CHAPTER 6 PROJECT IMPLEMENTATION

6-1 Project Implementing Agency

IRDP's are under the jurisdiction of the Ministry of Policy Planning and Implementation (MPPI). Consequently, MPPI will be the implementing agency for the Project.

Other concerned ministries are the Ministry of Agricultural Development and Research, and the Ministry of Land and Land Development, and it is anticipated that they will provide close technical support to MPPI in carrying out the Project.

Implementing structure for the Project is as follows:

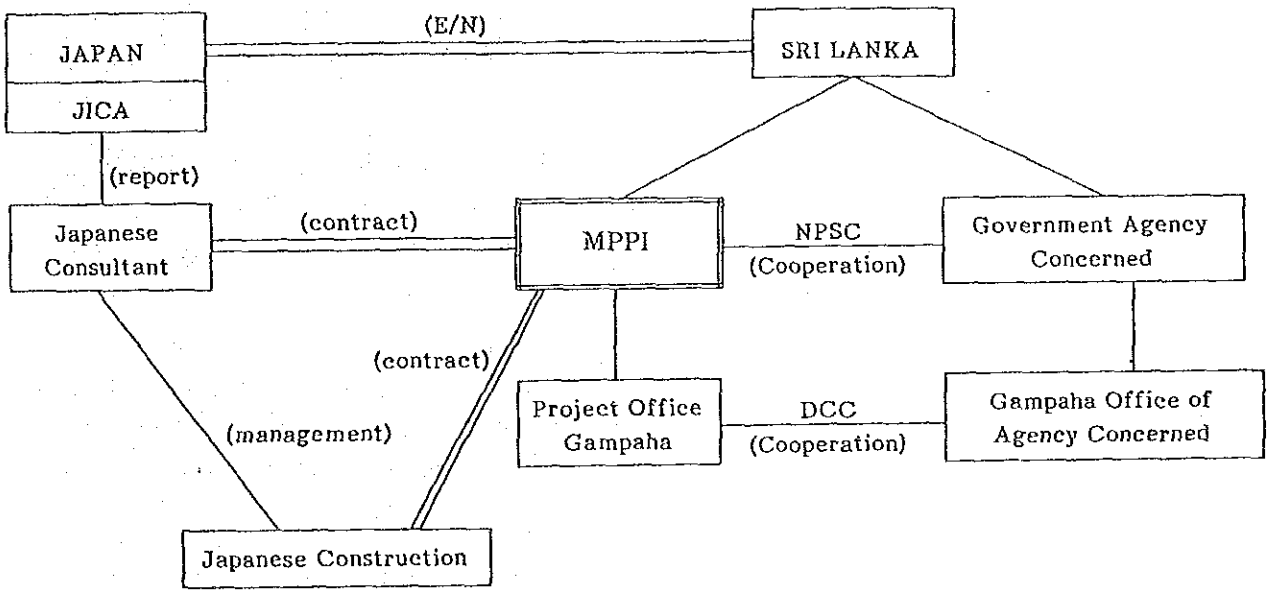


FIG. 6-1 IMPLEMENTATION STRUCTURE CHART

6-2 Construction Plan

6-2-1 Construction Conditions

Much of the work requested by the Sri Lankan side is small scale. In the case of such types of work, civil work is often performed by local contractors under the supervision of local and expatriate experts. However, in the case of local construction, skilled workers move on to another site upon completion of work, and contractors consequently do not have extensive permanent crews. In-house skilled laborers are few, and sufficient capital is generally not present for the purchase of construction machinery.

Foreign firms attempt to staff good local skilled personnel by offering attractive remuneration, but after a certain period of employment, such workers often leave the country for even more lucrative employment abroad in the Middle East, etc. This is particularly true in the case of machine operators, etc. This compounds the lack of skilled labor.

Large scale projects are almost entirely carried out by foreign firms. In the case of such work, foreign firms import construction machinery to be used, and except for general workers, bring in from abroad their labor as well.

There are no Sri Lankan companies leasing equipment. Consequently, it is a standard practice to borrow equipment from contractors depending on the availability. Long-term leasing of equipment under such an arrangement is reported to be virtually impossible.

Furthermore, equipment is old, often in disrepair, and spare parts are not available. In some cases, work has to be suspended for months while the contractor fabricates his own spare parts or procures them abroad from places like Singapore, etc.. Leasing of equipment locally accordingly requires careful scheduling of work.

Construction materials are generally available in Sri Lanka, except for temporary work materials such as sheet piles and metro-deck. However, there are some uncertainties in terms of stocks, delivery time and material quality. Fresh concrete can be obtained from dealers in Colombo.

Utilization of concrete mixer trucks must take into consideration traffic congestion in Colombo. In Gampaha District, mixing concrete in situ is preferable to use of fresh concrete. Care must be given to aggregate due to often low specific gravity and failure to meet JIS standards.

Recently, the use of clayey materials for earthwork reportedly requires transportation over long distances due to short supply. In view of the easy acquisition

of sandy material, it is preferable that the embanking method allow for use of this material.

Due to the effects of ethnic strife, unemployment has increased.

Implementation of works within a limited period in the frame of the Japanese Grant Aid Program will require careful scheduling taking into consideration the above conditions. Careful attention must be given to the fact that two rainy seasons per year (April-June and September-November) will affect construction. Procurement of labor, materials and equipment for construction will be a critical part of scheduling.

6-2-2 Construction Orientation and Method

The two-stage work should be executed according to the following table, with consideration given to the limited schedule of the Japanese Grant Aid Program, time of temporary work, deployment of machinery, timing of rainy seasons, etc.

TABLE 6-1 IMPLEMENTATION STRUCTURE CHART

— Project Components — ○ : PHASE I ● : PHASE II

Name of project			① ATT		② MEC		③ DTC		④ MMI		⑤ ASS
Name of zone			More-nna	Ambe-pussa	Nursery	Mixed-crop	Walpita	Ambe-pussa	Palu-Oya	More-nna	Entire District
Component	Construction work	Construction work	●	●	○	—	○	○	—	—	●
		Engineering work	●	●	○	○	○	—	○	●	—
	Material	Material	●	●	○		○	○	—	—	●
		Agro-machinery	●	●	○		○	○	—	—	—
		Vehicles	●	●	○		○	○	●		●

Stage I work is 12 months in keeping with the schedule for Japanese Grant Aid, and will extend from the beginning of December to the end of November of the following year.

Stage II work is to be commenced in early October for 14 months. This is 2 months earlier in the year than the start of the previous Stage I, and will permit work at the Morenna anicut to be carried out in the dry season (December-March)

Construction for Stage II is to be by negotiated contract between the Sri Lankan Government and the contractors to enable work to begin at the start of October.

In this way, the work will be completed according to the Japanese Grant Aid schedule.

A gate expert, electrical expert, general and special construction machinery operators, building facilities expert and construction machinery mechanic will be dispatched from Japan during the construction period.

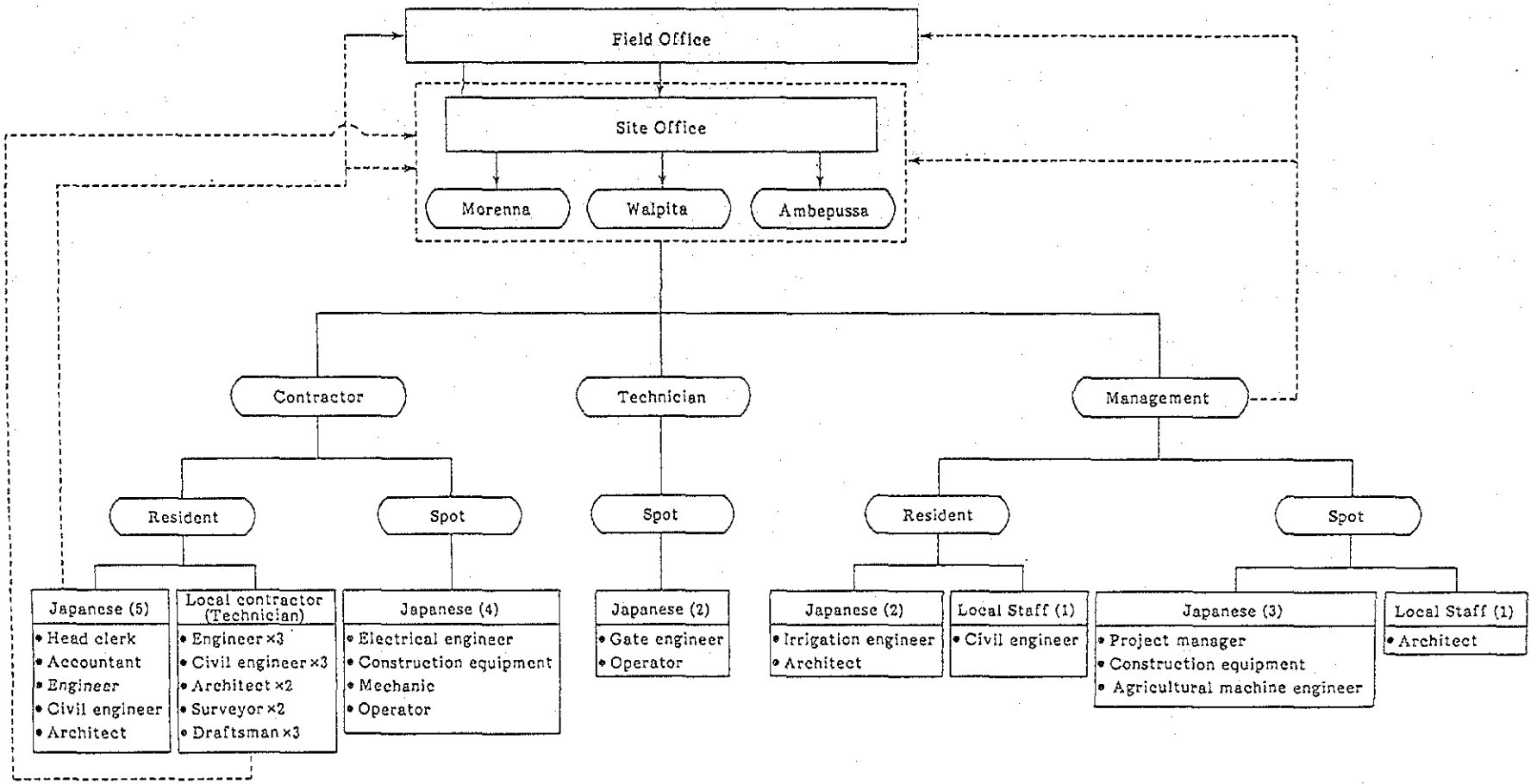


FIG. 6-2 WORK ITEMS BY PROJECT COMPONENT AND PHASE

The gate expert will oversee installation and testing of gates.

The electrical expert will be responsible for construction machinery and electrical work at the site.

The construction machinery operator will operate the bulldozer, backhoe, etc. A special operator will run the crawler crane and vibrohammer.

The building facility expert will be responsible primarily for power and water supply facilities.

The construction machinery mechanic will maintain the crawler crane, bulldozer and other heavy machinery.

Composition of the construction team will be 5 permanently assigned management personnel (office manager, accountant cum equipment and materials expert, building engineer, civil engineer and architect)

Construction supervision will be performed by 2 permanently assigned Japanese experts, and 1 permanently assigned Sri Lankan expert. The construction supervision structure is shown below.

The Field Office is to be established at the Gampaha Kachcheri. Lodgings for Japanese experts and a storage yard for equipment and materials will also be constructed on the same land. The Field Office will ensure enough space for permanently assigned contractors and Japanese experts to perform their required office duties. The Gampaha Kachcheri has been selected as the site for the office for the following reasons: i) availability of rent free land, ii) safety, iii) availability of communication facilities and iv) availability of water and electricity.

The Field Office ($A=200m^2$) and staff accommodations are to be brick. Although it would be conceivable to bring in a prefab unit from Japan which would be more speedily erected, construction costs would be higher. Consequently, Japanese experts will lodge in a hotel for the initial 4 months of Project implementation. The Field Office is intended to accommodate the Japanese experts for the 3 year period spanning stages I and II of construction.

Field Office Space

(i) Contractors

Japanese: office manager, accountant, construction engineer, civil engineer, architect, spot assigned experts (2)

Sri Lankan: accountant, construction materials expert, construction engineer, architect, miscellaneous duties, civil engineer (2), surveyor (2), testing (2), draftsman (2), QS (2), typist (2)

(Japanese: $8m^2 \times 7$ staff) + (Sri Lankan: $5m^2 \times 17$ staff) = $141m^2$

(ii) Consultant

Japanese: civil engineer, architect, spot assigned expert.

$10m^2 \times 3$ staff = $30m^2$

(iii) Conference room $2.5m^2 \times 10$ staff = $25m^2$

Total = $196m^2$

Accordingly, dimension of the facility is to be $5K \times 12K$ ($198m^2$).

Lodging Space

Permanently assigned experts: office manager, accountant, construction engineer, civil engineer, architect

Spot assigned experts: Peak is 6 persons. However, as such capacity is not needed for the bulk of the time, capacity is set at 3 persons.

Total staff = 3 + 5 = 8 persons

Accordingly, $2K \times 2K \times 3.3m2 \times 8$ staff = $106m^2$.

In addition, cafeteria ($33m^2$), kitchen ($21m^2$) cook quarters ($12m^2$) and hallway ($43m^2$) are to be included for a total $215m^2$.

Accordingly, total dimension of the facility is to be

$5K \times 13K \times 3.3m^2 = 215m^2$.

Site offices are to be established at Morenna, Walpita, and Ambepussa. Structure is to be prefab, of materials to be brought in from Japan. Prefab structure will permit the earliest possible erection of the offices thereby allowing prompt commencement of construction works.

Local consultant and experts will be permanently assigned to the offices. Employment of local technical staff will be indispensable for smooth communication between expatriate experts and Sri Lankan workers (who speak Singhalese).

Site Office Space

(i) Contractor

Japanese: civil engineer, architect

$2 \text{ staff} \times 8m^2 = 16m^2$

Sri Lankan: accountant, construction materials expert, construction engineer, architect, surveyor, QS, typist

$9 \text{ staff} \times 5m^2 = 45m^2$

(ii) Consultant

Sri Lankan: civil engineer, architect

$4 \text{ staff} \times 2.5m^2 = 10m^2$

$\text{Total} = 81m^2$

Accordingly, total dimension of the facility is to be

$4K \times 6K = 79m^2$

In carrying out the works, the contractor must cooperate closely with residents in and around the sites, as the bulk of construction is rehabilitation of existing structures having an effect on their ongoing daily lives.

The contractor must have ample experience, organization and capability of deploying required construction equipment and labor. This is essential given the technical challenges of Morenna anicut rehabilitation while the facility is in use, coffer dam construction, canal rehabilitation, construction works during the rainy seasons (April-June, September-November), etc.

FIG. 6-3 FIELD OFFICE AND LODGING

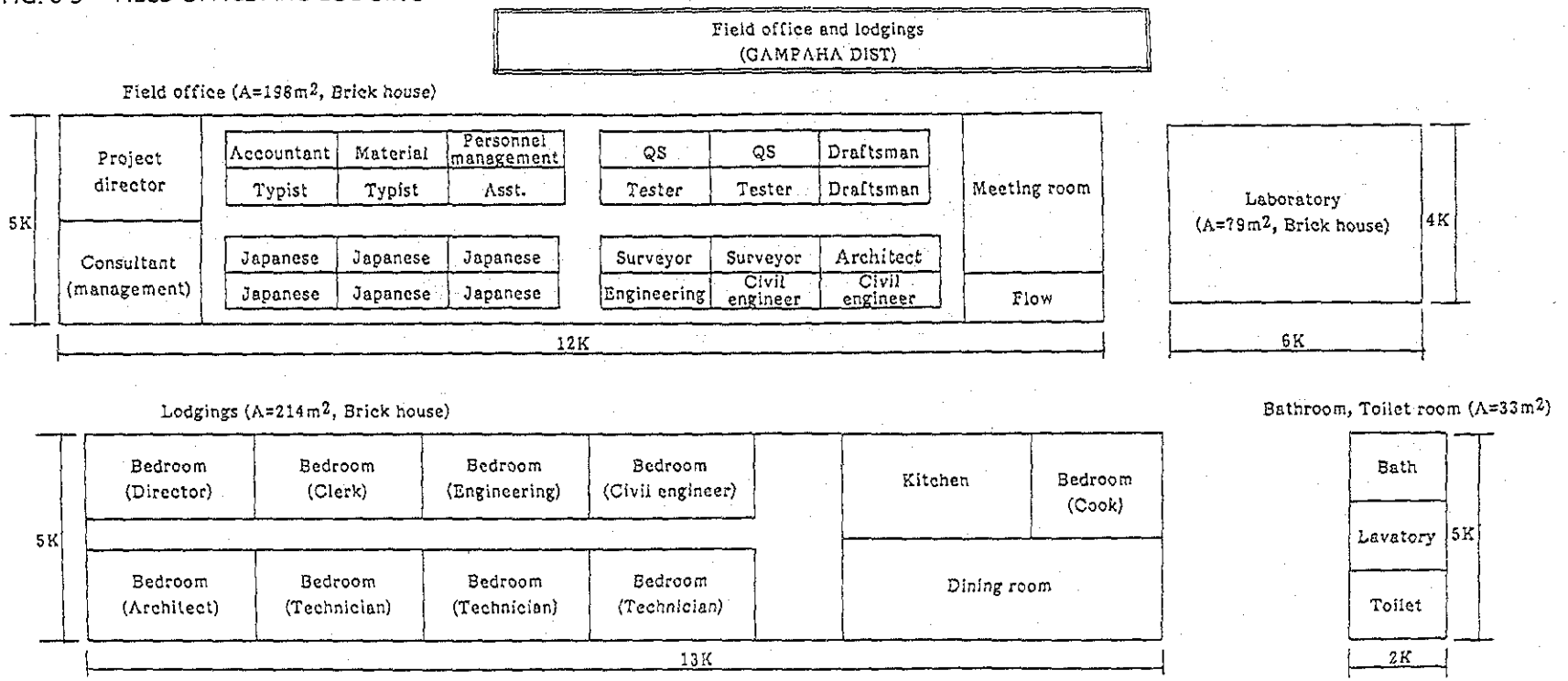
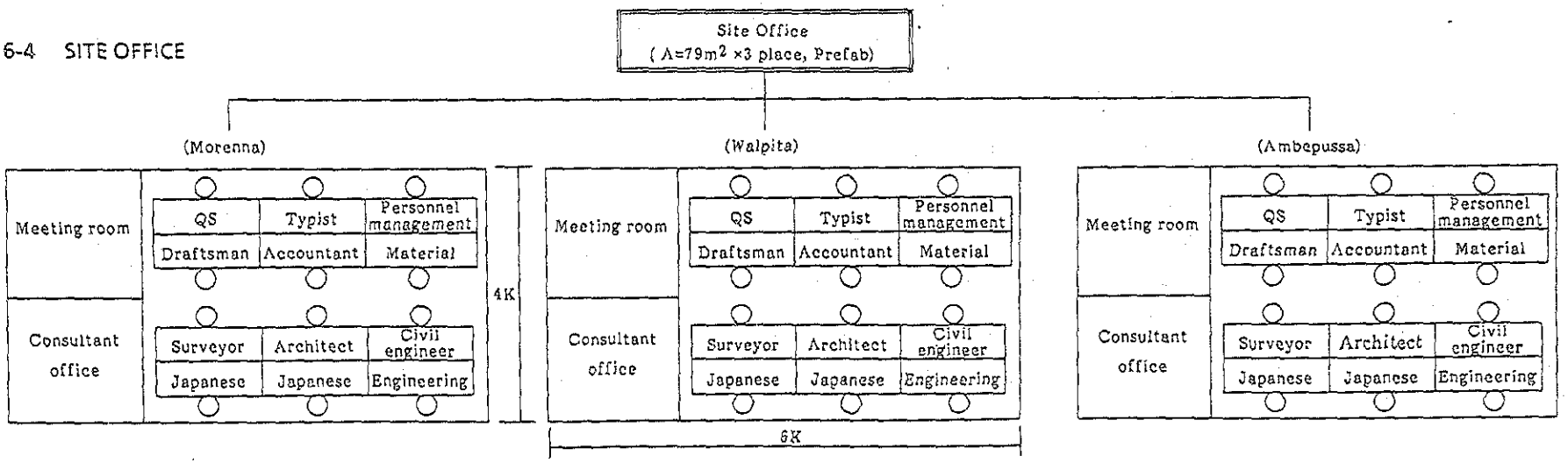


FIG. 6-4 SITE OFFICE



6-2-3 Construction Plan

(1) Schedule

The work will be carried out according to the attached schedule. Types of work are as follows.

TABLE 6-4 WORK ITEMS BY STAGE

STAGE I (Term : 16.5 Months)			STAGE II (Term : 18.0 Months)		
Temporary works			Temporary works		
Palu Oya Anicut	Civil	—	Morenna Anicut	Civil	—
L/B canal	Civil	—	R/B canal	Civil	—
Mec (Walpita)	Civil	Building	M/C canal	Civil	—
DTC (Walpita)	Civil	Building	ATT (Morenna)	Civil	Building
DTC (Ambepussa)	—	Building	DTC (Ambepussa)	Civil	Building
Equipment			ASS (All prefectures)	—	Building
			Equipment		

(2) Temporary Work (Palu Oya and Morenna anicuts)

Rehabilitation work at Palu Oya will be carried out first. Work sequence is to be as follows.

a. Concrete placing of temporary pier (upstream of Morenna headwork: H-piles + covering work

b. Access road (Morenna to Palu Oya, ℓ=440m)

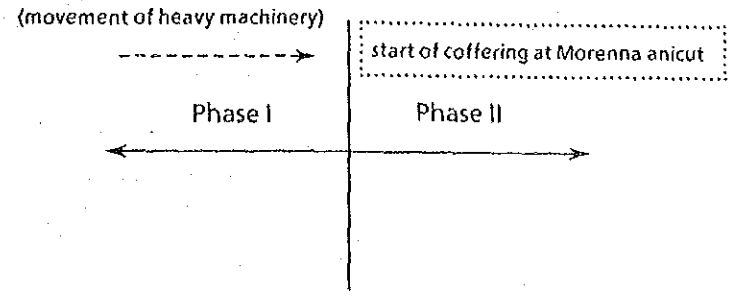
c. Cofferdam (steel pile, type II, double cofferdam) and slipway construction (downstream)

d. Removal work (concrete breaking at existing anicut)

e. Structural work (earthwork, cutoff pile, concrete placing)

f. Gate installation

g. Coffer dam removal



Rehabilitation work at Morenna anicut will be as follows:

a. Temporary pier (use of the one from Palu Oya)

b. Temporary diversion work, concrete breaking at existing spillway (heavy machinery deployed from Palu Oya)

c. Cofferdam (upstream, steel pile, type II, double cofferdam)

d. Slipway construction (between existing anicut and upstream coffer dam)

e. Access road embankment work

f. Cofferdam (downstream, steel pile, type II, double cofferdam)

g. Removal work (concrete breaking at existing anicut)

h. Structural work (anicut main body, gates)

i. Moving of coffer dam

j. Flood spillway construction

k. Coffer dam removal

(3) Machinery Use Plan

Construction machinery will be brought in from Japan (see list below and attached Construction Machinery Schedule).

TABLE 6-5 CONSTRUCTION EQUIPMENT

— Heavy Equipment —

Type	Capacity	Quantity
Crawler crane	35t	1
Vibro-hammer	40 kw	1
Generator	125 kvA 20 kvA	44
Back hoe	0.7 m3	2
Breaker		1
Dozer shovel	2.2m^3	2
Bulldozer	21t	1
Dump truck	8t	2
Submergible motor pump	+50 +100	20 10
Belt conveyor		10
Truck	8t	4
Mixer	0.5m^3	5

— General Equipment —

Type	Capacity	Quantity
Jeep (or wagon)		
Water Tanker		5
Welding machine	3,500l	1
Tamping rammer	300A	1
Reinforcing bar bender		3
Tool set		3 set
Compresser	3.5m^3	3
Tractor shovel	0.6	1
Truck crane	10t	1
※ Road roller	10t	1
※ Motor grader	3.2m	1

※ preparation in Sri Lanka

(a) Crawler Crane (35t, mechanical type × 1 unit)

The crane will be mainly used for the temporary pier work (upstream of Morenna anicut), and installation and removal of steel piles (cofferdam at Palu Oya and Morenna)

When not being used for the above, the equipment will be used for removing work and steel concrete work.

(b) Truck Crane (10t, hydraulic × 1 unit)

For auxiliary use with crawler crane for vibrating hammer works. The equipment will also be used at all sites for loading and unloading materials and as a wrecker, and for crane work at Ambepussa and Walpita. Accordingly, the equipment will be deployed for the duration of Stages I and II.

(c) Vibrating Hammer (electrical system, general type, 20kVA, 4 units)

For use on temporary pier, cofferdam, foundation cutoff and cofferdam removal work. The equipment will be deployed for the duration of the work.

(d) Diesel Generator (diesel drive, 125kVA x 4 units, 20kVA x 4 units)

TABLE 6-6 GENERATORS

KVA	Num	Purpose
125	1	Vibro-hammer, Welding machine
125	1	Channel work (Phase I : L/B, Phase II : R/B, M/C)
20	2	
125	1	Work for Walpita
	1	Work for Ambepussa
	1	Field Office
20	1	Water supply for Walpita
	1	Water Supply for Ambepussa

(e) Combo (hydraulic, crawler type, 0.7m3 x 2 units)

One unit is to be used for preparatory work at Palu Oya and Morenna anicuts, work in combination with the giantbreaker, and other structural construction work. The other unit is to be used for civil work at Ambepussa and Walpita.

(f) Dozer Shovel (2.2m3 x 4 units)

To be used for canal rehabilitation works. Four units are to be deployed for both Stages I and II.

(g) Bulldozer (21t x 2 units)

To be used for civil work at Walpita, Ambepussa and Morenna. One unit is to be used for temporary river diversion works, embanking and land preparation, while the other unit is for canal construction.

(h) Common Equipment

① Tank Lorry (3,800ℓ x 1 unit)

To be used as a water supply vehicle during construction. Necessary for concrete work.

② Concrete Mixer (drum capacity 0.5m^3 x 5 units)

TABLE 6-7 CONCRETE MIXERS

Work	Num.	Purpose
Anicut	1	Palu Oya, Morenna anicut works
Canal	2	Canal works
Walpita	1	Engineering & building work
Ambepussa	1	Engineering & building work

③ Jeep (vehicle for construction supervision to be calculated separately)

A total of 4 vehicles to be used at site office, Morenna, Walpita, Ambepussa and for ASS Scheme.

④ Dump truck (8t x 4 units)

For hauling materials and equipment.

⑤ Truck (8t x 4 units)

2 units for transporting labor and staff, 2 units for hauling materials and equipment.

⑥ Welder (AC arc welder, 300A x 4 units)

2 units for anicut construction, 1 unit each at Walpita and Ambepussa

⑦ Submersible Pump (15m head, ø50 1.5kW, ø100 5.5kW)

TABLE 6-8 SUBMERSIBLE PUMPS

D (mm)	Anicut	Canal	Walpita	Ambepus-sa	Total
100	2	4	2	2	10
50	4	8	4	4	20

Table 6-2 Construction Schedule. local staff · PHASE I

Works	Remarks	Year	1989							1990												1991												Total M/M
		Month	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	
Operation Eng.	Paluoya (1), Walpita (1) Ambepussa (1)					3												3																36
Civil Eng.	Anicut (1), Canal (1) Walpita (1)					3									3	1		1																33
Architec Eng.	Walpita (1) Ambepussa (1)					2												2																24
Surveyer	Paluoya (1), Walpita (1) Ambepussa (1)					2									2	1		1																21
Sub-Surveyer						4									4	2		2																42
Draftman	Paluoya (1), Walpita (1) Ambepussa (1)					3												3																36
Quantity Survey						1												1																12
Accountant						3												3																36
Materials						3												3																36
Typist						3												3																36
Tester						5												5																60
Miscellaneous						3												3																36
Guardman						3												3																36

Table 6-3 Construction Schedule local staff PHASE II

Works	Remarks	Year	1989							1990												1991											
		Month	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
												Total M/M																					
Operation Eng.	Morenna (1) Ambepussa (1)											28				2																	2
Civil Eng.	Anicut (1), Cannel 1 x 2 (2)											42				3																	3
Architec Eng.	Morenna (1) Ambepussa (1) ASS (1)											33				2								2	3								3
Surveyer	Morenna (1) Ambepussa (1)											28				2																	2
Sub-Surveyer												56				4																	4
Draftman	Morenna (1) Ambepussa (1)											28				2																	2
Quantity Survey	Morenna (1) Ambepussa (1)											14				1																	1
Accountant												42				3																	3
Materials												42				3																	3
Typist												42				3																	3
Tester												70				5																	5
Miscellaneous												42				3																	3
Guardman												42				3																	3

Table 6-9 Construction Schedule Works

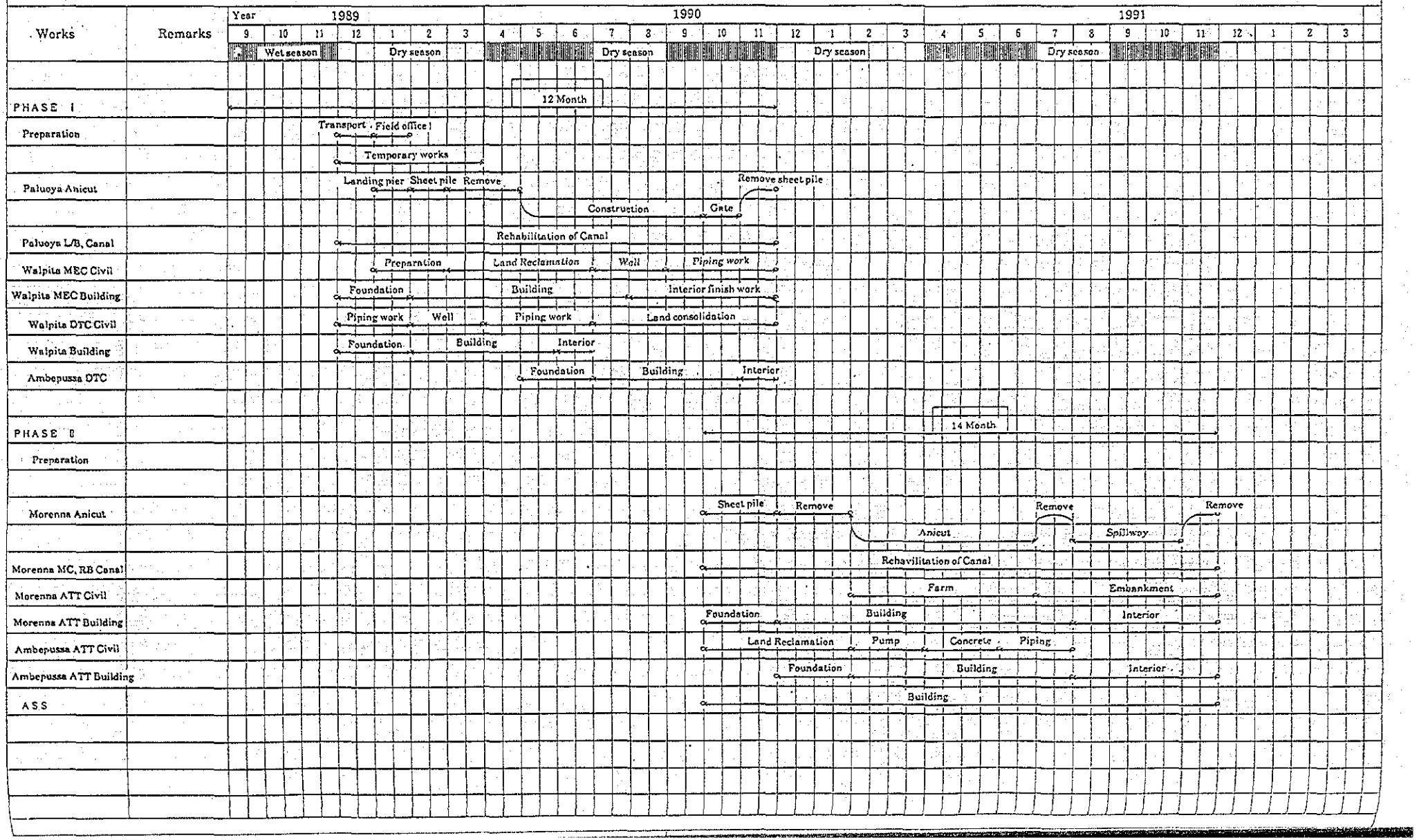


Table 6-10 Construction Schedule

Main Construction Equipment Arrangement

Works	Quantity	1989 9	10	11	12	1990 1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	1991 4	5	6	7	8	9	10	11	12	1	2	3
Crawler Crane	1					Vibro-work			Paluoya Anicut						Vibro		Vibro				Morenna-Anicut				Vibro		Spill-way					
Truck Crane	1					Vibro-work			Walpita Ambepussa						Vibro		Vibro				Building				Vibro		Building					
Backhoe	1					Paluoya Anicut															Morenna Anicut											
"	1					Walpita	Canal		Walpita			Canal			Walpita		Ambepussa		Canal			Ambepussa			Canal			Ambepussa				
"	1												Canal												Canal							
Dozer shovel	1					Canal			Paluoya			Canal			Paluoya				Canal			Morenna			Canal			Morenna			
"	1					Canal			Walpita			Canal			Walpita				Canal			Ambepussa			Canal			Ambepussa			
"	2											Canal													Canal							
Bulldozer	1					Walpita MEC									Walpita DTC				Ambepussa						Embankment of Morenna						
"	1								Canal													Canal										
Generator 125KVA	1								Paluoya Anicut										Morenna Anicut													
"	1								Ambepussa DTC										Ambepussa ATT													
"	1								Walpita MEC DTC										Morenna MC Canal													
"	1								Paluoya LB Canal										Morenna RB Canal													
"	1								Field office										Field office													

Table 6-11 Construction Schedule Construction Equipment Arrangement (PHASE I)

Works	Capacity	Machine-months
PHASE I		
Crawler crane	35TON	11
Truck crane	10TON	11
Vibro-hammer	40 KW	6
Generator	125KVA	55
Backhoe	0.7 m³	33
Giant breaker	700kg	4
Dozer shovel	1.3 m³	44
Bulldozer	21 TON	11
Bulldozer	21 TON	8
Water tanker	3,500ℓ	11
Mixer	0.5 m³	55
Light van	2,000cc	33
Concrete bucket	0.6 m³	11
Generator	20 KVA	44
Dump truck	8 TON	44
Truck	8 TON	44
Welding machine	300 A	44
Tamping rammer	60 kg	33
Belt conveyor	7 M	110
Submergible moter pump	4"	110
Submergible moter pump	2"	220
Compressor	5 m³/min	33
Breaker	20 kg	33
Vibrater	0.75 KW	110

Table 6-12 Construction Schedule Construction Equipment Arrangement (PHASE II)

Works	Capacity	Year	1989							1990												1991											
		Month	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
PHASE II												Machine-months																					
Crawler crane	35TON											12									①								①				
Truck crane	10TON											12																	①				
Vibro-hammer	40 KW											4													①								
Generator	125KVA											60																	⑤				
Backhoe	0.7 m³											36																	③				
Giant breaker	700kg											3									①												
Dozer shovel	1.8 m³											48																	④				
Bulldozer	21 TON											12																	①				
Bulldozer	21 TON											9														①								
Water tanker	3,500ℓ											12																	①				
Mixer	8.5 m³											60																	⑤				
Light van	2,000cc											48																	④				
Concrete bucket	0.6 m³											12																	①				
Generator	20 KVA											48																	④				
Dump truck	8 TON											48																	④				
Truck	8 TON											48																	④				
Welding machine	300 A											48																	④				
Tamping rammer	60 kg											36																	③				
Belt conveyor	7 M											120																	⑩				
Submergible moter pump	4"											120																	⑩				
Submergible moter pump	2"											240																	⑳				
Compressor	5 m³/min											36																	③				
Breaker	20 kg											36																	③				
Vibrater	0.75 KW											120																	⑩				

6-2-4 Supervisory Plan

(1) Basic Policy for Detailed Design

The following supplemental survey will be carried out to improve construction quality.

(i) Morenna

① Soil survey around anicuts (boring ℓ=20m, N value, C, φ)

② Determination of turnout sites along canals (consultations with Irrigation Department and Agrarian Services Department)

③ Detailed survey of canal crossing structures

④ Power source survey

⑤ Borrow pit survey (for canal embanking)

⑥ Confirmation of F/C length

(ii) Walpita

① Power source survey for DTC pump (capacity)

② Existing distribution pipe survey at DTC

③ Detailed survey of existing storage tank at DTC (structural dimensions)

④ Power source survey for MEC pump (2 sites)

⑤ Geologic survey for MEC conveyance pipe embedding

(iii) Ambepussa

① Power source survey for pump (2 sites)

② Survey for pipe embedding (farm water)

Design drawings, construction quantities, cost estimate and technical specifications will be prepared on the basis of the above supplemental survey.

The following tender documents will be prepared based on requirements of the Japanese Grant Aid Program, international procurement procedures, regulations, etc.

① Instruction to Tenderers

② Contract

③ General Conditions (proposed)

④ Special Conditions (proposed)

⑤ Technical Specifications (construction)

⑥ Technical Specifications (procurement)

⑦ Drawings

⑧ Bill of Quantities

(2) Detail Design Structure

The following experts will be deployed to carry out the above work.

TABLE 6-13 EXPERTS

Expert	Class	D/D	Implement-ation
1. Project Manager	2nd	field + home office	spot
2. Irrigation Engineer	3rd	field + home office	--
3. Irrigation Engineer	4th	field only	--
4. Irrigation Engineer	4th	--	permanent
5. Civil Engineer	4th	home office only	--
6. Building Engineer (facilities)	3rd	field + home office	spot
7. Architect	4th	field only	permanent (during building construction period)
8. Architect (draftsman)	4th	home office only	spot
9. Farm Machinery Engineer	3rd	home office only	spot
10. Local Engineer (civil)	--	--	permanent
11. Local Engineer (architect)	--	--	permanent (during building construction period)

(3) Implementation Supervision

Responsibility for implementation supervision will be assigned as follows:

(a) Support for tendering procedures → Project Manager

(b) Construction supervision → Irrigation Engineer and Architectural Experts

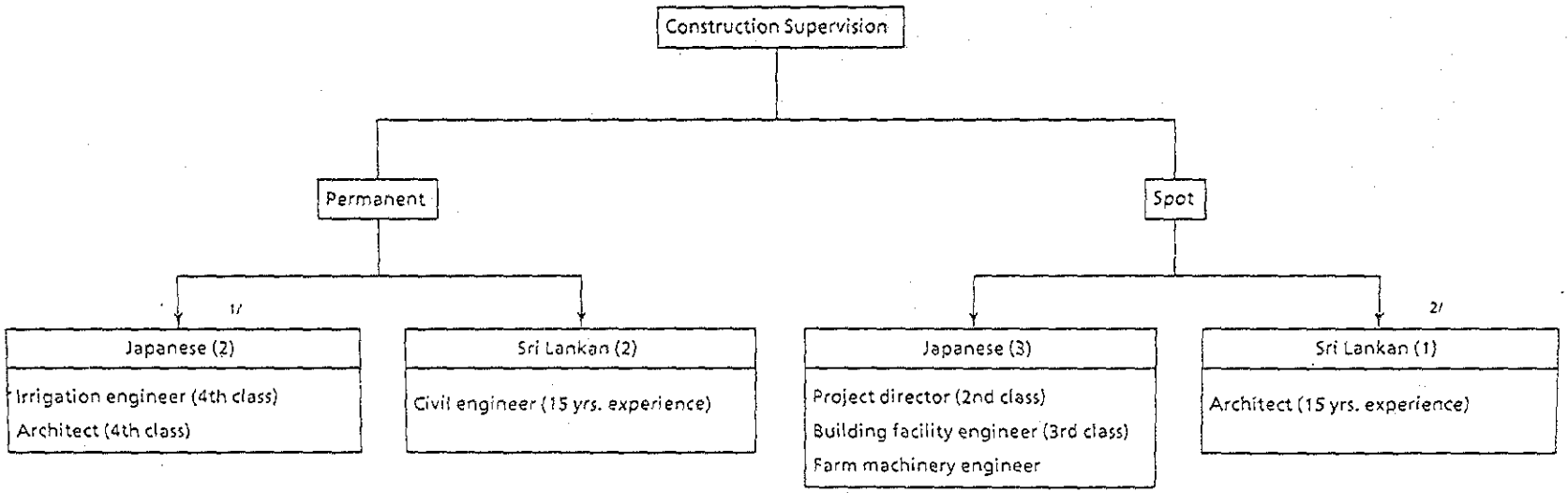
(c) Confirmation of factory inspection and shipping of equipment to be procured → Farm Machinery Engineer and Project Manager

(d) Interim and final inspections → Project Manager and permanently assigned experts

(e) Witnessing of operation test and handing over → Farm Machinery Engineer and Project Manager

The supervisory structure is outlined in Fig. 6-5.

FIG. 6-5 SUPERVISORY STRUCTURE



Note 1) Permanent assignment of 4th class experts for supervision is considered adequate given the nature of the work. Architect is to be permanently assigned only during the building construction period.
Note 2) Highly qualified local engineers will be permanently (or spot) assigned, receive transfer of technology in O/M, and also provide input regarding local practices and techniques.

6-2-5 Scope of Construction Work

Construction works to be borne by the Sri Lankan side are as follows:

① Removal of existing structures

② Power and water supply to site (including for construction)

③ Fencing, telephone works, etc. following completion of construction

Construction works by stage to be borne by the Japanese side are as follows:

(1) Stage I

(i) MEC Scheme

① Shallow well, pump and conveyance pipe (2 sites including 2 pump houses)

② Seedling farm (A=22,000m^2), irrigation facilities

③ Seed farm (A=33,360m^2), irrigation facilities

④ Facilities for seedling farm and office

-- Soil treatment yard (2)

-- Nursery bed (34)

-- Drying yard (2)

-- Office (1)

-- Watchman's quarters (1)

-- Garage (1)

(ii) DTC Scheme (Walpita)

① Shallow well, pump and conveyance pipe (including 1 pump house)

② Storage tank and distribution pipe

③ Training farm (A=27,400m^2) irrigation facilities

④ DTC construction

-- Workshop (1)

-- Garage (1)

(iii) DTC Scheme (Ambepussa)

① Road, etc

② Shallow well, pump and conveyance pipe

③ DTC construction

-- Workshop (1)

-- Garage (1)

(iv) MMI Scheme

① Temporary bridge and access road

② Palu Oya anicut (rehabilitation)

③ L/B main and branch canals and appurtenant structures (rehabilitation)

(2) Stage II

(i) ATT Scheme (Morenna and Ambepussa)

① Intensive cropping model farm (Morenna)

② Improved drainage model farm, drainage canals and embanking (Morenna)

③ ATT Center (Morenna)

-- ATT Center office (1)

-- Guardhouse (1)

-- Workshop (1)

-- Watchman's house (1)

-- Garage (1)

-- Drying yard (1)

-- Pumphouse (1)

④ Upland crops model farm (Ambepussa)

- Water source facilities, conveyance pipe (including pump house)
- Building facilities
  - -- Farm office (1)
  - -- Garage (1)
  - -- Watchman's house (1)
  - -- Soil treatment yard (1)
  - -- Drying yard (1)
  - -- Nursery bed yard (1)
  - -- Greenhouse (1)

(ii) MMI Scheme

① Morenna anicut

② R/B main and branch canal

③ M/C main and branch canal

④ Drainage canal

(iii) ASS Scheme

① Storehouse (14)

6-2-6 Material and Equipment Procurement

Material and equipment to be procured under the Project can be classified as follows:

(i) Construction materials and equipment:	To be procured locally and in Japan
(ii) Farm machinery:	To be procured in Japan (with consideration to problems of procurement, and repair and maintenance service
(iii) Vehicles:	To be procured in Japan (less expensive)
(iv) Others:	To be procured in Japan (due to difficulty in procurement locally)

Construction materials and equipment (i above) will be procured as follows:

(a) Local procurement

Cement (imported), aggregate, rebar, lumber (except special lumber for buildings where necessary), brick, fuel, electrical parts (British make)

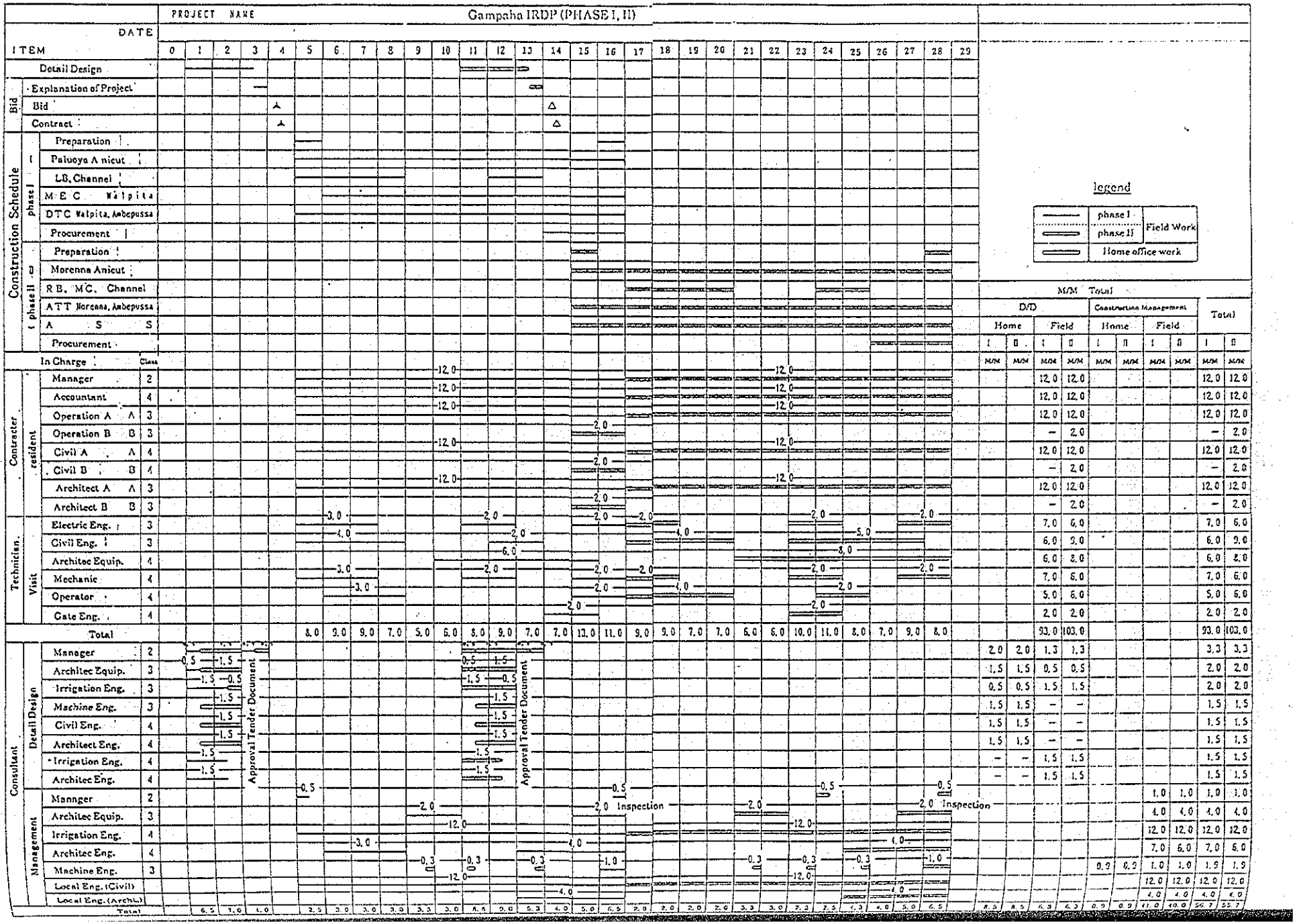
(b) Procurement in Japan

Items for which problems exist for local procurement, items for which quality poses a critical problem (gates, pumps, pipes), and steel piles, steel covering sheets and H-stakes for temporary work.

6-2-7 Implementation Schedule

Refer to following Implementation Schedule.

Table6-14 Implementation Schedule



6-2-8 Preliminary Project Cost Estimate

Portion to be borne by the Sri Lankan side is as follows.

TABLE 6-15 Unit : Million yen

Item	Amount
1. Acquisition of construction sites	0
2. Compensation	0
3. Power to site	0
4. Phone to ATT main bldg. and Seedling Production Center Office	1
5. Fencing after construction completion (that during construction is responsibility of contractor	6
6. Import tariffs on procured equipment and materials	81
Total	88

Construction machinery brought in from off-shore is to be exempt from import duties on the condition that said machinery will be taken back out of the country upon completion of construction.

Operation and maintenance costs to be borne by the Sri Lankan Government under the Project are estimated at ¥ 23.5 million (Rs 5.94 million) per annum.

CHAPTER 7 PROJECT EVALUATION AND CONCLUSION

7-1 Benefit of the Project

The purpose of the Project for improvement of agricultural production as a part of IRDP is raising farm income and increasing employment opportunities. As measures to attain the purpose, 5 schemes are to be implemented. The following effects are expected by implementation of the Project.

(1) Improvement of Agricultural Production and Raising of Farm Income

Three model farms are planned under the ATT Scheme. The model farms will be directly managed by farmers utilizing intensive agriculture practices under the guidance of experts in farm management. Productivity for paddy is expected to increase about 1.5 -2.0 times. In addition, the productivity of the fields themselves will be increased through introducing okra, beans etc., as dry season crops in paddy fields. Improvement of productivity is targeted as well at the farmer level in the Morenna model irrigation area. According to trial calculations at current prices, average farm income per household is expected to jump from 2,800 Rs / year to 3,500 Rs / year. The direct beneficiaries will be 16 families (68 persons) on the 2.1 ha of the intensive model farm, 22 families (54 persons) on the 3.5 ha of the improved drainage model farm, and 836 families (5,521 persons) on the 390 ha of the Morenna model irrigation area.

Another benefit will be brought by introducing minor export crops to coconut fields, i.e., coffee and pepper will be intercropped with coconut. This will be effective in raising farm income by an estimated Rs 13,800 (in coffee based farming) ~ Rs 28,000 (in pepper based farming) per ha. At the national level, the increase of minor export crops will earn foreign exchange. Cropping under the MEC Scheme will be increased by 600 ha / year in the first phase (first 5 years).

ESTIMATED FARM INCOME BY FARM SIZE

Farm Size	Present (Rs.)		Projected (Rs.)	
	Gross Income	Net Income	Gross Income	Net Income
10 Acres	35,930	17,866	209,720	144,824
4 Acres	15,868	7,752	113,585	79,040
1.2 Acres	7,051	3,222	39,423	23,649
0.5 Acre	3,212	1,667	16,222	11,205
0.25 Acre	444	282	3,840	2,895

(2) Increased Employment Opportunities

Intensive cultivation in paddy fields and upland fields and introduction of minor export crops and upland crops into coconut fields will increase employment opportunities including family labor, and promote income increases. At the upland crops model farm, agricultural production will be carried out in currently unused fields, creating employment opportunities for 24 full-time workers and 20 part-time workers. An additional effect will be the extension of new upland cropping technology to farmers.

(3) Other Specific Benefits

The following specific benefits will accrue from the Project:

① Increased rice production

② Increased exports from minor export crops

③ Increased production of upland crops

Benefit ① will contribute to achieving self-sufficiency in rice production for the District. Benefit ② will contribute to increased farm income as well as national foreign exchange earnings from exports. Benefit ③ will serve to raise the level of self-sufficiency in upland crops which is currently at around 10%. Effective use of existing farmland under the Project is expected to provide a model for cultivation of various upland crops including beans and other vegetables, thereby diversifying and enriching the rural diet.

(4) Ripple Effect

As a part of the IRDP, the Project is not limited to direct benefits to farmers in scheme areas. Rather, the significance of the Project lies in extending benefits of new technologies developed under the Project to all farmers in the District. It is planned to strengthen the operations of the existing agriculture extension and agrarian supporting services, such as the Extension Section of the Agriculture Department, the Agrarian Services Department, and the Agriculture Development Authority. These agencies, in addition to conventional activities of delivering seeds, fertilizers, etc., through the 26 AS centers located in the District, will be equipped under the Project to extend farming practices developed under the ATT, MEC and MMI schemes. Technical guidance performed by these agencies and the demonstrative effect of the Project will significantly contribute to the dissemination of modern agricultural techniques in the District.

At the DTC's under the Training and Education Section of the Agriculture Department, young future farmers will be trained who will be at the vanguard of agriculture in the District in the years to come. Improvement of educational facilities and procurement of training equipment and materials will allow for accelerated training of District farmers, serving to even out skewed levels of farming technology existing between areas within the District. Graduates of the centers will comprise the farmer base familiar with modern farming necessary to

make extension under the Project model schemes effective. Training at the centers will also encourage the cultivation of minor export crops.

(5) Other Effects

Rising farm income will stimulate the rural economy and facilitate local economic development. At the same time it is expected to promote rural development by promoting self-help efforts by the farmers themselves.

In addition, training in small-scale vegetable cultivation and home economics for women at the DTC's will contribute to improved nutrition in rural areas and is well in keeping with the national nourishment improvement plan by the Sri Lankan Government.

7-2 Conclusions and Recommendations

As described in 7-1, the benefits expected from the Project are many. ATT, MMI and MEC schemes will bring direct benefits to farmers in the respective scheme areas. Benefits of the Project will be further spread throughout Gampaha District through demonstration in the model areas, the ASS and DTC schemes.

Operation and management of the Project will be coordinated under the Regional Development Division of MPI. This entity has already implemented IRDP's in 15 districts acquiring broad experience and good results, thereby being in a position to effectively lead and supervise the agencies concerned under the Project.

Success of the Project, however, will require the vigorous support of the Sri Lankan Government at all levels. It is also important that the farmer support program including continuation of farm subsidies by the Minor Export Crops Department be aggressively pursued. Especially, it is necessary to fully support farmers at the initial stage in the realization of the Project.

As can be seen in the Walpita area, there are already farmers in the District triple cropping in paddy field (paddy + vegetables + fruits), and intercropping pineapple, pepper, etc. in coconut field. The Sri Lankan Government should lend its vigorous support to such efforts wherever possible, particularly in view of the highly fragmented nature of land holdings in the District.

The Sri Lankan Government has requested technical cooperation of Japan for implementing the Project. Since Japan has much experience in the effective use of paddy fields in rural areas near urban centers, as the Project area is characterized, and intensive cultivation, the requested cooperation can be readily realized. It is anticipated that the Project disseminate cropping practices beneficial to the area. It is also the firm hope of the Japanese Government that implementation of the Project will deepen the ties of friendship between Sri Lanka and Japan.

At the commencement of the Project, it is hoped that the Sri Lankan Government will move vigorously to procure construction sites, expedite the import of materials and machinery, and take the necessary budgetary measures for the costs to be borne by the Sri Lankan side.

APPENDICES

1. Members of Survey Team
2. Survey Schedule
3. Members List of Sri Lankan Party
4. Minutes of Discussion
5. Basic Design Drawings

APPENDIX - 1 MEMBERS OF SURVEY TEAM

1-1 Basic Design Survey

(1)	Team Leader	Hajime Takeuchi	All Japan Engineers Association for Irrigation, Drainage and Reclamation Director of Planning
(2)	Project Coordination	Yoshikatsu Nakamura	Deputy Head, First Basic Design Study Division, Grant Aid Planning and Survey Dept., JICA
(3)	Rural Development Plan	Fumio Tamura	CKCI
(4)	Irrigation Facilities Design	Kuniki Iwata	CKCI
(5)	Architectural Design	Naofumi Honma	CKCI
(6)	Cultivation Technology	Izumi Iikawa	CKCI
(7)	Farm Management and Training	Hiromasa Minakami	CKCI

1-2 Explanation of Draft Final Report

(1)	Team Leader	Toshio Okubo	Design Department, Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries Deputy Director
(2)	Rural Development Plan	Fumio Tamura	CKCI
(3)	Irrigation Facilities Design	Kuniki Iwata	CKCI
(4)	Farm Management and Training	Hiromasa Minakami	CKCI

APPENDIX - 2 SURVEY SCHEDULE

2-1 Basic Design Survey

1.	Jan. 9	Mon.	Leave Tokyo for Singapore
2.	Jan. 10	Tue.	Leave Singapore for Colombo
3.	Jan. 11	Wed.	Courtesy visit and meeting at MPI, ERD, Embassy, and JICA office
4.	Jan. 12	Tue.	Courtesy visit and meeting at MADR and MLLD, Explanation of the Inception report to MPI and the officials concerned
5.	Jan. 13	Fri.	Explanation the inception report to the Gampaha District Office and the officials concerned
6.	Jan. 14	Sat.	Observation of vegetables, fruits and flower market
7.	Jan. 15	Sun.	--
8.	Jan. 16	Mon.	Discussion on minutes of meeting, Start site survey
9.	Jan. 17	Tue.	Same as above
10.	Jan. 18	Wed.	Discussion on rehabilitation with Deputy Director of Irrigation Dept. at Horenna Anicut site
11.	Jan.19	Thu.	Signing of minutes by MPI Secretary and Mr. Takeuchi, the team leader
12.	Jan.20	Fri.	Site survey, Messrs. Takeuchi and Nakamura leave for Japan
13.	Jan. 21	Sat.	National holiday, site survey, internal meeting
14.	Jan. 22	Sun.	--
15.	Jan. 23	Mon.	Site survey, discussion with MPI, land survey
16.	Jan. 24	Tue.	Same as above
17.	Jan. 25	Wed.	Same as above
18.	Jan. 26	Thu.	Discussion with Add. Secretary of Ministry of Development and Research
19.	Jan. 27	Fri.	Observation of Matale MEC Training Center and Dilpitaya Subcenter built by IRDP
20.	Jan. 28	Sat.	Land survey, materials adjustment

21.	Jan. 29	Sun.	—
22.	Jan. 30	Mon.	Observation of AS Center, site survey
23.	Jan. 31	Tue.	Same as above
24.	Feb. 1	Wed.	Same as above
25.	Feb. 3	Thu.	Preparation of monthly report, site survey
26.	Feb. 3	Fri.	Submission of monthly report to JICA office, site survey, observation of DTC built by IRDP
27.	Feb. 4	Sat.	Site survey
28.	Feb. 5	Sun	—
29.	Feb. 6	Mon.	Discussion with Agriculture & MEC Dept's at Kandy, land survey
30.	Feb. 7	Tue.	Site survey
31.	Feb. 8	Wed.	Site survey, interim report to JICA director
32.	Feb. 9	Thu.	Discussion with Irrigation Dept., site survey
33.	Feb. 10	Fri.	Site survey
34.	Feb. 11	Sat.	Same as above
35	Feb. 12	Sun	—
36.	Feb. 13	Mon.	Site survey
37.	Feb. 14	Tue.	Discussion with MPI Director, materials adjustment
38.	Feb. 15	Wed.	Materials adjustment, internal meeting (General Election)
39.	Feb. 16	Thu.	Materials adjustment (Curfew all day)
40.	Feb. 17	Fri.	Report to MPI, Embassy, JICA office
41.	Feb. 18	Sat.	Meeting with Gempaha District Office
42.	Feb. 19	Sun.	Leave Colombo for Bangkok
43.	Feb. 20.	Mon.	Leave Bangkok for Tokyo

2-2 Explanation of Draft Report

1.	Apr. 20	Thu.	Leave Tokyo for Bangkok
2.	Apr. 21	Fri.	Leave Bangkok for Colombo Courtesy called to MPPI, contact with Japan Embassy and JICA office
3.	Apr. 22	Sat.	Submittal and explanation of Draft Final Report to MPPI and concerned agencies/officials
4.	Apr. 23	Sun.	
5.	Apr. 24	Mon.	Response to questions from MPPI officials, courtesy call to Vice Minister, Ministry of Agriculture, discussions with ERD; signing of Minutes
6.	Apr. 25	Tue.	Discussions with MPPI; visit to Gampaha District
7.	Apr. 26	Wed.	Discussions with MPPI
8.	Apr. 27	Thu.	Discussions with ID, ERD, MPPI; report to Japanese Embassy and JICA office
9.	Apr. 28	Fri.	Leave Colombo for Bangkok
10	Apr. 29	Sat.	Leave Bangkok for Tokyo

APPENDIX - 3 MEMBERS LIST OF SRI LANKAN PARTY

3-1. Sri Lankan Side

Ministry of Finance and Planning			
Mr.	S. Weerapana	Asst. Director	External Resource Dept.
Ministry of Plan Implementation			
Mr.	R. Paskaralingam	Secretary	
Dr.	V. Ambalavanar	Additional Secretary	
Mr.	Chandrasena Maliyadde	Director	Regional Development Div.
Mr.	R.B. Morapaya	Additional Director	Regional Development Div.
Mr.	K. Jayalath	Deputy Director	Regional Development Div.
Mr.	Jagathsoma Talpawila	Assistant Director	Regional Development Div.
Dr.	Jan Olsson	Advisor	Regional Development Div.
Mr.	J.A.M. Karnaratna	Dty. Director	Planning, Gampaha
Mr.	S.B. Gonagalla	Asst. Director	Planning, Gampaha
Mr.	D.B. Tennakoon	Asst. Director	Planning, Gampaha
Mr.	Luxman Hewapanna	Asst. Director	Planning, Gampaha
Ministry of Lands and Land Development (MLLD)			
Mr.	A.A. Wijethunge	Secretary	
Mr.	E. Vijilta de Silva	Deputy Director	(Phy)
Mr.	Rangith Ratnayaki	Deputy Director	(IMD)
Mr.	S.S. Ranatunge	Deputy Director	(IMD)
Irrigation Department, MLLD			
Mr.	K.D.P. Perera	Director	
Mr.	K.D.A.H. Nanayakkara	Deputy Director	Colombo Range
Mr.	T. Sivapathan	Deputy Director	(Engineering Materials)
Mr.	S.P.P. Gamage	Irrigation Engineer	Gampaha
Mr.	E.M.D. Ekanayaka	Add. Irrig. Engineer	Gampaha
Mr.	G.P. Sumathipala	T. A. Morenna	Gampaha
Mr.	Vidhyasekara	Work Supervisor	Gampaha
Ministry of Agricultural Development and Research (MADR)			
Mr.	N.K.K. Weragoda	Secretary	
Mr.	U. Sapukotana	Additional Secretary	
Mr.	J. Alwis		Development Division
Department of Agriculture, MADR			
Dr.	Edward Suraweera	Deputy Director	Economics & Projects
Mr.	Nihal Atapattu	Economist	Economics & Projects
Mr.	S. Wirasinghe	deputy Director	Extension
Mr.	W. Ratnayake	Deputy Director	Extension
Mr.	M.D.A. Perera	Assistant Director	Extension, Gampaha
Mr.	Ananda de Mel	Deputy Director	Training & Education
Mr.	G.B. Navaratne	Agricultural Officer	Vocational Training
Mr.	T.B. Tennakoon	Officer in Charge	DTC, Ambepussa
Mrs.	Alagiyawanna	Officer in Charge	DTC, Walpita
Mr.	P. Yatawara	Research Officer	ARTI
Mr.	G.M. Henegidare	R & T Officer	ARTI
Department of Agrarian Services, MADR			
Mr.	H. Gunasekera	Deputy Commissioner	
Mr.	B.M.A. Basnayake	Asst. Commissioner	Gampaha
Mr.	K.G. Leelananda	Asst. Commissioner	Gampaha
Department of Minor Export Crops, MADR			
Dr.	S. Kathirgamathaiyah	Director	
Mr.	A.S. Tennekoon	Deputy Director	
Mr.	D.I.D.J. Abeysekara	Asst. Director	Gampaha
Mr.	W. Sinipale	E.O.	Gampaha
Mr.	T.B. Senanayake	Asst. Director	Matale Training Center
Mr.	P. de A. Gurusinghe	Senior Asst. Director	Research, Matale
Mrs	Malinie Senanayake	Research Officer	Research, Matale
Mr.	Padmasiri Perera	R. O. (Post Harvest)	Research, Matale
Agricultural Development Authority, MADR			
Mr.	P.B. Rajakaruna	Dty. Prov. Director	Gampaha
Mr.	S. Wattuhewa	A.D.A. (Training)	
Western Province and Gampaha District			
Mr.	W. Ekanayake	Chief Secretary	Western Province
Mr.	M.S. de Silva	Government Agent	Gampaha
Mr.	S. Jayaweera	Additional G. A.	Gampaha

Position and Title: as of January 1989

3-2. Japanese Side

Embassy of Japan		
Mr.	Yasuya HAMAMOTO	Ambassador Extraordinary and Plenipotentiary
Mr.	Toshihisa TAKATA	Counsellor
Mr.	Kazuhiko MARUYAMA	First Secretary (Basic Design Survey)
Mr.	Shin MURAKAMI	First Secretary (Explanation of Draft Final Report)
Mr.	Masashi SAKURAMATA	Second Secretary
Mr.	Yoshio KANZAKI	Third Secretary
Japan International Cooperation Agency, Sri Lanka Office		
Mr.	Jiro HASHIGUCHI	Resident Representative (Basic Design Survey)
Mr.	Hideo YASUKI	Resident Representative (Explanation of Draft Final Report)
Mr.	Hiroshi NIINO	Assistant Resident Representative

APPENDIX - 4

4-1 Basic Design Survey

Minutes of Discussions
on
the Integrated Rural Development Project
for
Gampaha District
in
THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

In response to a request from the Government of the Democratic Socialist Republic of Sri Lanka, the Government of Japan has decided to conduct a Basic Design Study (the Study) for the Integrated Rural Development Project in Gampaha District (the Project), and entrusted the Study to the Japan International Cooperation Agency (JICA). JICA sent to the Democratic Socialist Republic of Sri Lanka the study team headed by Mr. Hajime Takeuchi, Chief of the Planning Department, All-Japan Engineers' Association for Irrigation, Drainage and Reclamation, from January 10th to February 19th, 1989.

The team had a series of discussions on the Project with the officials concerned of the Government of the Democratic Socialist Republic of Sri Lanka, and conducted field survey in the relevant areas to the Project.

As a result of the survey, both parties agreed to recommend to their respective governments, that the major points of understanding reached between them, as attached herewith, should be examined towards the realization of the Project.

Hajime Takeuchi
Team Leader,
JICA

R. Paskaralingam
Secretary,
Ministry of Plan Implementation

Colombo,
January 19, 1989

Attachment

1. The objective of the Project is to increase agricultural production and to diversify cropping patterns, and consequently to increase rural income, thereby helping to achieve targets envisaged in the Project.

2. The components of the Project are the following five (5) schemes:

A. Agricultural Technology Transfer Scheme (ATT)

The scheme is aimed at transfer of cultivation technology through the establishment of a model paddy farm at Morenna area, and a model upland farm at Ambepussa. A section to oversee the entire project will be created at the Agricultural Technology Transfer Center.

B. Minor Export Crop Promotion Scheme (MEC)

The scheme is aimed at technical guidance and extension activities to farmers in the district in the cultivation of minor export crops through the establishment of a facility at Walpita for seedling production, demonstration and training.

C. Scheme for Improvement of Agricultural Supporting System (ASS)

The scheme is aimed at revitalization of extension services through strengthening of facilities, and equipment and materials inventories at agrarian service centers in the district.

D. Scheme for Improvement of Agricultural Training System (DTC)

The scheme is aimed at improvement of the training system of young farmers and extension workers in farm management through strengthening of facilities, and equipment and materials inventories at the district training centers (DTC) at Walpita and Ambepussa.

E. Morenna Model Irrigation Scheme (MMI)

The scheme is aimed at expediting improvement of beneficiary farmers' income by implementing renovation of existing anicuts and main irrigation facilities at Morenna.

3. The sites for the Project are shown in *Annex I.*

4. In order to ensure proper implementation and effective operation and maintenance of the Project, the Sri Lankan Government arranged the organizational, personnel and budgetary setups as shown in *Annex II*, where it was further assured that the Ministry of Plan Implementation through its Regional Development Division will be responsible for the execution and monitoring of the Project throughout implementation, operation and maintenance stages.

5. To implement the Project defined in the above, the Sri Lankan Government requested the Japanese Government to provide facilities and equipment for the respective schemes under the Japan's Grant Aid Program. Such facilities and equipment include the following:

A. Agriculture Technology Transfer Scheme (ATT)

1. Agriculture technology transfer center

- Center building and facilities
- Farm machinery
- Equipment
- Vehicles

2. Model farm for intensive paddy-field farming at Morenna

3. Model farm for upland crop farming at Ambepussa

B. Minor Export Crop Promotion Scheme (MEC)

1. Nursery farm

- Farm office and facilities
- Farm machinery
- Equipment
- Vehicles

2. Mixed cropping model farm

C. Scheme for Improvement of Agricultural Supporting System (ASS)

1. Vehicles for agricultural supporting services

2. Fertilizer Storage

D. Scheme for Improvement of Agricultural Training System (DTC)

1. Walpita District Training Center

- Facilities for training farm
- Farm machinery
- Workshop, garage, lecture hall and hostel
- Training equipment
- Vehicles

2. Ambepussa District Training Center

- Facilities for training farm
- Farm machinery
- Workshop, garage, lecture hall and hostel
- Training equipment
- Vehicles

E. Morenna Model Irrigation Scheme (MMI)

1. Renovation of Morenna and Palu Oya anicuts

2. Rehabilitation of irrigation and drainage facilities

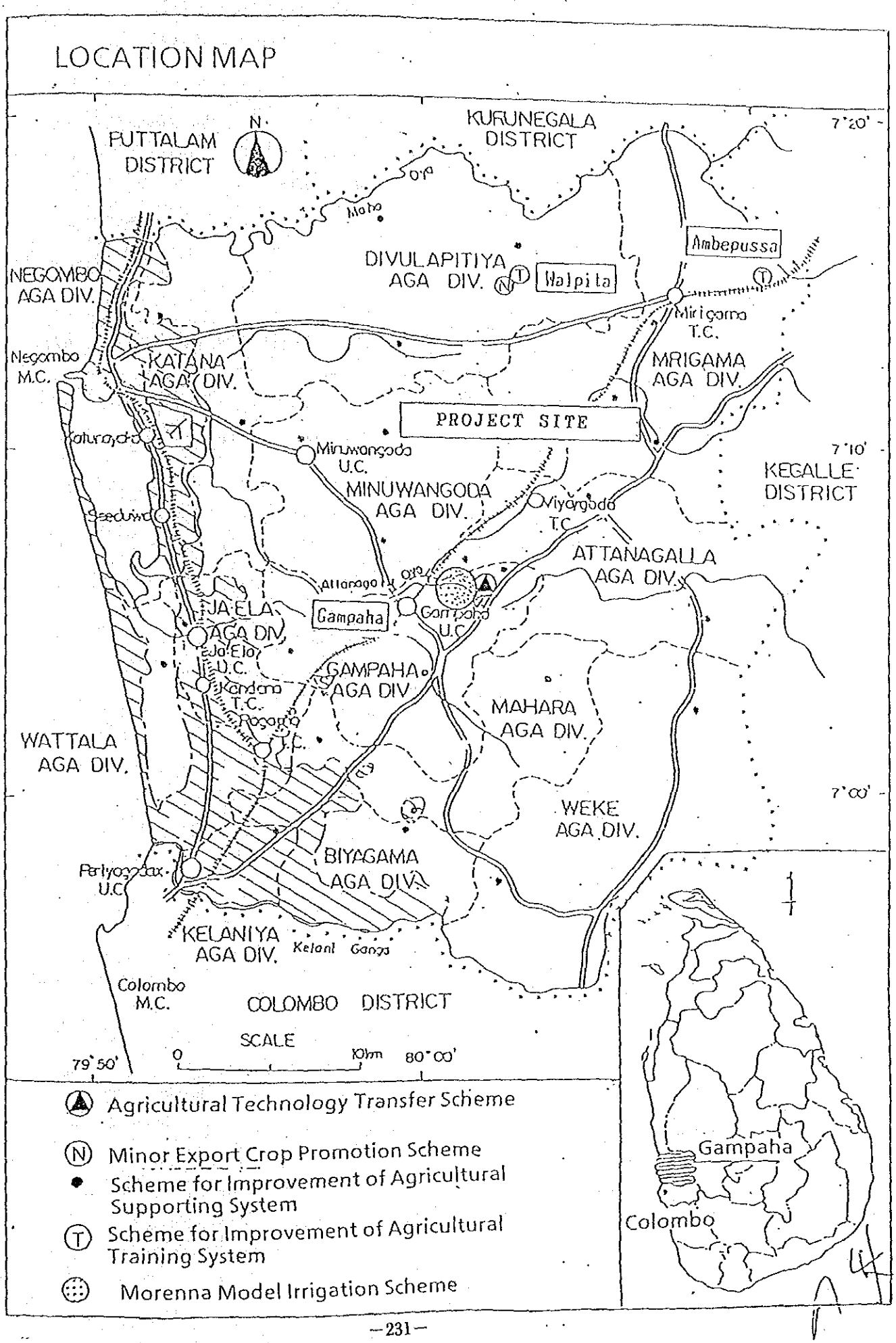
3. Equipment for operation and maintenance

It was noted, however, that the optimum quantities and scales of such schemes will be determined in the Basic Design Study.

6. It was further requested by the Sri Lankan Government to provide the Technical Cooperation of Japan to help achieve the expected target of the Project. The Study Team commented that, to operate the Project facilities effectively, the Sri Lankan Government might request a technical cooperation involving such expertises as water management, cultivation technology and farm machinery.

7. The Sri Lankan Government understood the Japan's Grant Aid system as explained by the Team.

8. To safeguard the proper implementation of the Project, the Sri Lankan Government will extend the undertakings as itemized in *Annex III*.


LOCATION MAP
PUTTALAM DISTRICT
KURUNEGALA DISTRICT
7°20'
Maho
Ambepussa
DIVULAPITIYA AGA DIV.
Walpita
NEGOMBO AGA DIV.
Mirigama T.C.
Negombo M.C.
KATANA AGA DIV.
MRIGAMA AGA DIV.
PROJECT SITE
Minuwangoda U.C.
7°10'
KEGALLE DISTRICT
MINUWANGODA AGA DIV.
Seeduwa
Viyagoda T.C.
ATTANAGALLA AGA DIV.
Attanagalu Oya
Gampaha
Gampaha U.C.
JA-ELA AGA DIV.
Ja-Ela U.C.
Kandana T.C.
Ragama T.C.
GAMPAHA AGA DIV.
MAHARA AGA DIV.
WATTALA AGA DIV.
7°00'
WEKE AGA DIV.
BIYAGAMA AGA DIV.
Peliyagoda U.C.
KELANIYA AGA DIV.
Kelani Ganga
Colombo M.C.
COLOMBO DISTRICT
SCALE
0
10km
79°50'
80°00'
Agricultural Technology Transfer Scheme
Minor Export Crop Promotion Scheme
Scheme for Improvement of Agricultural Supporting System
Scheme for Improvement of Agricultural Training System
Morenna Model Irrigation Scheme
Gampaha
Colombo

PROPOSED INTEGRATED RURAL DEVELOPMENT PROJECT FOR
GAMPAHA DISTRICT
ORGANIZATIONAL SET-UP

The organization and management of the proposed Gampaha district IRDP would be similar to the other IRDPs co-ordinated by the Ministry of Plan Implementation at present. There are 14 ongoing District IRD Projects funded by bi-lateral and multi-lateral agencies. These projects have been in operation for 8-10 years.

National Level:

At this level the Ministry of Plan Implementation through its Division of Regional Development would undertake the overall co-ordination in planning and implementation. Direct responsibility for implementation of the various project components will be assigned to the relevant line agencies.

At the national level a Project Steering Committee will be set up with the Secretary, Ministry of Plan Implementation as the Chairman and the Director, Regional Development as member Secretary of the committee. Other members of the Committee would be

1. Director, External Resources
2. Director, National Planning
3. Director, Agriculture
4. Director, Irrigation
5. Director,Minor Export Crops
6. Commissioner, Agrarian Services
7. General Manager, Coconut Cultivation Board

This Committee will monitor overall progres periodically and help to resolve inter Ministry/Departmental bottlenecks. The RDD of the Ministry of Plan Implementation while co-ordinating the planning and implementation process will monitor the progress at each level. A senior officer attached to RDD would be serving as the liason officer for the Gampaha Project. This work of the Regional Development Division will have the assistance of the Policy Planning Unit and the Monitoring and Evaluation Unit, both of which have guidance of foreign consultants.

Contd../2.

District Level:

The general supervision and co-ordination of the project will be the responsibility of the Project Office/Project Director under the guidance of the Project Co-ordinating Committee and with the support of Regional Development Division of the Ministry of Plan Implementation. This Committee will be chaired by the Govt.Agent/Chief Secretary and the Project Director who is a senior officer under the Ministry of Plan Implementation would be member Secretary.
Other members of the Committee will be

1. Assistant Director, (Agriculture)(Extension) Gampaha District.
2. Assistant Director, Agricultur (Training) - Makandura.
3. Assistant Commissioner, Agrarian Services, Gampaha.
4. Irrigation Engineer, Gampaha District
5. Regional Manager, Coconut Cultivation Board, Gampaha
6. Assistant Director, Minor Export Crops, Gampaha
7. Deputy Director, [illegible] Agricultural Deve. Authority.
8. Assistant Director, Land Reform Commission
9. Head of Agricultural Technology Transfer Centre

At the Project Co-ordinating Committee, the progress of each agency will be periodically reviewed and any bottlenecks would be resolved. The Govt.Agent who becomes the Head of the Co-ordinating Committee functions as the Deputy Head of the Line Departments. Further as the Chairman of the District Agricultural Committee be commands authority in all activities regarding agricultural Development.

The District Project Office headed by a Deputy Director of the MPI as the Project Director will have the assistance of 3 Assistant Directors and about 60 Development Officers/Plan Implementation Officers stationed at different AGA Divisions. The responsibility of the Project Office will generally include the preparation and revision of the annual work programme and preparati of quarterly reports and consolidation of Project Accounts.

Divisional Level:

At the Divisional Level the Asst. Govt. Agent who is directly under the Govt. Agent would be the co-ordinating officer. The field level officers of line departments stationed at Division level who are the implementors will co-ordinate both with the AGA and the District Heads of the respective Departments.

...3/-

A Divisional Level Operational Committee will be set up under the chairmanship of AGA. Members of the Committee will be

1. Plan Implementation Officers/Development Officers at Divisional Level. (one of these officers will be functioning as member Secretary)-
2. Agricultural Instructor-Extension
3. Agricultural Instructor-Training
4. Divisional Officer,Agrarian Services
5. Coconut Cultivation Officers
6. Minor Export Crops Extension Officer
7. Technical Officer,Irrigation.

Operation and Maintenance;

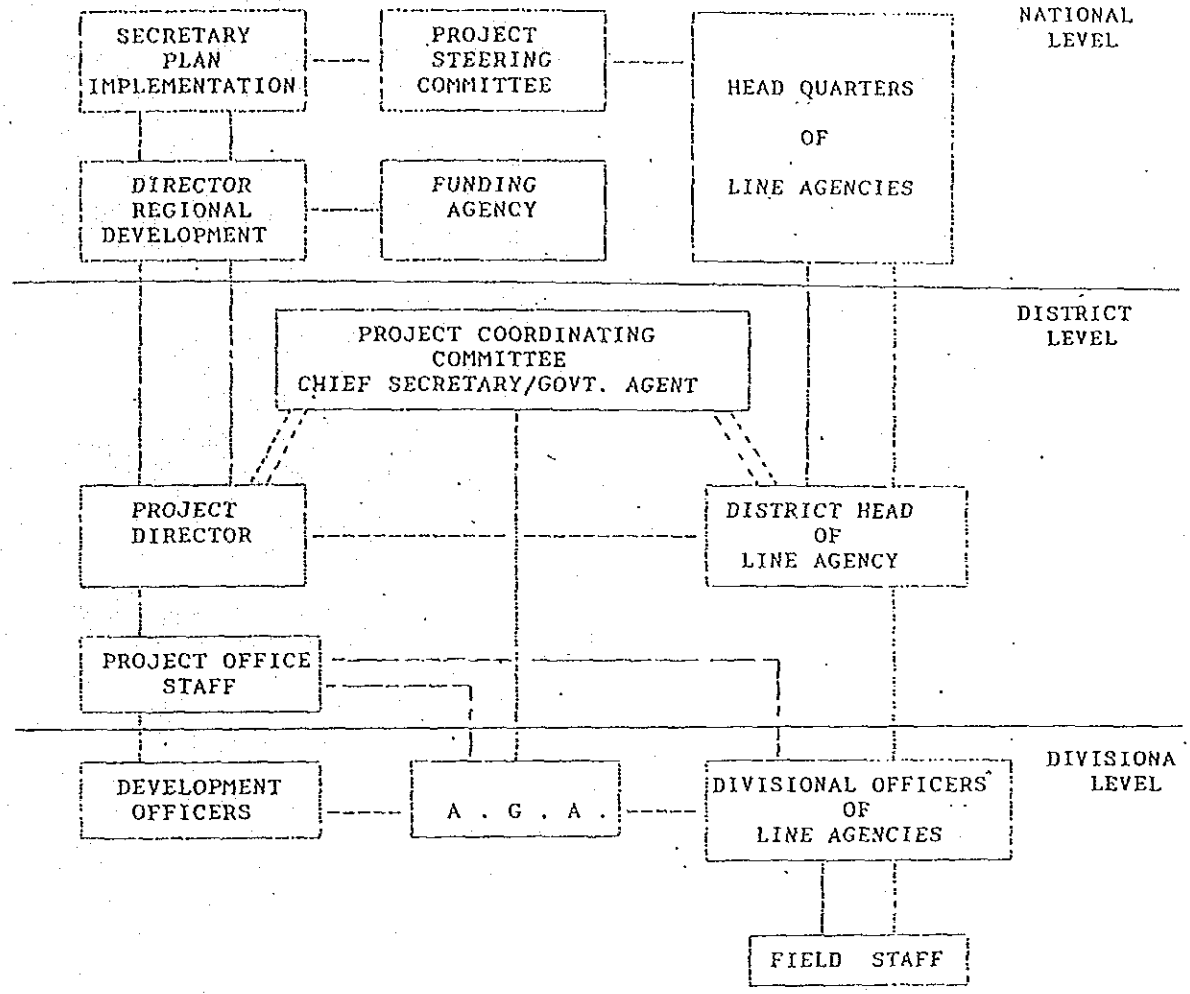
With the completion of the Project the Ministry of Plan Implementation undertakes to ensure proper planning,operation and the maintenance through the respective Departments by doing the periodical evaluations. The provision of funds necessary for operation and maintenance, will be made available by the respective ministries for the respective Departments.

However, the implementation and maintenance of the Project activities will still be under the guidance of the District Agricultural Committee which is statutory body constituted under the chairmanship of the Govt.Agent. District Agricultural Committee (DAC) has authority to supervise and control all agricultural activities in a District. Since the Gampaha District IRDP is totally in the field of agriculture all activities come under the purview of the DAC. The members of the DAC will include all District heads related to Agriculture, the Asst. Govt Agents and members of parliament in the District. The Project Office will function in a advisory capacity with regard to project activity to the DAC.

The Divisional Level operational committee will continue to function as co-orinator at the Divisional Level, under the Direction of the DAC. Through this committee the AGA, will direct the field level officers, of all line departments in the implementation and maintenance.

s.w./17/01/89.

ORGANIZATION SET-UP FOR
PROPOSED GAMPAHA IRDP



Annex-III

Required arrangements to be undertaken by the Sri Lankan Government are as follows:

1. To secure land necessary for the construction of the facilities and to clear, fill and level the site as needed prior to the commencement of construction.

2. To provide facilities for distribution of electricity, telephone, water supply and drainage and other incidental facilities to the Project site.

3. To construct and prepare the access road to the Project site.

4. To ensure prompt unloading, tax exemption and customs clearance at port of disembarkation in Sri Lanka of construction materials and equipment purchased under the grant.

5. To exempt Japanese nationals engaged in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in Sri Lanka with respect to the supply of the products and services under the verified contracts.

6. To accord Japanese nationals whose services may be required in connection with the Project under the verified contracts such facilities as may be necessary for their entry into Sri Lanka and their stay therein for the performance of their work.

7. To maintain and use properly and effectively the facilities constructed and equipment purchased under the grant aid.

8. To bear all the expenses, other than those to be borne by the grant, necessary for the construction of the facilities.

4-2 Explanation of Draft Report

Minutes of Discussions

on

the Draft Report of the Basic Design Study

on

the Integrated Rural Development Project

for

Gampaha District

in

THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

In response to the request of the Government of the Democratic Socialist Republic of Sri Lanka, the Government of Japan decided to conduct a basic design study on the Integrated Rural Development Project for Gampaha District (hereinafter referred to as "the Project") and entrusted the study to Japan International Cooperation Agency (JICA). JICA sent to Sri Lanka the Basic Design Study Team headed by Mr. Hajime Takeuchi, Director, Planning Department, All-Japan Engineers' Association for Irrigation, Drainage and Reclamation, from January 9th to February 20th, 1989. The Basic Design Study Team carried out a field survey and had a series of discussions on the Project with the officials concerned of the Government of the Democratic Socialist Republic of Sri Lanka headed by Mr. R. Paskaralingam, Secretary to the Ministry of Plan Implementation (the present Ministry of Policy Planning and Implementation), the Government of the Democratic Socialist Republic of Sri Lanka.

As a result of the survey and discussions, JICA prepared a Draft Report on the Study and despatched to the Democratic Socialist Republic of Sri Lanka a Mission for Explanation of Draft Report headed by Mr. Toshio Okubo, Deputy Director, Design Department, Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries from April 20th to 29th, 1989.

Both parties had a series of discussions on the Report and have agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards realization of the Project.

Colombo, April 24, 1989

大久保寿夫

Toshio Okubo
Leader,
Mission for Explanation
of Draft Report, JICA

V. Ambalavanar

for R. Paskaralingam
Secretary,
Ministry of Policy Planning
and Implementation.

Witness : C. Maliyadde

C. Maliyadde
Director,
Regional Development Division
Ministry of Policy Planning
and Implementation

ATTACHMENT

1. The Sri Lankan side agreed in principle to the basic design proposed in the Draft Report.

2. The Final Reports (10 copies in English) on the Project will be submitted to the Sri Lankan side in mid-June 1989.

3. The Sri Lankan side understood system of Japan's Grant Aid Program and confirmed the arrangements to be taken by the Government of the Democratic Socialist Republic of Sri Lanka for realization of the Project as agreed upon in the "Minutes of Discussions" dated January 19th, 1989.

4. The Government of the Democratic Socialist Republic of Sri Lanka will release necessary budget at the proper time according to the construction schedule.