泉（湧水）?											
	下水道施設												
	農機具等	水ポンプ											
灌漑	水源												
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計

位置	州名	西ジャワ	Jawa Barat										
	県名	バンドン	Bandung (DT II)										
	郡名	チサルア	Cisarua										
	村名	ツグムクティ	Tugumukti										
農業生産	面積計：？ ha												
	時期	作物	面積(ha)	生産(kg)	収量(t/ha)								
	乾季 4月～9月	トウモロコシ	36	72									
		ジャガイモ	5	50									
		トマト	10	200									
		ニンジン	7	70									
		サヤインゲン	16	240									
		キャベツ花	17	340									
	雨季 10月～3月	トウモロコシ	51	102									
		ジャガイモ	9	100									
		トマト	15	300									
		ニンジン	10	100									
		サヤインゲン	22	440									
		キャベツ花	28	560									
	全農民	Petani Pemilik		Petani Penggarap									
	157 人	146 人		男女	11 人								
地域条件	農用地条件												
	農道	土											
	村道	石、アスファルト											
	飲料水源	泉（湧水）、湖											
	下水道施設	有											
	農機具等	鋤、散布器											
灌漑	水源	泉（湧水）、湖											
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計
	33.2	33.2	33.2	33.2	33.2	33.2	200	200	200	200	300	200	3200
Dinas Pekerjaan?? Seksi Pengairan Lembang（労働局？灌漑部）													

位置	州名	西ジャワ	Jawa Barat										
	県名	チアンジュール	Cianjur										
	郡名	チュゲナン?	Cugenang										
	村名	マングンケルタ	Mangunkerta										
農業生産	面積計: 108.2 ha												
	時期	作物	面積(ha)	生産(kg)	収量(t/ha)								
	乾季 4月～9月	稲	90.3	541.8									
		トウモロコシ	5.0	12.5									
		トマト	4.0	7									
		唐辛子	2.6	3.9									
		L. Siam	1.4	3.5									
		サヤインゲン	5.0	10									
	雨季 10月～3月	稲	102.3	562.65									
		サヤインゲン	1.0	1.7									
		L. Siam	1.4	2.8									
		B. Dati??	1.0	1.97									
		ナス	1.5	2.85									
			1.0	1.90									
地域条件	全農民	Petani Pemilik		Petani Penggarap									
	563人	89人		男性	415人	女性	59人						
	農用地条件												
	農道	土、その他											
	村道	アスファルト、その他											
	飲料水源	良好											
	下水道施設	良											
	農機具等	無											
灌漑	水源	河川、その他											
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計
	95	96	71	70	69	69	72	97	99	98	96	95	1027

位置	州名	西ジャワ		Jawa Barat									
	県名	チアンジュール		Cianjur									
	郡名	ワルンコンダン		Warungkondang									
	村名	ゲクブロン		Gekbrong									
農業生産	面積計: ha												
	時期	作物	面積(ha)	生産(kg)	収量(t/ha)								
	乾季 4月～9月												
	雨季 10月～3月												
	全農民	Petani Pemilik		Petani Penggarap									
	人	人	男性	人	女性	人							
地域条件	農用地条件												
	農道												
	村道												
	飲料水源												
	下水道施設												
	農機具等												
灌漑	水源												
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計
平均年収/人	Rp 653,750/年												

位置	州名	西ジャワ		Jawa Barat									
	県名	ガルット		Garut									
	郡名	チスルパン		Cisurupan									
	村名	チサルパン		Cisurupan									
農業生産	面積計： 300ha												
	時期	作物		面積(ha)		生産(kg)		収量(t/ha)					
	乾季 4月～9月	ジャガイモ		33		18.6							
		キャベツ		34		26							
				13		8.6							
		トマト		17		28							
		唐辛子		4		6							
		トウモロコシ		28		16							
	雨季 10月～3月	ジャガイモ		51		18							
		キャベツ		77		27							
				8		8.5							
		トマト		14		28							
		唐辛子		8		6.0							
		トウモロコシ		14.5		16.5							
地域条件	全農民		Petani Pemilik			Petani Penggarap							
	916人		438人			男性	478人	女性	一人				
	農用地条件												
	農道		土、石、その他										
	村道		土、石、アスファルト、その他										
	飲料水源												
	下水道施設												
	農機具等												
			農業										
	灌漑	水源	泉（湧水）、湖										
必要水量													
4月		5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計
	35	50	50	40	40	35	25	20	20	25	25	30	

位置	州名	西ジャワ		Jawa Barat									
	県名	ガルット		Garut									
	郡名	サマラン		Samarang									
	村名	タンジュン・カルヤ		Tanjung Karya									
農業生産	面積計： 80ha												
	時期	作物	面積(ha)		生産(kg)		収量(t/ha)						
	乾季 4月～9月	唐辛子	3										
		トマト	4										
		キャベツ	6										
		トウモロコシ	10										
		ペニパナイゲン	8										
		?											
	雨季 10月～3月	唐辛子	5										
		トマト	8										
		キャベツ	15										
		トウモロコシ	30										
		ペニパナイゲン	20										
		?	2										
		?											
		全農民	Petani Pemilik		Petani Penggarap								
	849人	328人		男性	438人	女性	38人						
地域条件	農用地条件												
	農道	土、その他											
	村道	石、その他											
	飲料水源												
	下水道施設												
	農機具等												
		農業											
灌漑	水源	泉（湧水）											
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計
	35	35	30	30	20	20	50	50	45	40	35	35	

位置	州名	西ジャワ		Jawa Barat									
	県名			Sumedang?									
	郡名												
	村名			Mekarmukti?									
農業生産	面積計： 80ha												
	時期	作物	面積(ha)	生産(kg)	収量(t/ha)								
	乾季 4月～9月	水稲	20										
		大豆	60										
		玉葱	3										
		唐辛子	16										
	雨季 10月～3月	水稲	167	750									
	全農民	Petani Pemilik		Petani Penggarap									
	人	人	男性	人	女性	人							
地域条件	農用地条件												
	農道												
	村道	舗装無し											
	飲料水源	○K											
	下水道施設	○K											
	農機具等												
灌漑	水源	泉（湧水）											
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計

位置	州名	西ジャワ		Jawa Barat									
	県名	クニンガン		Kuningan									
	郡名												
	村名	チサントナ		Cisantana									
農業生産	面積計： 200ha												
	時期	作物	面積(ha)	生産(kg)	収量(t/ha)								
	乾季 4月～9月	B. Daun	125	2625	21								
		ジャガイモ	25	350	14								
		ニンジン	35	315	9								
		唐辛子	15	420									
	雨季 10月～3月	B. Daun	160	3520	22								
		ジャガイモ	20	300									
		ニンジン	10	100									
		唐辛子	10	290									
地域条件	全農民	Petani Pemilik		Petani Penggarap									
	550人	350人		男性	200人	女性	人						
	農用地条件												
	農道	土、アスファルト											
	村道	アスファルト											
	飲料水源	水道、井戸											
	下水道施設	－											
	農機具等	鋤											
灌漑	水源	泉（湧水）											
	必要水量												
	4月	5月	6月	7月	8月	9月	10月	11月	12月	1月	2月	3月	計
	120	120	120	120	120	120	100	100	100	100	100	100	1320

様式第1号（記第2関係）

資料収集リスト（収集資料）

プロジェクトID						調査団番号			
地域	東南アジア	調査団名又は 専門家氏名	インドネシア国ハイランド地域農業開発計画事前（予備）調査団			調査の種類	作成部課	農業開発調査課	
国名	インドネシア	配属機関名				現地調査期間	担当者氏名	鈴木 和哉	

番号	資 料 の 名 称	形態（図書・ ビデオ・地図・ 写真等）	収集資料	専門家作 成資料	JICA作成資 料	テキスト	取扱区分	図書館記入欄
20	PEMBAGIAN ADMINISTRASI KOTA MADIA BADUNG: 25 KECAMATAN 125 DESA/KELURAHAN	地図	○				JR・CR(→)→SC	
21	PEMBAGIAN WILAYAH KABUPATEN DATI II CIANJUR TERDIRI DARI VI WILAYAH PEMBANTU BUPATI 24 KECAMATAN 2PWK.KECAMATAN 6KELURAHAN 307 DESA	地図	○				JR・CR(→)→SC	
22	PEMBAGIAN ADMINISTRASI PEMERINTAHAN DI JAWA BARAT	地図	○				JR・CR(→)→SC	
23	DAFTAR ADMINISTRASI PEMERINTAHAN KABUPATEN DATI II BANDUNG	地図	○				JR・CR(→)→SC	
24	JAWA BARAT	地図	○				JR・CR(→)→SC	
25	Third Umbrella Cooperation Between Indonesia and Japan	図書	○				JR・CR(→)→SC	
26	無道力ポンプの作り方・使い方	図書	○				JR・CR(→)→SC	
27			○				JR・CR(→)→SC	
28			○				JR・CR(→)→SC	
29			○				JR・CR(→)→SC	

資料収集リスト(収集資料)

プロジェクトID						調査団番号			
地域	東南アジア	調査団名又は 専門家氏名	インドネシア国ハイランド地域農業開発計画事前(予備)調査団			調査の種類	作成部課	農業開発調査課	
国名	インドネシア	配属機関名				現地調査期間	担当者氏名	鈴木 和哉	
番号	資料の名称	形態(図書・ ビデオ・地図・ 写真等)	収集資料	専門家作 成資料	JICA作成資 料	テキスト	取扱区分	図書館記入欄	
1	JAWA BARAT DALAM ANGKA 1997	図書	○				JR・CR(→)・SC		
2	KUNINGAN DALAM ANGKA 1997	図書	○				JR・CR(→)・SG		
3	Nelles Road Atlas INDONESIA	図書	○				JR・CR(→)・SC		
4	KABUPATEN CLANJUR DALAM ANGKA TAHUN 1997	図書	○				JR・CR(→)・SC		
5	インドネシア農業の概要1997年12月	図書	○				JR・CR(→)・SG		
6	THIRD UMBRELLA COOPERATION and Model Farm Project	図書	○				JR・CR(→)・SC		
7	Summary of Investigation for Integrated Agriculture and Rural Development on Highland Area	図書	○				JR・CR(→)・SC		
8	GURUT DALAM ANGKA 1996	図書	○				JR・CR(→)・SC		
9	KABUPATEN BANDUNG DALAM ANGKA 1997	図書	○				JR・CR(→)・SC		
10	KABUPATEN SUMEDANG DALAM ANGKA 1997	図書	○				JR・CR(→)・SC		
11	LAPORAN TAHUNAN 1997 (GEMAH RIPA REPEH RAPIH)	図書	○				JR・CR(→)・SC		
12	PROPINSI DALAM ANGKA	図書	○				JR・CR(→)・SC		
13	LAPORAN TAHUNAN 1997 (msun medal)	図書	○				JR・CR(→)・SC		
14	GEMA PALAGUNG 2001 DI JAWA BARAT	図書	○				JR・CR(→)・SC		
15	農村における協同組合の現状・問題点と今後の発展戦略	図書	○				JR・CR(→)・SC		
16	DAIRY TECHNOLOGY IMPROVEMENT PROJECT IN THE REPUBLIC OF INDONESIA	地図	○				JR・CR(→)・SC		
17	PEMBAGIAN ADMINISTRASI KOTA MADIA BANDUNG:25 KECAMATAN 125 DESA/KELURAHAN	地図	○				JR・CR(→)・SC		
18	DAFTAR WILAYAH ADMINISTRASI PEMERINTAH KABUPATEN DT II KUNINGAN 19 KECAMATAN 369 DESA	地図	○				JR・CR(→)・SC		
19	JAKARTA City Map	地図	○				JR・CR(→)・SC		