3. Catatan diskusi dan prasaran lain

3.1 The Record of Discussions

THE RECORD OF DISCUSSIONS

BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM

AND THE AGENCIES CONCERNED OF THE

GOVERNMENT OF THE REPUBLIC OF INDONESIA

ON THE JAPANESE TECHNICAL COOPERATION

FOR THE INTEGRATED AGRICULTURAL AND RURAL

DEVELOPMENT PROJECT IN SOUTHEAST SULAWESI PROPVINCE

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Yasuto KIKUOKA visited the Republic of Indonesia from January 16, 1991 to January 26, 1991 for the purpose of working out the details of technical cooperation program concerning the Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province, Indonesia.

During its stay in the Republic of Indonesia, the Team exchanged views and had a series of discussions with the Indonesian Agencies concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, both parties agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

引住人

Mr. Yasuto KIKUOKA

Leader,

Implementation Survey Team

Japan International

Cooperation Agency,

Japan

Jakarta, January, 26, 1991

Mr. Nusyirwan Zen

Secretary General,

Ministry of Agriculture,

Republic of Indonesia

THE ATTACHED DOCUMENT

1. COOPERATION BETWEEN BOTH GOVERNMENTS

- 1. The Government of Japan and the Government of the Republic of Indonesia will cooperate with each other in implementing the Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province (hereinafter referred to as "the Project") for the purpose of introducing appropriate techniques and methods for the development of rural area in Indonesia.
- 2. The Project will be implemented in accordance with the Master Plan which is summarized in I of the Annex.

II. DISPATCH OF JAPANESE EXPERTS

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in II of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
- 2. The Japanese experts referred to in 1 above and their families will be granted in the Republic of Indonesia privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in the Republic of Indonesia under the Colombo Plan Technical Cooperation Scheme, and will include the followings:





- (1) Exemption from income tax and charges of any kind imposed on or in connection with the living allowances remitted from abroad in relation to the implementation of the Project:
- (2) Exemption from import and export duties and any other charges imposed in respect of personal and household effects which may be brought into from abroad or taken out of the Republic of Indonesia:
- (3) Exemption from import tax, import sales tax, sales tax and other taxes and charges of any kind imposed on or in connection with the purchase in the Republic of Indonesia by the Japanese experts of one motor vehicle per each expert:
- (4) Free local medical services and facilities to the Japanese experts and their families.

III. PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in III of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
- 2. The Equipment will become the property of the Government of the Republic of Indonesia upon being delivered c.i.f. to the Indonesian authorities concerned at the ports and/or airports of





disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in II of the Annex.

IV. PROVISION OF SPECIAL MEASURES

For fostering the smooth implementation of the Project, in accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to supplement a portion of local cost expenditures for training of middle-level technicians and key-farmers and for execution of the improvement works of physical infrastructure.

V. TRAINING OF INDONESIAN PERSONNEL IN JAPAN

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense Indonesian personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
- 2. The Government of the Republic of Indonesia will take necessary measures to ensure that the knowledge and experience aquired by the Indonesian personnel from technical training in Japan will be utilized effectively for the implementation of the Project.





- VI. SERVICES OF INDONESIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL.
 - 1. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to secure at its own expense the necessary services of Indonesian counterpart and administrative personnel as listed in IV of the Annex.
 - 2. The Government of the Republic of Indonesia will allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in II of the Annex for the effective and successful transfer of technology under the Project.
- VII. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF INDONESIA
 - 1. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to provide at its own expense
 - (1) Land, buildings and facilities as listed in V of the Annex:
 - (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;





- (3) Transportation facilities and travel allowance for the official travel of Japanese experts within the Republic of Indonesia; and
- (4) Suitably furnished accommodations for the Japanese experts and their families.

In addition, all equipment and machinery available at the Project site may be used for implementing the Project.

- 2. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to meet:
 - (1) Expenses necessary for the transportation of the Equipment within the Republic of Indonesia as well as for the installation, operation and maintenance thereof;
 - (2) Customs duties, internal taxes and any other charges, imposed on the Equipment in the Reublic of Indonesia; and
 - (3) All running expenses necessary for the implementation of the Project.

VIII. ADMINISTRATION OF THE PROJECT

1. The Secretary General of the Ministry of Agriculture will bear overall responsibility for the implementation of the Project.





- 2. The Secretary General of the Ministry of Agriculture will appoint the Project Director (Director, Bureau of Planning of the Ministry of Agriculture) whose responsibility is to administrate and manage the matters of the Project.
- 3. The Secretary General of the Ministry of Agriculture will appoint the Sub-Project Director (Head, Regional Office of Southeast Sulawesi, Ministry of Agriculture) whose responsibility is to implement the daily work of the Project.
- 4. The Japanese Team Leader will provide necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Project Director and Sub-Project Director.
- 5. The Japanese experts will give necessary technical guidance and advice to the Indonesian counterpart personnel on matters pertaining to the implementation of the Project.
- 6. For the effective and successful implementation of the Project, a Joint meeting and a Coordination meeting will be established with the function and composition as referred to in VI of the Annex.

IX. CLAINS AGAINST JAPANESE EXPERTS

The Government of the Republic of Indonesia undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occuring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Indonesia except for those arising from the willful misconduct or gross negligence of the Japanese experts.





X. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

and the constraint of the appearance of the constraint of the

XI. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from March 1, 1991 to February 29, 1996.





ANNEX

I. MASTER PLAN

The Government of Indonesia is trying to establish the appropriate methods of rural and regional development which is useful for the promotion of the "Integrated Agricultural and Rural Development Plan in Southeast Sulawesi" in line with GERSAMATA Program, and to the balanced regional development and poverty alleviation which occupies important positions in the "5th Five-Years National Development Plan" (REPELITA V) of Indonesia, and the Japanese Technical Cooperation will be implemented to assist on this trial.

1. Objectives

The Project will be carried out for the purpose of introducing the knowledge and technology for the appropriate agricultural and rural development in low developed regions. It is based on the natural and social conditions in rural area, aiming at the increase of farmers' income and the improvement of their living standard by the higher productivity and the diversification of agricultural production.

2. Activities of Technical Cooperation

Technical Cooperation will be implemented in line with the following activities.

The objective area of the activities (the Project site) shall be selected from the rural area of Southeast Sulawesi Province, which shall be developed as "Model Villages" for the surrounding regions. And the farmers in the area shall participate in the activities, being led by



一面

both the Japanese Experts and the Indonesian Counterpart personnel.

- (1) Planning of the integrated agricultural and rural development
 - Land use plan, cultivation and farming plan
 - Agricultural and rural infrastructure development plan
- (2) Development of agricultural and rural infrastructure
 - Basic agricultural infrastructure
 - Agricultural and rural facilities
- (3) Demonstration of cultivation and farming techniques
 - Paddy
 - Secondary food crops
 - Estate crops
 - (4) Strengthening of farmers group

Strengthening of farmers group aiming at effective water management, maintenance of agricultural infrastructure and planning of appropriate farming activities, etc.

(5) Training of regional and provincial government officials, extension workers and key farmers

II. JAPANESE EXPERTS

- 1. Team Leader
- 2. Coordinator
- 3. Experts in the field of





- (1) Regional planing
- (2) Agricultural and rural infrastructure
- (3) Construction and land reclamation
- (4) Farming guidance
- (5) Operation and maintenance of machinery
- (6) Farmers' group strengthening

Note: One (1) field of Expert is covered by Team
Leader concurrently.

Short-term Experts are dispatched when
necessity arises for the smooth implementation of the Project.

III. LIST OF THE ARTICLES TO BE PROVIDED BY THE GOVERNMENT OF JAPAN

- 1. Construction machinery and materials
- 2. Agricultural machinery, tools and materials
- 3. Instruments and materials for the training activities
- 4. Vehicles and Motorcycles
- 5. Other necessary equipment and materials

IV. INDONESIAN COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

- 1. Project Director
- 2. Sub-Project Director
- 3. Assistant Sub-Project Director (Administration)
- 4. Counterpart Personnel in the fields of :
 - (1) Regional planning
 - (2) Agricultural and rural infrastructure
 - (3) Construction and land reclamation
 - (4) Farming guidance



到便

- (1) to formulate the Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated under the framework of this Record of Discussion:
- (2) to review the overall progress of the technical cooperation program as well as the achievements of the above mentioned Annual Work Plan:
- (3) to review and exchange views on major issues arising from or in connection with the Technical Cooperation Program:
- (4) to monitor and evaluate the project activities,

which will be conducted at least once a year and whenever necessity arises.

The composition of the meeting will be as follows:

Indonesian side

- Representative of Bureau of International Cooperation, the Ministry of Agriculture
- Representative of Bureau of Agriculture and Irrigation, the National Development Planning Agency (BAPPENAS)
- Representative of Bureau of International Technical Cooperation, Cabinet Secretariat
- The other members may be appointed by the Director of Bureau of Planning, the Ministry of Agriculture.



司

The composition of the meeting will be as follows.

Indonesian side

- -Representative of the Board of Regional Development Planning (BAPPEDA)
- -The other members may be appointed by the Head of Regional office of Southeast Sulawesi, the Ministry of Agriculture.

Japanese side

- -Team Leader of Japanese Experts
- -Coordinator of Japanese Experts
- -Japanese Experts in the fields of:
 - 1) Regional planning
 - 2) Agricultural and rural infrastructure
 - 3) Construction and land reclamation
 - 4) Farming guidance
 - 5) Operation and maintenance of machinery
 - 6) Farmers' group strengthening

Note: One (1) field of Expert is covered by Team Leader concurrently.





3.2 Tentative Schedule of Implementation (TSI)

TENTATIVE SCHEDULE OF IMPLEMENTATION

FOR THE INTEGRATED AGRICULTURAL

AND RURAL DEVELOPMENT PROJECT

IN SOUTHEAST SULAWESI PROVINCE, INDONESIA

The Japanese Implementation Survey Team and the Indonesian Agencies concerned have jointly formulated the Tentative Schedule of Implementation for the Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province (hereinafter referred to as "the Project") as annexed hereto.

This has been formulated on the basis of the Record of Discussions on the Japanese Cooperation for the Project signed between the Japanese Implementation Survey Team and the Agencies concerned of the Secretariat General, Ministry of Agriculture of the Republic of Indonesia and on the conditions that necessary budget will be allocated for the implementation of the Project by both sides, and that the above-mentioned Schedule is subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the project.

查网往人

Nr. Yasuto KIKUOKA Leader, Implementation Survey Team Japan International Cooperation Agency Jakarta January, 26, 1991

Mr. Nusyirwan Zen Secretary General, Ministry of Agriculture, Republic Indonesia

TENTATIVE SCHEDULE OF IMPLEMENTATION

X 64 64				· · · · · · · · · · · · · · · · · · ·
	1881 : 0881	1992 :	1993 : 1994 : 1995	
1. ACTIVITIES OF THE TECHNICAL COOPERATION PROJECT				: = Objective area (villages):
	••	••	1	! Ranomeeto, Onewila, Palangga,
1. Planning of the integrated agricultural and rural development :	.		••	. Kineya, Laeya, Sabulakoa,
	••	•••		Lalobao, Lapulu
	••			
1) Land use, cultivation and farming plan	1]		
2) Agricultural and rural infrastructure development plan.	1	<u> </u>		
			••	
2. Development of agricultural and rural infrastructure			••	
		••		
1				
(ARTH LANGE, ATTACHTION COMMA, FACE FORCE, CTC.)		÷ :		
2) Agricultural and rural facilities	<u> </u>			•
(Meeting hall, Dry yard, cattle fattening yard,	<u></u>		•••	
Communal well, etc.)	••			••
	,			
3. Demonskration of cultivation and farming techniques				. * Demonstration/Training Parms
	•••	••	-	; shall be settled in Ranomeeto
1) Paddy				- and Polengge.
2) Secondary food crops	: 			
3) Estate crops	••		-	
		•••		
4. Strengthening of farmer's group.	,			
			••	
5. Training of Regional and Provincial Covernment officials,		••		
Extension workers, and Key farmers			 :	
		:: ::	•	
1) Planning method of agricultural and rural development	••	••	·	
2) Fara management				
3) Cultivation techniques	•		 	Ï
4) Patmet's group	••			
5) Others	••	 	••	
		-		

						;	
3. C. S.		ST BY	Fiscal Year	按	:		0 4 4 8 8 8 9 9
	1990	1661	7. 2061	1 : 6661	1394 ; 13	1995	+ 1 1
I. JAPANESE CONTRIBUTION		<u> </u>	<u> </u>	<u> </u>	<u> </u> 	! 	
1. Assignment of Experts			••••			••••	
	·		••		. 	•	
1) Long-term assignment		••		••			
(1) Team Leader	- -			+		ï	
(2) Coordinator	-1					ī	
(3) Experts in the fields of :		- -				••	
- Regional planning	-1				. ·	Ī	
- Agricultural and rural infrastructure	+ 			-	-	1	One (1) field of Expert is
- Construction and land reclamation		1	+	-		-	covered by Team Leader
- Farming guidance						Ī	concurrently
- Operation and maintenance of machinery			-			-	
- farmers' group strengthening			}	}	}	<u>,</u>	
			••	••	••	••	
2) Short-term assignment		-	+	!			several Experts a year
	•••					*	In the fields of Agricultural
		••	-•			••	economics. Post harvest, Livestock,
		:	••	<u>.i</u>		٠.	Soil analysis, Insects and pest
		••					controll, etc. (Necessary fields
		••		••	•-	•-	are studied by Joint/Coordination
		· <u></u>	•		<i>i</i> -		neeting)
	••			:			
2. Counterpart training in Japan		-	+	<u> </u> -	<u> </u>	* 	* Several Counterpart personnel
						••	a year (Candidates selection is
3. Provision of equipment, machineries, and materials		!	!		!	•-	coordinated by Bureau of Planning
	••	••	•-		••	+ - ,'	of MOA and BAPPENAS in collabora-
	:	 .		••			tion with JICA Experts.)
		-	}			 ,	
and rural infrastructure in objective area (villages)	•••			- : - :		• • • • • • • •	
2) Financial assistance on the Training of Regional and		+	+	-		ï	
Provincial Covernment officials, Extension workers, and			•••		•		
Xey farmers				••	••	· ••	
			•• •	•••			
	· ·	•	- •	-			
Accord analysis of their artistics						 ! !	ascent action of the second
\sim			- -	• -	. <u>-</u>		10111111
		• •		• •·			The Assaugher
						! 	

1990 1991 1892 1893 1895	**************************************	Fiscal Year	4 8 8 9 9
Experts. The Kendari The Specifies The		: 1991 ; 1992 ; 1993 ; 1994 ;	4 5 1
Donne; Sxperts.	INDONESIAN RESPONSIBILITIES		
Donner. Sxperts. Elities In Kendari In Cobjective In Rahomeeto			
Experts. Experts. Experts. In Kendari In Objective In Shommeto			
Experts. Experts. In Kendari In Objective In Ranomeeto	Counterpart Persoonel for Long-term Experts		
Experts. Experts. In Kendari In Objective In Sanomeeto	(1) Project Director		
Experts. Tryperts. To bersonnel 1 To bestive	(2) Sub-Project Director		
Experts. Zin Kendari In Sanomeeto In Banomeeto	(3) Assistant Sub-Project Director (Administration)		
Experts. Zin Kendari In Nobjective In Banomeeto	(4) Counterpart personnel in the field of:		
Experts. Expert	- Regional planning		
Experts. Experts. In Kendari In Objective In Objective In Sanomeeto	- Agricultural and rural infrastructure		
Experts. Experts. = In Kendari = In Ranomeeto	- Construction and land reclamation		* At least two counterpart
Experts. * In Kendari * In conjective * In objective * In Ranomeeto	- Parming guidance		personnel in each field
Experts. * In Kendari * In objective * In objective * In Sanomeeto	- Operation and maintenance of machinery		
Experts. * In Kendari * In objective cilities * In objective * In objective * In Ranomeeto	- Parmers' group attengthening		
clities The Kendari The Objective The Object	ounterpart Personnel for each field of Short-term Experts.		
facilities The control of the co	ounterpart Personnel in the field of Estate crops		
facilities	ther necessary supporting staffs		
facilities			
facilities In Kendari	and, Buildings, and Facilities		
facilities In Sanoneeto In San			
facilities	roject office		
To Sanoneeto and Parameter and			
	4		TO BORDON ON BUILDING THE TANKEN
location of running expenses	The Contraction		
location of running expenses	なかられる		
iocation of running expenses			
	location of running expenses		



3.3 Indonesian Request on Dispatch of Experts in Agricultural Field

REPUBLIK INDONESIA

DEPARTEMEN PERTANIAN

JI, Harsono RM No. 3 Pasar Minggu Jakarta 12550 Kotak Pos 83/12001/Kbynna Telp. 782131 - 7804116 Telex 44246 - 44332 Fax 783237

Jakarta, 12 January

1991

Hr. Yasuo Kitano Resident Representative, JICA Jln. Thamrin 24, Jakarta INDONESIA

Ho : 25/B.1/I/1991

Dear Sir,

5份 年

Re: Expert in short term and long term for

Integrated Agricultural and Rural Development in

South East Sulawesi

The summary report of long term survey of the project type technical cooperation for the Integrated Agricultural and Rural Development Project in South East Sulawesi has been conducted by JICA. The team has formulated a detail project preparation including dispatch of long term and short term experts.

Regarding to the goal of the project, i.e., to establish a package program model deals with increasing standard of living for the target groups in the rural area, it is appropariate if there is a continous activities focusing on monitoring, evaluation, and a policy analysis study. It is therefore, a long term expert in Agriculture Economist, a short term in Cocoa and Cashew nut Spesialists are necessary needed. Consequently an addition of one long term experts in agriculture economist, and two short term experts in specific commodities are proposed to be involved to the project.

Attached a list of activities would be done during his assignent.

Thank you for your kind cooperation.

Your sincerely

... Hoad Bureau of Planning Hinistry of Agriculture

cc

Dr.Ir. Alirahman, Head, Agriculture and Irrigation Bureau, Bappenas.

Hr. N. SATO JICA Experts for Promotion of Hajor Food Crops Program, Bureau of Planning MOA

40.1.

15 JAN 91

List of Activities

Base on short and long term objectives of the project, the activities would be done by the Agriculture Economist Specialist, Cashev nut and Cocoa Specialists as follows:

Agriculture Economist

- To colect and analize data of social economic condition of the target groups, (in and out of the project area).
 The duration could be quarterely, sixmonthly and annually
- To nonitor and evaluate the project activities such as : the progress of project in each desa
- To plan and establish small and nedium scale enterprices by the target groups in order to develop of agribusiness
- 4). To review the achievement of the project in order to ensure the goal of the project (increase standard of living for target group) related the impact of project in line of multiplier in social economic aspect
- 5). To prepare sixmonthly report and annually in line the national workshop together with steering commettee and would be presentated at national level
- 6). Other activities related to goal of the project

Casher nut and Cocoa Specialists

- To plan appropriate croping pattern and diversification pattern in order to develop cashes nut and cocoa comodities in upland area. Integrated Pest Hanagement should be taken in to account in designing those patterns.
- To prepare the recommendation for the comodities alternative which will be developed in project site.
- To design technology package start from cultivication to post harvest.
- Other activities related to develop in cashew nut and cocoa in project area.

3.4 Japanese Responce to the Request on the Experts in Agricultural Field

Comments and Plan of Japanese side about the cooperation on Agricultural Economics

1. Conditions

As the result of Long-tern Survey for the Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province, it has been recommended that Seven (7) Long-term Japanese Experts should be dispatched to attain the objectives of the Project. And the fields of them are as follows.

- 1) Leader (Regional Planning)
- 2) Coordination
- 3) Agricultural and Rural Infrastructure
- 4) Construction and Land reclamation
- 5) Farming Guidance
- 8) Operation and maintenance of machinery
- 7) Farners' group strengthening

At the end of, and after finished the survey, the Indonesian side requested to the survey team or to the JICA Indonesia office that an Expert on Agricultural Economics should also be dispatched as Long-term.

To answer for the request of this, the Japanese side reconsidered about the necessity and possibility to dispatch a long-term expert on Agricultural Economics, and summarized the opinions and an adaptable plan to cooperate in the field.

2. Opinions

The final target of this Project is to contribute to the establishment of "Model Package Program" which is adaptable for the promotion of agricultral and rural development in rural area of Indonesia.

From this point, it is very important to monitor and evaluate the effects of the project activities: if it has really improved the farm management and rural economic conditions of the Project area, and if it is adaptable for the development plans for the other regions.

But there are some points to be considered to deside the way of Japanese cooperation for nonitoring and evaluation.

- 1) Monitoring shall be done "objectively" from the outside of the Project team (Long-term Experts and Counterpart personnel of them).
- 2) Project effects for agro-economic conditions will come out not so immediately. May be appear after the construction and reclamation works of agricultural and rural facilities, followed by the guidance and training on cultivation techniques and farm management to the farmers.
- 3) Analysis of an improvement of farming and economic conditions is rather difficult, especially to extract the pure/direct effects of the Project.
- 3. Plan of cooperation in the field of Agriculture Economics

 Considering the conditions and some points mentioned above,

 Japanese side consider the appropriate way of cooperation in the field as follows.
 - 1) Study items
 - ① Survey on present farm management conditions in Project area (before the implementation of the Project)
 - ② Technical guidance on Bench-mark survey method
 - ③ Periodical check of farm canagement conditions and recommendation for implementation plan for the future (during and at the end of the Project)
 - The study would not be so high level of economical "analysis".
 but the "checking" (recording of changes) of farm management conditions.
 - 2) Method (Tentative Cooperation scheme)
 - ① Fiscal year 1991: Survey on present conditions by shorttarn expert (3-4 nonths)
 - @ Fiscal year 1992: Technical guidance on Bench-mark survey nethod by short-term expert (1-2 month)
 - S Fiscal year 1993: Perioical checking and reconnendation for the future planning by short-term 1995 experts (1-2 nonth x 1-2 times a year)

- **Study on ③ would be done based on the periodical (every three nonths of) data collection by the counterpart personnel.
- % The results of the study on 0, 3 shall be summarized and reported to the Joint committee.
- \times Japanese side try to dispatch the same personnel as short-term experts (1-3), as many times as possible.

TERMS OF REFERENCE ENERGY PLANNING FOR SUSTAINABLE AGRICULTURAL AND RURAL DEVELOPMENT

I. JUSTIFICATION

The major objectives of agricultural development include

- 1. To improve and maintain food self-sufficiency,
- 2. To increase income and improve equity in income distribution among individuals and regions,
- 3. To improve nutritional levels of the population,
- 4. To expand employment opportunities through programmes of sustainable agricultural and rural development.

Energy is a vital input in the fulfillment of all these objectives, besides that energy has also become a critical input, and a major constraint in sustainable agriculture and rural development. Commercial energy shortages, combined with the "other energy crisis", caused by the continued dependence of the rural people on the rapidly declining non-commercial biomass resources of firewood, crop waste and manure, have led the rural areas the hardest.

Energy in rural areas is used mainly for household consumption. These household energy needs mostly are met by "non-commercial" energy sources. Non-commercial energy forms are out side the planning process, even if awareness exists in conserving their resource base the rural people often have no other alternative for their survival.

Increasing agricultural and non-agricultural activities in rural area may also require commercial energy as a critical input. Therefore, there is a close relationship between the prevention of the destruction of the of the environment due to indiscriminate use of non-commercial energy sources, and utilization of commercial energy for improving productivity, creating employment and increasing income in rural areas.

There is a marked variation in the specific end-uses and energy forms used from region to region which representing different agro-climatic and eco-systems within a country. This brings out the need for implementing energy assessment and planning for sustainable agriculture and rural development, not only at the national or macro levels, but also at the decentralized and micro levels.

Such micro-level area-based integrated planning would also have to take into account socio-cultural and economic variables, their relationship to the existing and desired patterns of anergy consumption as well as environmental constraints in the micro region.

Area-based micro-level integrated planning for meeting rural energy needs for subsistence and development, would therefore have to include, not only renewable energy resources which may be obtained locally, but also various commercial energy sources, including electricity, petroleum products and coal, required for productive agricultural and non-agricultural activities for economic development of the rural region.

II. OBJECTIVES

To develop a framework for integrated rural energy planning and assessment in order to meet the energy requirements for sustainable agriculture and rural development, with the lowest possible cost to the economy and the environment.

III. THE SCOPE OF THE PROJECT

The activities in preparing area based energy plans are as follows:

a. Selection of the Area:

The size of the area has to be large enough to bring out the inter relationship between development programmes and energy requirements for subsistence and production, and to justify the building up of a decentralized data base for planning process. A collection of appropriate number of villages which have specific ecological characteristics may be more suitable, especially if it also coincides with a local administrative unit.

b. Rural Energy Surveys

This surveys will provide the data & information about energy consumption pattern in that region for different end-uses either for domestic consumption or productive activities, and also an initial assessment of available energy resources as well as their technologies. During the survey, the needs priorities and sociocultural preferences of the intended rural beneficiaries are also assessed.

IV, Institutional Framework

The Secretariat General, Ministry of Agriculture will take the overall responsibility of coordination in building up integrated rural energy plan for sustainable agricultural and rural development. Related Directorate General and Agency within MOA, Directorate General of New Energy, National Planning Agency, Ministry of Industry and Ministry of Home Affairs will be the supporting agencies.

At regional level the agencies which will be involved in working out this integrated planning are:

- 1. Regional office of MOA
- Provincial Services of Food Crops, Estate Crops & Livestock
- 3. Provincial Service of Ministry of Mining & Energy
- 4. Provincial Service of Ministry of Industry
- 5. Local Government offices concerned
- 6. Research & Development organization.
- 7. Private Sector organizations.

3.6 Address on the Signing Ceremony of the Record of Discussion and Press-Release Paper

THE SECRETARY GENERAL OF THE MINISTRY OF AGRICULTURE THE REPUBLIK OF INDONESIA

ADDRESS ON THE SIGNING CEREMONY OF THE RECORD OF DISCUSSIONS BETWEEN THE GOVERNMENT OF JAPAN AND THE GOVERNMENT OF INDONESIA ON TECHNICAL COOPERATION FOR THE INTEGRATED AGRICULTURAL AND RURAL DEVELOPMENT PROJECT IN SOUTHEAST SULAWESI

- The Honorable Representative of the Govenment of Japan,
- Mr. Yasuo Kokuoka, Leader of the Implementation Survey Team JICA,
- Other members of Implementation Survey Team of The Japan International Cooperation Agency,
- Distinguished guests, Ladies and Gentlement.

At the outset alllow me to express my sincere gratitude for your kind attention to attend this simple but very important ceremony, held at this Headquarter of the Ministry of Agriculture. Let me begin my brief speech by welcoming all our distinguished guest most warmly.

It is a great pleasure for me at this moment to be given the honour to sign the Record of Discussions as prepared by both the Japanese and Indonesian senior officials regarding project on "Integrated Agricultural and Rural Development Project in Southeast Sulawesi".

You may wish to note that eighty percent of our population are, in one way or another, related to agriculture in their daily endeavor. Around sixty percent of them are directly involved in

agricultural production activities. Furthermore, agricultural sector still play an important role in the gross domestic product formation which contributes about twenty eight percent. For these reasons, we strongly believe that efforts toward improvement of the welfare of the rural people cannot be separated from the agricultural sector development undertakings.

I am pleased to also note that the new integrated approach to agricultural and rural development to be implemented through this project is expected to contribute a great deal toward the improvement of the rural people's is welfare. The term 'integrated' convey the idea that development of rural area should be based on the resource base potential of the region.

This implies a complete development of all aspects of production processes, infrastructure, procurement of inputs, marketing, and institutional supports.

Distinguished guest, Ladies and gentlemen,

We are currently in the midst of the implentation of the fifth five years development plan. As you may be aware, the government has decided that special emphasize and high priority be given to the development of the eastern part of Indonesia. In this regard agriculture and rural development is essential for at least two reasons. Firstly, in general this region is still relatively less

developed while at the same time it posses potential natural resources waiting to be developed. Secondly, majority of the population in the region depend heavily on agriculture as their main source of income. The so called Southeast Sulawesi "GERSAMATA" program is in its nature an integrated approach to the development and it has been properly formulated. Therefore to my views, the selection of several villages in Southeast Sulawesi as the location for this project activities is very appropriate.

with regard to the implementation of this project, I would like to emphasize that it should be considered as part of our continous efforts toward the successfull implementation of the national agricultural development undertaking. I therefore wish to express my earnest hope that all agencies concerned should actively participate and closely cooperate in all stages of project activities including planning, implementation, monitoring as well as in the preparation of the future programmes of the project. In particular, I wish to request the kind cooperation of the provincial government of Southeast Sulawesi to optimize the benefits of having the project in this province.

Distinguished guest, Ladies and gentlemen,

In conclusion, on behalf of the Government of Indonesia, I would like to extend our appreciation to the Government of Japan for their generous assistance and cooperation render through this

project. I am looking forward to the successful implementation of the project and to the ever continuous mutual cooperation between both countries.

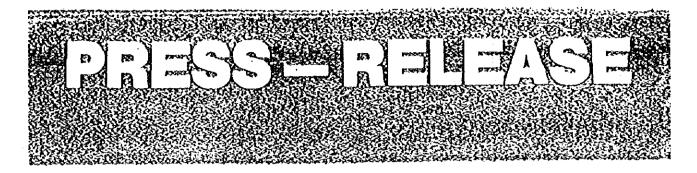
To our Distinguished guest, the Japanese Experts delegation which will depart to Tokyo soon after this signing ceremony, may I wish you a safe journey home.

I Thank you.

Arrigato Gozaimas.

Secretary General. The Ministry of Agriculture

Ir. Nusyirwan Zen



INFORMATION AND CULTURAL OFFICE
EMBASSY OF JAPAN
24, JL. M.H. THAMRIN
TEL. 324308
JAKARTA PUSAT

Jakarta, January 26, 1991

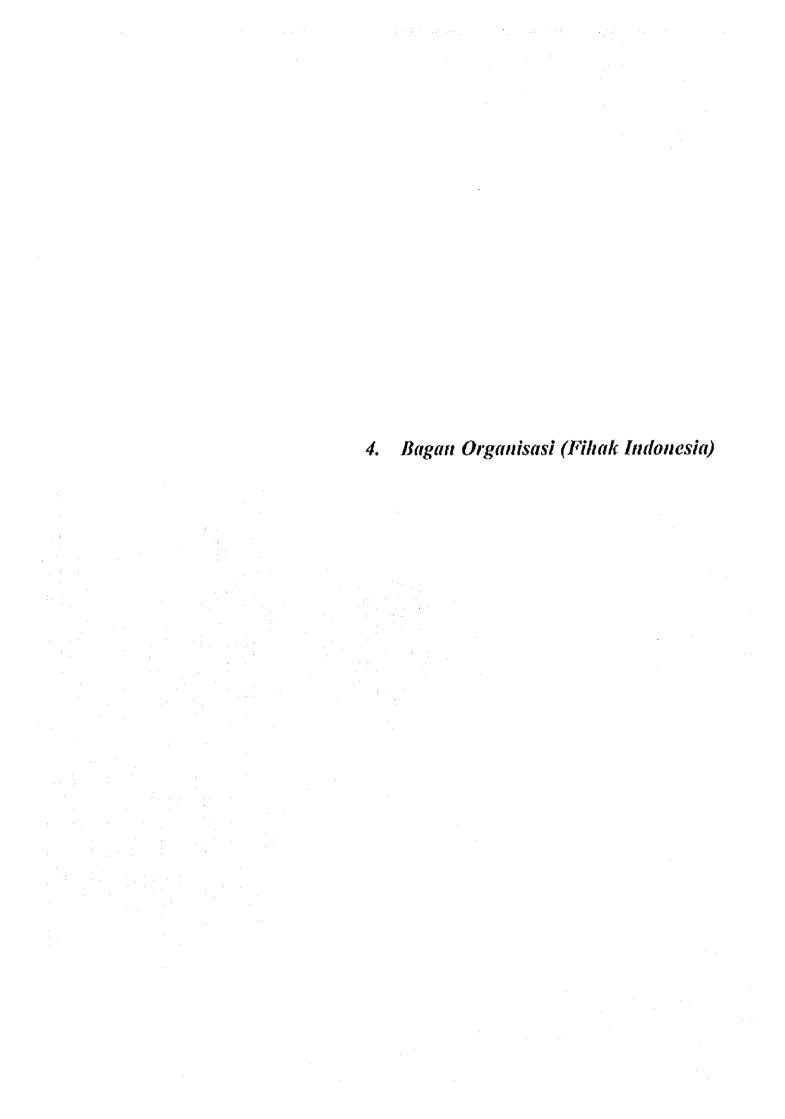
JAPAN ASSISTS INTEGRATED AGRICULTURAL AND RURAL DEVELOPMENT PROJECT IN SOUTHEAST SULAWESI

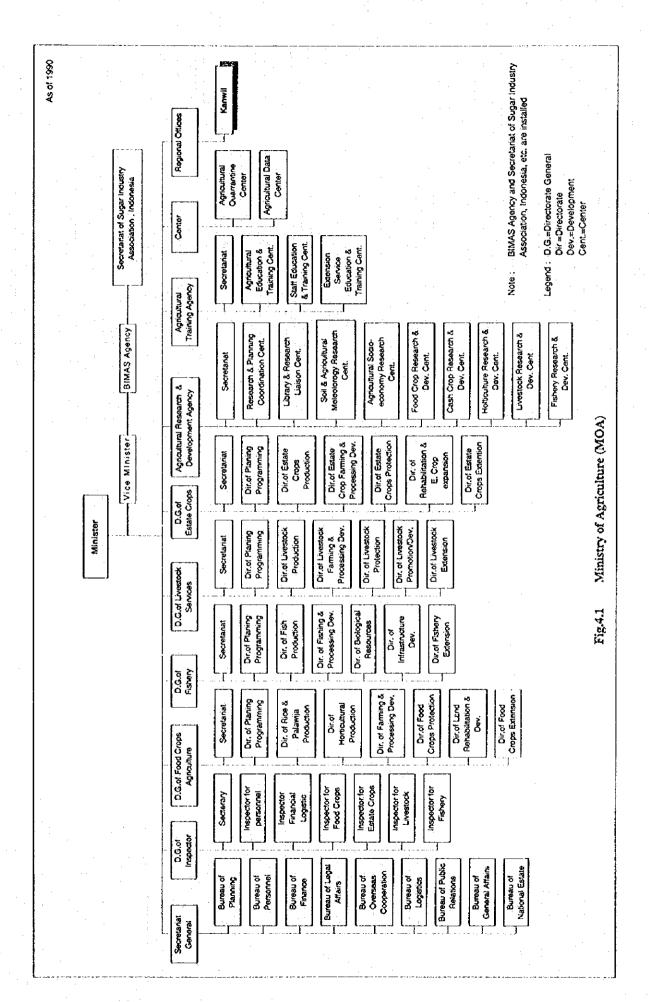
- 1. The Government of Japan decided to extend the technical assistance for "Integrated Agricultural and Rural Development Project" in Southeast Sulawesi. Basic document was signed today between Mr. Yasuo Kikuoka, the leader of implementation survey team of Japan International Cooperation Agency (JICA) and Ir. H. Nusyrwan Zen, the Secretary General of the Ministry of Agriculture.
- 2. The technical assistance which will start from March 1991 for five years, aims at introducing appropriate technology to the rural areas for agricultural and rural development. The project is expected to improve the farmer's living standard through achieving higher productivity and diversification of agricultural products.
- 3. The components of the project are:
 - (1). planning of land use and farming
 - (2). improvement of infrastructure,
 - (3). demonstration of farming techniques,
 - (4). strengthening of farmers' organizations and
 - (5). training of local government officials, and key farmers.

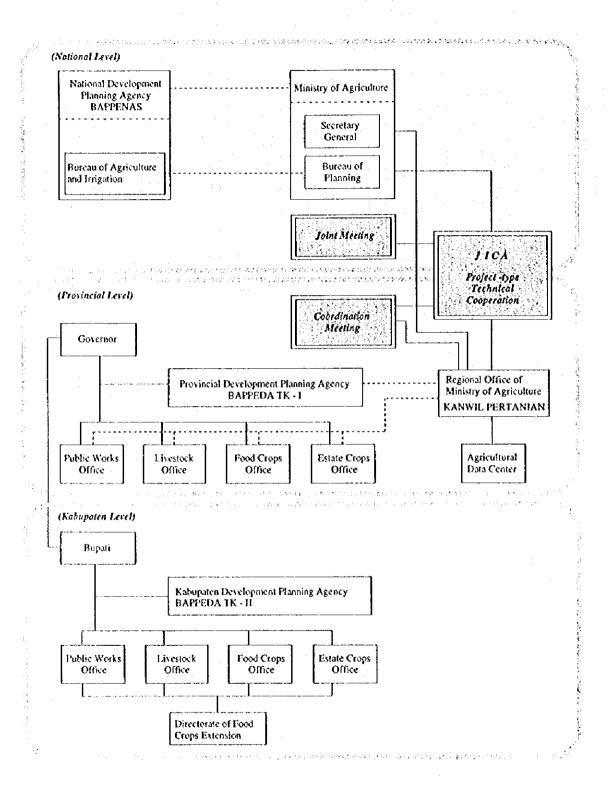
The project site will be selected among the rural areas of Southeast Sulawesi and will be developed as "Model Village". The far mers in the area are expected to participate in the activities supervised by the Japanese and Indonesian experts.

- 4. Japan will send several experts for:
 - (1). agricultural and rural development planning
 - (2). land reclamation and improvement of rural infrastructure,
 - (3). operation and maintenance of machinery, and
 - (4). strengthening of farmers' group,

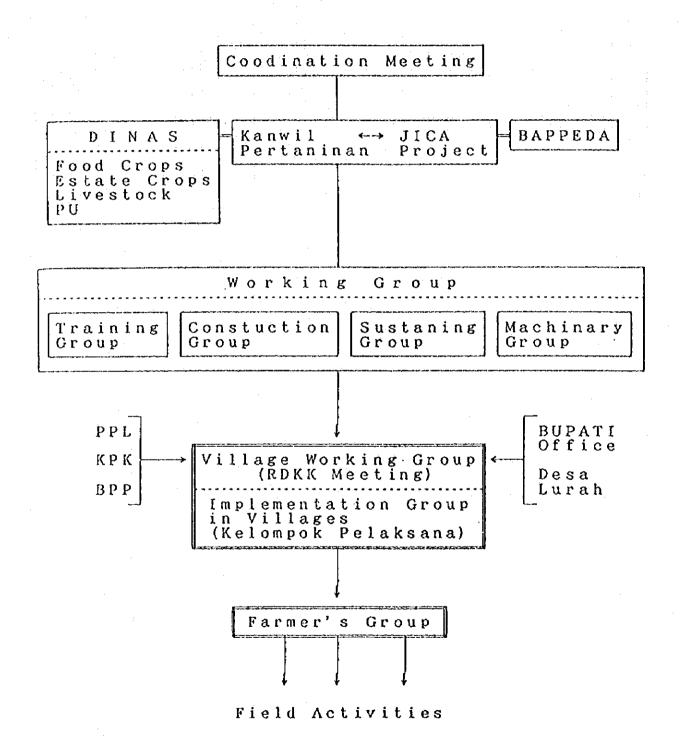
Japan will also donate construction and agricultural machinery, instruments and materials for training activities and vehicles.



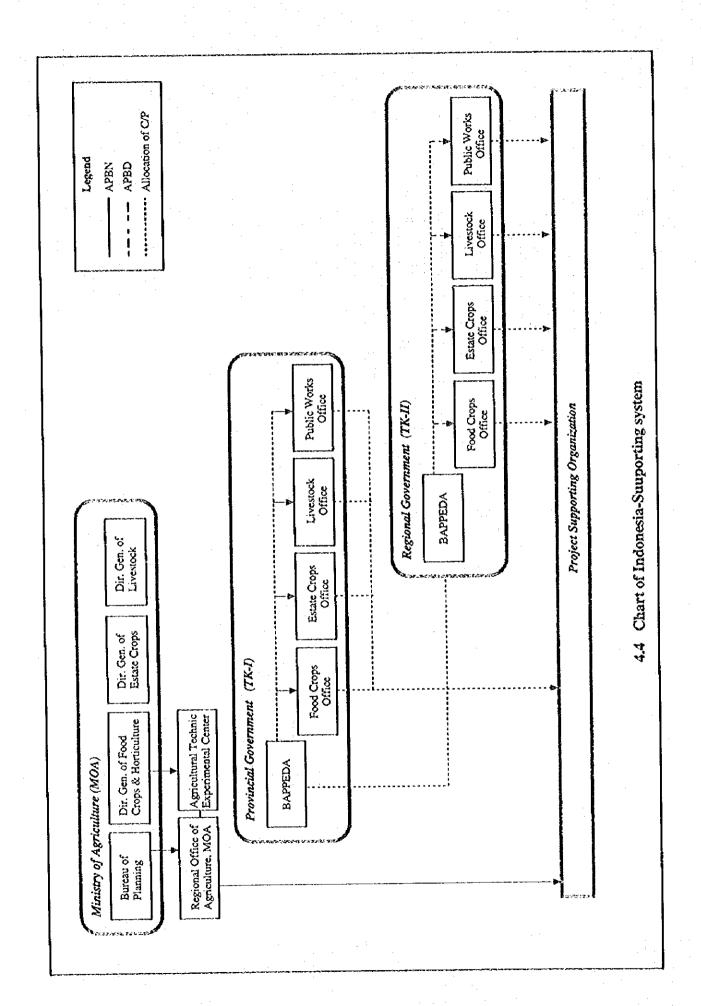


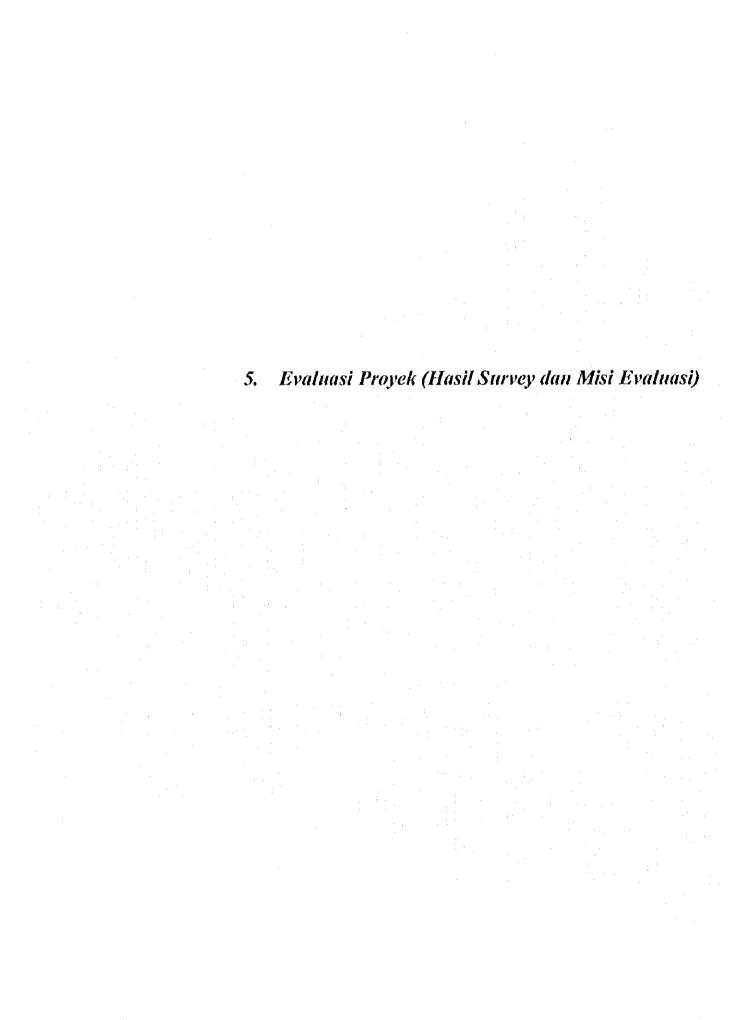


4.2 Organization for Project Implementation (National, Provincial and Kabupaten Level



4.3 Flowchart of Project Activities





5 Project Evaluation (Results of Survey and Evaluation Missions)

The record of discussions (R/D) for this project-type technical assistance project was signed and exchanged on 26th January 1991, with the technical assistance concerned beginning from the same day. A survey team was dispatched for planning discussions in April 1992 and drew up a Tentative Scheme for Implementation (TSI). A JICA Technical Guidance Team was dispatched in October 1993 to confirm the suitability of the project direction. At the same time, however, the JICA team indicated some delays in the progress of project activities and revised some aspects of the TSI. It also expressed concern over the likelihood of attaining the project's objectives within the time frame allowed. In its final evaluation, the JICA team indicated the necessity of revising the period of assistance.

The end of this project was held back and discussions were held with the government agencies concerned in August 1995, when it was decided to conduct the final evaluation survey. The survey team was dispatched to the area for the 14 days between 24th September and 7th October 1995 to conduct the closing evaluation. This project has been evaluated as follows, based on the findings of these surveys.

5.1 Plan discussion survey (April 1992)

(1) Survey objective

In this project, the TSI was exchanged together with the R/D at the time of the implementation discussion survey, but around one year after the R/D went into effect progress was already considerably behind that called for in the TSI. A JICA expert team met for discussions with the related Indonesian agencies (the Bureau of Planning of the Ministry of Agriculture, the Southeast Sulawesi Provincial Office of the Ministry of Agriculture and the Provincial Government of Southeast Sulawesi) to check the exact state of progress, find the problems and decide how best to proceed. The objective of this plan discussion survey was to draw up a plan for the future implementation of the project based on these discussions.

(2) Survey content

The specific points included in the survey are listed below. These points were determined through discussions with the parties concerned before the team was dispatched.

- a) Checking the state of progress in each area of assistance.
- b) The survey and examination of the points which were impeding the progress of the

project.

- Examination, from expert and technical standpoints, of the content of the assistance which should be included in future projects.
- d) Summary of the implementation plan
 - i) Preparation of an implementation plan for FY 1991/92.
 - ii) Review of the entire five-year implementation plan.
- e) Discussion and coordination with the Indonesian side concerning the above, and a signing and exchange of minutes.

(3) The survey team

The survey team was dispatched for 14 days between 24th February and 8th March 1992. The composition of the team and the names of its members are summarized in Table 5 - 1.

Table 5 - 1 Planning Arrangement Survey Team

Assignment	Member's Name	Belonging Organization
General Supervision	Kazuyoshi Kamitoko	Section of Development, Bureau of Structure Improvement, MAFF
Parming Guidance	Michito Yamamoto	Section of Upland Agricultural Development, Bureau of Farm Produce and Horticulture, MAFF
Construction Planning	Seinen Doshyo	Department of Overseas Activities, JALDA
Agriculture Rural / Land Improvement	Hironori Ogata	Section of Design, Bureau of Structure Improvement, MAFF
Business Coordination	Yoshitaka Washimi	Section of Agricultural Technical Cooperation, Department of Agricultural Development, Cooperation, JICA

The organizations involved in the planning arrangement survey are as follows.

- a) Ministry of Agriculture (Chief, Bureau of Planning and others)
- b) National Development Planning Board
- c) Regional Office of Southeast Sulawesi Province, MOA
- d) Provincial Government of Southeast Sulawesi Province (Governor of Province, other related offices such as BAPPBDA)
- c) Japan-related agencies (the relevant secretary of the embassy, the JICA Resident Representative and the JICA expert seconded to the Ministry of Agriculture).
- f) The JICA expert team (seven members).

(4) Summary of survey conclusions

a) The state of the project's progress

- i) Although the R/D on technical assistance between the Japanese and Indonesian sides was signed and exchanged on 26th January 1991, and the project started on 1st March, the seven members of the long-term expert team were not assembled before October of that year. After the long-term expert team was complete it was successful in building the project execution scheme by encouraging the Indonesian side and posting two counterparts in each related department. However, one counterpart in each department was only working part time, which was an inadequate system.
- ii) The delivery of the equipment provided was delayed, so the work of transferring specific skills for the use of construction and agricultural machinery had not begun, and neither had the infrastructure improvement work. However, according to reports received after the survey team returned to Japan, the arrival of equipment on site had already begun and the execution scheme for technical assistance was being formed. The preparations for infrastructure improvements, namely the ground surveying and implementation design for Ranometo Village (the site of the first construction start) were complete, and construction was to begin immediately.
- Training activities targeting the Regional Office of the Ministry of Agriculture, Provincial government staff, key farmers and others had not begun due to a delay in the budget instructions, but we have received a report that this problem was also solved soon after the survey team returned to Japan and the implementation of training began.
- iv) Farming guidance was also delayed beyond the planned start by a similar delay in the budget instructions, but the farming plan for Ranometo, the trial introduction of vegetables, the trial cultivation of rice by direct planting, and other preparatory elements were proceeding steadily.

(b) The project's problems

In addition to this project's "hard" aspects, it is significant that local representatives, and the officials concerned in local government joined in the farmers' participation to take the initiative in the project's planning process. The counterparts involved in all types of technological transfer also played an important role. Two counterparts were posted in each department, but as they were all very young the age difference between them and the long-term experts was perhaps too great, they lacked standing as instructors in the communities, and there were not enough people with suitable

specialist skills. Also, of the two counterparts in each department, one was only serving part time, which may have been due to a lack of confidence for full-time work.

- ii) Related government staff, key farmers, farmers' groups and others must receive training in fields such as cultivation, land reclamation and the reinforcement of farmers' organizations, but there is no clear willingness on the part of the Indonesian Government to spend money on such training. The Indonesian Government must establish proper budgetary measures for achieving the aims of the project.
- iii) The implementation of the project requires the long-term experts to make short stays in parts of the project area other than Ranometo, which is near to the project office.

(c) Examination of future project implementation

- i) The survey team visited the governor of South Sulawesi to encourage him to cooperate with the project for its smooth implementation. The team found that governor himself adheres to the concept of comprehensive rural development (GERSAMATA) and therefore supports the project strongly and has a high opinion of it.
- ii) Meetings were held in the field between the survey team and the chief of the Regional Office of the Ministry of Agriculture, the representative of the Regional Development Planning Agency in Southeast Sulawesi Province and other counterparts and long-term experts. The results of exchanges of views on the treatment of counterparts, early implementation of plans etc. will be reflected in a joint meeting to be held in Jakarta at a later date.
- iii) The first joint meeting for this project was held in Jakarta. It confirmed the implementation plan discussed at the second on-site coordination meeting, as well as discussing other necessary matters. This meeting discussed the detailed five-year plan for the TSI drawn up on 26th January 1991 and the implementation plan for 1992. Minutes for the meeting were signed and exchanged.
- iv) In the above minutes, the points to receive greater efforts from the Indonesian side were the posting of two full-time counterparts to each department and the provision of sufficient budget for the implementation of the project (particularly the costs of training). These points were agreed, signed and exchanged.

d) The opinions of the survey team

i) Although there were delays in the first year of the project's implementation, these were only in the early stages and since then the execution scheme has been built up,

with strong efforts from the expert team, cooperation with counterparts and delivery of mechanical equipment to the field. Moreover, the Ministry of Agriculture and other agencies have shown the Indonesian side's enthusiasm for the project. Bearing these positive factors in mind, there does not seem to be any need at this time for a major revision of the five-year plan for the TSI. In future, JICA technical guidance teams should give this matter further consideration if the situation in the field merits it.

- ii) Due to the nature of this project, the self-help efforts of the Indonesians on the receiving side are essential, a point which this survey team emphasized to the Indonesian side. Regrettably, BAPPENAS, which is a member of the joint meeting and the agency in charge of the project's finances, did not attend meetings. We have asked the JICA Indonesian office to encourage BAPPENAS to participate in future.
- fiii) Farming guidance for the "soft" aspects of the project is important to make full use of the improvements made to agricultural infrastructure under this project, in order to produce improvements in the living conditions of farmers. However, despite the importance and breadth of this project, only one long-term expert is assigned to this work. The dispatch of a unit of young overseas cooperation volunteers should be considered to improve this situation.

5.2. Interim evaluation (October 1993)

(1) Survey objective

JICA Inspection and Guidance Survey Team was dispatched to conduct this interim evaluation. The guidelines for the survey were to study the roles of both sides with particular reference to the TSI based on the R/D, the record of investment of funds, the activity in the project to date, how far the project objectives were being attained, and other aspects, as well as discussing the action plan for the remainder of the project period with those concerned. As the year of the survey was the third, marking the midpoint of the project period, the survey was to study the roles of the Japanese and Indonesian sides and their records of investment of funds, the activity in the project to date, how far the project objectives were being attained, and other factors, as well as discussing the action plan for the future with those concerned. These investigations were to give guidance and advice on cooperation and the management of the project in order to enable effective technical cooperation work and the completion of the project's targets within the five years. If necessary, suggestions were to be made to put the project back on course.

(2) Ascertaining and evaluating the state of progress of project activity

- a) The record of investment of funds, the activity in the project to date, and the progress towards project objectives were investigated on the basis of the TSI and, where there were delays in any parts of the project, an estimate was made of whether or not the work was going to be finished within the duration of the project cooperation.
- b) Problems were examined and countermeasures for the future were studied.
- c) Problems in technical aspects of the project, or in its implementation, were identified, and guidance and advice was given on countermeasures and the content of tasks for the coming year of the project.
- d) Discussions and deliberations were held concerning the content of the next year's cooperation implementation plan.
- e) Measures which should be taken by each side (Indonesia and Japan) in the next year for the short-term dispatch of experts, training of counterparts and planned provision of equipment were examined.
- f) The usage of equipment provided, the implementation of project work at local cost and the acceptance of trainees were investigated.
- g) The usage and maintenance of equipment and materials provided under this project was checked. Where necessary, appropriate guidance was given on its use, management and maintenance.
- h) Examination of other points.

(3) Interim evaluation method

JICA's evaluation of project-type technical assistance is based on the "Evaluation guidelines", which were drawn up in 1991 and are now under trial. These guidelines aim to achieve objective evaluation and operation based on a program which forms matrix of the relations between the project objectives, its content, investment and preconditions. The guidelines cover interim evaluation as well as evaluation at the end of the project. In this project the R/D and TSI were concluded and executed through the old methods without devising a log frame, so some do not believe it fits the evaluation guidelines, but it does fit for the purpose of objective evaluation. Therefore the evaluation was attempted as closely as possible to the guidelines, with the survey team providing suitable guidance and advice to both the Indonesian and Japanese sides to contribute to the success of the project.

(4) The survey team

The survey team was dispatched for 12 days between 24th August and 4th September 1993. The composition of the team and the names of its members are summarized in Table 5-2.

Table 5 - 2 Inspection and Guidance Survey Team

Assignment	Member's Name	Belonging Organization
Leader/General Supervision	Rhohei Funano	Section of Design, Bureau of Structure Improvement, MAFF
Vice-Leader/ Technical Cooperation	Yosbiaki Kano	Section of Agricultural Technical Cooperation, Department of Agricultural Development Cooperation, JICA
Regional Development/ Agricultural Land Improvement	Seinen Doshyo	Department of Internal Business Activities, JALDA
Farming Farmers Organization	Kazuhiro Akyu	Section of Young Farmer's Counter Plan, Division of Extension Education, Bureau of Farm Sericulture and Horticulture, MAFF
Business Coordination	Osamu Kosegawa	Section of Agricultural Technical Cooperation, Department of Agricultural Development Cooperation, JICA

The main organizations involved in the survey are as follows.

- a) Ministry of Agriculture (Chief, Bureau of Planning and others)
- b) National Development Planning Board
- c) Japan-related agencies (the relevant secretary of the embassy, the consul general of Ujung Pandang, the JICA Resident Representative and others)
- d) The JICA expert team (eight members)
- (5) Summary of the interim evaluation
- a) The state of the project's progress
 - The R/D for this project came into effect from March 1991, and the first team of experts was dispatched in June of that year to discuss specific methods of cooperation with their counterparts (C/Ps) and conduct the detailed field survey. Based on those discussions, the bulldozers, backhoes, dump trucks and other heavy equipment important for the initial stages of the project cooperation were procured locally, but the delivery of this equipment was delayed, being delivered between March and August 1992. In this period the delays in dispatch of experts from Japan and the delivery of heavy equipment were compounded by delays in filling the counterpart posts. Furthermore, many of the counterparts appointed were not

- adequately experienced in the experts' fields. Overall, a delay of around one year resulted, relative to the initial plan.
- ii) However, as the land development, construction of agricultural and rural facilities and other facilities such as model fields were completed in Ranometo, which was where construction began earliest, the perception of the project's direction and effects on both the sides became clearer. As this was the first participatory development project, both the sides appear to have experienced some uncertainty over how to proceed in the initial stages of the project's implementation. Deliberations and coordination took longer than expected, but by now it is our impression that the completion of works in Ranometo has given a clearer sense of the way forward. From now on both sides will approach the implementation of this project with much greater confidence. For future cooperation, the technical ability of the counterparts can be expected to advance rapidly, as they are well-versed in the project's implementation.
- iii) The establishment of a fund in Ranometo, the first village, built from the contribution of a portion of farmers' wages, is a good example of the strengthening of farmers' organizations. In the other seven villages, the organization process itself is still at the starting point.

b) Causes for concern in the project

- i) When the field survey of all the villages scheduled to receive cooperation was conducted, it became clear that the water catchment area for each site was small, so the main concern was to secure enough water for irrigation in the rainy season. The area clearly could not gather enough water for more than very limited irrigation in the dry season. Compared to areas with adequate water catchment where it is possible to grow two crops of paddy rice each year, the conditions for agricultural development in the eight villages due to receive cooperation were severe. Areas with adequate water catchment were either areas that had already benefited from irrigation projects by the Ministry of Public Works, or had cleared and reclaimed land themselves to build paddy fields. In Southeast Sulawesi Province, a majority of the land suffered from conditions as harsh as those faced by the eight project villages. The eight villages selected have various characteristics which could make them valuable models for agricultural and rural development stimulated by some form of public investment. In this sense, the selection of these villages was clearly appropriate.
- ii) The expert and counterparts responsible for demonstration of cultivation and farming techniques have to handle a wide variety of crops, including paddy rice, upland

crops and estate crops. The dominant crop patterns in the areas targeted for cooperation were wet-season paddy rice in tow-lying areas and, in upland fields, perennial estate crops or wet-season crops such as maize and soy beans. The project cooperation areas have small water catchment areas, with no reliable source of water for the dry season. Therefore to establish a form of stable cropping system suitable for the area, the right kinds of model fields should be built and used. Specifically, the crop development targets should be high-yielding paddy rice for the wet season crop and crops for the dry season which require less water than paddy rice does (soy beans, maize, vegetables etc.). These should be cultivated intensively on a land area calculated from the volume of water available for irrigation.

iii) Pest damage from types of wild boars and rats unseen in Japan is a major obstacle to crop cultivation. The reduction of this kind of damage is another reason why the cultivation models demonstrated should be held to a few carefully-selected types.

c) Future project implementation

- i) The project sites scheduled for future development are situated in remote areas, so it will be extremely difficult to make up for lost time and complete these areas on schedule. It is tikely that the period of cooperation will have to be reviewed at the time of the final evaluation survey.
- that two of the initially-planned villages be replaced with two other villages, but no such proposal was made in recent meetings with the state governor and the head of the BAPPEDA office. This is probably because the government of Southeast Sulawesi Province wants to make its best efforts to complete the eight villages of the initial plan. The Japanese side will also have to take flexible action for the completion of the eight villages, including budgetary measures.
- iii) The group leader has sent a letter to the Indonesian side urging appropriate measures on both sides of the budget.

d) The opinions of the survey team

In a meeting between the Vice-Minister of MOA, the Vice-Chairman of the Agriculture Bureau of BAPPENAS, the Governor of Southeast Sulawesi Province, the chief of the Provincial Office of Agriculture and others, the Indonesian side was united in emphasizing sustainability, the eradication of poverty and reduction of regional disparities as their prime concerns in the direction of agricultural policy. The content of this project fits neatly with the concerns of the Indonesian side, and it was

our impression that they were deeply concerned with the outcome of the project. Therefore, in the implementation of this project, it is important that the Japanese side be flexible in accommodating Indonesian policy intentions out of consideration for the strength of these intentions.

- In the villages of Ranometo and Palangga the soil improvement and the construction of agricultural and village facilities are now complete or nearing completion. The counterparts and farmers will gain valuable experience by actually using these facilities. The plan for these works in the next villages should be flexibly reviewed in the light of the application of this experience. This approach is one which must be built into the project, with the right level of technology and scale of budget for the country always in mind, so that after the cooperation period ends, Indonesia will be able to use this project as a model to pursue further sustainable agricultural development independently. For example, considerable sums were invested in the construction of water intakes and diversion works, but their safety and functionality demands adequate structure. Even so, the planning and design of these facilities must be considered together with the counterparts with much closer consideration of their costs. This consideration should include the use of cheaper materials, simpler structures and lagoons etc. As for the livestock market and seed stores, the usage of these facilities in Ranometo should be closely examined so that they will be of reference for the plans for the next village. The facilities for rice polishing and drying, and for training, have already been improved to make them easier for counterparts and farmers to use. These changes reflect the experience gained in Ranometo and Palangga. A similarly flexible approach should be taken to all designs in the future.
- freely. There is ample scope for examining further applications for these cattle, such as using them as draft animals, as settler farmers from Bali do, or rearing them intensively to produce fertilizer. If the use of cattle is fully incorporated into farming practice, it could serve to maintain soil quality and diversify dry-season agriculture with the introduction of grasses for pasture.
- iv) Once the infrastructure has been improved, the "soft" service-related fields which improve farming practice and strengthen farmers' organizations play a major role in maintaining the project's forward momentum. In the project area the villages are a diverse ethnic mix of indigenous Tolaki with Bugi settlers and other settlers from Java and Bali. Each of these peoples has its own culture and customs and their levels of farming expertise also differ. A thorough survey of these peoples and an approach which suits the characteristics of each is vital for the implementation of this project.

working groups have been set up to build the farmers' enthusiasm for the project through participation in the construction of irrigation canals, and to enable smoother implementation of the project. Organizations are being built for the operation and maintenance management of most of the equipment provided, and of the facilities constructed. They are also expected to contribute to the sustainability of the project. In Ranometo a portion of the wages earned from the participation of nine farmers' groups in the construction of irrigation canals was used to establish a fund totaling Rp3.2 million.

The voluntary creation of such independent funds by the farmers produces great benefits for the project. The Water Management Associations are being set up as planned and will begin service in the future. The farmers' future application and management of the funds which have been established should be studied together with the farmers as a way of raising their sense of participation. Some progress has been seen in Ranometo by now, but organization of farmers in the other seven villages has not even begun.

The farmers' organizations in Ranometo should be built up with government support so that the influence of their example can spread to the other seven villages. This kind of organization of the farmers is a vitally important issue, one which has a decisive effect on the evaluation of the project. At this stage of the project, steady progress must be made in this regard, and at the same time, the effects of the project should be aggressively publicized whenever important people visit the area, and through the use of billboards etc.

5.3 Final evaluation (November 1995)

(1) Survey objective

The completion of the project was held back and a final evaluation survey team was dispatched in September 1995 with the following objectives:

- a) An integrated evaluation of the project's achievements during its duration (including scheduled results).
- b) Discussions regarding measures which should be taken after the end of the cooperation period, with the resulting report and recommendations to be submitted to those concerned in the governments of both countries.
- c) Suggestions for feeding back the results of this evaluation to the cooperation planning and implementation of other projects of this type, so that their technical

assistance can be implemented more appropriately and effectively.

(2) The survey team

This survey was a joint effort by the Indonesian and Japanese Governments. The Japanese survey team was dispatched for 14 days between 24th September and 7th October 1995. The composition of the bilateral survey team and the names of its members are listed in Table 5 - 3.

Table 5 - 3 Final Evaluation Survey Team

Assignment	Member's Name	Belonging Organization
(Japanese Side)		
Leader/General Supervision/Regional	Koji Harada	Division of Construction, Bureau of Tokai Regional
Development		Agricultural Administration, MAFF
Rural Land Improvement	Shin Imai	Section of Overseas Land Improvement Technology,
		Division of Construction, Bureau of Structure
	× .	Improvement, MAFF
Construction Management/	Junya Yamauchi	Section of Overseas Land Improvement Technology,
Machinery Operation Maintenance		Division of Construction, Bureau of Structure
Management		Improvement, MAFF
Farming Guidance Strengthening of	Hiroyuki Ito	Section of Farm Products, Bureau of Farm Sericulture
Farmer's Organization		and Horticulture, MAFF
Planning Evaluation	Masayuki Takahashi	Section of Agricultural Technical Cooperation,
		Department of Agricultural Development
		Cooperation, JICA
(Indonesian Side)		
Leader/General Supervision/Regional	Mr. Iskander Andi	Division of Analysis and Evaluation
Supervision	Nuhung	Bureau of Planning, Ministry of Agruculture (MOA
Rural Land Improvement	Mr. Wahyu Chayo	Section of Designing and Planning
	Suryono	Regional Office in Southeast Sulawesi Province,
		Minstry of Public Works
Construction Management/Machinery	Mr. Alnasar Dewang	Section of Water Management
Operation, Maintenance Management		Public Works Office in Southeast Sulaesi Province
Farming Guidance/Strengthening of	Mr. Gayatri Rana	Division of Program Management
Parmer's Organization		Bureau of Planning, MOA
Planning Evaluation	Mr. Susilo Widodo	Division of Analysis and Evaluation
		Bureau of Planning, MOA

The main agencies involved in discussions are as follows:

- a) Ministry of Agriculture (Chief, Bureau of Plannning and others)
- b) National Development Planning Board
- c) Regional Office of Southeast Sulawesi Province, MOA

- d) Provincial Government of Southeast Sulawesi (provincial governor and others).
- e) Provincial and regional agencies (related district mayors)
- f) Japan-related agencies (the relevant secretary and councilor of the embassy, the JICA Resident Representative and others)
- g) All experts and counterparts involved in the project
- (3) Methods employed in the final survey
- a) Survey method

The survey, conducted jointly with an Indonesian survey team, evaluated the points detailed below in line with the "Evaluation Guidelines" for project-type technical assistance projects, although in the minutes the format was rearranged to describe the attainment of targets and effects together. A performance matrix was drawn up and used as the basis of discussion to assist in the smooth progress of evaluation meetings with the Indonesian survey team.

- i) Attainment of targets
- ii) The survey investigated consistency with the overall plan, attainment of targets, attainment of output and input targets, and reasons for attainment and non-attainment.
- iii) Project effects
- iv) The nature of the effects of the project, their propagation, the range of beneficiaries and other aspects were analyzed. Also, considering the project's role as a model for agricultural and rural development, its ripple effects were also evaluated.
- v) The outlook for independent development
- vi) The project's independence was examined with reference to its operation, management, economy, finances, skills and other aspects, and its sustainability was gauged and confirmed. In addition, a "Cooperation Target Attainment Table" was prepared in the course of the project as a form of self-evaluation. The joint survey team used this table as the basis of the field survey.

b) Joint evaluation

During the field survey, all members cooperated in preparing minutes for the discussed results, based on the performance matrix and other factors. The performance matrix is appended to the minutes. The Indonesian side was responsible for recording the minutes.

This is a task they should perform as part of their independent development and they positively recognized it as such. The performance matrix was divided into counterpart and farmer levels in line with the points of the TSI. Each point was marked A, B or C according to how well the target had been attained, and a brief comment was added to each. This produced a document summarizing the state of progress in the project as a whole.

This method used in this survey of the effects of the project was to evaluate and record the degree of target attainment for each area of activity within the project. The field survey visited seven of the eight villages to examine related facilities and talk to the people involved. There were time constraints, but the team made their best efforts to hear from as many farmers as possible.

- (4) Summary and Suggestions for Each Field
- a) Specific Points to Consider in Connection with the Evaluation
 - i) Planning of comprehensive agricultural and rural development
 - What is the impact of farmers' participation in this project?
 - . The position of the six types of development plan in the eight target villages.
 - · Planning for the effective use of land, water and human resources.
 - The handling of meteorological measurement data.
 - . The suitability of each type of farming plan.
 - ii) Agricultural and rural infrastructure improvement
 - . The outlook for Onewila village, which appears likely to be left out of the project.
 - The handling of wasteland in land improvement.
 - Degree of understanding of surveying (plane table, level, reference points and the preparation of contour maps).
 - Degree of understanding of design, estimation and construction (structural design, ????, quality control, construction management and process management).
 - Methods for the development of alang-alang grassland.
 - Maintenance management of agricultural infrastructure.
 - Systems for the management and maintenance of heavy equipment and agricultural machinery.
 - Degree of technical transfer to heavy equipment operators.

- State of machinery maintenance in each village.
- Method of response by counterparts when a breakdown occurs.
- Methods for the sustainable use of agricultural machinery (stock funds etc.).

iii) Demonstration of cultivation and farming techniques

- The current rate of self sufficiency in Indonesia's rice supply.
- State of preparation of technical manuals.
- State of Water Users' Associations (P3As).
- State of programs to support farmers' organizations.
- The handling of traditional Gotong-royong (the mutual assistance system).
- Handling of differences in farming forms between Tolaki, Bugi and other ethnic groups.
- Handling of model and trial fields.

iv) Strengthening of farmers' organizations

- Nature of the revolving system operated by Ministry of Agriculture program.
- State of each farmers' organization.
- Independence of farmers' organizations after the end of the project.
- Propagation of project effects to students of technical high schools.
- Real state of farmers' organizations and side trades.
- Agricultural fairs and the stimulation of villages.

v) Government-related agencies etc., key farmers and group training

- Content of training and methods of trainee selection.
- Training programs with an eye on the future.

vi) Miscellaneous

- Is this project "aid with a human face"?
- Division of budgetary burden between central and provincial governments.
- The state of counterpart posting.
- . Tasks the Indonesian side must tackle after the end of the project.
- Prolongation and the outlook for specialist fields which will require it.

b) Integrated Agricultural and Rural Development Plan/Agricultural and Rural Infrastructure

Development

i) Summary

This project is characterized by its use of farmers' participation, with a portion of the Indonesian side's local costs for the necessary land improvement, construction machinery etc. being substituted by the provision of model infrastructure improvements and the provision of equipment and materials in order to move the project forward smoothly. In particular, it is important to understand what is meant by "agricultural and rural improvements through farmers' participation", and this point is given close consideration in this final evaluation. The elements of this project which are evaluated as being well managed are analyzed below.

- This was "aid with a human face" in which discussions and coordination with the local farmers began from the start of the project plan and the project proceeded with their agreement.
- 2) One form of participation was the way farmers provided their labor for the excavation of irrigation canals. The counterparts were central to this process, which gave the farmers a sense of ownership of the facilities.
- 3) Agricultural and rural facilities which genuinely met the needs of the villages, such as rice polishing stations, shared wells, cattle fattening centers, drying facilities and seed stores, were constructed with the wholehearted participation of the farmers. This raises the farmers' sense of involvement in the building of the villages concerned, and persuaded them that these facilities should be maintained and managed by farmers' organizations.
- 4) The creation of stock funds and the collection of fees for the use of rice polishing stations by Water Users' Associations is highly desirable as a means of preparing funds for the maintenance management and replacement of facilities in the future. These measures are steps towards the independent development of the Water Users' Associations.
- 5) Effective development methods have been established for the use of heavy equipment in the development of alang-alang grassland and the preparation of paddy fields in wetland areas. Operation skills are being transferred to inexperienced operators selected from among the farmers.
- 6) The development concept of this project has been taken as the model for other projects developing in Southeast Sulawesi Province. These include projects financed by the World Bank and joint projects for integrated agricultural development funded by the Ministry of Agriculture from its own budget.

ii) Suggestions

- 1) The ripple effects of this project are starting to encourage nearby farmers to build their own paddies and dry fields. Development methods for such situations should be devised, which take into account the limitations on water, land and human resources.
- 2) One problem of these developments is that they go beyond those directed at food within the range enabled by the available human resources, raising the problem of unrestrained development motivated only by the availability of land. A development plan must be put forward which makes rational use of the land, water and human resources available in the area.
- Further technical transfer is required for quality and construction management for concrete and earthworks.
- 4) The maintenance management of equipment could face increasingly common breakdowns. The check system developed for this project must be used in suitable operation management.
- 5) In the cause of independent development, the provincial government should take a central role in project operation with support from central government-related agencies. The "Kendari District Office for Integrated Agricultural and Rural Development" should be enhanced to take on this role.
- 6) Shallow shared wells which are around 5m deep run the risk of pollution from the permeation of residual fertilizers and agricultural chemicals used in farming. These wells should be improved to allow their safe and sustainable use.

c) Construction Management

i) Summary

- 1) Construction are preceded by explanatory presentation meetings organized around the project counterparts to produce the implementation plans.
- 2) The construction of agricultural infrastructure can follow one of three methods: contracting, direct management and farmers' participation. These methods will transfer construction management skills to the counterparts and the people concerned in provincial government.
- 3) Quality control of constructed paddy fields was achieved using plane tables for surveying, and the relevant skills were transferred. The use of photogrammetry to survey completed works is a new approach in this country, and the Indonesian side gained a full understanding of the efficacy of the technique through the project.
- 4) Local explanatory meetings were held in each village even for directly managed construction works, particularly farm roads. These farm roads are also the roads the

- villagers use in their daily lives, so their opinions were heard and incorporated before the construction began.
- 5) Ponds were constructed as a valuable source of irrigation water for the dry season, so their locations were selected with great care.
- 6) The wages for farmers' groups providing construction labor were paid to the groups. Some 25~35% of these payments were appropriated to add to funds carmarked for future maintenance management and other organized farmers' activities. This practice led to the successful operation of these groups and their facilities.
- 7) The construction works for land improvement were contracted out, giving the counterparts a full understanding of the importance of construction procedures and the handling of topsoil. The effective application of heavy equipment methods for climinating alang-alang grass without the use of herbicides is a notable and valuable technique appropriate to the area.

i) Suggestions

- 1) Further technical transfer is required in connection with the judgement of site conditions, including complex technical specifications, slopes and soil properties, and for estimation based on calculations of soil haul distance etc.
- 2) The counterparts are now able to perform for themselves construction management tasks such as the preparation of implementation plans for simple facilities and earthworks etc. Further technical transfer is needed to enable them to handle the full range of construction management, including planning the implementation of advanced and complex works, estimation of construction costs and the direction of heavy equipment operation.
- 3) Technical transfer is necessary for the basic elements of the quality control of concrete works related to land improvement, the rolled compaction of farm roads and other construction management skills.
- 4) The developed methods of farmers' participation and the transferred techniques for eliminating alang-alang grass can be propagated for application in other developable areas, so they should be promoted further with the aid of the provincial government and other related agencies.
- 5) The inconvenience of communications caused by the isolation of the project office from the sites should be alleviated.

d) The Operation and Maintenance Management of Machinery

i) Summary

- 1) The construction skills of the operators of heavy construction equipment are gradually improving through technical guidance and training. A system for the maintenance management of heavy equipment is also being set up.
- 2) Technical guidance is given for the operation and repair of farm machinery such as rice polishers and hand tractors and many farmers have acquired these key skills.
- 3) Operation records and checklists are provided for the maintenance management of machinery, so that the office can keep track of the condition of the machinery in each village. There are also mobile two ton trucks which have been modified and equipped with the necessary equipment and materials to serve as mobile repair shops. The equipment is ready for the farmers to make repairs on their own equipment in the future.

ii) Suggestions

- 1) The farmers' skills in the operation and management are still at the early stages and many breakdowns still occur in the field. Training and guidance in day-to-day operation are required to raise farmers' skills to the level where they can diagnose problems.
- 2) Model villages which are far away from Kendari city lack workshops or other facilities to make repairs. The village level maintenance management system must be strengthened to at least the level of that in Ranometo. In comparison with Ranometo, the skills and gifts of the farmers in other villages are at a much lower level. Technical guidance for these farmers will need to carry on for a long time.

e) Demonstration of farming and cultivation techniques

i) Summary

- 1) The unit yield of rice crops has been around 1t/ha. Improved farming techniques could raise this to 3~5t/ha. Most notably, it has been proven that two crops per year is a possibility.
- 2) The locations of model fields were selected appropriately so that they fulfill their demonstration purposes. The area converted to cash crops nearby is expanding.
- 3) Upland paddy rice is the staple food of indigenous peoples who are a majority in the project area, and they also use it for religious events. Improved techniques for the cultivation of upland paddy rice is essential if development is to be fairly balanced between the various peoples and regions of the project area, so this crop has been

incorporated into the scope of technical assistance.

ii) Suggestions

- So far, the demonstration of techniques has been under the direct guidance of the experts, but for independent development in the future, this work should be handled by advanced educational field workers
- 2) Counterparts prepare manuals for proven techniques under the guidance of the experts. However, no sufficient proof has been conducted for transplanted paddy rice or for upland paddy rice and the guidance of experts should continue until these tasks are completed.

f) Reinforcement of farmers' organizations

i) Summary

- The survey of farmers' organizations gathered basic data on factors such as ethnicity, culture and land ownership. This survey was extremely valuable for the direction and progress of the project.
- 2) Before the project began the only farmers' organization was in Ranometo and that was largely dormant. Since the start of cooperation, associations have been formed for water management, rice polishing station users, machinery users and others as the relevant facilities have been built.
- 3) Projects to support organized activities have included chicken rearing, market gardening and vegetable cultivation for women's and young people's groups. These projects have succeeded in motivating the groups to work together in planning and implementing group activities and enhanced their abilities. They have also improved nutrition and increased cash income.

ii) Suggestions

- When future projects of this type are implemented, the basic survey of the farmers should be conducted at the earliest possible stage out of consideration of its effects on specific activities within the project.
- Current farmers' organizations exist independently with one for each function. In place of these, the Indonesian side should establish KUDs which can exercise integrated management functions.
- As farmers' organizations develop independently, their stock funds will become their economic base, so methods for the stable continuation of these funds should be studied.
- 4) In future, guidance should be focused on technical transfer at the level of educational

field workers, and particularly on counseling activities. Furthermore, all report documents should be translated into Indonesian and working manuals should be completed to assist in improving organizations.

(5) The Outlook for Independent Development

In this section, the Indonesian side of the survey team has examined issues which should be considered by the Indonesian side, and prepared the draft minutes of these deliberations. Important portions of these minutes are included here in summary.

a) The Outlook for Independent Organizational Development

A wide variety of agencies have pursued diverse activities towards the attainment of this project's goals, achieving considerable success. However, if this work is to continue and spread further after the end of the project, those concerned have to be aware that great efforts will be required. These efforts will be the task of the Indonesian government. Therefore the government must establish the organizational structures necessary for the continuation of this project. This will require coordination between the agencies involved, and a firmly established role for the counterparts, who have gained transferred skills. Even if the establishment of such an organization is impossible, the various agencies will still be capable of a wide range of activities.

However, strong cooperation between agencies will still be required. The regional government is the ideal organization to lead the strengthening of cooperative inter-agency links. This is in line with government guidelines calling for greater regional devolution of powers.

The solutions for the kind of independent development described above must be prepared during the R/D period.

b) The Outlook for Independent Financial Development

The Sixth National Development Plan included four central projects in the agricultural sector. Elements of these projects are modeled on this project and other parts are very similar in content. Therefore even after the Japanese cooperation with this project ends, it can continue to be developed using elements of the plans for these central projects. Even the parts of these plans which are not suitable for application to this project could be developed using the local government budget, foreign loans or bank loans.

(Note: World Bank projects modeled on this project are scheduled to begin in nearby areas.)

The stock fund system, established as part of the activities of the farmers' organizations

set up within the project, merits close attention as a way of recovering costs using independent financial resources. This system of shared investment by farmers can be expected to fund the purchase of materials, infrastructure improvements, the maintenance management of machinery and other applications.

(Note: Some of these funds currently hold portions of the wages paid for farmers' participation in infrastructure improvements and others use fees from the use of agricultural machinery and rice polishing stations).

c) The Outlook for Independent Physical and Technical Development

Technical cooperation has transferred skills to the counterparts and in some parts of the project's work the counterparts are taking the lead. During the R/D period it is an essential condition for the attainment of the project's objectives that most of the counterparts who have acquired transferred skills remain rooted in the project.

One aim of this project was that it should not end with the transfer of skills to the counterparts, but rather that the skills would be of direct benefit to the farmers. That was the purpose of the training of counterparts. Some of the counterparts have no more than a shallow knowledge of their assigned specialist fields. Considering the wide range of subjects they must give guidance in, further guidance will be required for some time to come.

The establishment of the kinds of organizational measures described above is a precondition for the training of successors to the counterparts. The role of the local government is important in this regard.

(6) The Necessity of Follow-up

This point is dealt with in more detail in section 3.7 below, but an extension of one year in the cooperation period will be required. After that, the need for ongoing follow-up in some fields should be considered, particularly in the "soft" aspects of the project. The extension is needed because the investment and activities initially scheduled for the eight model villages have not been completed.

The need for additional follow-up in certain fields can be foreseen because the cooperation period, including the extension, is the minimum period needed to complete one pass through all of the project's scheduled activity. It will not necessarily be long enough to realize the full effects. This is particularly likely in the fields where the main activity, centered on "soft" aspects, occurs after the land improvement stage.

The joint survey group indicated in the minutes whether or not follow-up would be

required.

- (7) Summary of Evaluation Findings
- a) Summary of the Evaluation

This project was a participatory comprehensive agricultural and rural development project in which the farmers are encouraged to participate in the building and improvement of their own villages. The facilities which have been built are maintained and managed by the farmers' own organizations. The recognition of these necessities is a revolution in perception of development.

The main factors behind this project's steady progress and production of results are as follows.

- i) The content of all plans was explained to the local farmers from the initial planning stage, and their agreement was gained before plans were adopted. Their awareness of participation was raised from the planning stage onwards.
- ii) At the implementation stage, one way the farmers participated was by providing their labor, under the guidance of project experts, for the construction of roads and water canals. The counterparts were central in this process. This process was taken as the opportunity to establish stock funds intended to cover the costs of maintenance management and eventual replacement of the facilities. This method also gives the farmers a stronger sense of ownership of the facilities.
- iii) As well as the production infrastructure, all other agricultural and rural facilities (such as rice polishing stations, fattening yards, seed stores, drying facilities, training facilities and shared wells) were constructed with the prior agreement of the farmers.
- iv) For the independent development of this project after its completion, the provincial government must set up an organization for its management. This organization will become the leading agency, which will work together with the central government (the local offices of the Ministries of Agriculture, Public Works and the Interior) to enhance and develop the project.
- v) The R/D deadline for this project is 29th February 1996, but this is likely to be delayed until around December 1996 due to the weather and other factors. Therefore the R/D will have to be simply extended by one year. In addition to bringing the construction to a satisfactory completion, a management system (for the management of facilities and machinery, water management and the stable continuation of the stock funds) must be established for farmers' organizations to run the project after the end of Japanese

assistance. A farming system will also be required. After the end of the extension period, follow-up will still be required, covering only the "soft" aspects of the establishment of management and farming systems by the farmers' organizations.

b) Suggestions

The following is a draft translation of suggestions made by the joint survey team.

i) Development of management techniques which are acceptable to the farmers

Ordinarily, technical transfer targets the counterparts as the first step. In this project, technical transfer direct to the farmers is necessary for the maintenance management of agricultural and rural facilities such as roads and irrigation channels which were constructed through the farmers' participation. Therefore, from the point of view of independent development after the end of Japanese assistance, it is extremely important to devise management techniques, including farming guidance, which are acceptable to the farmers. The farmers must also receive continuing training to enhance their command of these techniques.

ii) The project's future (potential for independent development)

If the project is to be capable of independent development in the future, it must have high-quality staff and a budget at least sufficient to cover the costs of the materials now supplied by Japan.

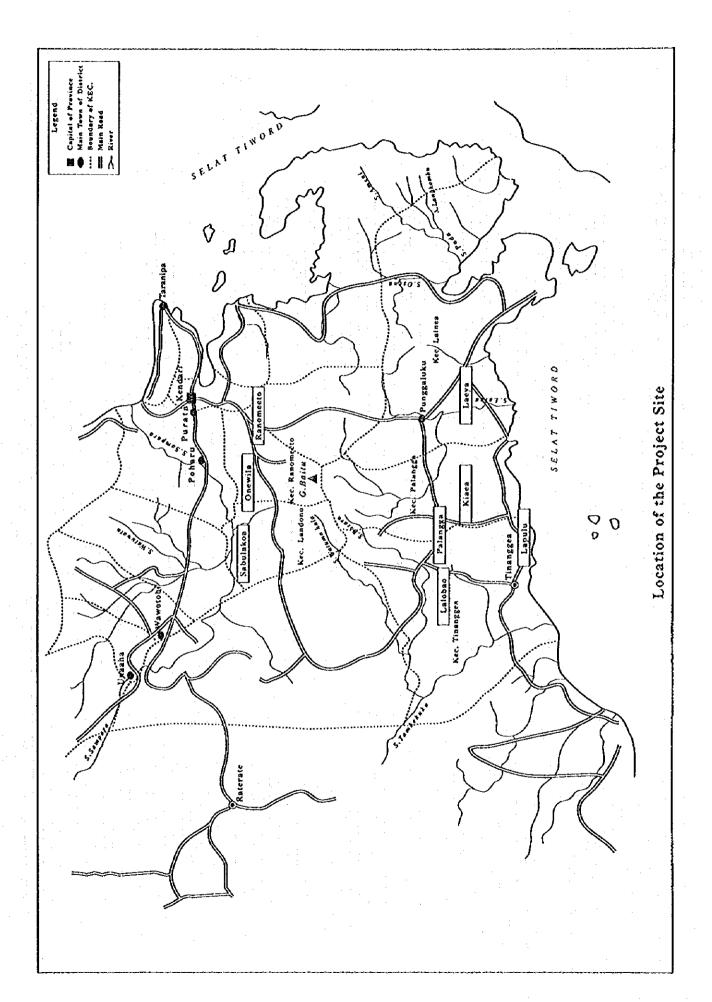
Furthermore, after the end of Japanese assistance, some kind of agency should be set up within BAPPEDA and the other provincial governmental agencies to carry on the project. This agency should, of course, work with the assistance of the Ministries of Agriculture, Public Works and the Interior and other related agencies.

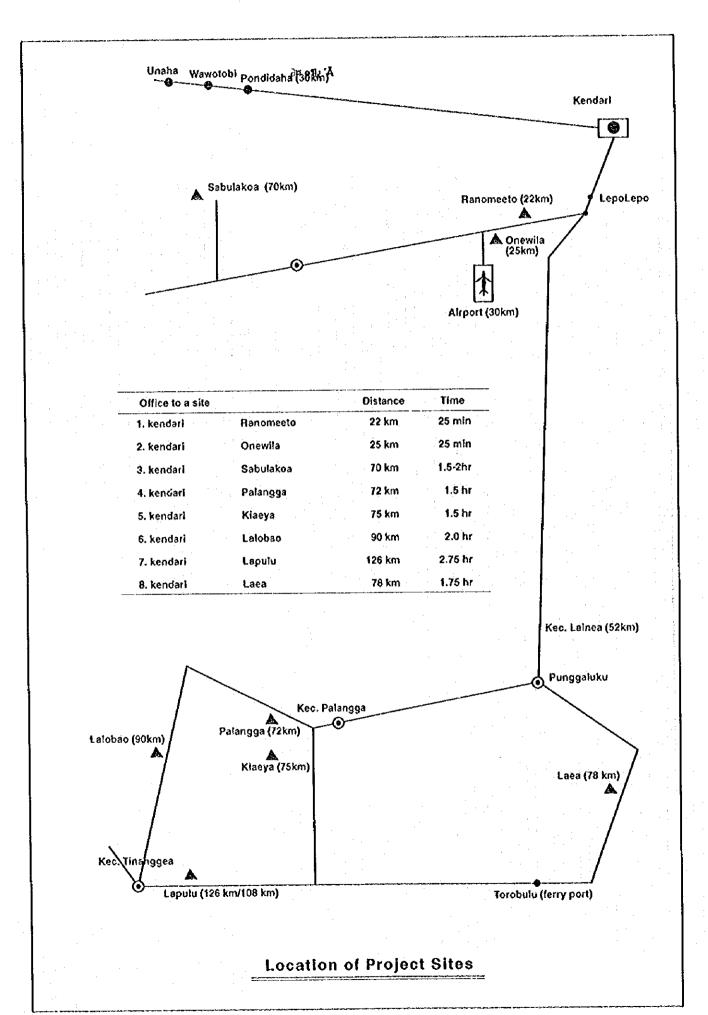
iii) The necessity of Japanese assistance in the future

According to the record of deliberations (R/D) signed on 26th January 1991, this project was to end on 29th February 1996, but the fact that the work of land reclamation can only proceed in the dry season, and other problems, delayed the completion of agricultural facilities, probably until December 1996. Further work is still needed to devise management techniques which are acceptable to the farmers. Therefore the joint survey team suggests that the Japanese assistance for this project be extended and full follow-up provided.

The joint survey team suggests one year as a suitable extension period, but further assistance should be considered later in the light of progress in the strengthening of farmers' organizations, particularly for water management, in the development of cultivation and farming techniques, and in other work stipulated in the TSI.

6. Gambar-Gambar





MAP OF THE PROJECT SITE

No.	SITE NAME	
1	Desa Ranomeeto Project Site	
2	Desa Palangga Project Site	
3	Desa Kiaca Project Site	
4	Desa Lapulu Project Site	
5	Desa Lalobao Project Site	
6	Desa Laeya Project Site	
7	Desa Sabulakoa Project Site	
8	Desa Onewila Project Site	

