

Thus, the persons in charge of the project did not show large dissatisfaction.

6-3-2. Evaluation and opinions by the evaluation team

(1) Evaluation and opinions by the joint evaluation team

The Note of Understanding does not contain special evaluation and opinions on the management and operation of the project. The understanding between experts and counterparts was evaluated as "good" in Item 5.9 as described in Chapter 5 (see 5-4-4, Part II). This shows the evaluation that the inconvenience in the operation due to language barrier was solved.

(2) Evaluation and opinions by the Japanese evaluation team

As described in the "Introduction" before, the project as a whole of this time was pioneers' trial and error. Therefore, the management and operation of the project as a part of it can be said to have been also pioneers' trial and error.

The management and operation for about 26 months from the start of the project to the time of evaluation cannot be said to have been smooth, in spite of the enormous efforts and ingenuity made by the respective persons in charge. It should be rather said that there was continuous and fearful groping.

However, the Evaluation Team evaluates highly the lessons and experience obtained through such groping, as a valuable milestone for future projects of technology transfer.

Evaluation and opinions for the respective items are shown below, including some proposals.

- 1) Were the management and operation in accordance with the contents of Record of Discussions (R/D)?

The management and operation did not deviate from the contents of R/D. However, a part of the contents of R/D (especially, Scope of Activities in Annex I, Drawing-up of implementation plans including project preparation and feasibility study for agricultural development) was variously interpreted, and there was certainly a controversy on the interpretations. It is presumed that any R/D can cause different views concerning the interpretations of words and phrases. It should be of course endeavored to conclude an R/D to avoid different interpretations, and the next problem is (a) how to find whether or not any difference is caused in the interpretations, and (b) how to solve the difference. The actions in this regard do not seem to have been taken promptly in this project. This project seems to have been expected to cover the four tasks of (a) pure transfer of planning techniques, (b) the planning itself (collection of data, review of existing plans, and drawing-up of new plans),

(c) finding of development projects, and (d) execution of any development project. Particularly to be noted is that the expectation for (c) and (d) was strong. Especially for (d), the parties concerned in South Sulawesi gave very strong opinions, expecting similar contribution as the projects by West Germany and Taiwan (projects based on the same ATA-140 R/D), as their straight demand).

The Scope of Activities of R/D says the technology transfer through the four stages: 1) survey, 2) review of existing plans, 3) drawing-up of sector plans, 4) drawing-up of implementation plans of the above plans, including the feasibility study. Therefore, the R/D, when read frankly, seems to require (1) technology transfer and (2) various reports (results of surveys and opinions after the review of existing plans) and drawn-up plans (sector plans and implementation plans including feasibility survey). The drawing-up of plans of (2) means preparation and not execution. The execution of any development project in this project was denied by BAPPENAS, including experimental execution. Therefore, that the demand for (4) mentioned before was not realized in this project should be approved as a reasonable action.

How far to meet the contents of R/D flexibly should be in accordance with the interpretations of the clauses by the respective countries concerned? Japan should admit as a fact, that West Germany met the R/D extensively, including execution, and should understand the situation that Indonesia desired Japan to meet it similarly. And we wish that Indonesian persons in charge understand that the West Germany method and the so-called "umbrella" method indicated by Indonesian Government in this relation did not suit the policies and systems of our country, and that to act always in strict conformity with the R/D is an essentially desirable way.

As a conclusion, the Evaluation Team understands and approves that the operation of the project was in conformity with the clauses of the R/D.

2) Was the operation made on the schedule?

Partly because the survey activities were limited by the election of the President at the beginning of the project, the schedule delayed about three months, as mentioned in 1-1, Part I. However, thanks to the efforts by the persons in charge, the lost time was gradually offset and the drafts of the report for Phase I were collected anyway in June, 1978 as scheduled. The activity reports for the respective quarters of each year were prepared and submitted very accurately by the effort of the survey teams. This effort should be appraised highly.

The report of Phase I was recompiled with considerable effort, based on the survey and recommendations made in October, 1978 by the Technical Support Committee, and the total V volumes of the report were completed in March, 1979. The effort made for the recompilation should be highly appraised.

- 3) Was the preparation before the start of the project sufficiently made?

It does not seem to have been quite sufficient. In this regard, it is surmised that some improvement can be made. If a survey had been preliminarily involved in collecting precision of the maps and data available in South Sulawesi Province, and getting information about the technical level of the persons in charge and the customs of the inhabitants, the project would have carried out more smoothly. If the actual situations are known only after a survey team arrives at the site, the schedule tends to be very tight, as in the case of the project of this time in which the results had to be obtained in a short period of time. While we know that, under the present system, the above mentioned preliminary action is a demand easy to make and hard to do, the Evaluation Team's recommendations in this regard are given in the proposals made later in this chapter.

- 4) Was the detailed execution strategy of the scope of activities examined sufficiently?

Also in this regard, it is surmised that some improvement can be made. If a manual of planning techniques to be transferred had been prepared when the project started, and if the confirmation of counterparts' abilities concerning the required basic planning techniques, supplementary training as required, the confirmation of language abilities for both experts and counterparts, the detailed curriculum for required training, etc. had been prepared before the transfer, then the project must have been operated more smoothly. However, it must have been very difficult in case of this project, to make such preparations, especially to prepare the manual for planning techniques, according to the technical level of counterparts and the data preparation level of South Sulawesi. It is surmised to have been inevitable that, as a result, while the actual language abilities of counterparts and experts and actual data available were confirmed, the contents of the techniques to be transferred were contrived in the literally groping operation.

- 5) Were the required short-term experts despatched and the required materials and equipment sent smoothly?

Short-term experts and materials and equipment were provided so sufficiently as not in the other projects assisted by Japan. Also in the questionnaire mentioned before, the persons in charge of the project evaluated highly in general, in this regard. The effort of the persons concerned and in charge should be highly evaluated.

However, from the standpoint of Indonesian Government, it cannot be denied that they were dissatisfied, for example, with the despatch of only 3 weeks, against a demand of Steering Committee for 3 months. It can be naturally estimated that an expert cannot be despatched always as demanded, depending on various situations such as the condition of the post he belongs to. A problem in this case is how to make coordination between the institutions in charge, of both the countries, prior to his despatch. If such coordination is sufficiently made to despatch an expert under mutual understanding, the dissatisfaction as mentioned above must be able to be solved greatly.

6) Could Technical Support Committee play their role?

In this case, though they could contribute to some extent, the results as a whole should be said unsatisfactory. As described also in 5-1-1, the Support Committee was established, "to discuss and provide advice and suggestions on the special and technical matters concerning the operation of the project". However, even if the members of the committee who are usually very busy are collected, to ask for their opinions on a problem to be settled promptly, it is not surmised that effective advice can be made so soon. The opinions of this Evaluation Team regarding the time of establishment, number of members, operation method, etc., are given in the recommendation made later in this chapter.

7) Was the decision making concerning the operation of the project made smoothly?

In spite of the efforts of all the persons in charge, decision making is surmised to have been not always smooth. It is desirable that required information is smoothly collected around a person with the duty of decision makings, and that consistent decision making is made on the responsibility of the person in charge. For this purpose the "information" mentioned above must be transmitted correctly and promptly, and the judgement of the person with the duty of decision making must be clearly discriminated from the demands and recommendations of the other persons. Furthermore, the judgement of the person with the duty of decision making must be transmitted promptly to all the persons in charge, and executed by them. It is desirable to closely examine such system of decision making before the start of a project, and to clarify the allotted roles and authorities, and way of decision transmission, in order not to cause confusion. This project seems to have started, without time for sufficient preparation, as in the case of the detailed execution strategy for the Scope of Activities. To make such preparation thoroughly may not be easy in light of the present system and the daily busy duties the persons in charge have, but it is certain that whether or not such preparation is sufficient determines the efficiency and the success of the project to a large extent. The operation of the project as a whole seems to have resulted in the continuous groping in spite of the effort of all the persons in charge, probably because this kind of "preparation at the beginning of the project" was not sufficient.

In this project, very many short-term experts were despatched, and several survey teams were sent. The preliminary explanation concerning the expected duty, the scope of authorized power, the positioning of the above duty in the entire composition of the project, etc. to the respective experts or teams, and the actions made in response to their reports submitted after their return to Japan (like expressions of Tokyo's decisions and orders given based on them, it, for the recommendations and opinions affecting the operation of the project, and for the reports on the results of discussion with Indonesian people) would have been made more smoothly, if the above preparation had been made sufficiently and all the persons concerned had acted strictly in accordance with the possibly prepared rules.

The results of groping in this project gave many lessons. We hope they will be used effectively in future.

6-4. Recommendations

As described in 6-3-2, it is considered desirable to make firm preparation, taking much time and labor at the beginning in this kind of projects. After all, it will give better results without fail.

Below are given detailed Proposals.*

6-4-1. Actions to be taken before the start of the project

(1) Preliminary data collection free from a specific project

For example, it will be very useful for a researcher despatched irrespective of a specific project to make a long-term investigation beforehand concerning such information as the data on the district concerned, availability of maps, technical level of the personnel of the governmental offices concerned, legal system and customs, along with his original study. The stationing of such researchers in the respective developing countries is considered useful greatly for starting any projects. To despatch a researcher, it is more desirable to assign at permanent facilities where he can make researches.

(2) A preliminary and careful survey and the preparation of a working schedule, mainly by a small-membered technical support committee

The members of a technical support committee should provide advice on the operation of a project consistently from the start of the project, and the number of the members should be as small as from 1 to 3. A survey prior to the start of a project, and the preparation of a detailed working schedule for the project is considered desirable to be made centrally mainly by such a technical support committee. The members of the support committee are of course not given the power of decision making. Every person who is in charge of many projects and usually very busy (of JICA, etc.) will get easy access to take care of the operation, being assured, if he has beside him advisers who have much experience in overseas work and excellent intelligence and know well the situations since the start of the project. (If each person in charge can use his time and labor sufficiently for each project, such a measure is not required, but actually he cannot afford it, and is often replaced by another on halfway). It can be estimated that such support committee system may have its problems, but we suggest it is to be tried once.

Note: Some of these are similar to the items in 5-4. But we consider these should be strongly recommended from the both viewpoints of "Better technology transfer" and "Better project management".

6-4-2. Action immediately after the start of the project

- (1) Confirmation of the abilities of experts and counterparts (language and planning techniques), and classroom-training for raising them to basic levels

Excellent talents should be of course assigned. Whether the training should be made before or after the start of a project is dependent upon case by case, but to perform this ability confirmation and this training is considered to give better results after all.

Experts are required to have the abilities covering both planning and education like this. Also as for language, they seem to be required to have a higher ability. Special consideration is given to necessity of preliminary training, etc.

- (2) Preparation of teaching materials for technology transfer

This can be considered as a part of "the preparation of a working schedule by the technical support committee" described before. It is considered desirable to complete teaching materials suitable for the abilities of trainees as soon as possible, in case of technology transfer projects like this.

6-4-3. Action to be taken after the end of Phase I

- (1) Execution of classroom-training by the completed teaching materials

The technology transfer by on-the-job training can give techniques only to a small number of counterparts. It will be very useful, if classroom-training including exercises can be carried out for many persons in charge of planning after the end of Phase I. If such training is done constantly, it will be more significant. If a training center for it is established, it may be more convenient.

Chapter 7. Comments and Opinions: Problems to be Solved and Problems Related to Prolongation of the Project Period - T.EGASHIRA -

7-1. Outline of Pilot Test Project and Related Problems

7-1-1. Background

The following four were chosen as the objects of Feasibility Studies (F/S) in Phase 1:

In Kabupaten Enrekang,

- 1) Reforestation Plan
- 2) Grassland Improvement Plan

In Kabupaten Jeneponto,

- 3) Citrus Improvement Plan
- 4) Model Shrimp Pond Plan

Of the above four Plans, high quality feasibility studies have been completed for Model Shrimp Pond Plan. In the transfer of techniques, however, only some segments of technical know-how have been transferred to the Counterparts directly involved with the Plan and it must be admitted that the transfer of techniques for the entire system has not yet been accomplished.

Moreover, Plans 1 through 3 are incomplete; still at the stage where Japanese experts have just finished preparing general outlines of the Plans.

The main purpose of this cooperation program is in the transfer of techniques. In order to transfer a series of techniques for various plans to the "Counterparts" that have never had any experience of setting up such plans, we feel it necessary to first provide them with a basic knowledge of technology of various Plans, perhaps through classroom-training. This should lead to a more effective setting up of plans and also for a more effective transfer of techniques in the end.

Up until the stage of reviewing the provincial plans in Phase I, the major emphasis was on collecting and charting basic data, but at the stage of feasibility studies, more systematic and advanced knowledge is required in such areas as farm management plan, physical plan and economic evaluation. It is necessary, therefore, for the Counterparts to have a basic knowledge of the plan-related techniques - not in segments, but in their entirety.

There still remains the problem of implementing the above-mentioned feasibility studies which the Indonesian side and our own Survey Team have been preparing under the title "Pilot Test". Judging from the record of discussions, we are under no obligation to implement, but a strong request from the Indonesian side has made the Technical Guidance Team in 1978 take up this matter and at that time it was decided that a Technical Guidance Team would study the advisability of implementation. Thus, a Technical Guidance Team was dispatched. The team was headed by Mr. Suzuki, Director of Planning Department of Kinki Agricultural Administration Bureau. In the report submitted by the Suzuki Team, they confirm that prolongation of the Project period is definitely necessary.

The reasons given are:

- 1) Establishment of development plans including F/S for those assignments not implemented at Phase II
- 2) Implementing F/S planned at Phase II (at two specific Kabupatens)
- 3) Implementing project found in the Third Block

They recognize a need for having a new R/D signed because of these reasons.

7-1-2. Pilot test outline

- 1) General outline of the pilot test.
As shown in the Table II-20 and Fig. II-6.
- 2) Required expenses for implementing the pilot test.
As shown in the Tables II-20 -- II-23.
- 3) Schedule for Implementing the pilot test.
As shown in the Tables II-24 -- II-25.

Among the data, the Table II-20 -- II-25 are taken directly from the draft submitted by the Experts Team and are given here for the readers' reference.

Table II-20 Outline of the Pilot Test

	Reforestation Plan	Grassland Improvement Plan
Location	Kabupaten Enrekang (Desa Bunta Barana, Kecamatan Alla)	
General description of the Area and objectives of the Project	<p>This Kabupaten is in the mountainous district of over 1,000m above sea level; temperature is mild - ranging from 18° - 28°C; annual rainfalls amount to over 2,000mm/m. Because of many sharp and bare slopes, severe land erosion is observed. For conservation of land and water, reforestation projects are being emphasized.</p> <p>On the other hand this Kabupaten is also known for Bali-Cattle production, and depending on the location, conflicts between grassland use and forestry use are observed. In order to insure conservation of the land through rational utilization and also to provide more income for the local residents through better utilization of the land, a Model Project for developing mountain village areas is planned.</p>	
Major Hardware	(Common facilities)	
	1) Training Center 1.6ha	(National property. Right of use belongs to Village Headman) Land Rental Contract
	2) Nursey field 20ha	(- ditto - ditto -) (Grass nursery 1.0ha; tree nursery 1.0ha)
	3) Experimental Forest 8.0ha	1) Model Pasture 500ha (Managed by Live-stock Bureau, Provincial Government)
Benefits in Kabupaten Enrekang	95,100ha	34,300ha
Organization	(Experts) Reforestation Grassland Improvement	(Counterparts) Liaison Reforestation Grassland Improvement
Notes:	<p>-Improvement in the 6km long access road and bridges needed (Planned to be allocated by the 1979 Budget from the President's Instruction)</p> <p>-Adjustments in the right of use of the land for Training Center needed.</p> <p>-Further study on securing enough quantity of water needed.</p>	

(Continued)

	Citrus Improvement Plan		Model Shrimp Pond	
Location:	Kabupaten Jeneponto		Kabupaten Jeneponto	
General description of the Area and Objectives of the Project	<p>This Kabupaten has a severe climate with the temperature of 25-35°C and annual rainfalls of 1,000m/m. The land shape varies with many sharp slopes and the ground contains many rocks.</p> <p>In this Kabupaten, orange is one of the major cash-products and its industry is rapidly growing throughout the Kabupaten. If the situation is left alone to take its own course, there soon will be a sharp price decrease of the product caused by over-production.</p> <p>By introducing modern cultivation techniques (such as cutting, water irrigation use of insecticide), it is intended to insure stable production and to improve quality of the product to maintain the proper price level and consequently to help to bring more profits to the farmers.</p>		<p>The temperature is 25-35°C annual rainfalls amount to about 600m/m. This Kabupaten has distinct dry and rainy seasons. There exists approximately 2,000ha in this region (in South Sulawesi Province, 46,000ha); coastal areas have been fully developed and the activities are spreading to the inland areas.</p> <p>Introduction of pumps has two objectives: one is to make the existing extensive fish ponds in the coastal areas intensive, and the other, as a means for expansion into the inland areas. Thus, fishponds equipped with pumps are designated, and the project has been designed as an experimental project.</p>	
Major Hardware	1) Training Center	5.0ha	- Model Shrimp Pond	
	2) Model Orange Orchard	3.0ha	(18.7ha National Property)	
	3) Nursery field	1.0ha	Nursery Pond	0.6ha
	4) Reservoir	1.0ha	Cultivation Pond	8.8ha
			Feed Production Area	2.5ha
Benefits in Kabupaten Jeneponto	7.000ha		1,800ha	Existing: 800ha New 1,000ha
Organization	(Experts)	(Counterparts)	(Experts)	(Counterparts)
	Agronomy (Citrus)	Liaison Agronomy (Citrus) growing	Aqua-culture	Liaison Aqua-culture Engineering Works

(Continued)

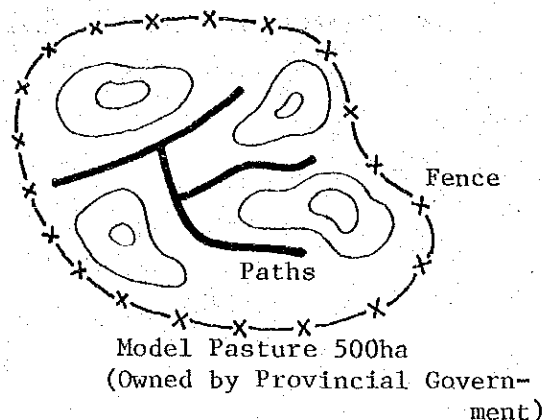
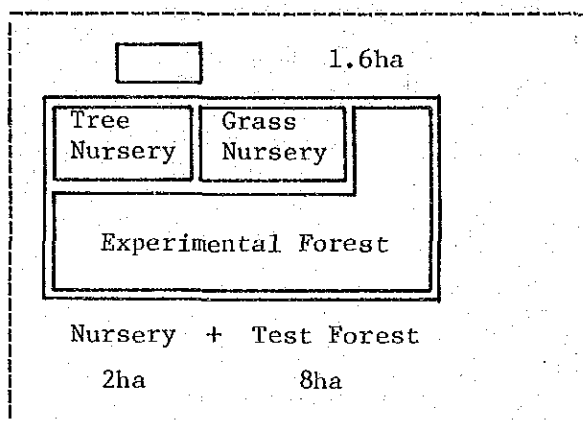
Notes :

- IRR = 17%
 - Procedure for diverting Training Center facilities (owned by DPU)
 - Adjustments in the right of use of water in relation to the use of reservoir water
 - Procedure for land use. Model Citrus Orchard, Reservoir ... owned by Governer
Nursery field ... owned by extension worker
 - IRR = 12.5% (Expected to decrease further due to rising cost of oil)
 - Marine fishery has priority over inland pond culture.
 - Technical cooperation required not only in Infrastructure, but in advanced techniques of virtually research level.
 - Because of above, this plan is not included in P/T. The Provincial Government, upon further study, will advise whether it is feasible or not to implement the project independently.
-

Fig. II-6 A Type Plan for Pilot Test

1. Kabupaten Enrekang (Reforestation and Grassland Improvement)

(Trainig Center)



National Property (Used by Village Headman)

Training Center .. 1.6ha (Local Cost)

Tree Nursey 1.0ha

Grass Nursery 1.0ha (For Model Infra)

Experimental Forest ... 8.0ha

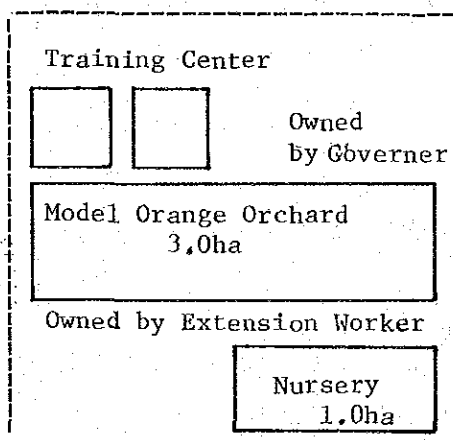
Model Pasture 500ha

Fence ... Materials provided

Paths ... None

2. Kabupaten Jeneponto (Citrus Improvement)

Kabupaten Jeneponto (Citurs Improvement)

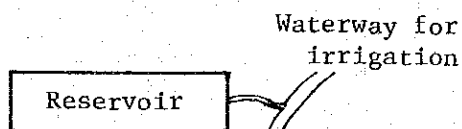


Training Center (Improvement in DPU Facilities) Local cost

Model Orange Orchard 3.0ha

Nursery 1.0ha

Reservoir 1.0ha



3. Staff

- | | | |
|------------|-----------------------|--------------------------|
| 1) Advisor | 2) Leader | |
| | 3) Reforestation | 4) Grassland Improvement |
| | 5) Citrus Improvement | 6) Coordinator |

* (Short-term) Experts. (Regional Planning, Model Infra, etc.)

Table II-21 Required Expenses of Facilities Construction for the Pilot Test
(Kab. Enrekang)

One official housing for experimental Forestry personnel, D type, 50 M2 large	Rp.	2,750,000
One official housing for grassland personnel, D type, 50 M2 large	"	2,750,000
One classroom, 96 M2 large	"	5,280,000
One dormitory for 40 persons, 280 M2 large	"	15,400,000
One storehouse, 70 M2 large	"	3,650,000
One car garage + equipment shed, 126 M2 large	"	5,670,000
Clean water facility at 1 km's distance	"	4,000,000
Fence for the complex, barbed wire/iron fence, 500 m long	"	2,500,000
Total	Rp.	42,200,000

(Kab. Jeneponto)

One housing for the Director of Training Center, C type 70 M2 large	Rp.	3,850,000
One classroom, 96 M2 large	"	5,280,000
One dormitory for 40 persons, 280 M2 large	"	15,400,000
One storehouse, 70 M2 large	"	3,850,000
One car garage + equipment shed, 126 M2 large	"	5,670,000
Clean water facility	"	2,500,000
Fence for the complex, barbed wire/iron fence, 500 m long	"	2,500,000
Total	Rp.	39,050,000

Notes: Figures in the above table shows a price on Rp. before the devaluation,
included 20% surplus as reserve.

Table II-22 Required Materials for the Reforestation and Grassland Improvement Projects (Draft)

I.	Training Center	: ¥ 7,355,000	
1.1.	Explanation	: ¥ 1,105,000	Generator, Slide projector, Tape recorder, Scree Stabilizer, and others.
1.2.	Preparation of teaching materials	: ¥ 420,000	Copying machine, Offser-multigraph, Typewriter, and others.
1.3.	Meteorological instrument	: ¥ 385,000	Rain raug recorder, Temperature recorder, Evaporimeter, Instrument screen, and others.
1.4.	Survey	: ¥ 497,000	Pocket compas, Hand level, Hypsometer, Planimeter, and others.
1.5.	Investigation	: ¥ 200,000	Microscope, Soil Hardness tester, PH-meter, and others.
1.6.	Maintenance	: ¥ 497,000	Techo meter, Servicing tools, and others.
1.7.	Vehicles	: ¥ 3,700,000	1 station wagon, 1 micro-bus, 1 motorcycle 125 cc.
II.	Nursery	: ¥ 9,414,000	
2.1.	Tractor	: ¥ 3,480,000	Wheel tractor with attachment.
2.2.	Cultivation	: ¥ 590,000	Refrigerator, Power grass mower, Knapsack sprayer, and others.
2.3.	Transportation	: ¥ 4,355,000	Dump track, Fork lift, Belt conveyer, and others.
2.4.	Pumping up	: ¥ 600,000	Diesel engine, Plunger pump, Vinyl pipe, and others.
2.5.	Tools	: ¥ 385,000	Wheel barrow, Watering pot, Farm tools, and others.
2.6.	Vehicles	: ¥ 200,000	1 motorcycle 125 cc.

Table II-24 Required Materials for the Citrus Improvement Project (Draft)

I.	Training center	: ¥ 11,406,000
1.1.	Explanation	: ¥ 2,070,000 Generator, over head projector, Slide projector, Tape recorder, Screen, Stabilizer, and others.
1.2.	Preparation of teaching materials	: ¥ 620,000 Copying machine, Offset-Multigraph, Typewriter, and others.
1.3.	Meteorological instrument	: ¥ 860,000 Rain gauge recorder, Temperature recorder, Wind velocity recorder, Sunshine heliograph, Instrument screen, and others.
1.4.	Water management	: ¥ 875,000 Soil tension meter, Actual volumeno meter, Current meter, Pocket compas, Planimeter, and others.
1.5.	Investigation	: ¥ 2,435,000 Microscope, Drying oven, Sugar concentration meter, Soil hardness tester, and others.
1.6.	Maintenance	: ¥ 916,000 Techo meter, Servicing tools, and others.
1.7.	Vehicles	: ¥ 3,630,000 Station wagon, micro-bus, motorcycle 100 cc.
II.	Nursery	: ¥ 8,460,000
2.1.	Tractor	: ¥ 3,950,000 Wheel tractor with attachment.
2.2.	Cultivation	: ¥ 1,797,000 Power sprayer, Power cultivator, Power grass mower and others.
2.3.	Transportation	: ¥ 1,850,000 Trailer and Tank car.
2.4.	Pumping up	: ¥ 375,000 Diesel engine, Plunger pump, Vinyle pipe, and others.
2.5.	Tools	: ¥ 385,000 Wheel barrow, Watering pot, Farm tools, and others.
2.6.	Vehicles	: ¥ 130,000 Motorcycle 100 cc.
	Total	: ¥20,000,000

Note: The above-mentioned table is amounted excluding some equipment, which will be prepared by Indonesian government aothorities.

(Continued)

III.	Trial forest	: ¥	731,000	
3.1.	Silviculture	: ¥	631,000	
				Hand auger, Power grass mower, and others.
3.2.	T o o l s	: ¥	100,000	
				Farm tools.
IV.	Grassland improvement	: ¥	2,930,000	
4.1.	Grassland management	: ¥	500,000	
				Barbed wire.
4.2.	Meteorological instrument	: ¥	180,000	
				Rain gauge, Evaporimeter, Instrument screen, and others.
4.3.	T o o l s	: ¥	50,000	
				Farm tools.
4.4.	Vehicles	: ¥	2,200,000	
				1 Hard top Jeep, 1 Trailer, 1 Motorcycle 125 cc.
Total		: ¥	20,430,000	- ¥ 20,000,000

Note : The above mentioned table is amounted excluding some equipments, which will be prepared by Indonesian government authorities.

Table II-25 Reforestation and Grassland Improvement Plans: Implementation Schedule

	1979 (s.54)												1980 (s.55)												1981 (s.56)												1982 (s.57)		
	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3					
1) Detail design (consultant) - (March)																																							
2) Training Center (1.0 ha) Establishment of Building Implementation of training																																							
3) Trial forest (10.0 ha) including seedling bed (1.0 ha) Establishment of Trial Forest seedling bed																																							
4) Seedling bed (1.0 ha) Establishment of seedling bed Implementation of seedling Transplant to model forest and afforestation area																																							
5) Trial grassland (500 ha) Establishment and improvement of facilities Planting of grass and legume seeds																																							
6) Dispatch of experts Forest a specialist for seedling cum silviculture a specialist for conservation cum mechanization Grassland a specialist for grasses and legumes a specialist for cattle																																							
7) Equipment																																							

Table II-25 Citrus Improvement Plan: Implementation Schedule

Year	1979 (s.54)												1980 (s.55)												1981 (s.56)		
	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3						
Month																											
1) Detail design (consultants) - (March)																											
2) Nursery bed (1.0 ha) Preparation for nursery bed Stock breeding Selection of mother threes Grafting (Budding) Inspection of young trees Distribution of grafted young trees to model orchard garden Protection against insects Protection against diseases																											
3) Training center (1.0 ha) Establishment of center Commencement of training																											
4) Model orchard (3.0 ha) Establishment of model orchard Comparative garden for superior varieties Exhibition garden on technical development Research on growth cycle Disease and pest control																											
5) Contests of citrus fruit and trees 1. preparation 2. evaluation 3. officials																											
6) Dispatch of experts : Cultivation Diseases and insects																											
7) Equipment																											

7-2. Comments and Opinions of the Evaluation Team

7-2-1. On prolongation

The team has concluded that a prolongation is unavoidable because of the following reasons:

(1) Concerning the Feasibility Studies recorded in the Record of Discussion, out of the four items which were decided upon by the Joint Committee, only one item has been completed. It is necessary to complete feasibility studies on the remaining three items;

(2) Setting up of projects alone has not satisfied the Indonesian side, especially the South Sulawesi Provincial Government and other local governments such as in Kabupaten Enrekang and in Kabupaten Jenepoto. They have long been insisting on implementing those projects. Moreover, Planning Office of the Secretariat in the Ministry of Agriculture of the Central Government began to share the same view and the Experts Team has shown an intent to the Indonesian side to, in effect, implement the pilot test.

Then, what is the definition of the pilot test? The pilot test means a test which is conducted to gather necessary data for feasibility studies and it is more proper perhaps to call it the test rather than the "Pilot" test. In short, the pilot test is one part of feasibility studies, or one link in the chain of the program.

We, therefore, conclude that so far as it was determined, after Evaluation survey, that the feasibility study had been completed, it would not be necessary to implement the pilot test for Model Shrimp Pond. Moreover, the activities of "Shallow Sea Aquaculture Cooperation" from our government will overlap with the pilot test activities. We, therefore, judge that the pilot test does not need to be implemented.

7-2-2. On method of extending record of discussions (R/D)

Concerning the Scope of Activities in R/D which specifies the objectives of this cooperation program and its limits of activities, no revision would become necessary if the pilot test is classified as a part of feasibility studies, as we have discussed above.

Conversely, if the pilot test is defined as a "mini project", independent of feasibility studies, it would be difficult to find a justification for implementing pilot test in the extended Phase of this cooperation program; we feel that implementation should be done under a separate R/D as a different project.

We, therefore, think that revised portions should be red as follows:

- (1) New fields of dispatched experts

Advisor

Leader with additional duty of Regional Planning

Afforestation and reforestation

Grassland Improvement

Citrus Improvement

Coordinator/Liaison officer

- (2) Prolongation period of cooperation

We judge that a period of about 30 months is required for the transfer of technology in the three feasibility studies items and for the preparation of Experts' return to Japan.

To explain further, in the first year classroom training for feasibility studies and infrastructure preparations for pilot test will be done. In the second year, actual experiments will be done in reforestation and grassland and citrus improvements. (Naturally, in both years the investigation and planning activities for feasibility studies will be the major part of business). The last six months will be spent for final organization of feasibility studies and preparation for the return trip.

7-2-3. On planning projects in the Third Block

This area is also known as "Rice Bowl" and is considered as an important food-base in Indonesia. This area naturally was included in the Master plan, but the Planning Bureau of the Secretariat in the Ministry of Agriculture of Indonesia intended to implement study plan of the feasibility studies Level and hoped for Japan's cooperation in a large scale project. The Indonesian side, therefore, strongly requested implementing a large scale feasibility studies in the Third Block at the extended Phase of this cooperation. However, in the Third Block today, JICA and those in the Public Works in Indonesia are jointly engaged in research and development to implement Comprehensive Development Plan for Central Sulawesi Water Resources. Though it is called a "Comprehensive" Development Plan, its Master plan is centered on the development of agricultural irrigation system and it cannot be rationalized for Japan to be conducting two overlapping research projects or to be setting up two similar projects simultaneously. It is recommended, therefore, to study the feasibility of Agricultural development cooperation from Japan after the general policies of "Comprehensive Development Plan for Central Sulawesi Water Resources" are established, if the Japanese side wishes to go into the Third Block.

7-2-4. Problems related to prolongation of the project and pilot test implementation

(1) It is necessary for Indonesia to obtain to BAPPENAS clearance for prolongation. Record shows that BAPPENAS once objected to the experimental project during the discussions in R/D of this cooperation. Pilot test is on the same as the experimental project, and may face the same problem.

(2) It is important to remind the Indonesian side of the fact that their local cost is included in the plan for implementing pilot test and that their allocating the proper budget for local cost is a prerequisite.

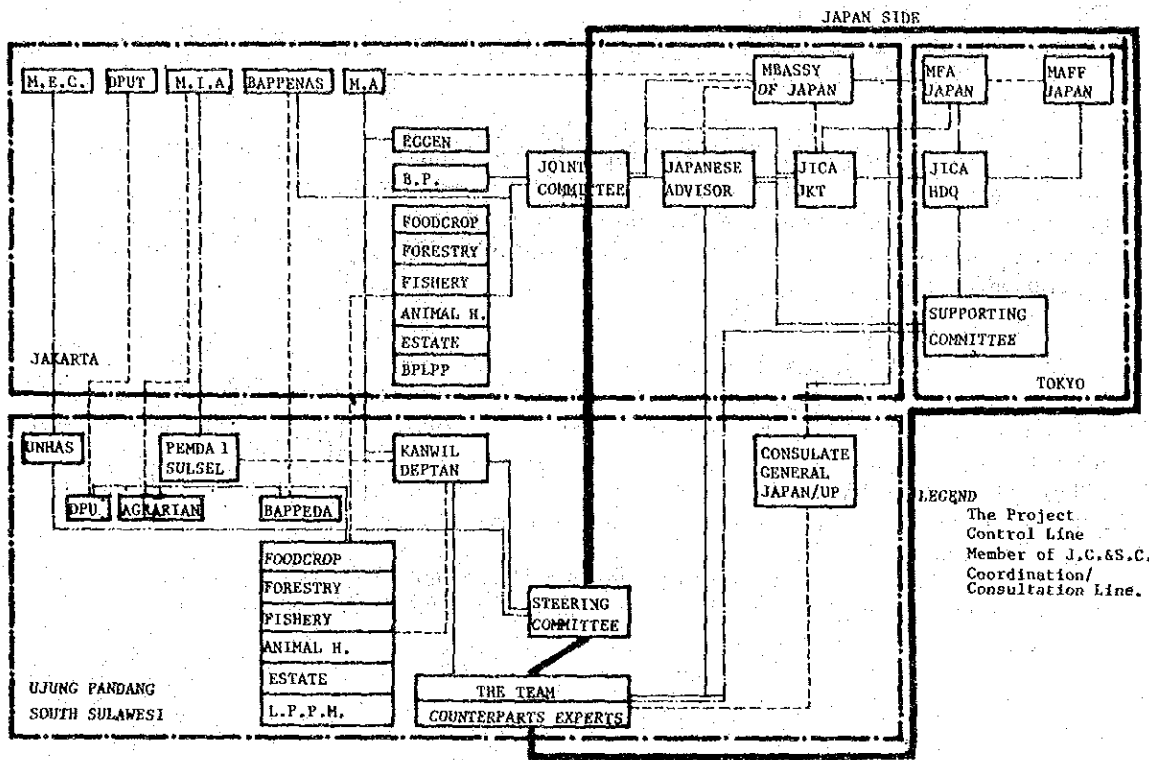
(3) The right of using the land planned for pilot test project and legal access to irrigation water must be secured beforehand.

(4) Cost for administrative organization for pilot test, especially the wages and salaries of the staff members and other administrative expenses must be met by local cost.

7-2-5. On communication between experts team and JICA headquarters

(1) When assignments are on research-planning as in the case of the Cooperation, there are many elements which must be analysed and decided upon on the spot. The Experts Team should maintain a constant contact the JICA headquarters.

(2) When extending R/D of this Cooperation, it is necessary to clearly state concrete work assignments in such form as "a note of understandings" to avoid such confusions as the ones we observed which originated from different interpretations from both sides. All specialists and team leaders, especially, should go through a sophisticated orientation program before they are sent to Indonesia and much care should be taken to make certain that the opinions of the Experts Team and JICA headquarters are in agreement and consistent.



JICA