

**MAHAWELI DOWNSTREAM SUPPORT PROJECT**  
**PROJECT ASSISTANCE COMPLETION REPORT**

OFFICE OF PROJECTS

JULY 1993

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# MAHAWELI DOWNSTREAM SUPPORT PROJECT

## PROJECT ASSISTANCE COMPLETION REPORT

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### Basic Project Identification Data:

1. **Country:** Sri Lanka
2. **Project title:** Mahaweli Downstream Support Project
3. **Project Number:** 383 – 0103
4. **Funding:** AID: grant \$ 2,000,000  
loan \$ 13,000,000  
B/G: \$ 20,100,000
5. **Project dates:** Project paper approved: July 17, 1987  
Project agreement signed: August 28, 1987  
PACD: Original August 31, 1992  
Final December 31, 1992
6. **Implementing Agency :** Government of Sri Lanka  
Mahaweli Engineering and Construction Agency
7. **Technical Assistance Contractor:** Development Alternatives, Inc.  
Washington D.C.
8. **Evaluation:** Final Assessment: August 1992
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MAHAWELI DOWNSTREAM SUPPORT PROJECT (383-0103)

PROJECT ASSISTANCE COMPLETION REPORT

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## ACRONYMS

AID	Agency for International Development
DAI	Development Alternatives, Inc.
FAR	Fixed Amount Reimbursement
GSL	Government of Sri Lanka
LOP	Life of Project
MARD	Mahaweli Agriculture and Rural Development
MBD	Mahaweli Basin Development
MDS	Mahaweli Downstream Support
MEA	Mahaweli Economic Agency
MECA	Mahaweli Engineering and Construction Agency
OFC	Other Field Crops
O & M	Operation and Maintenance
PACD	Project Assistance Completion Date
PIL	Project Implementation Letter
TA	Technical Assistance
US	United States

## MAHAWELI DOWNSTREAM SUPPORT PROJECT

### BACKGROUND

The development of the Mahaweli River Basin included six major irrigation systems. In 1985, System B--the last major initiative planned for 40,000 hectares of irrigated land was in the initial stage of development. AID had made a major commitment to the development of System B, having already provided \$ 120 million for the design and construction of the concrete lined main and branch canals under the MBD projects, Phases I and II. In addition, AID's Mahaweli Sector Support Loan had provided \$ 50 million to meet the cost of the infrastructure development of the Mahaweli Headworks.

To bring the left bank of System B to full potential, AID proposed two linked projects as the final phase of its contribution to the Mahaweli infrastructure development. The Mahaweli Downstream Support (MDS) Project was designed to finance the construction which would complete the tertiary irrigation and settlement infrastructure in Zone 4A of System B. The development of Zone 4A was essential to realize a return on AID's MBD investments in 30 km of main and branch canals. Constructing the infrastructure which allowed irrigated agricultural production was a necessary pre-condition to obtaining full benefits of the left bank of System B.

The Mahaweli Agriculture and Rural Development (MARD) Project, which is the "linked" project of MDS, was designed to move new settlers into high yielding paddy production, and from paddy to more profitable diversified crops for domestic and foreign markets.

### PROJECT GOAL AND PURPOSE

The development goal of the MDS was to obtain the maximum possible economic benefits from the land and water resources available to settler families on the left bank of System B.

The purpose of the project was to put in place the downstream infrastructure in Zone 4A which would complete the infrastructure development of the left bank in System B.

## EXECUTIVE SUMMARY

The physical infrastructure targets of the MDS project were the completion of the tertiary irrigation system (distribution, field, and drainage canals), road network, settlement dwellings and the buildings required for social and administrative functions of the new settlements. In addition, the project would complete critical infrastructure needs such as roads and reservoirs in other zones of System B.

In August 1987, USAID signed the MDS project agreement with the GSL. The project was implemented through the GSL's Mahaweli Engineering and Construction Agency (MECA), which is an agency under the Mahaweli Authority of Sri Lanka. MECA provided technical and administrative inputs required for project implementation and was responsible for management of the construction and settlement programs.

Project activities commenced in 1988. The major ongoing constraint affecting the implementation of the project has been sporadic terrorist incidents. These terrorist activities were sometimes directed against construction contractors and MECA staff, resulting in the death of several MECA staff members, contractor personnel, and local farmers. Even in times of relative calm, these incidents affected the willingness and performance of construction contractors and MECA personnel.

Construction targets were re-defined in 1990 to focus work exclusively in the safe areas of Zone 4A. Blocks 402, 403 and about half of Block 401 were removed from the work plans. This resulted in the reduction by approximately half of the originally planned construction targets. The re-defined works were confined to the blocks 404, 405, and the southern half of Block 401. In spite of the security problems, the construction targets of the MDS project as modified and revised in 1990, have been largely met by the PACD. Approximately 2000 farmer families were settled with the provision of full irrigation facilities, and the social and administrative infrastructure facilities are essentially completed. A significant achievement was the revision of the land use plan which improved the farm layouts and provided better equity of land quality to settlers. Also, these revisions, in turn, resulted in the increase of settler incomes.

The revised land use plan called for improving the main outlet drains as a remedy for the imperfectly drained soils in Zone 4A. However, because of their close proximity to unstable parts of Zone 4A, the improvements to the main drain outlets could not be completed. The MDS Final Assessment Report recommended that these drains must be completed by the GSL.

## 1. CONSTRUCTION

### 1.1. Activities

The following construction related activities were to be carried out under the MDS project.

(a) Design of the irrigation system and revision of land use plan in Zone 4A.

(b) Construction of the tertiary irrigation system:

Distributary canals .....	140 km
Field canals .....	310 km
Farm-level drainage canals .....	370 km
Turnout drains .....	420 km
Jungle clearing .....	5770 ha
Development of farm plots .....	4520 ha

(c) Construction of the road network in the settlement areas:

Paved market roads.....	65 km
Un-paved hamlet roads.....	210 km

(d) Construction of settlement areas:

Township.....	1 No.
Area Centers .....	2 Nos.
Village Centers .....	2 Nos.
Hamlets .....	15 Nos.

(e) Settlement implementation:

Basic social infrastructure facilities (primarily dwellings and supply of water) to settle 4515 farmer families.

### 1.2. Financing Process

The MDS construction was financed under the Fixed Amount Reimbursement (FAR) rules. MECA implemented the construction primarily through contracts with local contractors. Because of GSL budget constraints, an advance funding mechanism was set up in March 1990. Amounts to be advanced were determined based on a quarterly construction program submitted by MECA. As old advances were liquidated by actual expenditures, MECA applied for new advances to meet the next quarter's requirements.

### **1.3. Progress**

Because of the security problems, the rate of construction progress was low during the first two years of the project. However, the rate of progress improved during the last two years of the project as a result of the following measures:

(a) A risk allowance was paid to MECA staff and to the survey crew who were required to work in certain areas.

(b) USAID agreed to an overall increase of 35% of all construction estimates. This increase was in turn passed on to the local construction contractors as an incentive for working in certain areas.

(c) USAID met with Secretary to the Ministry of Lands Irrigation and Mahaweli Development several times and stressed the need for improved security measures in the project areas. As a result of these meetings troops were deployed to construction sites to allow construction to progress.

The above measures contributed substantially to accelerate construction in Blocks 404 and 405. However, no construction work could be commenced in Blocks 402, 403, and northern portion of Block 401, because of their close proximity to unstable parts of the country ( See Figure 2).

### **1.4. Re-defined construction targets**

Because of security issues, construction targets were re-defined in 1990 to focus work only in the safe areas of Zone 4A and to drop those areas which were considered too dangerous to work in. Accordingly, Blocks 402, 403, and about half of Block 401 were removed from the work plans. This resulted in a substantial reduction in the original construction targets. Construction and maintenance of farm level drainage canals had been shifted to farmer responsibility. (See page 5 of this report for re-defined targets).

### **1.5. Status at the PACD**

(a) **Revision of land use plan and design of tertiary irrigation system:** Under the MDS, a revised land use plan was developed and implemented in the Blocks 404, 405 and 401. This revised land use plan differed from the conventional land use plans practiced in other Mahaweli Systems. The main feature of the revised land use plan was the increase in the extent of homestead plots from 0.2 hectare to 0.4 hectare ( see Section 6.1 under project accomplishments).

**(b) Construction of tertiary irrigation system:**

**Status as follows:**

	original target	re-defined target	achieved at PACD
Distributary canals	140 km	63 km	55 km
Field canals	310 km	138 km	128 km
Farm level drainage canals	370 km	0*	0 *
Turnout drains	420 km	184 km	126 km
Jungle clearing	5770 ha	2625 ha	2625 ha
On-farm development	4520 ha	2000 ha	1780 ha

**(c) Road network:**

Market roads	65 km	29 km	23 km
Hamlet roads	210 km	92 km	80 km

**(d) Settlement centers:**

Town	1	0	0
Area center	2	1	1
Village center	2	1	0
Hamlets	15	9	8

**(e) Settlements:** 1935 farmer families and 600 non-farmer families have been settled in Zone 4A at the PACD.

Appendix A is a listing of completed construction sub projects as of the PACD.

**1.6 Construction works outside Zone 4A**

Two PILs were also issued for construction in other Zones of System B. These were the drainage canal improvements in Zones 1 and 5 and improvements to Pimburettewa and Aralaganwila Tanks (reservoirs) in Zone 5. The drainage canal improvements were dropped subsequently in the course of re-structuring construction sub-projects. Improvements to the Pimburettewa and Aralaganwila Tanks were completed satisfactorily.

**1.7 Re-structuring of construction sub projects**

On a recommendation made by the MDS Project Assessment concluded in August 1992, the construction sub-projects were re-structured in October 1992. Under the re-structuring process, the activities of 26 sub-projects for which PILs had been issued were

re-allocated to 86 new sub-projects. The purpose of this restructuring was to designate construction sub projects by functional elements as required by PIL 6. Also, the restructuring facilitated increased reimbursements to the GSL. A complete listing of re-structured sub-projects is presented in Appendix B.

### 1.8 Hamlet roads

The project required the construction of 92 km of hamlet roads as part of social infrastructure provided to new settlers. At the PACD, 80 km of these roads had been completed by MECA. However, reimbursements for these roads were denied by USAID because MECA had not followed the proper sequence of steps required for financing construction under FAR method.

## 2. USAID FUNDING AND GSL CONTRIBUTION

The funding requirements under the original project loan agreement were as follows.

LOP funding	USAID	\$ 15.0 Million
	GSL	\$ 20.1 Million

### 2.1 USAID funding

A major portion\* of the construction cost of the following items was met by USAID funds. This include:

- (a) Tertiary irrigation systems, including distributary canals, field canals, drainage canals, and flood control measures.
- (b) Road networks which included market and hamlet roads.
- (c) Minor tanks (reservoirs).

In addition, the following were 100 percent funded by USAID:

- Technical assistance to implement MDS
- Commodities to MECA needed for project activities
- Overseas training to MECA staff, and
- Project evaluations.

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\* Originally USAID agreed to fund 74 percent of the cost of the above. However, because of the devaluation of the Rupee against the Dollar, the USAID portion of the above costs was increased to 85 percent from March 1990.

Each of these activities is discussed in later sectors of this report.

## 2.2 GSL contribution

GSL funds were utilized to meet 26 percent of the total construction cost of the tertiary irrigation system and the road network (later reduced to 15 percent). The GSL funded 100 percent of the total cost of land clearing, on-farm development, settlement assistance, and the construction cost of social and settlement infrastructure. As required by the project agreement, the GSL also financed the engineering and administrative costs associated with the construction activities, settlement assistance, local salaries of the MECA staff, in-country training, office space, and housing for the TA contractor.

## 2.3 Actual Expenditure

The redefined construction targets (Section 1.4) resulted in a substantial reduction of expenditure from the originally planned LOP expenditure.

Actual expenditure is as follows:

USAID	\$ 5,002,109	
GSL	\$ 7,600,000	( as verified by Mission Controller)

In April 1993, the projects loan and grant agreement was amended to revise the project financial plan as follows.

USAID	\$ 5,580, 051
GSL	\$ 7,500, 000

## 2.4 Unresolved Financial Issues

A PIL will be issued after the Terminal Disbursement Date (TDD) to de-obligate remaining funds.

Also, the Mission is negotiating with the GSL to recover an amount of \$ 8,025, the cost of training of a non-returnee who was sent on a study tour under the MDS.

## 3. TECHNICAL ASSISTANCE

The project agreement called for one technical assistance contractor for both the MDS and MARD projects. A contract was signed with the DAI, following accepted AID contracting procedures. The contract provided one long-term expatriate advisor to serve as chief of party for both projects and a long term expatriate advisory position under MDS for an irrigation

engineer, to be assisted by three local engineers. However, it was not possible to fill the long-term engineer position because, acceptable candidates could not be found who were willing to work under the difficult security conditions that prevailed in the MDS project areas. This position was replaced by U.S. engineers on short-term assignments and by increasing the responsibilities of the three locally hired engineers.

The DAI contract budget was divided into two parts.

Budget A: MARD     \$ 10,110,177

Budget B: MDS     \$ 1,439,422

Technical Assistance under MDS were reimbursed monthly under Budget B. Approximately 16 percent of the Chief of Party's time was billed to budget B.

A summary of TA assignments is provided in Appendix B to this report.

#### 4. TRAINING

The project agreement called for in-country and overseas training for MECA staff. Training was provided to MECA staff in construction management and technical aspects of irrigation engineering with relation to drainage and flood control.

##### 4.1 In-country training

In-country training (workshops and lectures) was offered to MECA staff by the DAI resident team and short-term consultants. Informal on-the-job instructions and guidance through seminars were also provided by the consultants. The need for such training was identified through discussions between the TA team and MECA site staff. Day-to-day training in blocking-out for drainage, general drainage design, and quality control for construction management was provided to MECA staff.

**Computer training:** In-country computer training was organized and provided to MECA staff by DAI on computer aided design and "AutoCAD" plotting for the design of the tertiary irrigation systems and blocking-out of farm plots.

**Workshops:** Over the course of the MDS project, five workshops were conducted under MDS or joint MDS/MARD auspices.

A listing of the computer training and the variety or purposes of the workshops held are presented in Appendix D to this report.

## 4.2 Overseas training

Four training tours were organized and funded under MDS. The main purpose of these tours was to expose MECA engineers to irrigation and drainage projects in other countries that were similar to projects envisioned in System B, and to become familiar with the methods that were used in the design, construction, and implementation of those projects.

Participants on these tours were selected on the basis of their work assignments in MECA. They were required to pass USAID's language competency examination and were further required to be located in System B or to have assignments related to System B.

These training tours contributed to the improvement of MECA's investigation, design and construction administration capability. Listing of overseas tours, in-country workshops and computer training is presented in Appendix C to this report.

( One of the seven participants who went on a study tour to Taiwan did not return to Sri Lanka. The Mission is currently in the process of negotiating with the GSL to recover the cost of the training from GSL).

## 5. PROCUREMENT

### 5.1 Procurement process

The DAI contract provided for joint purchase and use of equipment for those items which served both the MARD and MDS projects. Procurement was made by DAI on a competitive basis. In addition, MECA made two procurements under the MDS project. These were for US \$ 78,606 in 1988, and US \$ 48,350 in 1989 for the purchase of twelve Mitsubishi Pajero jeeps. The cost of items which could be allocated to both projects (MARD and MDS) was to be split in the ratio of 76/24 respectively.

### 5.2 Commodity procurement

Other than the twelve vehicles, the major equipment expenditures for MDS were for computers, surveying equipment, and equipment for soil compaction etc..

Listing of commodities purchased under MDS, their prices and disposition is presented in Appendix D . The list has been countersigned by the MECA Director. The GSL has assured proper maintenance of these commodities and usage for activities consistent with the original purchase ( see Attachment 1 to Appendix D).

### 5.3 Inventory audit results

The Coopers and Lybrand Report stated that physical existence could not be verified of two lap top computers and one printer purchased under MDS. However, the existence of the two lap top computers was subsequently confirmed by MECA. USAID is currently communicating with MECA and DAI to locate the printer.

## 6. PROJECT ACCOMPLISHMENTS

Despite the security concerns already mentioned, the project was able to achieve substantial progress in the following areas.

### 6.1. Design of the irrigation system and revision of land use plan

(a) Improved surveys and additional soil data were coupled with modified layout criteria and used for design of the farm blocks, field canals, and drains. This improved the layout, provided better equity of land quality to settlers, and minimized land leveling.

(b) As a result of the revision of the land use plan, homestead sizes in Zone 4A were increased from 0.2 to 0.4 hectares (from .5 to 1 acre). This resulted in a significant increase in the settler incomes in Zone 4A as seen from the following example.

Income per settler - cultivation season Maha 1991/92 ( Rupees)

	Income from paddy	OFC*	Homestead	total income
System B average (excluding 4A) Rs.	14,400	230	1,300	15,930
Zone 4A average Rs.	14,500	220	9,700	24,420

\* Other field crops grown in irrigated plots  
Source: MDS Final Assessment Report

### 6.2. Construction

Despite the security problems the project achieved substantial progress in Blocks 404 and 405 under the re-defined construction targets. Status of achieved target levels as of the PACD is

presented in Section 1.5 of this report (page 5).

**6.3. Farmer organizations:** Farmer organizations are being fostered in System B. Operation and maintenance of field canals has already been delegated to farmer groups in Zone 4A. MEA is in the process of implementing a program to hand over operation and maintenance of the distributary canals to farmer organizations. This process is already complete in some sectors in System B.

## 7. LESSONS LEARNED:

### **7.1 Revised land use plan:**

A major achievement in the MDS is the design of the land use plan which is a significant deviation from the conventional land use method practiced in the Mahaweli Project. The MDS revised land use plan resulted in the following benefits:

(a) Increasing the homestead size from 0.2 to 0.4 ha ( 0.5 to 1.0 acre), significantly increased settler incomes (Section 6.1 under Project Accomplishments).

(b) High intensity surveys\* resulted in minimizing design related construction adjustments and in reduced land levelling costs.

(c) Utilization of a down-the-slope design of farm plots provided greater farm equity and reduced drainage problems.

(d) Usage of O&M roads as farm-to-market road where possible reduced land requirements and construction costs.

### **7.2. New construction techniques**

New construction techniques adopted under the project resulted in the following benefits:

(a) The revised design of the toe drain filter for tank embankments using a sand filter with a smaller rock toe improved the functionality of the toe drain. It also reduced the construction cost.

(b) Detailed soil information greatly assisted the layout design and construction of irrigation project facilities and eliminated rock outcrops and shallow soils on farm plots.

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\* In the normal survey maps which are used for designing tertiary irrigation systems the contour interval is 1.0 meter. In the high density surveys used for MDS, the contour intervals were reduced to 0.5 meters (and for some cases 0.25 meters).

## 8. RATIONALE FOR NOT CONTINUING WITH THE CONSTRUCTION

Civil disturbances have been the overriding impediment to the progress of the MDS project. Terrorist activities have been periodically directed against MECA staff, construction contractors, and local farmer residents. This resulted in the theft of construction equipment and MECA vehicles, and the death of several MECA staff members, contractor members, and local farmers (see note below). These events were beyond the control of the GSL or MECA. Because of these events, continuation of project activities (investigations, surveys, design and construction) was seriously hampered. MECA's ability to staff and manage the project under such conditions has been adversely affected throughout the project.

Mike McGovern, construction engineer of the DAI in his mid-term report "Construction Progress and Issues", published in June 1990, made the following comments.

'If such incidents continue, it appears unlikely that the much needed acceleration in the construction progress will occur. If these incidents continue over the balance life of the project, USAID will be forced to make hard choices concerning continuing funding of a project that simply cannot be done in a foreseeable time frame regardless of the reasons'.

Through its entire life of the project the security situation did not improve significantly. Despite various incentives offered to contractor personnel, MECA was able to complete only Blocks 404 and 405 which are situated along the relatively secure main highway. The remaining works are located in Blocks 402, and 403 and in the northern part of Block 401, which are further away from the main highway. Survey crews do not want to mobilize in those areas.

Note: As per police reports, during the period April 1987 to May 1992, 196 people were killed resulting from terrorist activities which occurred at close proximity to Zone 4A area. These figures include 57 security personnel, 137 local farmers and contractor personnel, and 2 MECA officials.

## 9. SUSTAINMENT

### 9.1 Continuation of Construction

Although USAID project assistance was concluded at the PACD, the construction of the tertiary irrigation system and the settlement program in Block 401 are being continued by the GSL. Since

December 31, 1992, up to the time of this report, approximately 20 km of distributary and field canals have been completed by the GSL. Also, through an accelerated settlement program, approximately 150 farm families have been settled since December 1992.

## **9.2 Completion of the Drainage System**

One of the aspects highlighted in the Final Assessment Report is the completion of the drainage system in Zone 4A. The report stressed the importance of the drainage as part of any irrigation system producing diversified crops, to prevent water clogging and to provide the means to leach and remove salinity. Although a substantial portion of the turnout drains were completed under the MDS, the improvements planned to the main drainage system could not be completed during the project. MECA has now placed high priority in the completion of these drains. However, the security situation is the major constraint, since most of the main drains are located in close proximity to the sensitive areas.

## **9.3 Operation and Maintenance**

Initially the irrigation system will be maintained by MECA for two crop seasons during which time the system will be tested and defects corrected (if encountered any). After two crop seasons the system will be handed over to MEA for operation and maintenance. Farmer groups are responsible for the operation and maintenance of field canals and drainage canals. Realistic planning is underway for eventual farmer takeover of the operation and maintenance of the complete distributary system inclusive of distributary canals.

Budget: MEA's O&M budget for system B averages about Rs.1,200 per hectare. This amount is expected to be reduced by approximately 60 percent once the O&M of Distributaries, field canals, and drainage canals have been takeover by the farmer groups.

## **9.4 Post project monitoring**

The MDS project area (Zone 4A) is located within the territory of the MARD project. Monitoring of continued construction in Zone 4A has been included in the scope of work of the technical assistance contract of MARD II, which is an extension to MARD I.

## **10. ENVIRONMENTAL ISSUES**

### **10.1 Adverse Impacts of MDS**

Clearing of 2,625 ha of jungle and establishment of human settlement of the area resulted in the following adverse impacts on environment.

- a) Loss of habitat for wildlife
- b) Loss of jungle vegetation replaced by agricultural crops.
- c) Soil erosion of barren lands and embankments.
- d) Increase of salinity in some locations due to raising of water table.

### **10.2 Mitigative measures**

The Somawathiya National Park and the Flood Plains National Park which are bordering System B were designated and declared as protected areas under the USAID funded Mahaweli Environment Project concluded in 1991. The total extent of these parks is approximately 55,000 hectares.

Conservation measures of vegetating embankments were carried out under the MDS to reduce soil erosion. Eventual completion of the drainage system in Zone 4A will reduce salinity in the MDS areas.

Also, preservation of wetland and riparian forest reservations will be monitored in the continuation of construction in Zone 4A.

### **10.3 Positive Impacts**

The MDS resulted in the following positive impacts on the environment.

- a) Increased extent of wetlands for environmental improvement
- b) Increased habitat for waterfowl, and for freshwater fisheries.

## **11. EVALUATION**

Final assesment of the MDS project was conducted in August 1992. The purpose of the assesment was to review the construction accomplishments, and the constraints encountered in implementing the MDS project. The major constraint identified by the evaluation team was the serious security problems the project encountered since signing of the project agreement. The assesment recommended that the outlet drains and the main drains should be completed.

## 12. AUDIT

In April 1992, a construction audit was carried out on the MDS project by RIG/A/Singapore. The audit had no issues. In May 1993, MDS was audited by the RIG/A/Singapore on Mission's controls of the host government cost sharing contributions. The draft report of the audit discussed the issue of contributions made by other donor agencies which were included as part of host country contributions for activities in the development of Zone 4A. The Mission is taking appropriate actions to resolve this issue.

## 13. VALIDITY OF ASSUMPTIONS

The assumptions as per project paper, and their validity are as follows.

Assumption 1: The agronomic and water management technologies are available to grow diversified crops in Zone 4A.

The required agronomic and water management technologies have been provided by the MARD project. (The goal of the MARD project, which is the "linked" project of MDS, was to increase the settler incomes through crop diversification. Zone 4A is within MARD's physical territory).

Assumption 2: Domestic and/or export markets will be available for the crops that can be grown in Zone 4A.

As per 1991/92 cultivation census of System B, Zone 4A settlers were able to market all of their produce locally. The average income of Zone 4A settlers were 50 percent higher than the income of other System B settlers (per MDS Final Assessment Report). Availability of export markets for diversified crops, is currently being pursued under MARD project.

Assumption 3: Recurrent cost of the operating and maintaining the irrigation system will be fully met by the beneficiaries of the GSL.

Operation and maintenance of the tertiary irrigation system of Zone 4A will be carried out by the farmer organizations. However, the headworks, main and branch canals are currently being operated and maintained by the MASL. Realistic planning is underway to impose fees from water users of the Mahaweli systems to meet the operational cost of the complete irrigation system including main and branch canals.

Assumption 4: Proper coordination between MECA and MILD to assure adequate and timely surveys.

Coordination between MECA and MILD had been satisfactory. The

surveys have been adequate and timely in respect of the completed construction works. However, Zones 402, 403, and northern portion of Zone 401 could not be surveyed due to security reasons.

Assumption 5: Coordination between MECA and MEA to assure that all infrastructure functions properly.

All infrastructure, the irrigation as well as social, were constructed by MECA. The irrigation infrastructure is being smoothly transferred to MEA. The settlements, welfare and social needs of settlers as well as the functionality of the social infrastructure are being carried out by MEA. There has been satisfactory coordination between MECA and MEA in the implementation of the above activities.

Assumption 6: Proper supervision of contractors by MECA.

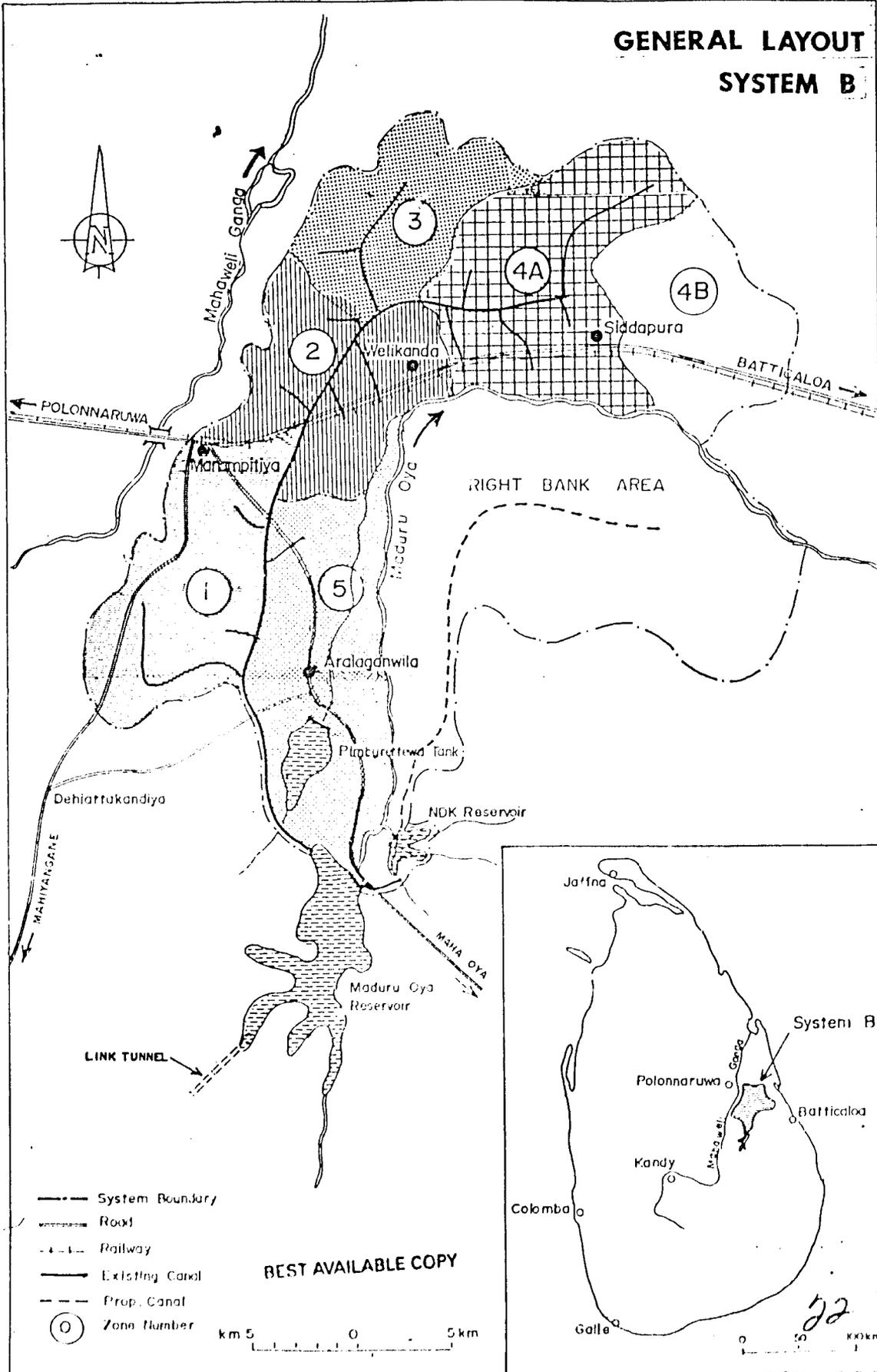
Accomplished satisfactorily.

Assumption 7: Adequate and timely funding by GSL of non-AID funded portion of the construction.

GSL provided adequate and timely funding. Please see Section 2.3 in this report.

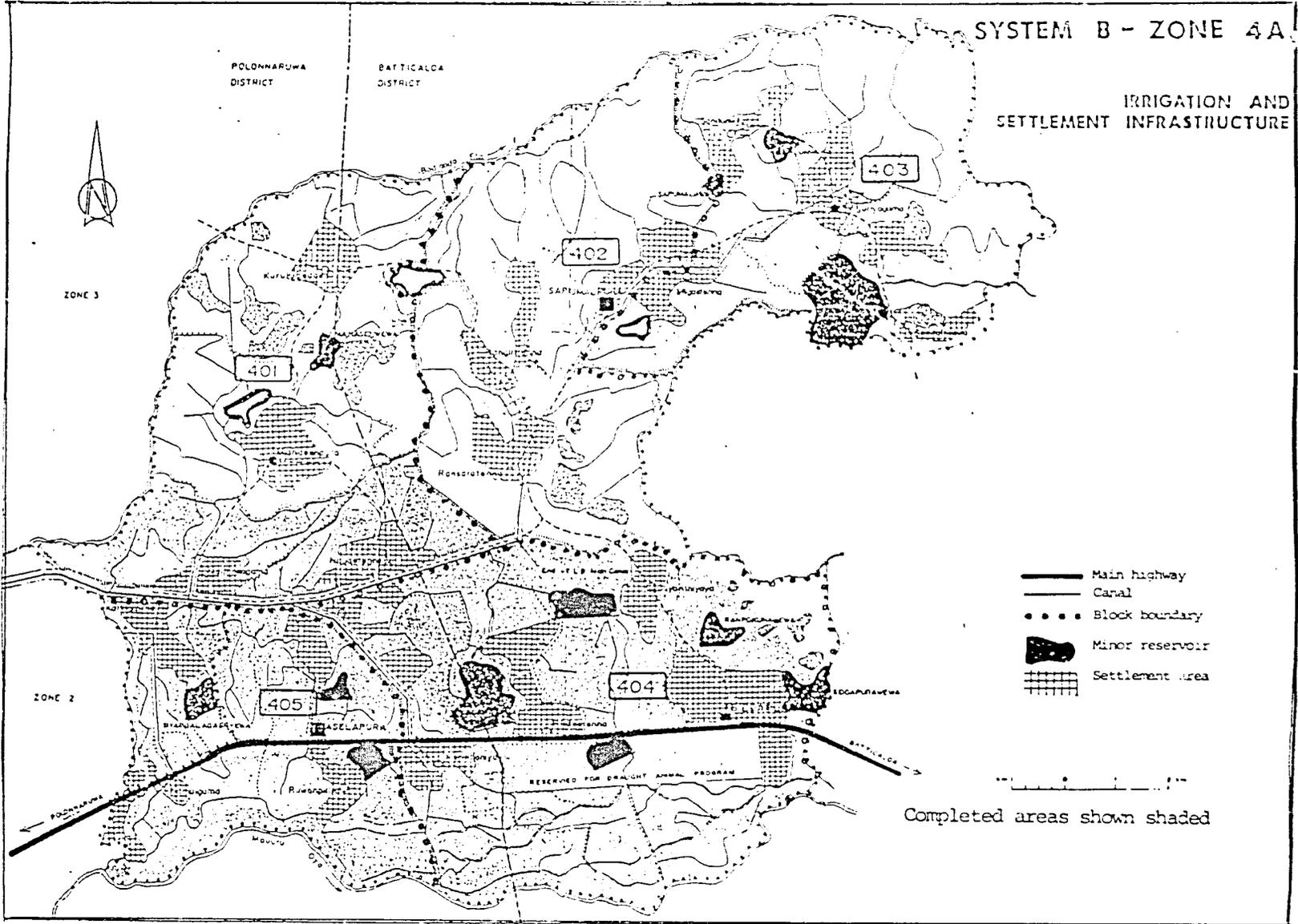
Figure 1

# GENERAL LAYOUT SYSTEM B



SYSTEM B - ZONE 4A

IRRIGATION AND SETTLEMENT INFRASTRUCTURE



BEST AVAILABLE COPY

Figure 2

APPENDIX A  
LISTING OF COMPLETED CONSTRUCTION SUB PROJECT

SUB PROJECT	BLOCK	WORK DISCRIPTION	TYPE	ESTIMATED COST	REIMBURSABLE AMOUNT	
					Rs	US\$
1		Bridge LB R5 @ stn 0+380km	EW & ST	536,367.83	455,912.66	10,534.03
2	404	FEEDER CANAL JAYANTHIWEWA	JC & EW	40,735.91	30,144.57	934.43
3	401	D1	ME	1,105,997.63	818,438.25	25,982.17
			MAN	459,974.70	340,381.28	10,805.75
			STR	667,131.26	567,061.57	14,187.18
4	405	D1	ME	1,979,692.65	1,464,972.56	45,680.47
			MA	902,296.13	667,639.14	20,820.05
			STR	1,341,732.95	992,882.38	28,754.20
5	405	D2	ME	791,974.13	586,060.86	17,786.37
			MA	206,306.33	152,666.68	4,633.28
			STR	113,072.63	83,673.75	2,539.42
6	405	D5	ME	398,263.50	338,523.98	8,463.10
			MA	322,835.63	274,410.29	6,860.26
			STR	343,904.98	292,319.23	7,313.47
7	405	D6	ME	1,518,966.54	1,291,121.24	32,278.03
			MA	419,323.90	356,429.57	8,910.74
			STR	896,584.62	762,096.98	19,066.72
8	401	D3	ME	690,398.33	510,888.10	16,218.67
			MA	513,100.58	379,694.43	12,053.79
			STR	2,293,925.99	1,949,888.09	48,783.79
9	401	D4	ME	605,465.55	448,044.51	14,223.64
			MA	169,962.98	125,772.61	3,992.78
			STR	752,750.46	639,837.89	16,007.95
10	401	D5	ME	439,267.73	325,058.12	10,319.31
			MA	319,723.20	236,595.17	7,510.96
			STR	1,049,401.33	891,991.13	22,316.52
11	404	D1	ME	621,054.88	459,580.61	14,892.44
			MA	250,467.53	185,345.97	6,006.03
			STR	1,147,320.13	849,016.90	24,587.80
12	404	D2	ME	1,033,917.41	878,829.80	21,987.24
			MA	481,962.89	409,668.46	10,249.40
			STR	1,061,047.00	901,889.95	22,564.17
13	404	D3	ME	1,923,750.00	1,423,575.00	44,128.18
			MA	681,841.13	504,562.44	15,640.50
			STR	1,354,356.73	1,002,223.98	29,024.73
14	404	D4	ME	937,426.57	796,812.58	19,935.27

SUB PROJECT	BLOCK	WORK DISCRIPTION	TYPE	ESTIMATED COST	REIMBURSABLE AMOUNT	
					Rs	US\$
			MA	296,787.17	252,269.09	6,311.46
			STR	521,300.00	443,105.00	11,035.94
16	405	DR 35 41-44	EW	735,983.82	625,586.25	15,370.67
17	405	DR 53,54,56-60,62-67,72,73	EW	3,048,444.98	2,591,178.23	63,665.31
18	404	DR 1 TO 15	EW	2,737,859.81	2,327,180.84	57,221.07
19	404	DR 23-34	EW	2,463,779.43	2,094,212.54	51,454.85
20	404	DR 42-44,52-58,61-72	EW	3,944,873.27	3,353,142.28	82,447.56
21	405	DR 01-11,31-34,14,15	EW	2,521,038.98	2,142,883.13	52,650.69
22	405	DR 12,13,18-23,27-29	EW	2,052,511.68	1,744,634.93	42,865.72
23	404	FC 01 TO 15	EW & ST	4,993,334.03	4,244,333.93	104,364.31
24	404	FC 23-24	EW & ST	3,937,281.16	3,346,628.99	82,228.23
25	404	FC 42- 44 52- 58 61-72	EW & ST	7,899,901.61	6,714,916.37	65,107.36
26	405	FC 01-11 31-34 14 15	EW & ST	5,130,091.77	4,360,578.00	7,130.51
27	405	FC 12 13 18-23 27-29	EW & ST	3,633,209.46	3,088,228.04	75,877.84
28	405	FC 35 41-44	EW & ST	1,486,821.11	1,263,797.94	31,051.55
29	405	FC 53 54 56-60 62-67 72 73	EW & ST	4,942,282.78	4,200,910.36	3,217.21
30	404	H ROAD MENIKDENIYA	EW	1,090,743.30	807,150.04	22,420.83
	404	H ROAD MENIKDENIYA	STR	440,039.25	325,629.05	9,045.25
	404	H ROAD MENIKDENIYA	STR	531,339.08	393,190.92	109,121.97
	404	H ROAD MENIKDENIYA	STR	465,103.01	344,176.25	9,560.45
31	405	ASELA TO 49,50,52	EW & ST	1,120,942.11	952,800.79	22,256.50
		KALINGA TO 16,30	EW & ST	705,778.37	599,911.61	14,013.35
32	405	NAMAL TO 17,24,25,26	EW & ST	1,245,491.24	1,058,667.55	24,729.45
36	404	TO 15A (13A)	EW & ST	622,744.60	529,232.91	12,230.43
41	401	M ROAD K'BEDDA TO N'GAMA	EW & ST	2,623,890.25	1,941,678.79	62,695.47
47	402	M ROAD R'TENNA TO S'WEWA	EW & ST	2,745,063.03	2,031,346.64	64,487.19
48	402	M ROAD ... RA TO R'PITIYA	EW & ST	984,933.30	728,850.64	23,138.12
49	401	SD1/D2	ME	78,196.66	66,467.16	1,661.68

SUB PROJECT	BLOCK	WORK DISCRIPTION	TYPE	ESTIMATED COST	REIMBURSABLE AMOUNT	
					Rs	US\$
52	404	SD1/D1	MA	90,153.00	76,630.05	1,915.75
			STA	242,014.13	205,712.01	5,146.66
			ME	1,304,315.56	965,193.59	31,276.53
54	404	SD1/D4	MA	340,397.78	251,894.36	3,132.49
			STA	739,228.03	547,028.74	15,842.12
			ME	314,850.78	267,623.16	6,695.60
55	404	SD2/D1	MA	47,373.53	40,267.50	1,007.44
			STR	258,400.00	219,640.00	5,495.12
			ME	1,583,477.33	1,171,773.22	37,970.62
56	404	SD2/D3	MA	249,811.43	184,860.46	5,990.29
			STR	543,112.64	401,903.35	11,639.25
			ME	93,511.46	69,198.48	2,145.02
57	404	SD2/D4	MA	21,935.14	16,232.00	503.16
			STR	127,167.03	94,103.60	2,725.23
			ME	705,214.08	599,431.97	14,997.05
58	404	SD3/D3	MA	157,924.69	134,235.99	3,358.42
			STR	171,460.00	145,741.00	3,646.26
			ME	725,611.50	536,952.51	16,743.14
59	405	SD1/D1	MA	382,576.50	283,106.61	8,827.77
			STR	715,158.84	529,217.54	15,326.31
			ME	1,582,886.48	1,171,336.00	36,524.35
60	401	SD1/D3	MA	384,729.75	284,700.02	8,877.46
			STR	523,213.27	387,251.82	11,214.94
			ME	363,802.73	269,214.02	8,546.48
61	405	SD1/D5	MA	195,795.23	144,888.47	4,559.63
			STR	296,675.01	252,173.76	6,309.08
			ME	59,961.26	50,967.07	1,274.18
62	405	SD1/D6	MA	18,277.58	15,535.94	388.40
			STR	83,544.20	71,012.57	1,776.65
			ME	254,274.86	216,133.63	5,403.34
63	405	SD2/D5	MA	45,395.10	38,585.84	964.65
			STR	242,025.72	205,721.86	5,146.91
			ME	138,055.46	117,347.14	2,933.68
64	405	SD2/D6	MA	168,100.65	142,825.55	3,575.14
			STR	83,544.20	71,012.57	1,776.65
			ME	1,600,511.54	1,360,434.81	34,010.87
			STR	602,062.26	511,701.92	12,792.55
			STR	1,757,372.61	1,493,761.72	37,372.20

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SUB PROJECT	BLOCK	WORK DISCRIPTION	TYPE	ESTIMATED COST	REIMBURSABLE AMOUNT	
					Rs	US\$
65	405	SD3/D6	ME	338,297.99	287,553.29	7,188.83
			MA	53,599.45	49,809.53	1,245.24
			STR	324,446.13	275,779.21	6,899.65
66	401	SD1/D4	ME	185,822.78	137,508.86	4,365.36
			MA	68,739.64	50,867.33	1,614.84
			STR	260,893.27	221,759.28	5,548.14
68	401	SD2/D2	ME	157,831.67	134,156.92	3,353.92
			MA	123,358.28	104,854.54	2,621.36
			STR	118,823.29	100,999.80	2,526.89
69	401	SD3/D2	ME	337,834.13	287,159.01	7,178.98
			MA	167,926.91	142,737.87	3,568.45
			STR	250,800.06	213,180.05	5,333.50
73	404	SD1/SD3/D3	ME	111,128.29	82,234.93	2,564.23
			MA	63,922.16	47,302.40	1,474.97
			STR	160,089.02	118,465.87	3,430.81
76	404	SD1/SD1/D1	ME	400,525.22	296,388.66	9,604.30
			MA	55,946.70	41,400.56	1,341.56
			STR	225,439.48	166,825.22	4,831.31
77	405	SD1/SD1/D1	ME	427,413.04	316,285.65	9,862.35
			MA	34,516.13	25,541.94	796.44
			STR	222,018.44	164,293.65	4,758.00
78	405	SD1/SD2/D6	ME	1,329,578.75	1,130,141.94	28,253.55
			MA	304,002.45	258,402.08	6,460.05
			STR	699,526.92	594,597.88	14,876.10
79	404	JAYANTHIWEWA	EW	8,293,602.83	6,137,266.09	187,111.77
			STR	738,672.71	546,617.81	16,665.18
80	405	RUWANWEWA	EW	4,693,283.46	3,989,290.94	99,732.27
			SLU	219,808.90	186,837.57	4,670.94
			SLU	219,808.90	186,837.57	4,670.94
			SPILL	487,063.64	414,004.09	10,350.10
81	405	ASELAWEWA	EW	4,751,142.24	4,038,470.90	100,961.77
			SLU	219,808.90	186,837.57	4,670.94
			SLU	357,806.97	304,135.92	7,603.40
			SPILL	298,974.55	254,128.37	6,353.21
82	405	SIYABALAGASWEWA	EW	3,320,429.29	2,822,364.90	70,559.12
			SLU	123,402.49	104,892.12	2,622.30
			SLU	123,402.49	104,892.12	2,622.30
			SPILL	109,020.82	92,667.70	2,316.60

SUB PROJECT	BLOCK	WORK DISCRIPTION	TYPE	ESTIMATED COST	REIMBURSABLE AMOUNT	
					Rs	US\$
84	Z 1 & 5	ARALA GANWILA	EW & ST	3,828,528.39	3,254,249.13	79,101.80
85	Z 1 & 5	PIMBURETTEWA	EW & ST	6,160,697.50	5,236,592.88	127,287.10
86	404	KADAWATHMADU	SLU SPILL	246,479.11 1,038,681.22	209,507.24 882,879.04	4,840.70 20,399.20
			Total		122,713,083.26	3,028,549.67

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Summary of MDS Technical Assistance Assignments

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<u>Name</u>	<u>Position/ Assignment</u>	<u>Project</u>	<u>Firm</u>	<u>Assignment Date</u>
<u>Expatriate Long-Term Staff:</u>				
Max Goldensohn	Chief-of-Party	MARD/MDS	DAI	07/18/88-05/16/92
Bruce Spake	Chief-of-Party	MARD/MDS	DAI	05/16/92-present
<u>Sri Lankan Long-Term Staff:</u>				
K. Satgunasingam	Irrigation Engr.	MDS	DAI	09/03/88-08/31/92
A. Weerasuriya	Civil Engr.	MDS	DAI	09/14/88-02/03/90
M. Panapitiya	Drainage Engr.	MDS	DAI	11/02/88-08/31/92
<u>Short-Term Staff:</u>				
D. Mickelwait	Management Visit	MARD/MDS	DAI	11/14/88-11/19/88
K. Satgunasingam	Engineer	MARD/MDS	DAI	07/20/88-08/31/88
D. Haslem	Flood Control	MDS	Harza	11/10/88-12/20/88
M. Redditt	CAD/Blocking Out	MDS	Harza	01/15/89-04/04/89
D. Mickelwait	Management Visit	MARD/MDS	DAI	02/21/89-02/24/89
G. White	Construction Management	MDS	Harza	04/22/89-08/07/89
M. Redditt	CAD/Blocking Out	MDS	Harza	09/07/89-11/13/89
D. Mickelwait	Program Review	MARD/MDS	DAI	11/13/89-11/18/89
M. McGovern	Construction Engineering	MDS	DAI	04/15/90-12/03/91
A. Schultz	Management Visit	MDS	Harza	11/23/90-11/28/92
D. Mickelwait	Management Visit	MARD/MDS	DAI	05/18/91-05/22/91
R. Gross	Management Visit	MARD/MDS	DAI	07/29/91-07/31/91
A. Schultz	Management Visit	MDS	Harza	03/25/92-04/01/92
M. Goldensohn	Advisor to COP	MARD/MDS	DAI	05/16/92-07/07/92
M. McKee	Project Close-out	MDS	Harza	07/06/92-07/31/92
C. Thompson	Project Assessment	MDS	Harza	07/09/92-08/10/92
D.S.A. Kulasekera	Project Assessment	MDS	private consultant	07/09/92-08/10/92
H. Gunatilleke	Project Assessment	MDS	U. of Peradeniya	07/09/92-08/10/92

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## SUMMARY OF OVERSEAS TOURS SUPPORTED BY MDS

Tour Designation	Date of tour	Estimated tour cost US \$	Tour Objectives/subjects for study	Participants	Title
U.S.A.	11.11.89-09.12.89	39,000	Construction Management	M.H. Abeygunawardene Pamila de Mel P. Konesmoorthy M.M. Gunatilleke K.A.D.S. Chandasiri J.A.S.A. Jayasinghe	AD CE RE RPD(SB) DRE DD(SB)
Egypt & Pakistan	6 -26 July'90	30,000	Irrigation & Drainage	H.M.G. Herath P. Keerawella S.M.S. Sathkumara W.A.D.N. Wanasinghe W.K. Gunadasa K. Rajapakse	DRPD(SB) CE(SB) CE DRE(SB) Snr.Des.Eng. Pr. Eng(SB)
Taiwan & Indonesia	19.06.92-17.07.92	63,000	Irrigation & drainage, Design & construction management techniques, quality control crop diversification, operation & Maintenance of headworks	M.M. Gunatilleke M.N. Manthirimudalige H.M.P. Herath D.M. Karunatilleke D.B. Wijeratne B.R. Suraweera H.A.S. Prematillake	RPD(SB) CE(Des) Pr. Engineer Project Eng. Des. Eng. Des. Engineer Project Eng.
Egypt	13.07.92-10.08.92	57,000	Irrigation & drainage, design & construction techniques, operation & maintenance of Headworks, Hydraulic sedimentation control, crop diversification	K.A.D.S. Chanrasiri M.A.G. Karunaratne D.C.S. Elakanka S.M. Seelaratne A.C.S. Walpita P.A.W. Fernando	DRPD(SB) DRE (SB) CE Project Eng. Project Eng. Project Eng.

Summary of Workshops Held by MDS or MDS/MARD

Workshop Title	Sponsorship	Date of Workshop	Location of Workshop	Major Topic(s)	Number in Attendance
Team-Building Workshop	MDS	15-16 June, 1989	Polonnaruwa	Project planning for construction management, handing over, drainage improvement, computer use, training	N/A
Theory into Practice	MDS/MARD	22-24 Feb., 1989	Bentota	Review of the first MDS/MARD Work Plan; establish procedural methods for effective implementation of project concepts	N/A
The New Integrated Rural Development	MDS/MARD	28 Feb. to 2 March, 1990	Habarana	Review of the second MDS/MARD Annual Work Plan; generate specific recommendations to guide program implementation	64
USAID Project Reimbursement and Advance Funding Procedures	MDS	20 August, 1991	Colombo	Procedures and regulations for reimbursement, advance, and liquidation of USAID-supported construction projects	20
Irrigation, Drainage, and Infrastructure Construction and Improvement in Zones 1 and 5	MDS	1 October, 1991	Pimburattewa	USAID reimbursement procedures and requirements under the FAR system	20

Computer training

Seminar Topic	Location	Dates	Participation	Trainer
CAD training	Welikanda	21 Sept-3 Oct 1989	6	W.M. Redditt
CAD training	Colombo	5-15 Oct, 1989	3	W.M. Redditt
CAD training	Welikanda	17 Oct-6 Nov, 1989	3	W.M. Redditt
CAD training	Colombo	7-11 Nov, 1989	3	W.M. Redditt
"Management of the Micro-Computer as an Engineering Tool"	Welikanda and Colombo	Oct, 1989	N/A	W.M. Redditt
"AutoCAD and Plotting"	Colombo	Oct, 1989	N/A	W.M. Redditt



COMMODITY MANAGEMENT SYSTEM LEGALID-SRI LANKA  
TO OPEN AN ACCOUNT FOR

FINANCIAL DOMESTIC SUPPORT PROJECT CATEGORY	REF NO	COMMODITY DESCRIPTION	UNIT MEAS.	SERIAL NUMBER	QUANTITY	U PRICE	T PRICE	DATE ACQ	DATE INST	LOCATION	REMARKS	DATE INSP	EXPIRES	WAS DISPOS
OFFICE EQUIPMENT	1891	COMPUTER ACCESSORIES	N/A	N/A	1	178.00	178.00	///	///	DEPT. HQS OFFICE, KALUWAKKULA	INSTALLED IN COMPUTER	///	NO	///
OFFICE EQUIPMENT	1892	COMPUTER ACCESSORIES	N/A	N/A	1	1,892.00	1,892.00	///	///	DEPT. HQS OFFICE, KALUWAKKULA	INSTALLED IN COMPUTER	///	NO	///
OFFICE EQUIPMENT	1893	COMPUTER ACCESSORIES	N/A	N/A	1	1,211.00	1,211.00	///	///	DEPT. HQS OFFICE, KALUWAKKULA	INSTALLED IN COMPUTER	///	NO	///
OFFICE EQUIPMENT	1895	COMPUTER ROOMS	N/A	N/A	1	78.46	78.46	///	///			///	NO	///
OFFICE EQUIPMENT	1896	COMPUTER SOFTWARE	N/A	N/A	1	883.25	883.25	///	///			///	NO	///
OFFICE EQUIPMENT	1896	COMPUTERS	KAYPRO 256	497196	1	4,676.33	4,676.33	12/11/89	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1895	COMPUTERS	KAYPRO-256	494942	1	4,676.33	4,676.33	12/11/89	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1896	COMPUTERS	KAYPRO	497191	1	3,823.41	3,823.41	12/11/89	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///
OFFICE EQUIPMENT	1897	COMPUTERS	KAYPRO	497201	1	3,823.41	3,823.41	12/11/89	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///
OFFICE EQUIPMENT	1894	DIGITAL PLOTTER	ROLAND D11 11M	8518648	1	1,322.89	1,322.89	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1894	DIGITAL PLOTTER	ROLAND D11 11M	863221	1	1,322.90	1,322.90	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///
OFFICE EQUIPMENT	1892	DISTILLER	SUMERSKETCH	SEE ROWAYS	1	1,147.82	1,147.82	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///
OFFICE EQUIPMENT	1891	DISTILLER	SUMERSKETCH	SEE ROWAYS	1	1,147.82	1,147.82	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1898	FAX MACHINE	MURATA-F28	F211281062089	1	1,391.71	1,391.71	06/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///
OFFICE EQUIPMENT	1889	FAX MACHINE	MURATA-F28	F2112810661882	1	1,391.70	1,391.70	06/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1894	JOINTLY FINCD	N/A	N/A	1	14,936.19	14,936.19	///	///			///	NO	///
OFFICE EQUIPMENT	1894	IVA UPS	IVA UPS	N/A	1	2,161.70	2,161.70	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		///	NO	///
OFFICE EQUIPMENT	1892	LAPTOP COMPUTER	HTCH	116744	1	5,189.81	5,189.81	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1892	LAPTOP COMPUTER	HTCH	1547098	1	5,189.81	5,189.81	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	NO	///
OFFICE EQUIPMENT	1894	LAPTOP COMPUTER	HTCH	116857	1	5,189.80	5,189.80	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	NO	///
OFFICE EQUIPMENT	1891	PHOTOCOPIER	BESTENDER-23161	2425	1	2,668.95	2,668.95	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///
OFFICE EQUIPMENT	1891	REPLICATION OF SOFTWARE	N/A	N/A	1	1,183.43	1,183.43	08/02/90	///	DEPT. HQS OFFICE, KALUWAKKULA		///	NO	///
OFFICE EQUIPMENT	1892	PRINTER	STAR NT 1500	46489100044	1	764.69	764.69	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1894	PRINTER	STAR NT 1500	46489100024	1	764.69	764.69	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		///	NO	///
OFFICE EQUIPMENT	1897	PRINTER	STAR NT 1500	25208800074	1	764.69	764.69	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	NO	///
OFFICE EQUIPMENT	1896	PRINTER	STAR NT 1500	464891000221	1	1,284.66	1,284.66	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/06/92	YES	///
OFFICE EQUIPMENT	1898	PRINTER	STAR NT 1500	46489100004	1	1,284.66	1,284.66	08/02/90	///	MEGA COL. SHOPS BLDG, DEPT. HQS BLDG		05/07/92	YES	///

PHOTOCOPY

COMMODITY MANAGEMENT SYSTEM USAID-SRI LANKA  
COMMODITY ACQUISITION REPORT

UPSTREAM SUPPORT PROJECT

CATEGORY	REF NO	COMMODITY DESCRIPTION	MFG/MODEL	SERIAL NUMBER	QUANTITY	UP PRICE	TYPE PRICE	DATE REC	DATE DET	LOCATION	COMMODITY	DATE DISP	ENCL	DATE DISPS
OFFICE EQUIPMENT	178	PRINTER	HP LASERJET SEPI	3 784019704	1	2,102.79	2,102.79	05/01/81	/ /	NEA COL SUPPLY UNIT	815 178	05/01/81	YES	
OFFICE EQUIPMENT	179	UPS SYSTEM	1 KVA	780270002	1	2,161.71	2,161.71	12/11/81	/ /	NEA DE-SIDRAPUA	1201	05/27/82	YES	
OFFICE EQUIPMENT	180	UPS SYSTEM	1 KVA	811010003	1	2,161.71	2,161.71	12/11/81	/ /	NEA DE-SIDRAPUA	1201	05/27/82	YES	
OFFICE EQUIPMENT	182	UPS SYSTEM	2140-KILOD UPS	781610003	1	2,161.70	2,161.70	01/22/82	/ /	NEA COL SUPS & CONF OFF		05/26/82	YES	
FIELD EQUIPMENT	181	AL TELESCOPIC LEVEL TRIPOD	N/A	N/A	1	49.27	49.27	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	182	AL TELESCOPIC LEVEL TRIPOD	N/A	N/A	1	49.27	49.27	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	183	AL TELESCOPIC LEVEL TRIPOD	N/A	N/A	1	49.27	49.27	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	184	AL TELESCOPIC LEVEL TRIPOD	N/A	N/A	1	49.27	49.27	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	183	METAL RAINING POLE	N/A	N/A	1	14.53	14.53	11/17/81	/ /	NEA NE-LANKA		/ /	NO	
FIELD EQUIPMENT	184	METAL RAINING POLE	N/A	N/A	1	14.53	14.53	11/17/81	/ /	NEA NE-LANKA		/ /	NO	
FIELD EQUIPMENT	182	PLATE COMPACTOR	WAGER VPH 1750	627101015	1	3,981.58	3,981.58	09/28/81	06/27/82	NEA NE-LANKA	SE-4, F-45	05/27/82	YES	
FIELD EQUIPMENT	184	PLATE COMPACTOR	WAGER VPH 1750	627101009	1	3,981.58	3,981.58	09/28/81	06/27/82	NEA NE-LANKA	SE-4, F-49	05/27/82	YES	
FIELD EQUIPMENT	185	PLATE COMPACTOR	WAGER VPH 1750	627101021	1	3,981.58	3,981.58	09/28/81	06/27/82	NEA NE-LANKA	SE-4, F-45	05/27/82	YES	
FIELD EQUIPMENT	186	PLATE COMPACTOR	WAGER VPH 1750	627101003	1	3,981.58	3,981.58	09/28/81	06/27/82	NEA NE-LANKA	SE-4, F-45	05/27/82	YES	
FIELD EQUIPMENT	182	THEODOLITE	TOPCON TL 26 DE	62467	1	3,325.61	3,325.61	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	184	THEODOLITE	TOPCON TL 26 DE	62463	1	3,325.61	3,325.61	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	182	TOTALING LEVEL WITH TRIPOD	TOPCON-TSA	616771	1	1,290.12	1,290.12	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	183	TOTALING LEVEL WITH TRIPOD	TOPCON-TSA	616772	1	1,290.12	1,290.12	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	184	TOTALING LEVEL WITH TRIPOD	TOPCON-TSA	61676	1	1,290.12	1,290.12	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	187	TOTALING LEVEL WITH TRIPOD	TOPCON-TSA	61676	1	1,290.12	1,290.12	11/17/81	/ /	NEA NE-LANKA		05/27/82	YES	
FIELD EQUIPMENT	189	VIBRATING RAYDER	WAGER BEAR	655201162	1	2,813.08	2,813.08	09/28/81	09/28/82	NEA NE-LANKA	SE-4, F-42	05/27/82	YES	
FIELD EQUIPMENT	192	VIBRATING RAYDER	WAGER BEAR	655201178	1	2,813.08	2,813.08	09/28/81	09/28/82	NEA NE-LANKA	SE-4, F-42	05/27/82	YES	
FIELD EQUIPMENT	191	VIBRATING RAYDER	WAGER BEAR	655201176	1	2,813.08	2,813.08	09/28/81	09/28/82	NEA NE-LANKA	SE-4, F-42	05/27/82	YES	
FIELD EQUIPMENT	192	VIBRATING RAYDER	WAGER BEAR	655201166	1	2,813.08	2,813.08	09/28/81	09/28/82	NEA NE-LANKA	SE-4, F-42	05/27/82	YES	
VEHICLES	187	JEEP	MITS PAJERO DIELOCHNG	11-5511	1	9,875.81	9,875.81	10/27/81		NEA NE-LANKA			NO	
VEHICLES	188	JEEP	MITS PAJERO DIELOCHNG	11-5512	1	9,875.81	9,875.81	10/27/81		NEA NE-LANKA			NO	
VEHICLES	189	JEEP	MITS PAJERO DIELOCHNG	11-5513	1	9,875.81	9,875.81	10/27/81	11/17/81	NEA NE-LANKA		05/28/82	YES	
					TOTAL	143,872.85								

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APPENDIX D

COMMODITY MANAGEMENT SYSTEM USAID-ORI LANKA

MAHAWELI CONSTRUCTION SUPPORT PROJECT

ITEM NO.	QTY	COMMODITY DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE	DATE	DATE	LOCATION	REMARKS	DATE	STATUS
170	1	MITS PATRO 500 LBS	EA	1	9,000.00	9,000.00	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
171	1	MITS PATRO 500 LBS	EA	1	9,000.00	9,000.00	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
172	1	MITS PATRO 500 LBS	EA	1	9,000.00	9,000.00	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
173	1	MITS PATRO 500 LBS	EA	1	9,000.00	9,000.00	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
174	1	MITS PATRO 500 LBS	EA	1	9,000.00	9,000.00	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
175	1	MITS PATRO 500 LBS	EA	1	10,867.40	10,867.40	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
176	1	MITS PATRO 500 LBS	EA	1	10,867.40	10,867.40	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
177	1	MITS PATRO 500 LBS	EA	1	10,867.40	10,867.40	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
178	1	MITS PATRO 500 LBS	EA	1	10,867.40	10,867.40	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	YES
185	1	JOINTLY FUNDED	N/A	1	9,541.56	9,541.56	11/18/88	11/18/88	MAHAWELI	FOR MAHAWELI	11/18/88	NO
					GRAND TOTAL	258,843.41						

*[Signature]*  
 L.V. TALAGALA  
 DIRECTOR (SYSTEMS)  
 MAHAWELI ENGINEERING AND CONSTRUCTION AGENCY  
 MAHAWELI AUTHORITY OF SRI LANKA

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නිර්මාණ ඒජන්සිය

நலங்கை மகாவலி அறிக்கார  
மகாவலி பொறியியல் நிரர்மான  
ஆய்வகம்

**Mahaweli Engineering and  
Construction Agency of the  
Mahaweli Authority of Sri Lanka.**



ம. ப. 1667, 11, ஜாவத்தி சாட், கொழும்பு - 5,  
தொலைபேசி எண்: 583060 / 583071

த.பெ.எண்.1667, 11, ஜாவத்த வீதி;கொழும்பு - 5,  
தொலைபேசி எண் 583060/583071

P. O. Box No. 1667, 11, Jawatte Road Colombo-5.  
Telephone No. 583060/583071,  
Fax No. 586719.  
Cable: "Mahaweli" Telex: 21391 Maweli CE

SYB/C/6B.  
29th July, 1993.

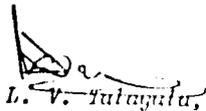
Mr. Stanley A. Stalla,  
Acting Chief,  
Office of Projects,  
USAID.

Project:-Mahaweli Down Stream Support  
Subject:- Project Close Out.

This has reference to your letter dated 8th July 1993  
on the above subject.

I am enclosing following as requested therein:-

- (1) Project Accomplishment - as reported by DAI  
in 4th quarter report of 1992.
- (2) Commodity Inventory duly signed by me. These  
equipment will be properly maintained as far as  
practicable and be used for activities contant with the  
purchase.

  
L. V. Tulayulu,

Director(Syn. "B"),  
Mahaweli Engineering & Const. Agency of  
Mahaweli Authority of Sri Lanka.

JASA/J.