

APPENDIX - T

Implementation Plan and Cost Estimate

APPENDIX - T IMPLEMENTATION PLAN AND COST ESTIMATE

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Chapter 1 IMPLEMENTATION PLAN

1.1 Project Executing Agencies

The Irrigation Management Division (IMD) of the Ministry of Irrigation and Power (MIP) would be the executing agency of the development programmes. In connection with the project implementation, IMD would co-ordinate all activities of the relevant government agencies and regional organisations.

The Project consists of various programmes, and many government agencies at central and provincial levels will participate in the implementation of these programmes. These agencies concerned are shown below:

Implementing Agencies related to Development Programmes

Development Programmes	Implementing Agencies										
	PDOA/ IPEU	DOI	PED	IMD	DAS	PDAPH	NAQDA	NYSC	NAITA	DS	KARTI
Awareness Programme											●
Strengthening of FOs and community development	Major scheme										
	Medium & Minor schemes										
Agricultural development (stable crop production and crop diversification)	●										
Income generation	Home garden development										
	Livestock development										
	Fishery development										
	Vocational Training										
	Small enterprises and business development										
Improvement of marketing					●						
Improvement of credit					●						
Rehabilitation and improvement of irrigation facilities	Major & Medium Schemes										
	Minor Schemes										
Improvement of water management	Major Schemes										
	Medium Schemes										
	Minor Schemes										
Improvement of farm roads		●									
Strengthening of agricultural support services	●				●	●	●				
Research programme for cascade system					●						
Monitoring and evaluation				●							

DOA : Department of Agriculture

PDOAs : Provincial Department of Agriculture

IPEU : Inter Provincial Extension Unit

DOI : Department of Irrigation

PED : Provincial Engineering Department

IMD : Irrigation Management Division

DAS : Department of Agrarian Services

PDAPH : Provincial Department of Animal Production & Health

NAQDA : National Aquaculture Development Authority

NYSC : National Youth Service Council

NAITA : National Apprentice & Industrial Training Authority

DS : Divisional Secretariat

KARTI : Kobbekaduwa Agrarian Research and Training Institute

1.3.2 Construction plan

(1) Construction period

The schedule consists of the survey and design, tendering, and construction as follows:

Implementation Period of Irrigation Facilities Rehabilitation

Name of Scheme(s)	Survey, Investigation, Design and Tendering	Construction
Nachchaduwa	2 years	3 years
Palukadawela	2 years	2 years
Periyakulama	1 year	1 year
Maha Nanneriya	1 year	1 year
Maha Nanneriya Minor Schemes	1 year	1 year

(2) Construction plan

1) Tanks and main canals and related structures

Rehabilitation or improvement of the tanks will be carried out mainly during the dry season, when the tank water is the least. All major works will be completed by the end of the dry season.

Rehabilitation or improvement of canals, roads, and related facilities for all the schemes will be carried out mainly during the dry season. For all the schemes, the rehabilitation work should be carried out so as not to disturb the current irrigation water supply, as much as possible, or if the construction work has to disturb the current water supply, the disturbance period should be shortened as much as possible.

2) D- and F-canals

The government agencies, such as ID and PED, will make a contract with a FO for rehabilitation and improvement of D- and F-canals. The work will be carried out with the instructions of government agencies.

1.4 Procurement Plan

The PMU will be responsible for procurement of all goods and services under the Project.

The civil works under irrigation infrastructure and institutional support components are numerous, simple in nature, labour intensive and dispersed widely over the area. The civil works, thus, will be carried out by prequalified contractors selected under local competitive bidding (LCB) procedure. The contract award will be made by PMU or the government agencies, depending on the contract amounts.

In the PCM workshop sessions, it is observed that the farmers are anxious to rehabilitate the D and F canals by themselves. It is expected that the farmers' participation in the rehabilitation and improvement works of irrigation facilities could lead to enhance their ownership to the facilities. Therefore, evaluating the capacity of FOs based on the action plan prepared the farmers, the works are entrusted the farmers as much as possible.

Procurement for Rehabilitation of Irrigation Facilities

Name of Scheme(s)	Tank	Main Canal	D- & F-canals
Major Schemes	Contractor	Contractor	Farmers by contract
Medium Schemes	Contractor	Contractor	Farmers by contract
Minor Schemes	Contractor	Farmers by contract	Farmers by contract

A 10% of the total construction cost will be contributed by a Farmers' Organisation, as the system has been applied in the previous foreign-assisted projects. In addition, to encourage maximum beneficiary participation, certain civil works, such as rehabilitation of D- and F-canals, will be contractually and directly assigned for execution by capable FOs provided that (i) the FO has the capability to carry out the works; (ii) the work is located in the scheme benefiting the FO; and (iii) the FO agrees to proceed the proposed rehabilitation plan and to contribute a 10% of total construction cost.

Each supply contract for equipment, vehicle and materials will be awarded on the basis of international competitive bidding (ICB), LCB, or direct purchasing, depending the procurement cost. The awareness and training programme will be entrusted to a government organisation concerned or external institutes.

1.5 Overall Implementation Plan

The Project consists of five major items: (i) mobilisation of PMU, (ii) awareness programme / training programme, (iii) implementation of development programmes, (iv) monitoring and evaluation, and (v) follow-up programme. The period required for implementation of these works is estimated as follows, based on their work volumes and referring to the relevant on-going projects.

Implementation Period for Development Components

Major Project Works	Period (Years)
1. Mobilization of PMU (including CPCC & PPCC)	3 (months)
2. Awareness Programme	1.5
3. Implementation of the Development Programmes	
1) Strengthening of FO	3-5
2) Rehabilitation and improvement of irrigation facilities and farm roads	One major scheme
- Survey, design & tendering	2
- Construction and supervision	2-3
One medium or minor scheme	
- Survey, design & tendering	1
- Construction and supervision	1
3) Strengthening of agricultural support facilities (farmer centre, etc.)	1-2
4) Improvement of water management and agricultural activities	2-5
4. Monitoring and Evaluation (including base line survey, bench mark survey, workshop with farmers, PCM, monitoring of environment)	5-7
5. Follow-up Programme	0.5-1

Schemes	Duration (Year)
Nachchaduwa Major Scheme	7
Palukadawela Major Irrigation Scheme	6
Periyakulama Medium Irrigation Scheme	5
Mahananneriya Medium Scheme	5
Mahananneriya Minor Schemes (Cascade)	5

Chapter 2 COST ESTIMATE

2.1 Basic Consideration

The initial investment costs for the Project are estimated per each development programme as shown below. It is noted that costs for works to be covered by the normal activities of the government are excluded from the project costs.

Categories of Initial Investment Cost

Development Programme	Hardware		Software				Remarks
	Rehabilitation / improvement	Supporting facilities equipment	Awareness / training	PMU	Engineering	Loan funds	
I. Development Programme							
1. Strengthening farmers' organisation							
1) Awareness programme and training programme for FO leader	-	-	●	-	●	-	Awareness programme is carried out for both government staff and farmers
2) Establishment of multi function FO	-	-	-	-	-	-	Activities by FOs under regular guidance of ASC. The programme is achieved through the activities of items 3 4)
3) Implementation of income generation and social services	-	-	-	-	-	-	
4) Construction of farmer centre	-	●	-	-	●	-	
2. Supplying irrigation water							
1) Rehabilitation / improvement of irrigation facilities and farm roads	●	-	●	-	●	-	Training programme for both government staff and farmers
2) Improvement of water management	-	-	●	-	●	-	
3) Strengthening of O&M of irrigation facilities	-	-	●	-	●	-	
3. Improvement of agricultural activities							
1) Promotion of crop diversification and improvement of yield	-	-	-	-	-	-	Activities by FOs. The programme is achieved through the activities of items 3 2), 3) and 4)
2) Strengthening of agricultural extension services	-	-	●	-	●	-	Establishment of demonstration farm and farmers' training, etc.
3) Improvement of marketing of farm input and output	-	-	-	-	-	-	Activities by FOs. The programme is achieved through the activities of items 1. 1)
4) Improvement of access to credit services	-	-	-	-	-	●	Activities by FOs. The programme is achieved through the activities of items 1. 1)
5) Forestation / wild elephant	-	-	-	-	-	-	Activities by FOs under regular guidance of ASC
4. Strengthening of farmer supporting system							
1) Strengthening of implementing agencies	-	●	●	-	●	-	Training programme for government staff.
2) Strengthening of supporting system for farmers and FOs	-	●	●	-	●	-	Rehabilitation / improvement of ASC, institutes for agricultural research and extension with provision of training equipment
3) Supporting programme for income generation	-	●	-	-	●	-	
II. Mobilisation of PMU and administration							
	-	●	-	●	-	-	Costs for administration , monitoring & evaluation, and environmental monitoring, etc.

Note: ● Investments for the Project

The basic condition of the cost estimates are as follows:

- a) Exchange rates used for the estimate are US\$ = 71Rs as of July 1999.
- b) 12.5% of GST is considered.

2.2 Cost Estimate for Each Category

2.2.1 Rehabilitation and Improvement Costs of Irrigation Facilities and Farm Roads

The rehabilitation and improvement cost of irrigation facilities including farm roads for respective schemes is estimated on the basis of the following conditions, mainly for economic evaluation of each scheme.

- a) Direct cost for civil works, such as tanks, main canals, and parts of D-canals in the major and medium schemes, are estimated by the staff of ID,
- b) Direct cost for civil works are estimated by “Unit Rates for Construction works 1999 MIP” and “Rate Analysis for 1999 ID Kurunegala” (see Table T.2.1),
- c) Overheads and profit factor is estimated at 26% of direct cost in major and minor schemes, and as 21% of direct cost in minor schemes, and
- d) Physical contingencies for major, medium, and minor schemes are 15%, 10%, and 5%, respectively.

The rehabilitation and improvement costs for the respective schemes were estimated as follow, and details are shown in Table T.2.2.

**Rehabilitation and Improvement Costs of Irrigation Facilities and Farm Roads
(Excluding Price Contingencies and G.S.T.)**

Scheme	Area (ha)	Direct cost (Rs. 1,000)	Price Contingency (Rs. 1,000)	Total (Rs. 1,000)	Cost per ha	
					(Rs. /ha)	(US\$/ha)
Nachchaduwa major scheme	2,540	343,600	51,500	395,100	155,600	2,190
Palukadawela major schemes	956	51,000	7,700	58,700	61,400	860
Periyakulama medium scheme	91	16,200	1,600	17,800	195,600	2,750
Mahananneriya medium scheme	158	12,800	1,200	14,000	88,600	1,250
Mahananneriya minor schemes	117	14,500	700	15,200	129,900	1,830
Total	3,862	438,100	62,700	500,800	129,700	1,830

Remarks : Exchange rate : US\$ 1.00 = Rs. 71, GST : Goods and Services Tax

The details of the cost for each scheme are shown in Tables T.2.3 to T.2.7 and Attachments.

2.2.2 Costs for Rehabilitation and Improvement of Supporting Facilities and Provision of Equipment

The Project would be commenced with establishment of the PMU. Further, the Project provides various buildings, vehicles and equipment for strengthening of agricultural support system including agricultural extension, income generation, etc. Their capital costs were estimated as follows, and details are shown in Table T.2.8.

**Costs for rehabilitation and improvement of supporting facilities and provision of equipment
(Excluding Price Contingencies and G.S.T.)**

(Unit : Rs. 1,000)

Items	Amount	Description
1. Mobilisation of PMU	29,200	Vehicles and Office equipment
2. Construction of farmer Centre	35,640	27Nos., Floor space 140 m ² /no.
3. Strengthening of Agricultural Support Services		
1) Institutional Strengthening Programme		
- Logistic Support Strengthening Programme	700	Motor cycle x 3 and computer x 3 for IPEU, PODA/NCP & PODA/NWP
- Upgrading of ISTI, Maha Illuppallama	9,900	Video camera (VHS) x 1, Video deck (VCR) x 2, TV x 1, Overhead projector & screen x 2, Printing machine x 1, Copy machine x 1, Bus (60 seats) x 1.
2) Strengthening of Farmers / FOs Support Facilities		
- ASC Strengthening Programme	300	Motor cycle x 3, Renovation of building, Provision of Office / Training Equipment
- Strengthening of DAS	2,400	Vehicle : Anuradhapura DAS x 1, Kurunegala DAS x 1
3) Support programme for Income Generation		
- Upgrading of Seed Farm, Galgamuwa	11,150	Potting Shed x 2, Office x 1, Shade house x 2, Water storage tank x 1, Pumping station x 1, Irrigation System x 1, 4 t Truck x 1, Office / Training Equipment
- Upgrading of IFTC, Nikaweratiya	11,610	Training building(120 m ²) x 1, Hostel x 1, Manager quarter x 1, Dairy shed x 1, Dairy laboratory x 1, Mini bus x 1
- Strengthening of PDAPH	200	Provision of motor cycles
- Strengthening of Aqua-culture Extension Centre	3,250	Extension centre building x 1, Training equipment, Facilities for extension centre, office equipment.
4) Strengthening of RPM Office	200	Provision of motor cycles
4. Physical Contingency (5%)	5,230	
Total	109,780	

2.2.3 Costs for Awareness and Training Programme

Costs for awareness and training programme for both the government staff and farmers are presented in the following table (see Table T.2.9 in details).

Costs for awareness and training programme (Excluding Price Contingency and G.S.T.)

(Unit : Rs. 1,000)

Item	Amount	Description
1. Strengthening of Farmers' Organisations		
1) Awareness programme	16,000	Costs for both government staff and farmers
2) Training of FO's leaders	2,880	448M/M for facilitators, vehicle rental costs
2. Supplying irrigation water in accordance with schedule		
1) Training for construction supervision	870	Costs for both government staff and farmers
2) Training for water management	700	Costs for both government staff and farmers
3) Training for operation and maintenance	700	Costs for both government staff and farmers
3. Improvement of agricultural activities		
1) Strengthening of agricultural extension services		
- Field programme	11,430	Inputs (50% of necessary quantity), texts, and transportation costs for farmers
- Farmer training programme	1,650	Texts, and transportation costs for farmers
- Seed production programme	1,300	140 ha for paddy and 45 ha for OFC.
4. Strengthening of agricultural support programme		
1) Institutional strengthening programme for agricultural extension		
- Staff training programme	460	Participants : 25persons/course, 11 courses
- Institutional strengthening	7,600	Strengthening of co-ordination between farmers, extension staff, and researching staff
2) Strengthening of farmers / FOs support institutes		
- Induction & refresher training of DO/ASC	460	Participants : 25persons/course, 11 courses
- Induction & refresher training of animator	460	Participants : 25persons/course, 11 courses
5. Follow-up programme	1,950	10% of items 1. 2), 2., and 3.
6. Physical contingency(5%)	2,320	
Total	48,780	

2.2.4 Costs for Administration of PMU, Engineering and Capital of Loan

Costs for administration of PMU, capital of loan are estimated as follows: (see Table T.2.10 for details)

Costs for administration of PMU, capital of loan (Excluding Price Contingency and G.S.T.) (Unit : Rs. 1000)

Item	Amount	Description
1. Administration Cost of PMU	56,280	Personnel cost, consumables, monitoring and survey cost
2. Capital of Loan	20,000	Capital for revolving loan
3. Contingencies (5%)	3,810	
Total	80,090	

The estimated administration costs of PMU are Rs. 56.3 million for 7 years. In connection with the improvement of access to credit, the group loan, and revolving loan, and mutual aid credit would be proposed. The loan capital will be arranged as described below. The capital of the revolving loan would be arranged by the Project.

	Arrangement of Capital of Loan
Group loan (Cultivation loan)	Finance from banks. The loan arrangement will be carried out by PMU.
Revolving loan (mid-term loan)	The capital of the loan is arranged by farmers themselves. PMU arrange the loan capital and give farmers credit if the farmers have insufficient capital.
Mutual aid credit system	Finance from Women Bank

The engineering works including survey, planning, detailed design, etc. were estimated at 10% of rehabilitation and improvement, capital for project management and strengthening of support system, and awareness and training programmes.

2.3 Summary of Costs

2.3.1 Total Project Cost

The total project costs including all irrigation schemes were estimated to be Rs.805 million, excluding price escalation. The costs per hectare was estimated at Rs.208,400 (US\$ 2,950), and the rehabilitation and improvement costs of irrigation facilities and farm roads account for 62% of total costs.

Total Project Costs (Excluding Price Contingency and G.S.T.)

(Unit : Rs. Million)

	Commanding Area (ha)	Rehabilitation Cost*1	Capital for Support Facilities *1	Awareness and Training Programmes *1	PMU Administration and Loan*1	Engineering Cost*1	Total
Nachchaduwa major scheme	2,540	395.1	67.0	27.5	51.4	49.1	590.1
Palukadawela major schemes	956	58.7	27.6	12.2	19.9	9.8	128.2
Periyakulama medium scheme	91	17.9	1.7	1.6	1.9	2.1	25.2
Mahananneriya medium scheme	158	14.0	4.4	2.3	4.0	2.0	26.7
Mahananneriya minor schemes	117	15.2	9.1	5.2	2.9	2.8	35.2
Total	3,862	500.9	109.8	48.8	80.1	65.8	805.4
Proportional Extent		62%	14%	6%	10%	8%	100%
Cost per Hectare	(Rs./ha)	129,700	28,400	12,600	20,700	17,000	208,400
	(US\$/ha)	1,830	400	180	300	240	2,950

Remarks : *1 Including physical contingency

Exchange Rate : US\$1.0 = Rs. 71

2.3.2 Project Costs per Implementing Agency

Many government agencies at central and provincial levels will participate in the implementation of the Project. The project costs per implementing agency are as follows.

Project Costs per Implementing Agency (Excluding Price Contingency and G.S.T.)

(Unit : Rs. Million)

Implementing Agency	Rehabilitation Cost	Capital for Support Facilities	Awareness and Training Programmes	PMU Administration and Loan	Engineering Cost	Total	%
IPEU	-	0.3	14.2	-	-	14.5	1.8%
PDOA / NCP	-	0.1	0.9	-	-	1.0	0.1%
PDOA / NWP	-	22.4	8.0	-	-	30.4	3.8%
DOI	485.7	-	2.3	-	-	488.0	60.6%
PED / NCP	-	-	-	-	-	0.0	0.0%
PED / NWP	15.2	-	0.1	-	-	15.3	1.9%
IMD	-	68.3	4.8	80.1	65.9	219.1	27.2%
DAS	-	5.4	1.7	-	-	7.1	0.9%
PDAPH / NCP	-	0.1	-	-	-	0.1	0.0%
PDAPH / NWP	-	9.8	-	-	-	9.8	1.2%
NAQDA	-	3.4	-	-	-	3.4	0.4%
KARTI	-	-	16.7	-	-	16.7	2.1%
Total	500.9	109.8	48.7	80.1	65.9	805.4	100.0%

DOA : Department of Agriculture

PDOAs : Provincial Department of Agriculture

IPEU : Inter Provincial Extension Unit

DOI : Department of Irrigation

PED : Provincial Engineering Department

IMD : Irrigation Management Division

DAS : Department of Agrarian Services

PDAPH : Provincial Department of Animal Production & Health

NAQDA : National Aquaculture Development Authority

NYSC : National Youth Service Council

NAITA : National Apprentice & Industrial Training Authority

DS : Divisional Secretariat

KARTI : Kobbekaduwa Agrarian Research and Training Institute

Note : * The costs for works to be covered by the normal activities of the government are excluded from the project costs.

2.3.3 Annual Disbursement Costs

The annual disbursement programme of the Project costs is presented below. The detail of the cost per each irrigation scheme is shown in Table T.3.1.

Annual Disbursement Costs

(Unit : Rs. Million)

	Year							Total
	2002	2003	2004	2005	2006	2007	2008	
Rehabilitation Cost	-	-	224.5	185.5	90.9	-	-	500.9
Capital for Support Facilities	41.3	31.1	27.7	9.7	-	-	-	109.8
Awareness and Training Programmes	12.8	10.5	7.7	6.8	6.2	3.4	1.3	48.7
PMU Administration and Loan	8.4	8.4	14.8	14.2	14.2	11.6	8.5	80.1
Engineering Cost	13.2	13.2	13.2	6.6	6.6	6.6	6.5	65.9
Total	75.7	63.2	287.9	222.8	117.9	21.6	16.3	805.4
Price contingency	15.9	20.9	133.6	136.0	91.0	20.5	18.7	436.6
GST (12.5%)	11.4	10.5	52.7	44.9	26.1	5.3	4.4	155.3
Grand Total	103.0	94.6	474.2	403.7	235.0	47.4	39.4	1,397.3

Remarks : GST : Goods and Services Tax

The price contingency of the Project is set at 10% per year based on the average of the escalation rate of the retail price in Colombo in last 5 years (1994 – 1998).¹

2.4 O&M and Replacement Cost

Annual Operation and maintenance costs for irrigation schemes are estimated as follows:

Annual O&M Costs

(Unit : Rs.)

	Total	Government	Farmers
Major schemes	2,000	1,000	1,000
Medium schemes	1,500	-	1,500
Minor schemes	1,500	-	1,500

Among the costs shared by the farmers, the amount of Rs. 500 is allocated to an allowance for gate operators, named by salaris. The remaining costs are used for the maintenance of irrigation facilities. The maintenance costs are composed of material and labour costs. They are in the ratio of 3 : 7. The estimated O&M costs of supporting facilities and equipment are 1 % of the investment costs.

The replacement cost are estimated, assuming that the steel gate of irrigation facilities, O&M equipment, vehicle, and equipment for extension and training are replaced in every 10 years, and buildings in every 25 years.

¹ Annual Report 1996 and 1998, Central Bank of Sri Lanka.

TABLES

Table T 2.1 Unit Cost Used for Rehabilitation Works

Item	Description	unit	Cost (Rs.)	Source
1. Materials				
1) Cement		bag	295.00	1
2) Sand		cu.	550.00	1
3) Metal	1 1/2"	cu.	2,600.00	1
4) Rubble	6" - 9"	cu.	1,000.00	1
5) Plank	1"	sq.	1,800.00	1
6) Steel T/S		Lb.	17.25	1
7) RCC Pipes	12" dia.	ft	350.00	2, (23.3)
	15" dia.	ft	410.00	2, (23.4)
	18" dia.	ft	550.00	2, (23.5)
	24" dia.	ft	700.00	2, (23.6)
8) Cast Iron Gate	12" dia.	each	11,500.00	2, (21.2)
	18" dia.	each	30,000.00	2, (21.4)
	24" dia.	each	40,000.00	2, (21.5)
	30" dia.	each	60,000.00	2, (21.6)
2. Labor				
1) Unskilled		day	175.00	1
2) Skilled		day	275.00	1
3. Civil Works				
1) Concrete Works (1:3:6)				
Materials	cement, sand, metal, water, form		8,200.00	
Labour	@7.75 unskilled, @1.00 skilled		1,631.25	
Total		cu.	9,831.25	1, (18)
2) Rubble Masonry				
Materials	cement, sand, rubble		3,200.00	
Labour	@5.00 unskilled, @0.75 skilled		1,081.25	
Total		cu.	4,281.25	1, (24)
3) Plastering (1/2" thickness, 1:3)				
Materials	cement, sand		350.00	
Labour	@1.00 unskilled, @1.00 skilled		450.00	
Total		cu.	800.00	1, (25)
4) Earth Works (Excavation & compaction)				
Labour	@2.22 unskilled		388.50	1, (11)
5) Desilting		cu.	400.00	2, (25.1)
6) Weeding		sq.	7.27	2, (25.2)

bag : 50 kg
cu. : 100 cubic feet
sq. : 100 square feet
ft. : 1 feet
Lb. : 1 pound

Source 1 : Unit rates for Construction Works, 1999, Kurunegala, Irrigation Department

Source 2 : Unit rates for construction works, 1999, Rates Committee, MIP, Colombo

Table T 2.2 Rehabilitation and Improvement Cost for Irrigation Facilities and Farm Roads

Major and Medium Schemes (Unit : Rs. 1000)

	Major Schemes		Medium Schemes	
	Nachchaduwa	Palukadawela	Periyakulama	Mahananneriya
Tank	10,750	2,118	9,484	2,180
Feeder Canal	16,200	825	-	-
Main canals	72,038	9,416	4,726	3,503
D-canals	91,867	5,173	2,574	-
F-canals	81,808	17,627	2,216	-
Anicuts	-	5,350	-	3,600
Roads	-	-	-	1,264
Sub-total	272,663	40,509	19,000	10,547
Overhead & Profit	70,892	10,532	3,990	2,215
Sub-total	343,555	51,041	22,990	12,762
Physical Contingency	34,356	5,104	2,299	1,276
Total	377,911	56,145	25,289	14,038

Minor Schemes (Unit : Rs. 1000)

	Minor Schemes						
	Kallan-chiya	Arthi-kulama	Palumai-lewa	Ihalagama	Tambare	Ihala-nanneriya	Total
Tank	1,586	1,506	1,495		2,663	1,663	8,913
Canal system	989	227	495		293	243	2,247
Feeder Canal	96	-	-		-	-	96
Roads	-	-	946		-	-	946
Sub-total	2,671	1,733	2,936	4,002	2,956	1,906	16,204
Overhead & Profit	454	294	499	680	502	324	2,753
Sub-total	3,125	2,027	3,435	4,682	3,458	2,230	18,957
Physical Contingency	313	203	344	468	346	223	1,896
Total	3,438	2,230	3,779	5,150	3,804	2,453	20,853

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (1/9)

Classification	Item	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
1) Civil Work					
	a) Tank		1 L.S.	10,750,000	
	b) Kalawewa-Tissawewa-Yoda Ela (Feeder Canal)		1 L.S.	16,200,000	
	c) High Level Main Canal		1 L.S.	47,128,000	
	d) High Level Distributary Canal (managed by ID)		1 L.S.	57,256,000	
	e) High Level Distributary/Field Canal (managed by FO)		1 L.S.	38,864,000	
	f) Low Level Main Canal		1 L.S.	24,910,000	
	g) Low Level Distributary Canal (managed by ID)		1 L.S.	34,611,000	
	h) Low Level Distributary/Field Canal (managed by FO)		1 L.S.	42,944,000	
	j) Total Cost of Civil Work			272,663,000	
		Pro-rate		1,512	US\$/ha
2) Overhead & Profit				70,892,000	26% of 1)
3) GST				42,944,000	12.5% of 1) and 2)
4) Total of Basic Cost				386,499,000	1) +2) + 3)

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (2/9)

Item to be rehabilitated	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Tank	Bund	Earth works in tank bund where necessary	1 L.S.	200,000
		Strip turfing to newly filled earth	1 L.S.	50,000
		Gravelling along tank bund	1 L.S.	300,000
		Providing new rip rap	1 L.S.	500,000
		Construction of toe filler	280 m	1,500,000
	Sluice	Repair to existing sluice	1 L.S.	300,000
		Providing gabion walls in down stream of sluice	1 L.S.	1,000,000
	Spillway	Repair to spillway	1 L.S.	500,000
	Others	Improvements to tank bund access road	1 L.S.	1,000,000
		Construction of retaining wall in bund road	1 L.S.	300,000
Improvement to foot bridge		1 L.S.	100,000	
Service tanks	Improvement of service tank of 11 nos.	11 nos.	5,000,000	
Tank Total			10,750,000	
Feeder canal	Structure	Retaining wall	1 L.S.	9,200,000
		Measuring device & regulator	3 nos.	450,000
		Culvert, bridge & crossing	4 nos.	1,800,000
		Other structure	1 L.S.	550,000
	Earth works	Desilting, etc.	10,500 m	4,200,000
Feeder canal Total			16,200,000	
High Level Main	Structure	Masonry wall (canal lining)	3,976 m	17,732,000
		Bathing step	16 nos.	440,000
		Bridge	23 nos.	7,360,000
		Water control device	31 nos.	15,095,000
		Other facilities	3 nos.	185,000
	Sub-total			40,812,000
	Earth works	Back fill, desilting, etc.	4,476 m	3,936,000
Road	Graveling of canal road	15,256 m	2,380,000	
Total			47,128,000	

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (3/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Low Level Main	Structure	Masonry wall and other lining	3,197 m	7,969,000	
		Bathing step	4 nos.	180,000	
		Bridge	80 nos.	10,834,000	
		Water control device	21 nos.	1,192,000	
		Crossing culvert	8 nos.	145,000	
		Other facilities	1 nos.	90,000	
		Sub-total			20,410,000
	Earth works	Desilting, etc.	10,500 m	4,000,000	
Road	Graveling of canal road	10,500 m	500,000		
Total				24,910,000	
High Level	Structure	Concrete lining	519 m	2,461,185	
D4-canal	Earth works	Earth works for canal bund forming	795 m	246,159	
	Road	Gravelling	795 m	40,330	
High Level	Structure	Concrete lining	83 m	344,450	
D5-canal	Earth works	Earth filling	83 m	10,000	
High Level	Structure	Concrete lining	1,481 m	7,628,695	
D7-canal	Earth works	Earth works for canal bund forming	267 m	104,490	
	Road	Gravelling	376 m	25,345	
High Level	Structure	Concrete lining	90 m	370,800	
D11-canal	Earth works	Earth works for canal bund forming	154 m	10,500	
High Level	Structure	Concrete lining	323 m	1,328,700	
D12-canal	Earth works	Earth works for canal bund forming	176 m	25,500	
High Level	Structure	Masonry wall for canal lining	27 m	81,000	
D15-canal		Turnout	2 nos.	30,000	
	Earth works	Earth works for masonry wall	27 m	14,000	
High Level	Structure	Masonry wall for canal lining	21 m	20,000	
D17-canal		Turnout	2 nos.	30,000	
	Earth works	Earth works for masonry wall	21 m	7,000	
High Level	Structure	Masonry wall for canal lining	260 m	700,000	
		Drop structure	4 nos.	27,000	
	Turnout structure	3 nos.	80,000		
	Other facilities	1 L.S.	18,000		
	Earth works	Earth works for masonry wall	260 m	75,000	
D19-canal	Road	Gravelling	825 m	150,000	

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (4/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
High Level D21-canal	Structure	Masonry wall for canal lining	700 m	2,110,000	
		Drop structure	6 nos.	54,000	
		Turnout structure	5 nos.	130,000	
		Culvert	1 no.	6,000	
	Earth works	Earth works for masonry wall	700 m	85,000	
	Road	Gravelling	700 m	125,000	
High Level D26-canal	Structure	Masonry wall for canal lining	2,025 m	8,814,000	
		Drop structure	17 nos.	128,000	
		Turnout structure	10 nos.	218,000	
		Culvert	2 no.	20,000	
		Other facilities	1 L.S.	70,000	
	Earth works	Earth works for masonry wall	2,025 m	450,000	
Road	Gravelling	2,025 m	350,000		
High Level D27-canal	Structure	Masonry wall for canal lining	1,961 m	8,512,500	
		Drop structure	8 nos.	35,000	
		Turnout (including pipe outlet & regulator)	13 nos.	162,500	
		Culvert	1 no.	15,000	
	Earth works	Earth works for masonry wall	1,961 m	148,000	
	Road	Gravelling	1,961 m	325,000	
High Level D35-canal	Structure	Masonry wall for canal lining	2,698 m	10,800,000	
		Drop structure	16 nos.	145,000	
		Turnout	4 nos.	65,000	
		Culvert, crossing & bridge	6 no.	65,000	
		Other facilities	1 L.S.	25,000	
	Earth works	Earth works for masonry wall	2,698 m	320,000	
Road	Gravelling & filling pot	2,422 m	500,000		
High Level D36-canal	Structure	Masonry wall for canal lining	1,661 m	5,700,000	
		Drop structure	5 nos.	42,000	
		Turnout & pipe outlet	14 nos.	85,000	
		Culvert, crossing & bridge	2 no.	13,000	
		Other facilities	1 L.S.	10,000	
	Earth works	Earth works for masonry wall	1,661 m	325,000	
Road	Gravelling & filling pot	1,661 m	175,000		

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (5/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
High Level D36A-canal	Structure	Masonry wall for canal lining	631 m	3,118,000	
		Drop structure	3 nos.	13,000	
		Turnout & pipe outlet	7 nos.	50,000	
		Culvert, crossing & bridge	1 no.	4,000	
		Other facilities	1 L.S.	15,000	
	Earth works	Earth works for masonry wall	631 m	100,000	
Road	Gravelling & filling pot	631 m	100,000		
High Level D-canal Total				57,256,000	
Low Level D1-canal	Structure	Rectangular canal section	820 m	2,916,000	
		Turnout & pipe outlet	7 nos.	38,000	
	Earth works	Earth works for rectangular canal section	820 m	84,000	
	Road	Gravelling	810 m	90,000	
Low Level D1A-canal	Structure	Rectangular canal section	537 m	1,933,200	
		Drop structure	1 nos.	9,500	
		Turnout & pipe outlet	1 nos.	2,000	
		Culvert & crossing	2 nos.	42,000	
	Earth works	Earth works for rectangular canal section	537 m	140,000	
	Road	Gravelling	537 m	57,938	
Low Level D2canal	Structure	Trapezoidal canal section	465 m	1,674,000	
		Turnout, pipe outlet & regulator	5 nos.	48,500	
		Culvert & crossing (tractor crossing)	1 nos.	40,000	
	Earth works	Earth works for trapezoidal canal section	0 m	0	
	Road	Gravelling	475 m	40,050	
Low Level D3A-canal	Structure	Trapezoidal canal section	13 m	46,800	
		Turnout & pipe outlet	1 nos.	2,000	
	Earth works	Earth works for trapezoidal canal section	0 m	0	
	Road	Gravelling	15 m	1,350	
Low Level D4-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	1,235 m	4,463,560	
		Drop structure	1 nos.	20,000	
		Turnout, pipe outlet & regulator	9 nos.	150,000	
		Culvert & crossing	1 nos.	10,000	
	Earth works	Earth works for trapezoidal canal section	170 m	35,000	
	Road	Gravelling	1,245 m	180,000	

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (6/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Low Level D5-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	18 m	64,800	
		Turnout, pipe outlet & regulator	2 nos.	25,000	
	Earth works	Earth works for trapezoidal canal section	0 m	0	
Low Level D6-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	1,325 m	4,741,400	
		Drop structure	6 nos.	144,500	
		Turnout, pipe outlet & regulator	7 nos.	68,000	
		Culvert, crossing & bridge	2 nos.	1,041,000	
	Earth works	Earth works for trapezoidal canal section	0 m	0	
	Road	Gravelling	1,350 m	170,000	
Low Level D7-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	170 m	612,000	
		Turnout, pipe outlet & regulator	3 nos.	22,000	
		Culvert, crossing & bridge	1 nos.	3,000	
	Earth works	Earth works for trapezoidal canal section	0 m	0	
	Road	Gravelling	0 m	0	
Low Level D8-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	340 m	1,260,000	
		Turnout, pipe outlet & regulator	7 nos.	55,000	
		Culvert, crossing & bridge	1 nos.	20,000	
	Earth works	Earth works for trapezoidal canal section	0 m	0	
	Road	Gravelling	350 m	50,000	
Low Level D9-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	2,000 m	7,220,000	
		Drop structure	3 nos.	53,000	
		Turnout, pipe outlet & regulator	14 nos.	211,000	
		Culvert, crossing & bridge	1 no.	35,000	
	Earth works	Desilting the canal bed	3,000 m	75,000	
	Low Level D10-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	190 m	1,120,000
		Turnout, pipe outlet & regulator	2 nos.	31,000	
		Culvert, crossing & bridge	1 no.	2,000	
Earth works		Desilting the canal bed	0 m	0	
Road		Gravelling	355 m	40,000	
Low Level D11-canal	Structure	Trapezoidal canal section (masonry wall + plaster)	726 m	2,748,600	
		Turnout, pipe outlet & regulator	4 nos.	137,000	
		Drop structure	5 nos.	191,000	
	Earth works	Desilting the canal bed	0 m	0	
	Road	Gravelling	748 m	100,000	

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (7/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Low Level Nelubewa center	Structure	Trapezoidal canal section (masonry wall + plaster)	578 m	2,148,800	
		Turnout, pipe outlet & regulator	9 nos.	86,000	
		Culvert, crossing & bridge	2 nos.	38,000	
	Earth works	Desilting the canal bed	0 m	0	
	Road	Gravelling	588 m	75,000	
Low Level D-canal Total				34,611,000	
High Level Sena Samagi FO-1	Structure	Canal lining (masonry or concrete)	335 m	347,200	
		Regulator	1 no.	36,675	
		Culvert	1 no.	26,350	
	Earth works	Earth works for canal bund filling	61 m	18,725	
		Earth excavation for drainage canal	75 m	11,200	
	Road	Earth filling & gravelling	4,000 m	1,365,850	
Total of FO-1				1,806,000	
High Level Mahasen FO-2	Structure	Canal lining (masonry or concrete)	1,488 m	1,625,950	
		Water tank	2 nos.	25,400	
		Regulator	2 nos.	209,850	
		Spill canal improvement	1 no.	56,000	
		Culvert	2 nos.	21,000	
	Earth works	Earth works for canal bund filling	152 m	19,300	
		Earth woks for gravelling & others	1 L.S.	401,600	
Total of FO-2				2,359,000	
High Level Parakrama FO-3	Structure	Canal lining (masonry or concrete)	3,848 m	7,681,175	
		Regulator & turnout	5 nos.	58,925	
		Culvert	24 nos.	791,600	
		Construction of threshing yard	3 nos.	106,725	
		Improvement of anicut	1 no.	186,150	
	Earth works	Earth works for canal bund filling	207 m	45,825	
	Road	Earth filling & gravelling	4,000 m	2,062,800	
Total of FO-3				10,933,000	
High Level Samagi FO-4	Structure	Canal lining (masonry or concrete)	1,610 m	2,172,450	
		Turnout	4 nos.	114,900	
		Culvert	1 no.	37,400	
	Earth works	Earth work for canal desilting	3 nos.	89,425	
Total of FO-4				2,414,000	

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (8/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
High Level Ranketa FO-5	Structure	Canal lining (masonry or concrete)	6,089 m	7,757,200	
		Sluice gate	1 nos.	199,900	
		Culvert	2 no.	98,200	
	Earth works	Earth work for drainage canal	500 m	97,125	
		Earth work for canal bund filling	10 m	1,925	
	Road	Earth filling & gravelling	5,476 m	2,197,150	
Total of FO-5				10,351,000	
High Level 26/27 D-canal FO-6	Structure	Canal lining (masonry or concrete)	2,389 m	1,982,450	
		Turnout	13 nos.	265,150	
		Culvert	3 no.	79,050	
	Earth works	Earth work for canal bund filling	1 no.	3,850	
	Road	Earth filling & gravelling	6,468 m	1,444,725	
Total of FO-6				3,775,000	
High Level Ruwanmweli FO-7	Structure	Canal lining (masonry or concrete)	1,470 m	2,818,125	
		Regulator & turnout	3 nos.	103,900	
		Culvert	1 no.	79,125	
	Earth works	Improvement of spill tail canal	1,500 m	582,750	
		Earth work for drainage canal excavation	500 m	194,250	
Road	Earth filling & gravelling	5,950 m	2,515,850		
Total of FO-7				6,294,000	
High Level Tissa FO-8	Structure	Canal lining (concrete)	550 m	932,025	
Total of FO-8				932,000	
High Level D & F-canal Total				38,864,000	
Low Level Al-Aksa FO-9	Structure	Canal lining (masonry)	5,400 m	4,257,375	
		Turnout	16 nos.	160,500	
	Total of FO-9				4,417,000
Low Level Ekasth FO-10	Structure	Canal lining (masonry or concrete)	3,105 m	6,511,075	
		Regulator & turnout	5 nos.	143,625	
		Causeway	1 no.	26,350	
	Earth works	Earth work for canal bund filling	3,947 m	389,425	
	Road	Earth filling & gravelling	2,840 m	2,002,825	
Total of FO-10				9,073,000	

Table T 2.3 Cost Estimation for Rehabilitation Works of Nachchaduwa Scheme (9/9)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Low Level Isuru FO-11	Structure	Canal lining (masonry or concrete)	1,631 m	2,273,200	
		Turnout	12 nos.	223,500	
	Earth works	Culvert	1 no.	26,350	
		Tractor entrance	1 no.	7,150	
	Road	Earth work for canal bed desilting	200 m	16,850	
	Road	Earth filling & gravelling	3,236 m	1,582,575	
Total of FO-11				4,129,000	
Low Level Rana Mayura FO-12	Structure	Canal lining (masonry or concrete)	3,060 m	3,281,875	
		Turnout & sluice gate	5 nos.	162,725	
		Culvert	3 nos.	58,050	
		Others	1 L.S.	110,000	
	Earth works	Earth work for canal bed desilting	122 m	5,125	
		Earth work for canal bund filling	550 m	75,225	
Road	Earth filling & gravelling	4,720 m	2,310,675		
Total of FO-12				6,003,000	
Low Level Gemunu FO-13	Structure	Canal lining (masonry or concrete)	4,900 m	6,546,725	
		Culvert	4 nos.	105,400	
	Earth works	Earth work for canal bund filling	5,200 m	351,775	
		Road	Earth filling & gravelling	6,200 m	3,292,050
Total of FO-13				10,295,000	
Low Level Wiyaya FO-14	Structure	Canal lining (masonry or concrete)	2,500 m	4,544,075	
		Culvert	8 nos.	210,750	
	Earth works	Earth work for canal bund filling	4,150 m	1,451,900	
		Earth work fir drainage excavation	4,000	777,000	
	Road	Earth filling & gravelling	2,100 m	2,043,850	
Total of FO-14				9,027,000	
Low Level D & F-canal Total				42,944,000	

Table T 2.4 Cost Estimation for Rehabilitation Works of Palukadawela Scheme (1/5)

Classification	Item	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
1) Civil Work					
	a) Tank		1 L.S.	2,118,000	
	b) Feeder Canal		1 L.S.	825,000	
	c) Anicut		1 L.S.	5,350,000	
	d) RB Main Canal		1 L.S.	9,416,000	
	e) Distributary Canal (managed by ID)		1 L.S.	5,173,000	
	d) Field Canal & small tank (managed by FO)			17,627,000	
	f) Total Cost of Civil Work			40,509,000	
		Pro-rate		597	US\$/ha
2) Overhead & Profit				10,532,000	26% of 1)
3) GST				6,380,000	12.5% of 1) and 2)
4) Total of Basic Cost				57,421,000	1) +2) + 3)

Table T 2.4 Cost Estimation for Rehabilitation Works of Palukadawela Scheme (2/5)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Tank	Bund	Earth works in forming bund at low sections	1 L.S.	150,000	
		Improvement to rip rap protection	1 L.S.	5,000	
		Improvement to bathing spots	1 L.S.	50,000	
		Construction of new bathing spots	1 L.S.	75,000	
		Gravelling tank bund road	1 L.S.	150,000	
		Provision of toe filter	1 L.S.	3,000	
	Sluice	Improvement to down stream structure of LB & RB sluices	1 L.S.	150,000	
		Improvement to upstream wall of RB sluice & fixing gate posts	1 L.S.	125,000	
		Provision of trash rack	1 L.S.	30,000	
		Provision of hand rails to head sluice	1 L.S.	30,000	
	Spillway	Providing reinforced concrete skin cover	1 L.S.	150,000	
		Construction of bridge over spill way	1 L.S.	500,000	
	Others	Construction of new bridges	2 nos.	400,000	
		Construction of new causeway	4 nos.	150,000	
Construction of retaining wall		60 m	150,000		
Tank Total				2,118,000	
Feeder Canal	Structure	Regulator	1 no.	60,000	
		Measuring device	1 no.	455,000	
	Earth works	Earth filling & desilting	472 m	235,000	
	Road	Leveling	472 m	75,000	
Feeder Canal Total				825,000	

Table T.2.4 Cost Estimation for Rehabilitation Works of Palukadawela Scheme (3/5)

Item to be rehabilitated	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Anicut	Improvement to Dangahakotuwa amuna	1 L.S.	350,000	
	Improvement to Alakola amuna	1 L.S.	250,000	
	Improvement to Kota Ela	1 L.S.	250,000	
	Improvement to Weeradadana amuna (No.1)	1 L.S.	350,000	
	Improvement to Weli amuna	1 L.S.	250,000	
	Improvement to Malgaha Kotuwa	1 L.S.	250,000	
	Improvement to Weehena amuna	1 L.S.	400,000	
	Improvement to Thalakola amuna	1 L.S.	300,000	
	Improvement to Thibbatuhena amuna	1 L.S.	300,000	
	Improvement to Weeradadana amuna (No.2)	1 L.S.	350,000	
	Improvement to Kotuwela amuna	1 L.S.	350,000	
	Improvement to Halmilla Kotuwa amuna	1 L.S.	250,000	
	Improvement to Pahgaha Kotuwa amuna	1 L.S.	350,000	
	Improvement to Karuwala Gaha Kotuwa amuna	1 L.S.	350,000	
	Improvement to Puranwela amuna	1 L.S.	250,000	
Improvement to Nawa amuna	1 L.S.	250,000		
	Construction of new anicut between Thalakola & Thibbatuhena amuna	1 L.S.	500,000	
Anicut Total			5,350,000	
RB Main Canal	Structure	Retaining wall (masonry)	16 nos.	535,000
		Turnout, regulator & measuring devices	31 nos.	1,955,000
		Bridge, culvert & crossing	28 nos.	1,361,000
		Spill causeway	10 nos.	110,000
		Bathing spots	9 nos.	140,000
		Improvement of tunnel section	260 m	1,000,000
		Others	1 L.S.	100,000
Earth works	Earth filling, desilting & gravelling road	16,260 m	4,215,000	
RB Main Canal Total			9,416,000	
Tract 1 D6-canal	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	948 m	450,000
Tract 1 D10-canal	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	1,950 m	650,000

Table T.2.4 Cost Estimation for Rehabilitation Works of Palukadawela Scheme (4/5)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Tract 2 D10-canal	Structure	Retaining wall for canal lining (masonry)	2 no.	50,000	
		Turnout & regulator	12 nos.	103,000	
		Drop structure	5 nos.	20,000	
		Culvert	2 no.	16,000	
		Others	1 L.S.	10,000	
	Earth works		0 m	0	
Tract 2 D10/4-canal	Structure	Retaining wall for canal lining (masonry)	2 no.	70,000	
		Turnout & pipe outlet	8 nos.	64,000	
		Drop structure	12 nos.	68,000	
		Pipe culvert	7 no.	56,000	
		Others	1 L.S.	4,000	
	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	1,920 m	750,000	
Tract 4 D10canal	Structure			0	
	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	720 m	300,000	
Tract 5 D1-canal	Structure	Pipe outlet	5 nos.	55,000	
		Pipe culvert	2 no.	38,000	
		Others	1 L.S.	8,000	
	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	1,712 m	600,000	
Tract 5 D2-canal	Structure	Pipe outlet	12 nos.	98,000	
		Culvert	1 no.	35,000	
		Causeway	1 no.	50,000	
	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	2,038 m	600,000	
Tract 6 D1-canal	Structure	Retaining wall for canal lining (masonry)	1 no.	60,000	
		Pipe outlet	14 nos.	163,000	
		Drop structure	12 nos.	52,000	
		Culvert	2 nos.	38,000	
		Bathing spots	1 no.	15,000	
	Earth works	Earth works for canal bund forming, turfing & gravelling for bund road	1,920 m	750,000	
D-Canal Total				5,173,000	
Tract 1 F-canal	Structure	Turnout	23 nos.	895,675	
	Earth works			0	

Table T.2.4 Cost Estimation for Rehabilitation Works of Palukadawela Scheme (5/5)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Tract 2 F-canal	Structure	Canal lining (masonry or concrete)	82 m	83,519	
		Farm turnout	31 nos.	543,205	
		Culvert	1 no.	39,600	
		Drain canal anicut	1 no.	345,075	
		Others	1 L.S.	28,100	
	Earth works	Earth works for canal bund forming	150 m	35,325	
		Desilting from tank bed	1 L.S.	1,630,200	
Road	Earth filling & gravelling	10,020 m	4,474,925		
Tract 3 F-canal	Structure	Canal lining (masonry or concrete)	400 m	521,375	
		Farm turnout	5 nos.	240,875	
		Culvert	1 no.	47,550	
		Bathing step	3 nos.	129,200	
	Earth works	Earth filling for canal & road	1 L.S.	77,700	
Tract 4 F-canal	Structure			0	
	Earth works			0	
Tract 5 F-canal	Structure	Canal lining (masonry or concrete)	304 m	501,875	
		Sluice	1 L.S.	99,940	
		Farm turnout	4 nos.	101,020	
		Culvert	12 nos.	360,045	
		Bathing step	3 nos.	40,575	
		Others	1 L.S.	67,625	
	Earth works	Earth works for canal bund forming	206 m	101,525	
Road	Earth filling & gravelling	9,582 m	5,614,950		
Tract 6 F-canal	Structure	Tank rip rap protection	1 L.S.	71,225	
		Bathing step	1 no.	38,175	
		Farm turnout	4 nos.	61,275	
		Earth works	Earth work for canal bed desilting	1 L.S.	100,150
	Road	Earth filling & gravelling	375 m	544,025	
Puranagama F-canal	Structure	Canal lining (masonry or concrete)	462 m	420,050	
		Causeway	3 nos.	327,825	
	Earth works	Earth work for canal bund filling	200 m	43,600	
	Road	Earth works for drainage canal excavation	200 m	41,125	
F-Canal Total				17,627,000	

Table T 2.5 Cost Estimation for Rehabilitation Works of Periyakulama Scheme (1/2)

Classification	Item	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
1) Civil Work					
	a) Tank		1 L.S.	6,362,000	
	b) Main Canal (Centre Low Level)		1 L.S.	3,856,000	
	c) D-Canal (Centre Low Level)		1 L.S.	997,000	
	d) F-Canal (RB High Level)		1 L.S.	745,000	
	e) F-Canal (LB High Level)		1 L.S.	1,450,000	
	f) Total Cost of Civil Work		1 L.S.	13,410,000	
		Pro-rate		2,076	US\$/ha
2) Overhead & Profit				2,816,000	21% of 1)
3) GST				2,028,000	12.5% of 1) and 2)
4) Total of Basic Cost				18,254,000	1) +2) + 3)

Table T 2.5 Cost Estimation for Rehabilitation Works of Periyakulama Scheme (2/2)

Item to be rehabilitated		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Tank	Bund	Earth and gravel filling & slope protection	1 L.S.	1,562,000	
	Sluice	Reconstruction	3 nos.	600,000	
	Spillway	Spill tail canal improvement	1 L.S.	2,000,000	
	Others		1 L.S.	2,200,000	
	Total			6,362,000	
Main Canal (Low level, center)	Structure	Turnout & Regulator	9 nos.	154,000	
		Culvert	1 nos.	50,000	
		Rubble masonry wall	430 m	2,286,000	
		Sub-total		2,490,000	
	Earth works	Earth works & turfing	1,310 m	655,000	
		Drainage Canal Improvement	930 m	255,000	
		Sub-total		910,000	
	Maintenance road	Earth filling & graveling	430 m	456,000	
	Total			3,856,000	
	D-Canal 1 (Low level, center)	Structure	Turnout	7 nos.	42,000
Culvert			2 nos.	100,000	
Sub-total				142,000	
Earth works		Earth works	1,710 m	855,000	
		Sub-total		855,000	
Total				997,000	
F-canal (High level, RB)	Structure	Turnout	3 nos.	18,000	
		Culvert	2 nos.	100,000	
		Sub-total		118,000	
	Earth works	Earth works	1,110 m	555,000	
		Drainage Canal Improvement	100 m	72,000	
	Total			627,000	
F-canal (High level, LB)	Structure	Turnout	8 nos.	48,000	
		Culvert	2 nos.	100,000	
		Sub-total		148,000	
	Earth works	Earth works (field canal improvement)	2,100 m	1,050,000	
		Drainage Canal Improvement	920 m	252,000	
	Total			1,302,000	
Total			1,450,000		
Total				13,410,000	

Table T 2.6 Cost Estimation for Rehabilitation Works of Mahannaneriya Scheme (1/2)

Classification	Item	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
1) Civil Work					
	a) Tank		1 L.S.	2,180,000	
	b) Anicut		1 L.S.	3,600,000	
	c) RB Main Canal		1 L.S.		
		Earth Works	1 L.S.	1,050,000	
		Structures	1 L.S.	2,453,000	
	d) F-Canal		1 L.S.		
		Earth Works	1 L.S.	0	
		Structures	1 L.S.	0	
	e) Road (FO's request)		1 L.S.	1,264,000	
	f) Total Cost of Civil Work			10,547,000	
		Pro-rate		940 US\$/ha	
2) Overhead & Profit				2,214,000	21% of 1)
3) GST				1,595,000	12.5% of 1) and 2)
4) Total of Basic Cost				14,356,000	1) +2) + 3)

Table T 2.6 Cost Estimation for Rehabilitation Works of Mahananneriya Scheme (2/2)

Item to be rehabilitated	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Tank	Bund	Earth works in forming bund at low sections	1 L.S.	150,000
		Gravelling tank bund road	1 L.S.	80,000
		Improvement of rip rap protection	1 L.S.	750,000
		Improvement of concrete slap protection	1 L.S.	250,000
		Provision of toe-filter	1 L.S.	200,000
	Sluice	Improvement to tower and approach of sluice & fixing gauge	1 L.S.	200,000
		Improvement of down stream transition structure	1 L.S.	75,000
		Provision of measuring device	1 L.S.	50,000
	Spillway	Provision of upstream cut-off wall	1 L.S.	100,000
		Improvement of downstream water cushion	1 L.S.	250,000
Improvement of abutments		1 L.S.	75,000	
Others	Improvement of anicut	7 nos.	3,600,000	
Total			5,780,000	
Main Canal (RB)	Structure	Rubble masonry wall for canal lining	88 m	370,000
		Turnout & regulator	29 nos.	1,108,000
		Culvert	12 nos.	365,000
		Drainage inlet structure	6 nos.	55,000
		Drop structure	7 nos.	130,000
		Canal spill structure	6 nos.	300,000
		Others	1 no.	125,000
	Sub-total			2,453,000
	Earth works	Desilting, Earth work in forming canal bund & turfing	3,550 m	1,050,000
		Sub-total		
F-Canal	Structure			
	Earth works			
Road	Earth filling & graveling		2,310 m	1,183,000
	Culvert		2 nos.	81,000
	Sub-total			1,264,000
Total			10,547,000	

Table T.2.7 Cost Estimation for Rehabilitation Works of Minor Schemes (Cascade) (1/4)

Name of Scheme	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks	
Kallanchiya	1) Civil Work				
	a) Tank	1 L.S.	668,000		
	b) Canal system	1 L.S.	989,000		
	c) Feeder Canal	1 L.S.	96,000		
	d) Road	1 L.S.	0		
	g) Total Cost of Civil Work		1,753,000		
		<u>Pro-rate</u>		3,048.00	US\$/ha
	2) Overhead & Profit		298,000	17% of 1)	
	3) GST		256,000	12.5% of 1) and 2)	
	4) Total of Basic Cost		2,307,000	1) +2) + 3)	
Artikulama	1) Civil Work				
	a) Tank	1 L.S.	719,000		
	b) Canal system	1 L.S.	227,000		
	c) Feeder Canal	1 L.S.			
	d) Road	1 L.S.	0		
	g) Total Cost of Civil Work		946,000		
		<u>Pro-rate</u>		1,101.00	US\$/ha
	2) Overhead & Profit		160,000	17% of 1)	
	3) GST		138,000	12.5% of 1) and 2)	
	4) Total of Basic Cost		1,244,000	1) +2) + 3)	
Mailewa	1) Civil Work				
	a) Tank	1 L.S.	1,161,000		
	b) Canal system	1 L.S.	495,000		
	c) Feeder Canal	1 L.S.	0		
	d) Road	1 L.S.	946,000		
	g) Total Cost of Civil Work		2,602,000		
		<u>Pro-rate</u>		1,666.00	US\$/ha
	2) Overhead & Profit		442,000	17% of 1)	
	3) GST		380,000	12.5% of 1) and 2)	
	4) Total of Basic Cost		3,424,000	1) +2) + 3)	

Table T 2.7 Cost Estimation for Rehabilitation Works of Minor Schemes (Cascade) (2/4)

Name of Scheme	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks
Ihalagama	1) Civil Work			
	a) Tank			
	b) Canal system			
	c) Feeder Canal			
	d) Road			
	g) Total Cost of Civil Work		2,890,000	
	<u>Pro-rate</u>		1,404.00	US\$/ha
2) Overhead & Profit			491,000	17% of 1)
3) GST			422,000	12.5% of 1) and 2)
4) Total of Basic Cost			3,803,000	1) +2) + 3)
Tambare	1) Civil Work			
	a) Tank		1,480,000	
	b) Canal system		293,000	
	c) Feeder Canal		0	
	d) Road		0	
	g) Total Cost of Civil Work		1,773,000	
	<u>Pro-rate</u>		1,236.00	US\$/ha
2) Overhead & Profit			301,000	17% of 1)
3) GST			259,000	12.5% of 1) and 2)
4) Total of Basic Cost			2,333,000	1) +2) + 3)
Ihara Nanneriya	1) Civil Work			
	a) Tank		1,492,000	
	b) Canal system		243,000	
	c) Feeder Canal		0	
	d) Road		0	
	g) Total Cost of Civil Work		1,735,000	
	<u>Pro-rate</u>		940.00	US\$/ha
2) Overhead & Profit			294,000	17% of 1)
3) GST			253,000	12.5% of 1) and 2)
4) Total of Basic Cost			2,282,000	1) +2) + 3)

Table T 2.7 Cost Estimation for Rehabilitation Works of Minor Schemes (Cascade) (3/4)

Name of Scheme		Description	Quantities	Rehabilitation Cost (Rs.)	Remarks	
Kallanchiya	Tank	Bund	Bund earth work & slope protection	1 L.S.	294,775	
		Spill	Construction of spill & causeway	1 L.S.	204,575	
		Sluice	Reconstruction	1 no.	169,170	
		Sub-total			668,000	
	Canal system	F-canal	Rubble masonry wall	1,000 m	696,100	
		Structure	Farm turnout	20 nos.	293,425	
		Sub-total			989,000	
	Feeder canal	Earth Excavation		1,500 m	96,200	
		Sub-total			96,000	
	Total				1,753,000	
Artikulama	Tank	Bund	Bund earth work & slope protection	1 L.S.	195,525	
		Sluice	Reconstruction	2 nos.	323,240	
		Bathing step	New construction	2 nos.	116,025	
		Spill	Rehabilitation	1 L.S.	84,900	
		Sub-total			719,000	
	Canal system	Structure	Farm turnout	10 nos.	146,800	
		Causeway	New construction	2 nos.	80,925	
		Sub-total			227,000	
	Total				946,000	
	Mailewa	Tank	Bund	Bund earth work & slope protection	1 L.S.	330,100
Sluice			Reconstruction	1 no.	155,545	
Spill tail canal			Earth excavation	3,000 m	676,000	
Sub-total					1,161,000	
Canal system		Canal	Earth filling & turfing, L=1.5 km	1,500 m	495,700	
		Sub-total			495,000	
Road		Agricultural Road	Earth & gravel filling	2,000 m	946,100	
		Sub-total			946,000	
Total				2,602,000		

Table T 2.7 Cost Estimation for Rehabilitation Works of Minor Schemes (Cascade) (4/4)

Name of Scheme	Description	Quantities	Rehabilitation Cost (Rs.)	Remarks	
Tambare	Desilting	1 L.S.	106,000		
	Bund	Bund earth work & slope protection	1 L.S.	418,725	
	Spill	Rehabilitation	1 L.S.	644,740	
	Sluice	Reconstruction	2 nos.	311,090	
	Sub-total			1,480,000	
	Canal system	Structure	Farm turnout, 20 nos	20 nos.	293,425
	Sub-total			293,000	
Total			1,773,000		
Ihara Nanneriya	Bund	Bund earth work & slope protection	1 L.S.	539,175	
	Bathing step		3 nos.	191,460	
	Desilting		1 L.S.	400,000	
	Sluice	Reconstruction	1 no.	155,545	
	Spill	Rehabilitation	1 L.S.	206,085	
	Sub-total			1,492,000	
	Canal system	Canal	Earth filling	800 m	173,100
Canal	Rehabilitation of pipeline	30 m	70,000		
Sub-total			243,000		
Total			1,735,000		
Total			8,809,000		
Rs./ha			1,404		

Table T 2.8 Costs for Rehabilitation and Improvement of Supporting Facilities and Provision of Equipment (Priority Irrigation Schemes)

Items	Quantity	Unit	Price (Rs.1,000)	Amount (Rs.1,000)	Remarks
1. Mobilization of PMU				29,200	
1) Vehicles and Equipment					
- Vehicles *1	19	No.	1,200	22,800	
- Motor Cycles *2	4	No.	100	400	
2) Office Equipment					
- Computer set	10	No.	200	2,000	
- Copy machine	5	L.S.	300	1,500	
- Other equipment	1	L.S.		1,000	
3) Others		L.S.		1,500	
2. Construction of Farmer Centre	27	No.	1,320	35,640	Floor space 140 m2/no.
3. Strengthening of Agricultural Support Services				39,710	
1) Institutional Strengthening Program for Agricultural Extension					
- Logistic Support Strengthening Program					
Provision of Motor Cycles	3	No.	100	300	IPEU, PODA/NCP & PODA/NWP
Provision of Computer Set	2	Set	200	400	IPEU & PODA/NWP
- Upgrading of ISTI, Maha Illuppallama					
Audio visual equipment	1	Set	900	900	Video camera (VHS) x 1, Video deck (VCR) x 2, TV x 1, Overhead projector & screen x 2, Printing machine x 1, Copy machine x 1
Bus	1	No.	9000	9,000	
2) Strengthening of Farmers/FOs Support Facilities					
- ASC Strengthening Program					
Provision of Motor Cycles for ASC	3	No.	100	300	ASC Nachchaduwa (Anuradhapura), ASC Galugamuwa (Kurunegala), ASC Mahananneriya (Kurunegala)
Renovation of Building, Office/Training Equipment	4	L.S.	600	2,400	ASC Nachchaduwa (Anuradhapura), ASC Tirappane (Anuradhapura), ASC Galugamuwa (Kurunegala), ASC Mahananneriya (Kurunegala)
- Strengthening of DAS					
Provision of Vehicle/DAS Office	2	No.	1200	2,400	DAS offices of Anuradhapura & Kurunegala
3) Support Programs for Income Generation					
- Upgrading of Seed Farm, Galgamuwa					
Potting Shed	2	No.	6.2/m2	2,480	200 m2
Shade House	2	No.	5.0/m2	4,000	400 m2
Office Quarter	1	No.	12.2/m2	1,220	100 m2
Irrigation facilities				140	Water pump & pumping station, water storage tank, irrigation system (1 ha)
Garage	1	No.	4.1/m2	210	50 m2
Training Equipment	1	Set	600	600	
Office Facilities	1	Set	500	500	
Vehicle (4 t truck)	1	No.	2,000	2,000	
- Upgrading of IFTC, Nikaweratiya					
Training building	1	No.	12.2/m2	1,460	120m2
Hostel	1	No.	13.5/m2	2,700	5 rooms x 40m2/room
Manager quarter	1	No.	13.5/m2	1,350	100 m2
Dairy shed	1	No.	300	300	To house 20 cows
Minisize dairy laboratory	1	No.	500	500	
Vehicle	1	No.	2,900	2,900	Micro-bus: 25 seats
- Strengthening of PDAPHs' Extension Activities					
Provision of Motor Cycles	2	No.	100	200	Anuradhapura and Kurunegara Offices
- Strengthening of Aqua-culture Extension Center					
1. Extension center building	1	No.	12.2/m2	2,400	200 m2
2. Training equipment	1	No.	270	270	
3. Facilitates of extension center	1	Set	380	380	Tables, chairs, board, cabinet, etc.
4. Provision of Motor Cycles for Aquaculture Extension Officers	2		100	200	
4) Strengthening of RPM Offices					
- Provision of Motor Cycles	2		100	200	
4. Physical Contingency (5%)				5,230	
Total				109,780	

*1 Number of Vehicles in PMU Office

Project Director	1	Agri. Supporting	1
Deputy Project Director	1	Income Generation	2
Construction (1)	4	M&E	2
O&M	1	Administration (2)	3
Farmer Supporting/Credit	2	IMD Head Office	2
Total			19

(1) 2 nos. for PEDs in NWP and NCP

(2) 2 nos. for mobilising resources persons and training equipment for institutional development.

*2 Technical officers of PED in NWP & NCP

Table T 2.9 Costs for Awareness and Training Programmes

Items	Quantity	Unit	Price (Rs.1,000)	Amount (Rs.1,000)	Remarks
1. Strengthening of Farmers' Organizations (FOs)					
1) Awareness Programme				16,000	(rounded)
- Employment of expert for participatory approach	125	M/D	10	1,250	NHDA/KARTI/NGO
- Facilitator	248	M/D	5	1,240	NHDA/KARTI/NGO
- Assistant to the facilitator	196	M/D	3	588	DAS/IMD/KARTI
- Instructor/Expert (Gender, PCM/LFA, Community Dev.)	76	M/D	5	380	NHDA/KARTI/NGO
- Instructor - ASC DO	60	M/D	0.5	30	DAS
- Other Resource Persons	32	M/D	3	96	NGO, Volunteer
- Other Resource Persons assisting in CAP	588	M/D	2	1,176	NGO, Volunteer
- Printing & binding the Syllabus, Guidelines, Manual,etc.	18,000	#	0.15-0.5	3,000	
- Printing & binding of Action Planning Report	28	FOs	3	84	
- Teaching Materials (Text, Report, Video tape etc.)	9,877	#		1,410	
- Hand-out on Participatory Development	310	#	0.05	16	
- Stationery	1,015	Persons	0.5 - 1.0	580	
- Stationery	224	FOs	0.5-2.0	150	
- Rental fees for lecture rooms & Equipment	212	Days	6.5-15.0	330	
- Accommodation for Instructors and Residential Training	532	Persons	2.5-5.0	1,450	
- Meals (Lunch & tea x 2)	1,060	Persons	0.35-0.5	420	
- Miscellaneous	5,252	Persons/FOs	0.5-2.0	1,800	
- Vehicles	26.7	Month	75	2,003	Rental base
2) Training of FOs' Leaders				2,880	(rounded)
- Facilitator	112	M/D	5	560	(2day x 2 x 28 FOs)
- Assistant to the facilitator	112	M/D	3	336	DAS/IMD/KARTI
- Accommodation for Facilitator and other	224	Persons	2.5	560	
- Instructor	140	M/D	3	420	DAS/IMD/KARTI
- Instructor	84	M/D	3	252	KARTI
- Vehicles	10	Month	75	750	Rental base
2. Supplying irrigation water in accordance with schedule.					
1) Training for construction and supervision				870	
2) Training for water management				700	
3) Training for operation and management of irrigation facilities				700	
3. Improving agricultural activities.					
1) Strengthen agricultural extension services					
- Field programs				11,430	(rounded)
Adaptive Trials, Paddy, OFC & Vegetables	28	Unit	30	840	
Demonstration Plots, Paddy	57	Unit	16	912	
Demonstration Plots, OFC & Vegetables	71	Unit	10	710	
Cropping Pattern Demonstration	18	Unit	64	1,152	
Demonstration Block, Paddy	23	Unit	130	2,990	
Demonstration Farm, Paddy	11	Unit	40	440	
Demonstration Farm, OFC	17	Unit	30	510	
Paddy Productivity Increase Program	39	Unit	20	780	
IPM, Paddy & OFC	31	Unit	100	3,100	
- Farmer training programmes				1,650	(rounded)
Induction Farmer Training	7	Unit	28	196	
Induction Farmer Guidance	38	Unit	8	304	
Farmer Training	21	Unit	30	630	
Workshop/Mass Guidance	33	Unit	5	165	
Seed Campaign	19	Unit	10	190	
Study Tour	13	Unit	13	169	
- Seed production programme				1,300	(rounded)
Paddy Seed Production Program	140	ha	7	980	
OFC Seed Production Program	45	ha	7	315	
4. Strengthening Agricultural Support Programs					
1) Institutional Strengthening Program for Agricultural Extension					
- Staff Training Program				460	(rounded)
Induction Staff Training	1	Unit	42	42	IPEU, PDOA (NCP & NWP)
Refresher/In-service Training	10	Unit	42	420	IPEU, PDOA (NCP & NWP)
- Institutional Strengthening				7,600	(rounded)
Strengthening of Guidance/Supervision/Coordination		L.S.		5,000	IPEU, PDOA (NCP & NWP)
Strengthening of Research-Extension-Farmer Linkage		L.S.		2,600	IPEU, PDOA (NCP & NWP)
2) Strengthening of Farmers/FOs Support Institutions					
- Induction & Refresher Training of DO/ASC	11	Unit	42	460	(rounded)
- Induction & Refresher Training of Farmer Animators	11	Unit	42	460	(rounded)
5. Follow-up programme		L.S.		1,950	10% of 1.-2), 2. & 3.
6. Physical Contingency (5%)				2,320	
Total				48,780	

Table T 2.10 Costs for Administration of PMU and Capital of Loan

Items	Quantity	Unit	Price (Rs.1,000)	Amount (Rs.1,000)	Remarks
1. Administration Cost of PMU				56,280	
1) Personnel Cost - Officers	2,100	M/M	10	21,000	25 officers x 12 months x 7 years
- Supporting staff	2,520	M/M	6	15,120	30 staff x 12 months x 7 years
2) Monitoring and survey		L.S.		1,400	Rs.200,000 x 7 years
3) Consumables and others		L.S.		18,760	50% of 1) and 2)
2. Capital of Loan	40	Unit	500	20,000	
3. Physical Contingency (5%)				3,810	
Total				80,090	

Table T 3.1 Annual Disbursement Schedule of Project Costs

(Unit: Rs.1,000)

Items	Total	2002	2003	2004	2005	2006	2007	2008
I. Rehabilitation and Improvement of Irrigation Facilities and Farm Road (including physical contingency)								
1. Nachchaduwa Major Scheme	395,090	-	-	142,230	161,990	90,870	-	-
2. Palukadawela Major Scheme	58,700	-	-	35,220	23,480	-	-	-
3. Periyakulama Medium Scheme	17,850	-	-	17,850	-	-	-	-
4. Mahananneriya Medium Scheme	14,040	-	-	14,040	-	-	-	-
5. Mahananneriya Minor Schemes (Cascade)	15,170	-	-	15,170	-	-	-	-
Sub-total	500,850	-	-	224,510	185,470	90,870	-	-
II. Rehabilitation and Improvement of Supporting Facilities and Provision of Equipment								
1. Mobilization of PMU	29,200	29,200	-	-	-	-	-	-
2. Construction of Farmer Centre	35,640	-	-	26,400	9,240	-	-	-
3. Strengthening of Agricultural Support Services	39,710	10,100	29,610	-	-	-	-	-
1) Institutional Strengthening Program for Agricultural Extension								
- Logistic Support Strengthening Program	700	-	700	-	-	-	-	-
- Upgrading of ISTI, Maha Illuppallama	9,900	9,900	-	-	-	-	-	-
2) Strengthening of Farmers/FOs Support Facilities								
- ASC Strengthening Program	5,100	-	5,100	-	-	-	-	-
3) Support Programs for Income Generation								
- Upgrading of Seed Farm, Galgamuwa	11,150	-	11,150	-	-	-	-	-
- Upgrading of IFTC, Nikaweratiya	9,210	-	9,210	-	-	-	-	-
- Strengthening of PDAPHs' Extension Activities	200	-	200	-	-	-	-	-
- Strengthening of Aqua-culture Extension Center	3,250	-	3,250	-	-	-	-	-
4) Strengthening of RPM Offices								
- Provision of Motor Cycles	200	200	-	-	-	-	-	-
4. Physical Contingency (5%)	5,230	1,970	1,480	1,320	460	-	-	-
Sub-total	109,780	41,270	31,090	27,720	9,700	-	-	-
III. Awareness and Training Programmes								
1. Strengthening of Farmers' Organizations (FOs)								
1) Awareness Programme	16,000	11,210	4,790	-	-	-	-	-
2) Training of FOs' Leaders	2,880	-	1,000	1,340	540	-	-	-
2. Training for construction, water management and O&M	2,270	360	560	150	280	340	420	160
3. Improving agricultural activities.								
1) Strengthen agricultural extension services								
- Field programs	11,430	-	1,300	3,160	3,030	2,680	1,260	-
- Farmer training programmes	1,650	-	560	430	350	190	120	-
- Seed production programme	1,300	-	-	210	350	490	250	-
4. Strengthening Agricultural Support Programs								
1) Institutional Strengthening Program for Agricultural Extension	8,060	540	1,580	1,890	1,780	1,690	580	-
2) Strengthening of Farmers/FOs Support Institutions	920	80	170	170	170	170	160	-
5. Follow-up Programme (10% of 1.-2), 2. & 3.)	1,950	-	-	-	-	360	490	1,100
6. Physical Contingency (5%)	2,320	610	500	370	320	300	160	60
Sub-total	48,780	12,800	10,460	7,720	6,820	6,220	3,440	1,320
IV. Administration Cost of PMU and Capital of Loan								
1. Administration Cost of PMU	56,280	8,040	8,040	8,040	8,040	8,040	8,040	8,040
2. Capital of Loan	20,000	-	-	6,000	5,500	5,500	3,000	-
3. Physical Contingency (5%)	3,810	400	400	700	680	680	550	400
Sub-total	80,090	8,440	8,440	14,740	14,220	14,220	11,590	8,440
V. Engineering Services (10% of I to III)								
Total	65,940	13,188	13,188	13,188	6,594	6,594	6,594	6,594
VI. Price Contingency								
Grand Total	436,624	15,897	20,912	133,604	136,024	90,970	20,515	18,702
VII. GST (12.5%)								
Grand Total with Tax	1,242,064	91,595	84,090	421,482	358,828	208,874	42,139	35,056
VIII. GST (12.5%)								
Grand Total with Tax	155,257	11,449	10,511	52,685	44,854	26,109	5,267	4,382
Grand Total with Tax	1,397,321	103,044	94,601	474,167	403,682	234,983	47,406	39,438

FIGURES

Central Project Coordination Committee (CPCC)	
Chairman	
Secretary	IMD
Member	DOI, DOA, DAS, PCs, DSs
Major Functions	
<ul style="list-style-type: none"> - Co-ordination of implementation agencies - AWP approval & budget arrangement at central - Project monitoring 	

Provincial Project Coordination Committee (PPCC) / NCP	
Chairman	Chief Secretary, NCP
Secretary	Project Director, PMU
Member	DOI, IPEU, PDOA, DAS, Anuradhapura, PDAPH, NAQDA
Major Functions	
<ul style="list-style-type: none"> - Inter-provincial coordination - Necessary provincial budget arrangement 	

Provincial Project Coordination Committee (PPCC) / CP & NWP	
Chairman	Chief Secretary, NWP
Secretary	Project Director, PMU
Member	DOI, PDOA(CP/NWP), DAS, Kurunegala, PDAPH(NWP), NAQDA
Major Functions	
<ul style="list-style-type: none"> - Inter-provincial coordination - Necessary provincial budget arrangement 	

Project Management Unit (PMU)	
Project Director	IMD
Deputy Proj. Director	Dep. of Irrigation Dep. of Agriculture(DOA)
Major Functions	
<ul style="list-style-type: none"> - Project management & coordination - Sector & Overall AWP preparation - Project M&E and supervision & guidance 	

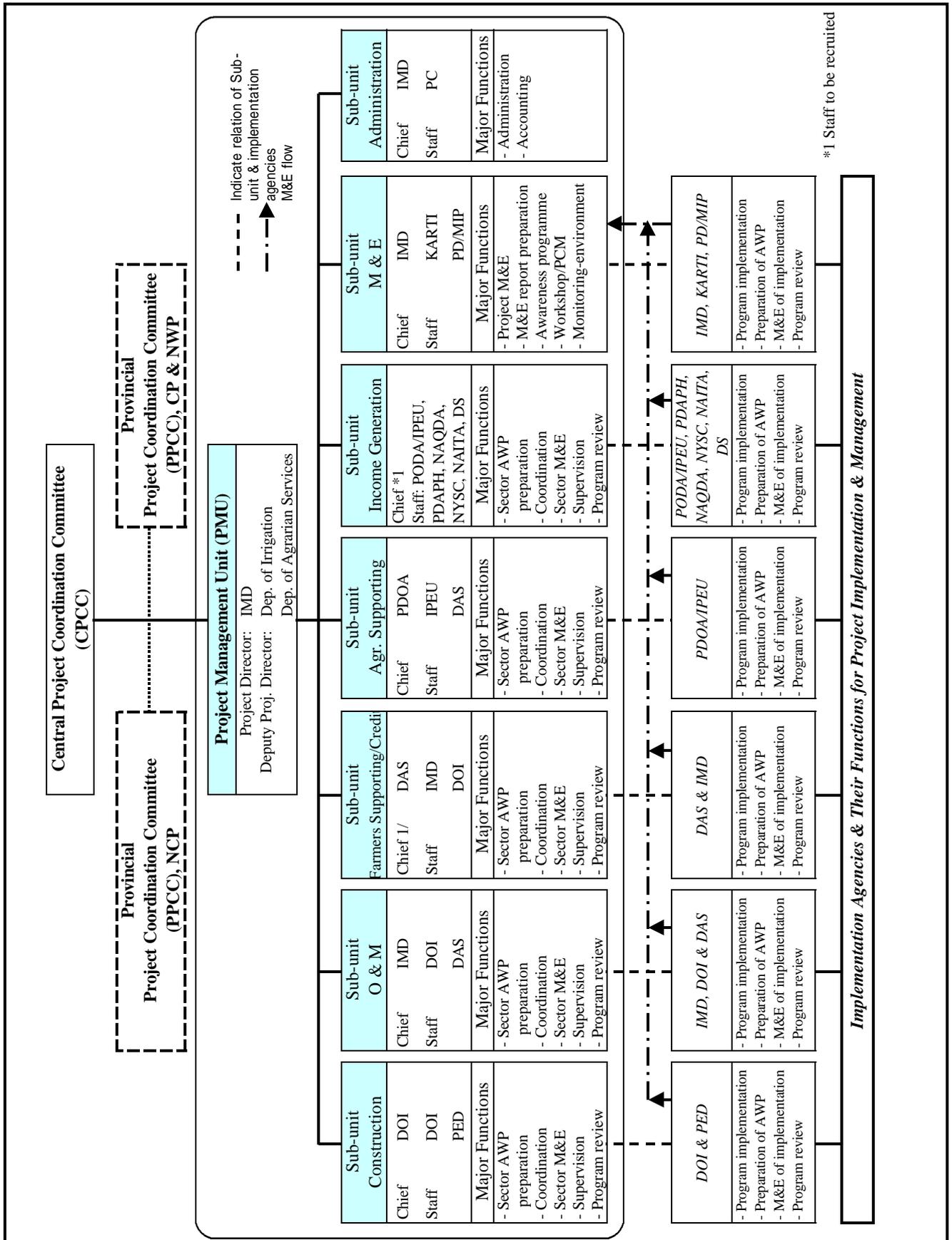
Implementation Agencies			
NCP		CP/NWP	
Agencies	Project Components	Agencies	Project Components
DOI, PED Anuradapura IMD PDOA, NCP IPEU, DOA DAS, Anuradapura PDAPH, NCP NAQDA	<ul style="list-style-type: none"> - Irrigation works - Farm road - O&M Sector Program - Agricultural Support Programs - Agricultural Support Programs - Farmers/FOs Support Programs - Cultivation Loans - O&M Sector Program - Livestock Sub-sector Support Programs - Fishery Sub-sector Support Programs 	<ul style="list-style-type: none"> - Irrigation works - Farm road - O&M Sector Program - Agricultural Support Programs - Farmers/FOs Support Programs - Cultivation Loans - O&M Sector Program - Livestock Sub-sector Support Programs - Fishery Sub-sector Support Programs 	

The Study for the Potential Realization of Irrigated Agriculture in the Dry and Intermediate Zones of Sri Lanka

Japan International Cooperation Agency

Figure T 1.1

Proposed Institutional Set-up for Project Implementation and Management



**The Study for the Potential Realization
of Irrigated Agriculture
in the Dry and Intermediate Zones of Sri Lanka**

Japan International Cooperation Agency

Figure T 1.2

Proposed Organisational Structure of Project Management Unit

ATTACHMENTS

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (1/59)

Name of Scheme : Nachchaduwa

Place : Tank

Portion	Description of Rehabilitation and Improvement Plan	Estimated cost required (Rs.)	Remarks
Tank Bund	Earth work in tank bund where necessary	200,000.00	
	Strip turving to newly filled earth	50,000.00	
	Gravelling along tank bund	300,000.00	
	Removing of existing damaged Rip-Rap section and re-packing, providing new Rip-Rap	500,000.00	
	Construction of toe filter from 1000m to1280m	1,500,000.00	
Sluice	Repairs to existing Sluice	300,000.00	
	Providing Gabion walls in down stream of sluice	1,000,000.00	
Spillway	Repairs to spill way	500,000.00	
Others	Improvement to tank bund access road (Metaling sand taring)	1,000,000.00	
	Construction of retaining walls in bund road near sluice	300,000.00	
	Improvement to foot bridge	100,000.00	
Grand Total		5,750,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (2/59)

Name of Scheme : Nachchaduwa

Name of Canal : Yoda Ela (Feeder Canal), Eartworks

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
1	0.0km	10.0km	10000	9.19	20'-0	12'-0	verticle	Desilting along the chl	2,500,000.00
2	7.08km	7.58km	500	9.19	20'-0	12'-0	verticle	Straiten the canal	700,000.00
3								Farth work where necessary	1,000,000.00
									4,200,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (3/59)

Name of Scheme : Nachchaduwa

Place : Yoda Ela (Feeder Canal), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
1	0.020km	Measuring device (N)		x							To measure water from System H	200,000.00	
2	2.10km	Bathing steps (N)		x								50,000.00	
3	2.60km	Retaining wall (N)		x								400,000.00	
4	8.60km	Retaining wall (N)		x								800,000.00	
5	3.83km	Bridge											
6	4.68km	Cross Regulator									To be demolish	50,000.00	
7	5.07km	Retaining wall (N)		x								500,000.00	
8	5.87km	Retaining wall (N)		x								500,000.00	
9	6.62km	Cause way Cum]									along the chl. Road		
10		Dr.under crossing								x		400,000.00	
11	6.80km	Cause way		x						x	along the chl. Road	500,000.00	
12	7.011km	Retaining wall (N)		x								400,000.00	
13	7.083km	Retaining wall (N)		x								500,000.00	
14	7.173km	Box culveit(18'.0×12'.0)		x						x		200,000.00	
15	7.29km	Retaining wall (N)		x								500,000.00	
16	7.38km	Retaining wall (N)		x								800,000.00	
17	7.461km	Retaining wall (N)		x								400,000.00	
18	7.542km	Retaining wall (N)		x								500,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (4/59)

Name of Scheme : Nachchaduwa

Place : Yoda Ela (Feeder Canal), Structure

19	8.01km	Retaining wall (N)		x								500,000.00
20	8.181km	Box culveit(12'.0×12'.0)		x					x	Along the chl. Road		200,000.00
21	8.81km	Retaining wall (N)		x								400,000.00
22	8.325km	Retaining wall (N)		x								400,000.00
23	8.415km	Bridge(39'.-6"×9'-6")		x					x			1,000,000.00
24	8.505km	Retaining wall (N)		x								400,000.00
25	8.613km	Retaining wall (N)		x								600,000.00
26	9.0km	Retaining wall (N)		x								1,000,000.00
27	9.0km	Bridge										
28	9.45km	Retaining wall (N)		x								600,000.00
29	9.81km	Measuring device (N)		x								200,000.00
	Total											12,000,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (5/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan if any	Estimated cost required (Rs.)
1	100.8	351.0	250		6.15			Beck fill for R/wall-LB side	32,500.00
2	400.0	670.0	270					Beck fill for R/wall-LB side	35,100.00
3	600.0	650.0	50					Beck fill for R/wall-RB side	6,500.00
4	717.0	110.0	383					Beck fill for R/wall-LB side	49,790.00
5	900.0	110.0	200					Beck fill for R/wall-RB side	26,000.00
6	1115.0	1362.0	247					Beck fill for R/wall-LB & RB side	32,110.00
7	1444.0	1499.0	55					Beck fill for R/wall-LB & RB side	7,150.00
8	2600.0	2800.0	200					Beck fill for R/wall-LB side	26,000.00
9	3886.4	41114.0	225					Beck fill for R/wall-LB & RB side	29,250.00
10	4580.0	4765.0	185					Beck fill for R/wall-LB & RB side	24,050.00
11	5750.0	5900.0	150					Beck fill for R/wall-LB & RB side	19,500.00
12	6625.0	6700.0	75					Beck fill for R/wall-LB & RB side	9,750.00
13	6745.0	7100.0	355					Beck fill for R/wall-LB & RB side	46,150.00
14	7550.0	7700.0	150					Beck fill for R/wall-LB & RB side	19,500.00
15	7275.0	7305.0	30					Beck fill for R/wall-LB & RB side	3,900.00
16	7833.8	7988.8	55					Beck fill for R/wall-LB & RB side	7,150.00
17	7890.0	7920.0	30					Beck fill for R/wall-LB & RB side	3,900.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (6/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan if any	Estimated cost required (Rs.)
18	8000.0	8160.0	160		6.15			Beck fill for R/wall-RB side	20,800.00
19	8140.0	8200.0	60					Beck fill for R/wall-LB side	7,860.00
20	8210.0	8225.0	15					Beck fill for R/wall-LB & RB side	1,950.00
21	10110.0	10140.0	30					Beck fill for R/wall-LB & RB side	3,900.00
22	11100.0	11275.0	175					Beck fill for R/wall-LB & RB side	22,750.00
23	11899.4	12049.4	150					Beck fill for R/wall-RB side	19,500.00
24	12200.0	12280.0	80					Beck fill for R/wall-RB side	10,400.00
25	12285.0	12315.0	30					Beck fill for R/wall-LB & RB side	3,900.00
26	12724.0	12809.0	85					Beck fill for R/wall-RB side	11,050.00
27	12832.5	13052.5	220					Beck fill for R/wall-RB side	28,600.00
28	14504.5	14565.5	61					Beck fill for R/wall-LB & RB side	7,930.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (7/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan if any	Estimated cost required (Rs.)
1	14.97km.	15.00km.	30m	9.1975	6.0m	1.25m			100,000.00
2	16.494km.	16.514km.	50m	9.1975	9.50m	2.20m			300,000.00
3	17.559km.	17.609km.	50m	9.1975	10m	3.45m			300,000.00
4	18.654km.	18.699km.	45m	9.1975	9.75m	3.85m			300,000.00
5	19.523km.	19.583km.	60m	9.1975	11.00m	3.35m			400,000.00
6	20.448km.	20.508km.	60m	9.1975	10.35m	3.30m			400,000.00
7	21.960km.	22.010km.	50m	9.1975	10.20m	3.10m			300,000.00
8	22.996km.	23.026km.	30m	9.1975	9.80m	3.45m			200,000.00
9	23.697km.	23.732km.	35m	9.1975	9.77m	3.65m			200,000.00
10	25.542km.	25.572km.	30m	9.1975	10.02m	3.70m			200,000.00
11	27.125km.	27.165km.	40m	9.1975	10.06m	3.70m			260,000.00
12	27.745km.	27.785km.	40m	9.1975	9.38m	3.62m			260,000.00
13	29.026km.	29.056km.	30m	9.1975	9.60m	3.70m			200,000.00
14	14.97km.	30.226km.	1.526km	9.1975	9.50m	3.60m		Gravelling of chl . bund road	2,380,000.00
			3,976						6,316,940.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (8/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
1	100.8	Prop. Retaining wall	250lm	Yes							Prop New R/wall	687,500.00
2	225.0	Prop. Bathing spot	0.1No.	Yes								30,000.00
3	375.0	Prop. Bathing spot	0.1No.	Yes								30,000.00
4	406.0	Prop. New Bridge		Yes								700,000.00
5	400.0	Prop. N. Retaining wall	2.70lm	Yes							Prop New R/wall L.B	742,500.00
6	425.0	Prop. Bathing spot	0.1No.	Yes							New Bathing spot	25,000.00
7	500.0	Prop. Bathing spot	0.1No.	Yes							New Bathing spot	25,000.00
8	550.0	Prop. Bathing spot	0.1No.	Yes							New Bathing spot	25,000.00
9	600.0	Prop. Bathing spot	0.1No.	Yes							New Bathing spot	25,000.00
10	420.0	Prop. Bridge	0.1No.	Yes								700,000.00
11	600.0	Prop. Retaining wall	50lm	Yes							New R/wall -RB	137,500.00
12	600.0	Prop. Bridge	0.1No.	Yes							New Bridge	70,000.00
13	717.0	Prop. Retaining wall	383lm	Yes							New R/wall -RB	1,053,250.00
14	725.0	Prop. Bathing spot	0.1No.	Yes							New Bathing spot	30,000.00
15	900.0	Prop. Retaining wall	200lm	Yes							New R/wall -RB	550,000.00
16	870.0	Prop. Bathing spot		Yes							New Bathing spot	25,000.00
17	925.0	Prop. Bathing spot		Yes							New Bathing spot	25,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (9/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
18	1115.0	Prop. Retaining wall	247lm	Yes							New R/wall -LB & RB	2,717,000.00
19	1444.0	Prop. Retaining wall	55lm	Yes							New R/wall -LB & RB	605,000.00
20	1620.0	Prop. Bathing spot		Yes							New Bathing spot	25,000.00
21	1670.0	Prop. Bathing spot		Yes							-do-	25,000.00
22	1725.0	Prop. Bathing spot		Yes							-do-	25,000.00
23	2600.0	Prop. Retaining wall	200lm	Yes							New R/wall -LB	550,000.00
24	2720.0	Prop. Bridge		Yes							New Bridge	700,000.00
25	3886.4	Prop. Retaining wall	225lm	Yes							New R/wall -LB&RB	1,237,500.00
26	4580.0	Prop. Retaining wall	185lm	Yes							New R/wall -LB&RB	1,017,500.00
27	4590.0	Prop. Bridge		Yes							New Bridge	700,000.00
28	5750.0	Prop. Retaining wall	150lm	Yes							New R/wall -LB&RB	825,000.00
29	5875.0	Prop. Bridge		Yes							New Bridge	700,000.00
30	6150.0	Prop. Bridge		Yes							New Bridge	700,000.00
31	6625.0	Prop. Retaining wall	75lm	Yes							New R/wall- LB&RB	412,500.00
32	6745.0	Prop. Retaining wall	355lm	Yes							New R/wall -LB&RB	1,952,500.00
33	6750.0	Prop. Bathing spot		Yes							New Bathing spot	25,000.00
34	6800.0	Prop. Bathing spot		Yes							New Bathing spot	25,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (10/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
35	6900.0	Prop. Bathing spot		Yes							New Bathing spot	25,000.00
36	7275.0	Prop. Bridge		Yes							New Bridge	700,000.00
37	7275.0	Prop. R/wall U/S & D/S	30lm	Yes							New R/wall -LB&RB	165,000.00
38	7550.0	Prop. Retaining wall	150lm	Yes							New R/wall -LB&RB	825,000.00
39	7853.8	Prop. Bridge		Yes							New Bridge	700,000.00
40	7833.8	Prop. R/wall U/S & D/S	55lm								New R/wall -LB&RB	302,500.00
41	7890.0	Prop. Retaining wall	30lm								New R/wall -LB&RB	165,000.00
42	8000.0	Prop. Retaining wall	160lm								New R/wall -RB	440,000.00
43	8140.0	Prop. Retaining wall	60lm								New R/wall -LB	165,000.00
44	8210.0	Prop. Retaining wall	15lm								New R/wall -LB&RB	82,500.00
45	8215.0	Prop. Bathing spot	2Nos.								New Bathing spot LB&RB	50,000.00
46	9540.0	Prop. Bridge									New Bridge	70,000.00
47	10110.0	Prop. Bridge									New Bridge	700,000.00
48	10110.0	Prop. R/wall U/S & D/S	30lm								New R/wall -LB&RB	165,000.00
49	11100.0	Prop. Retaining wall	175lm								New R/wall -LB&RB	962,500.00
50	11899.4	Prop. Retaining wall	150lm								New R/wall -RB	412,500.00
51	12.2	Prop. Retaining wall	80lm								New R/wall -RB	220,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (12/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
1	14.90km.	Bridge(10mx3m)		Yes							Hand raits	10,000.00
2	14.95km.	Measuring device (new)		Yes								500,000.00
3	14.97km.	R/wall (12m-L)		No								
4	15.00km.	Bolders packing (new)		Yes								100,000.00
5	15.70km.	Gated Tumout	01 18'dia	Yes			x		x			25,000.00
6	15.71km.	Bridge(11.10mx3.0m)		No	x							
7	16.410km.	Gated Tumout	01 18'dia	Yes			x		x			15,000.00
8		Cum Bridge		Yes					x			5,000.00
9	16.499km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x			1,100,000.00
10	16.550km.	Gated Tumout	01 12" dia	Yes	x				x			15,000.00
11	17.533km.	Gated Tumout	01 18'dia	Yes			x		x			30,000.00
12	17.559km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x			1,100,000.00
13	17.676km.	Cross Regulator(old)		No								
14	17.888km.	Bridge Tumout		Yes					x			20,000.00
15	18.641km.	Gated Tumout	01 18'dia	Yes			x		x			30,000.00
16	18.650km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x			1,200,000.00
17	18.850km.	Chl. Spill		Yes			x		x			55,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (13/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
18		Cum Bridge		Yes					x		15,000.00	
19	18.936km.	Chl. Spill		Yes			x		x		30,000.00	
20	19.200km.	Gated Tumout	01 24"dia	Yes			x		x		25,000.00	
21	19.212km.	Bridge (7.55mx3.30m)		Yes					x		20,000.00	
22	19.503km.	Gated Tumout	01 24"dia	Yes					x		40,000.00	
23	19.523km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,500,000.00	
24	20.245km.	Gated Tumout	01 12" dia	Yes			x		x		25,000.00	
25	20.448km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,200,000.00	
26	20.967km.	Gated Tumout	01 24"dia	Yes			x		x		25,000.00	
27		Cum Bridge		Yes					x		20,000.00	
28	21.909km.	Gated Tumout	01 12"dia	Yes			x			x	200,000.00	
29	21.960km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,300,000.00	
30	22.00km.	Bridge (10.55mx3.0m)		Yes					x		10,000.00	
31	22.900km.	Gated Tumout	01 12"dia	Yes			x			x	200,000.00	
32	22.946km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,200,000.00	
33	23.557km.	Gated Tumout	01 9"dia	Yes			x		x		20,000.00	
34	23.622km.	Gated Tumout	01 12"dia	Yes			x		x		25,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (14/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
35		Cum Bridge		Yes					x		10,000.00	
36	23.622km.	Bridge-Railway Track		No								
37	23.697km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,100,000.00	
38	23.841km.	Bridge-main road	(20.80mx7.60m)	Yes					x		50,000.00	
39	24.100km.	Gated Tumout	01 12" dia	Yes			x		x		20,000.00	
40	24.573km.	Foot Beidge (4mx29.60m)		Yes					x		10,000.00	
41	25.527km.	Gated Tumout	01 18" dia	Yes			x		x		25,000.00	
42	25.542km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,100,000.00	
43	26.669km.	Bridge(17.30mx3.95m)		No								
44	26.730km.	Bridge		No								
45	27.079km.	Gated Tumout	01 30" dia	No								
46	27.083km.	Bridge(19.10mx4.60m)		No								
47	27.125km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,000,000.00	
48	27.455km.	Gated Tumout	12" dai	Yes			x		x		30,000.00	
49		Cum Bridge chl .spill		Yes			x		x		50,000.00	
50	27.722km.	Gated Tumout	01 18" dia	Yes			x		x		40,000.00	
51	27.745km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		985,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (15/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
52	29.017km.	Gated Turnout	01 24" dia	Yes			x		x		20,000.00	
53	29.026km.	Cross Regulator	04 (5'-0x3'-0)	Yes			x		x		1,000,000.00	
54	29.035km.	old Reguletor		No								
55	29.226km.	Bridge(13.60mx4.80m)		No								
56	30.226km.	Culvert across the		No								
57		Main road		No								
											40,812,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (16/59)

Name of Scheme : Nachchaduwa

Name of Canal : Low Level Main Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
1	0.000	10.500	10.500					Desilting the main Canal	1,000,000.00
2	0.000	10.500	10.500					Gravelling the main Canal bund road where necessary	500,000.00
3	2+0.340							Removing the impurities on the water spread area at Madawalagama Tank	1,000,000.00
4	End of							ditto, Kaluwila wewa	1,000,000.00
5	main chl.							ditto, Nalubewa Tank	1,000,000.00
									4,500,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (17/59)

Name of Scheme : Nachchaduwa

Name of Canal : Low Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
1	0.000	L.L. Main Sluice		No								
2	0.007	RB R/W	23m length	Yes					x		To be raised by 0.5m (L=23m)	20,000.00
3	0.157	Regulator	4'x4' doors, 4nos.	Yes			x				Replace with steel gates	60,000.00
4	0.161	RB R/W	13m length	Yes						x	Demolish and re-construct	50,000.00
5	0.173	Foot Bridge	1m width	Yes					x			10,000.00
6	0.173~0.222	Canal Section	L=49m x B=3.3m	Yes					x		Sill to be provided	110,000.00
7	0.222	Bridge		Yes					x			5,000.00
8	0.224	RB R/W	8.55m length	Yes					x		To be replastered 8.55m length, 0.75m Av. height	100,000.00
9	0.359	LLD-1 Sluice	2 nos./ 0.45m dia.	Yes					x			4,000.00
10	0.775	LLD-1A Sluice	0.38m dia.	Yes					x			4,000.00
11	0.781	Bridge	2/1.85x1.3m, opening	Yes					x			10,000.00
12	0.961	R/W	125m length, 1.5m Av. Height	Yes							New construction	350,000.00
13	1+0.096	LLD-2	0.457m dia.	No								
14	1+0.096~0.140	R/W	Av. 0.5m to be plastered	Yes					x		Plastering	10,000.00
15	1+0.139	Regulator	1.1mx1.1m, opening 3nos	Yes			x		x		Gates to be replaced with steel, D/S stilling	100,000.00
16	1+0.200	Foot Bridge	13m length	Yes						x	Replacement	100,000.00
17	1+0.747	R/W	24m length	Yes					x		To be plastered	4,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (18/59)

Name of Scheme : Nachchaduwa

Name of Canal : Low Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
18	1+0.791	Bridge		Yes					x		13,000.00	
19	2+0.140	Regulator	8m width	Yes							New regulator to be provided 300,000.00	
20	2+0.312	Bridge		Yes					x		Abutment 1 no 3.2m slab to be re-provided 50,000.00	
21	2+0.340	Madawalagama Tank Spill		No								
22	2+0.527	Sluice-do-		Yes					x		2,000.00	
23	2+0.340~0.930	Rip rap to be increased (height)	590m length	Yes							Rip rap height to be increased 2,000,000.00	
24	2+0.998	Regulator	1.1mx1.1m, opening 2nos	Yes			x				Replace of gates, rubble pitching 50,000.00	
25		Providing Bathing spot-2Nos.									New 80,000.00	
26	3+0.100	Providing R/W	17m.long								New(17m length) 65,000.00	
27	3+0.123	Bridge	5.2m.x2m	No								
28	3+0.717	LLD-4	0.457dia	No								
29	3+0.797	Common bridge Temporary	10m.long	Yes						x	80,000.00	
30	3+0.9735	Bridge								x	4,000.00	
31		Providing B/Spots									New 30,000.00	
32	4+0.7151	LLD-5	0.38 dia	Yes						x	2,000.00	
33	4+0.8238	Regulator	1.1x1.1m	Yes						x	20,000.00	
34	4+0.845	Proposed R/W	30m.long								New in RB side (30m) 110,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (19/59)

Name of Scheme : Nachchaduwa

Name of Canal : Low Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replac-ment	no need	Minor repair	Replac-ment		
35	4+0.896	LLD-6	2/0.457 dia	No								
36	5+0.050	RNV(30m)tobe provided	30m.long							No	110,000.00	
37	5+0.078	LLD-6A	0.3m.dia	No								
38	5+0.090	Regulator	1.1x1.1-3Nos							Gates to be replaced with steel gates -D/S Pitching-Providing	160,000.00	
39	5+000	15m R/W to be provided	15m. long							New	55,000.00	
40	5+0.310	-do (RB side)								New	55,000.00	
41	5+0.325	Course way								Concrete lining to be done	90,000.00	
42	5+0.4872	Bridge						x			2,000.00	
43	5+0.500	Kaluwila wewa										
44	6+0.0369	LLD-6B	0.3 dia									
45	6+0.184	Regulator	1.1x1.1m	Yes						D/S, R/W to be reconstructed	150,000.00	
46	5+0.500 to 6+0.1800	Rip-rap		Yes					x	Te be increased the rip-rap height	2,000,000.00	
47	6+0.200to 6+0.350	Gabion wall to be Provided in RB	150m.length								300,000.00	
48	6+0.600	LLD-6C	0.3dia	Yes							3,000.00	
49	7+0.3892	LLD-8	0.45dia	No								
50	7+0.350	R.pitching to be done in RB								New	70,000.00	
51	7+0.4165	Regulator	1.1x1.1m.	Yes						Gates to be replaced with steel. U/S ,D/S R-pitching to be	100,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (20/59)

Name of Scheme : Nachchaduwa

Name of Canal : Low Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
52	7+0.7815	LLD-8A	0.3dia	Yes		x					Door to be replaced	10,000.00
53	7+0.7815	Level crossing to be provided	8m. Width								New	75,000.00
54	7+950	Bridge		No								
55	7+950	Bathing spot to be provided										40,000.00
56	8+2391	LLD-8B	0.3dia	No								
57	8+2695	Regulator		Yes					x		Rubble pitching	50,000.00
58	8+0.282	Gabion wall to be Provided in RB									New	60,000.00
59	8+0.454	Bridge		No								
60	8+0.270	Bathing spot to be provided									New	30,000.00
61	8+0.773	LLD-8C				x					Door to be provided	10,000.00
62	8+0.8714	F/Bridge		Yes								
63	9+0.0224	LLD-8E	0.3dia								Level crossing to be provided (Regulator)	60,000.00
64	9+0.178	F/Bridge		No								
65	9+0.411	LLD-9	2/0.45dia						x		R/W in both side to be provided	50,000.00
66	9+0.463	R/W to be provided	50m.long								50m long R/W to be demolish & reconstruction both side	200,000.00
67	9+0.512	Regulator							x		R.pitching to be re-bone	25,000.00
68	9+0.8786	LLD-9A	0.3dia	No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (21/59)

Name of Scheme : Nachchaduwa

Name of Canal : Low Level Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	Estimated cost required (Rs.)
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
69	10+0.0176	Bridge		Yes					x		D/S R/W to be constructed	60,000.00
70	10+0.0884	LLD-10	0.457dia	No								
71	10+0.122	LLD-10A	0.3dia	No								
72	10+0.214	LLD-10B	0.3dia	No								
73	10+0.215	Regulator	1.1x1.1m-2Nos.	Yes					x		R.pitching to be done	30,000.00
74	10+0.3727	LLD-10C	0.3dia	No								
75		LLD-10D	0.3dia	No								
76	10+0.484	LLD-10E	0.3dia	No								
77	10+0.5823	LLD-11	0.45dia	No								
78	10+0.598	LLD-11A	0.3dia	No								
79	10+0.6116	Regulator							x			2,000.00
80	10+611 to 11+0.60	R/W in both side reconstruction	450m.length	Yes							450m length (both side)	2,300,000.00
81											7Nos. Crossing to be provided	70,000.00
82		70 nos. foot bridge to be provided										10,500,000.00
												20,410,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (22/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	HLD4								286,489.00
	HLD5								10,000.00
	HLD7								129,835.00
	HLD11								10,500.00
	HLD12								25,500.00
	HLD15								14,000.00
	HLD17								7,000.00
	HLD19								225,000.00
	HLD21								210,000.00
	HLD26								800,000.00
	HLD27								473,000.00
	HLD35								820,000.00
	HLD36								500,000.00
	HLD36A								200,000.00
									3,711,324.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (23/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	HLD4								
1	0.000	795.000	795.000	0.07	0.8	Varing	Varing	Earth work for chl bund & road	246,159.00
2	0.000	795.000						Gravelling a long chl road	40,330.00
									286,489.00
	HLD5								
1	61.000	144.000	83.000	0.06	1	Varing	Varing	Earth work for chl bund filling	10,000.00
									10,000.00
	HLD7								
1	1500.000	1767	267.000	0.12	1	Varing	Varing	Chl. road - Earth work	104,490.00
2	1500.000	1876	376.000					Chl. road - Gravalling	25,345.00
									129,835.00
	HLD11								
1	70.000	224	154.000	0.05	1	Varing	Varing	Gravelling along D/chl. road	10,500.00
									10,500.00
	HLD12								
1	374.300	550.3	176.000	0.07	1	Varing	Varing	Eaeth work - chl bund foming	25,500.00
									25,500.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (24/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	HLD15								
1	0.000	65	65.000						
2	65.000	92	27.000					Eaeth work - chl bund foming	14,000.00
									14,000.00
	HLD17								
1	0.000	21	21.000		0.8	0.6	Verticle	Back fillong - Earth work	7,000.00
									7,000.00
	HLD19								
1	0.0km.	0.095km.	95.000	0.105	0.9	0.43	Verticle		25,000.00
2	0.095km.	0.160km.	65.000	0.0566	1	0.48	Verticle		20,000.00
3	0.160km.	0.260km.	100.000	0.0368	0.5	0.53	Verticle		30,000.00
4	0.0km.	0.825km.	8.250					Filling pot hples & gravelling along the chl. road	150,000.00
									225,000.00
	HLD21								
1	0.0km.	0.515m.	515.000	0.0849	0.8	0.41	Verticle		60,000.00
2	0.515km.	0.70km.	185.000	0.0566	0.9	0.4	Verticle		25,000.00
3	0.00km.	0.70km.	700.000					Filling pot hples & gravelling along the chl. bund road	125,000.00
									210,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (25/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	HLD26								
1	0.0km.	0.675km.	675.000	0.1785	1.15	0.6	Verticle		100,000.00
2	0.675km.	0.850km.	175.000	0.1644	1.1	0.6	Verticle		40,000.00
3	0.850km.	1.360km.	510.000	0.1301	0.85	0.5	Verticle		190,000.00
4	1.360km.	1.760km.	400.000	0.1301	0.76	0.8	Verticle	Formed chl section	95,000.00
5	1.760km.	0.025kn.	265.000	0.0987	0.76	0.5	Verticle		25,000.00
6	0.0km.	2.025km.	205.000					Filling pot hples & gravelling along the chl. road	350,000.00
									800,000.00
	HLD27								
1	0.0km.	1.275km.	1275.000	0.1944	1.05	0.65	Verticle		100,000.00
2	1.275km.	1.410km.	125.000	0.1814	1.05	0.6	Verticle		10,000.00
3	1.410km.	1.680km.	270.000	0.1406	0.85	0.5	Verticle		18,000.00
4	1.680km.	1.825km.	145.000	0.0857	0.70	0.46	Verticle		10,000.00
5	1.825km.	1.961km.	136.000	0.0566	0.52	0.4	Verticle		10,000.00
6	0.0km.	1.961km.	1961.000					Filling pot hples & gravelling along the chl. road	325,000.00
									473,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (26/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	HLD35								
1	0.725km.	1.725km.	1000.000	0.0766	0.8	1.6	Verticle		115,000.00
2	1.752km.	1.970km.	910.000	0.0766	0.8	1.5	Verticle		110,000.00
3	1.910km.	2.555km.	645.000	0.0396	0.9	1.43	Verticle		75,000.00
4	2.555km.	2.698km.	143.000	0.0198	0.9	1.5	Verticle		20,000.00
5	0.276km.	2.698km.	2422.000					Filling pot hples & gravelling on chl. road	500,000.00
									820,000.00
	HLD36								
1	0.0km.	0.046km.	46.000	0.2566	0.91	698		R/Wall section	60,000.00
2	0.046km.	0.186km.	140.000	0.2385	1	0.65	Verticle		25,000.00
3	0.186km.	0.40km.	214.000	0.1049	0.8	0.5	Verticle		50,000.00
4	0.40km.	1.661km.	661.000	0.0481	0.457	0.43	Verticle	Formed chl. section	190,000.00
5	0.0km.	1.061km.	1,061.000					Filling pot hples & gravelling on chl. road	175,000.00
									500,000.00
	HLD36A								
1	0.0km.	0.255km.	255.000	0.1132	0.9	0.5	Verticle		55,000.00
2	0.255km.	0.63km.	376.000	0.0707	0.762	0.457	Verticle		45,000.00
3	0.0km.	0.631km.	631.000					Filling pot hples & gravelling along the chl. road	100,000.00
									200,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (27/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works		Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
	HLD4											2,461,185.00	
	HLD5											344,450.00	
	HLD7											7,628,695.00	
	HLD11											370,800.00	
	HLD12											1,328,700.00	
	HLD15											111,000.00	
	HLD17											50,000.00	
	HLD19											825,000.00	
	HLD21											2,300,000.00	
	HLD26											9,250,000.00	
	HLD27											8,725,000.00	
	HLD35											11,100,000.00	
	HLD36											5,850,000.00	
	HLD36A											3,200,000.00	
												53,544,830.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (28/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
	HLD4												
1	32.900	Concrete lining	269.91m	Yes							Prop. cement conc. lining	1,389,985.00	
2	528.400	Concrete lining	441m	Yes							Prop. cement conc. lining	226,600.00	
3	577.400	Concrete lining	1151m	Yes							Prop. cement conc. lining	473,800.00	
4	695.000	Concrete lining	191m	Yes							Prop. cement conc. lining	78,280.00	
5	717.000	Concrete lining	651m	Yes							Prop. cement conc. lining	267,800.00	
6	785.000	Concrete lining	61m	Yes							Prop. cement conc. lining	24,720.00	
			L = 519m									2,461,185.00	
	HLD5												
1	61.000	Concrete lining	831m	Yes							Prop. cement conc. lining	344,450.00	
												344,450.00	
	HLD7												
1	65.900	Concrete lining	204.11m	Yes							Prop. cement conc. lining	1,051,115.00	
2	282.000	Concrete lining	1811m	Yes							Prop. cement conc. lining	982,665.00	
3	484.000	Concrete lining	80.81m	Yes							Prop. cement conc. lining	416,120.00	
4	574.800	Concrete lining	252.21m	Yes							Prop. cement conc. lining	1,298,830.00	
5	840.000	Concrete lining	606.21m	Yes							Prop. cement conc. lining	3,121,930.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (29/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works		Other
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
6	1500.700	Concrete lining	29.31m	Yes							Prop. cement conc. lining	150,895.00	
7	1563.400	Concrete lining	39.91m	Yes							Prop. cement conc. lining	205,485.00	
8	1633.300	Concrete lining	46.71m	Yes							Prop. cement conc. lining	240,505.00	
9	1761.000	Concrete lining	61m	Yes							Prop. cement conc. lining	30,900.00	
10	1816.000	Concrete lining	351m	Yes							Prop. cement conc. lining	130,250.00	
												7,628,695.00	
	HLD11												
1	134.700	Concrete lining	901m	Yes							Prop. cement conc. lining	370,800.00	
												370,800.00	
	HLD12												
1	25.500	Concrete lining	68.51m	Yes							Prop. cement conc. lining	282,220.00	
2	97.500	Concrete lining	73.51m	Yes							Prop. cement conc. lining	302,820.00	
3	189.000	Concrete lining	451m	Yes							Prop. cement conc. lining	185,400.00	
4	249.000	Concrete lining	501m	Yes							Prop. cement conc. lining	206,000.00	
5	316.000	Concrete lining	521m	Yes							Prop. cement conc. lining	214,240.00	
6	414.800	Concrete lining	33.51m	Yes							Prop. cement conc. lining	138,020.00	
												1,328,700.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (30/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
	HLD15												
1	0.000	T/O-D/S structure											
2	86.000	T/O structure	0.1No. 0.3m dia			x		x		Chl. gate with other parts		15,000.00	
3	92.000	T/O structure	0.1No. 0.3m dia			x		x		-do-		15,000.00	
4	65.000	Proposed R/Wall	2lmx2							New R/Wall		81,000.00	
												111,000.00	
	HLD17												
1	0.000	R/Wall	211m					x		1:3:6 ct. cone. chl. bed & replasteting		20,000.00	
2	2.100	T/O structure	01No. 0.3m dia			x		x		Chl. gates with all other parts		15,000.00	
3		T/O structure	01No. 0.3m dia			x		x		-do-		15,000.00	
												50,000.00	
	HLD19												
1	0.045km.	Drop structure (0.350m)						x				5,000.00	
2	0.457km.	Road Crossing	0.65m dia x 7.4m	Yes						Main Road			
3	0.462km.	Retaining wall		No				x				13,000.00	
4	0.096km.	Gated Turnout	01 12"	Yes		x		x				20,000.00	
5	0.123km.	Drop structure (0.6m)		Yes				x				6,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (31/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
6	0.160km.	Gated Turnout	01 12"	Yes			x		x		35,000.00		
7	0.175km.	Drop structure(0.905m)		Yes					x		8,000.00		
8	0.25km.	R/Wall L- 6.10m		Yes					x		5,000.00		
9	0.253km.	Gated Turnout	01 12"	Yes			x		x		25,000.00		
10	0.260km.	Drop structure(0.90m)		Yes					x		8,000.00		
11	0.0km- 0.095km.	Chl lining (new)		Yes						0.015m3/s	175,000.00		
12	0.095km- 0.160km.	Chl lining (new)		Yes						0.0566m3/s	225,000.00		
13	0.166km- 0.260km.	Chl lining (new)		Yes						0.0368m3/s	300,000.00		
											825,000.00		
	HLD21												
1	0.0km.	Gated Turnout	01 24" dia	Yes		x			x		15,000.00		
2	0.025km.	Drop structure(0.20m)		Yes					x		8,000.00		
3	0.20km.	Drop structure(0.305m)		Yes					x		8,000.00		
4	0.22km.	Gated Turnout	01 9" dia	Yes			x		x		30,000.00		
5	0.40km.	Drop structure(0.305m)		Yes					x		8,000.00		
6	0.487km.	H.P.Culvert(600mdia x 7.4)		Yes					x		6,000.00		
7	0.508km.	Gated Turnout	01 9" dia	Yes		x			x		15,000.00		

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (32/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
8	0.515km.	Drop structure(0.305m)		Yes					x			10,000.00	
9	0.60km.	Drop structure(0.305m)		Yes					x			12,000.00	
10	0.627km.	Gated Turnout	01 12"	Yes			x		x			35,000.00	
11	0.650km.	Drop structure(0.610m)		Yes					x			8,000.00	
12	0.70km.	Gated Turnout	01 12"	Yes			x		x			35,000.00	
13	0.0km-0.515km.	Chl. Lining (new)		Yes							0.0849m ³ /s	1,460,000.00	
14	0.515km-0.70km.	Chl. Lining (new)		Yes							0.0566m ³ /s	650,000.00	
												2,300,000.00	
	HLD26												
1	0.425km.	Drop structure(0.305m)		Yes				x				6,000.00	
2	0.610km.	R/Wall 40m L		Yes				x				10,000.00	
3	0.656km.	Road crossing 6.10m x 0.95m		Yes				x				10,000.00	
4	0.675km.	Gated Turnout	01 12" dia	Yes		x		x				12,000.00	
5	0.725km.	Drop structure(0.305m)		Yes				x				5,000.00	
6	0.796km.	Gated Turnout	01 12" dia	Yes		x		x				10,000.00	
7	0.847km.	Gated Turnout	01 12" dia	Yes			x	x				35,000.00	
8	0.842km.	Concrete lining 20.0m		Yes				x				20,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (33/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
9	0.890km.	Road crossing 1.20m x 9.20m		Yes				x				10,000.00	
10	0.90km.	Drop structure(1.279m)		Yes				x				15,000.00	
11	0.948km.	R/Wall (L-124m)		Yes				x				10,000.00	
12	1.0km.	Drop structure (0.61m)		Yes				x				8,000.00	
13	1.005km.	Gated Turnout	01 12" dia	Yes			x	x				35,000.00	
14	1.050km.	Drop structure (0.305m)		Yes				x				8,000.00	
15	1.150km.	Drop structure (0.305m)		Yes				x				6,000.00	
16	1.158km.	Gated Turnout	01 12" dia	Yes		x		x				12,000.00	
17	1.225km.	Drop structure (0.305m)		Yes				x				6,000.00	
18	1.283km.	Drop structure (0.61m)		Yes		x		x				8,000.00	
19	1.295km.	Gated Turnout	01 12" dia	Yes				x				15,000.00	
20	1.325km.	Drop structure (0.305m)		Yes				x				6,000.00	
21	1.360km.	Gated Turnout	01 12" dia	Yes			x	x				20,000.00	
22	1.372km.	R/Wall (20m x L)		Yes					x			15,000.00	
23	1.375km.	Gated Turnout	01 12" dia	Yes		x			x			22,000.00	
24	1.375km.	Drop structure (0.914m)		Yes					x			8,000.00	
25	1.450km.	Drop structure (0.61m)		Yes					x			6,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (34/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
26	1.497km.	Drop structure (1.219m)		Yes					x			12,000.00	
27	1.550km.	Drop structure (0.914m)		Yes					x			8,000.00	
28	1.650km.	Drop structure (0.61m)		Yes					x			6,000.00	
29	1.722km.	Gated Turnout	01 12" dia	Yes		x			x			12,000.00	
30	1.750km.	Drop structure (0.305m)		Yes					x			6,000.00	
31	1.7829km.	Gated Turnout	01 12" dia	Yes			x		x			30,000.00	
32	1.825km.	Drop structure (0.305m)		Yes					x			6,000.00	
33	1.956km.	Gated Turnout	01 12" dia	Yes			x		x			30,000.00	
34	2.025km.	Drop structure		Yes					x			8,000.00	
35	1.360km. to 1.76km.	Formed canal		Yes							Formed chl sec.	800,000.00	
36	0.0km. to 0.85km.	Chl. Lining (new)		Yes							0.1785m ³ /s	3,700,000.00	
37	0.85km. to 1.76km.	Chl. Lining (new)		Yes							0.1301m ³ /s	3,300,000.00	
38	1.76km. to 2.025km.	Chl. Lining (new)		Yes							0.0987m ³ /s	1,014,000.00	
												9,250,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (35/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
	HLD27												
1	0.0137km.	Gated Turnout	01 9" dia	Yes		x			x			15,000.00	
2	0.025km.	Drop structure (0.305m)		Yes					x			6,000.00	
3	0.0288km.	Cross Regulator	01 bay	Yes					x			3,000.00	
4	0.218km.	Pipe out let	01 10cm	Yes					x			1,500.00	
5	0.225km.	Cross Regulator	01 bay	Yes					x			3,000.00	
6	0.375km.	Drop structure (0.305m)		Yes					x			5,000.00	
7	0.375km.	Pipe out let	01 10cm	Yes					x			1,500.00	
8	0.550km.	Drop structure (0.305m)		Yes					x			5,000.00	
9	0.555km.	Pipe out let	01 20cm	Yes					x			2,000.00	
10	0.782km.	Gated Turnout	01 9" dia	Yes			x		x			35,000.00	
11	0.850km.	Drop structure (0.305m)		Yes					x			5,000.00	
12	1.2275km.	Drop structure (0.305m)		Yes					x			5,000.00	
13	1.276km.	Gated Turnout	01 9" dia	Yes		x			x			20,000.00	
14	1.370km.	Box culvert(6m x 0.80m)		Yes					x			15,000.00	
15	1.412km.	Gated Turnout	01 18" dia	Yes		x			x			15,000.00	
16	1.50km.	Drop structure (0.305m)		Yes					x			3,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (36/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
17	1.57km.	Pipe out let	01 4" dia	Yes					x			1,500.00	
18	1.684km.	Gated Turnout	01 20" dia	Yes		x			x			15,000.00	
19	1.80km.	Drop structure		Yes					x			3,000.00	
20	1.875km.	Gated Turnout	01 9" dia	Yes		x			x			15,000.00	
21	1.825km.	Drop structure (0.305m)		Yes					x			3,000.00	
22	1.961km.	Gated Turnout	01 9" dia	Yes			x		x			35,000.00	
23	0.0km - 1.410km	Chl. Lining (new)		Yes							0.1944m ³ /s	6,200,000.00	
24	1.410km - 1.680km	Chl. Lining (new)		Yes							0.1406m ³ /s	1,200,000.00	
25	1.680km - 1.825km	Chl. Lining (new)		Yes							0.0857m ³ /s	600,000.00	
26	1.825km - 1.961km	Chl. Lining (new)		Yes							0.0566m ³ /s	512,500.00	
												8,725,000.00	
	HLD35												
1	0.0km.	Gated Turnout	01 12" dia	Yes	x				x			15,000.00	
2	0.037km.	Bridge across the rd.	8.20m x 0.80m dia	No									
3	0.070km.	Railways Crossing		No									
4	0.10km.	0.305m drop structure		Yes					x			10,000.00	
5	0.131km.	Bridge (9m x 1.6m)		Yes					x			15,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (37/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
6	0.178km.	Box culvert		Yes					x			15,000.00	
7	0.276km.	Road Crossing		Yes					x			5,000.00	
8		Cum drop(0.305m)		Yes					x			16,000.00	
9	0.392km.	Road Crossing(1.80m x 2.3m)		Yes					x			5,000.00	
10	0.575km.	Drop structure(0.305m)		Yes					x			10,000.00	
11	0.641km.	Gated Tumout(02)	02 24" dia	Yes	x				x			10,000.00	
12	0.650km.	Drop structure(0.305m)		Yes					x			8,000.00	
13	0.657km.	Culvert 3"-Odia. x 12'-02		Yes					x			5,000.00	
14	0.70km.	Drop structure(0.305m)		Yes					x			10,000.00	
15	0.725km.	Drop structure(0.305m)		Yes					x			6,000.00	
16	0.800km.	Drop structure(0.610m)		Yes					x			6,000.00	
17	0.825km.	Drop structure(0.914m)		Yes					x			5,000.00	
18	0.925km.	Drop structure(0.914m)		Yes					x			16,000.00	
19	1.025km.	Drop structure(0.305m)		Yes					x			5,000.00	
20	1.225km.	Drop structure(0.305m)		Yes					x			6,000.00	
21	1.375km.	Drop structure(0.305m)		Yes					x			10,000.00	
22	1.850km.	Drop structure(0.610m)		Yes					x			6,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (38/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
23	1.934km.	Gated Turnout	01 12" dia	Yes		x			x			15,000.00	
24	1.950km	Drop structure(0.305m)		Yes					x			10,000.00	
25	2.166km.	Bridge Cum chl spill		Yes					x			20,000.00	
26	2.230km.	Gated Turnout	01 12" dia	Yes			x		x			25,000.00	
27	2.475km.	Drop structure		Yes					x			10,000.00	
28	2.558km.	Gated Turnout	01 12" dia	No					x				
29	2.675km.	Drop structure		Yes					x			11,000.00	
30	2.675km.	R/wall (183m)		Yes					x			25,000.00	
31	0.0km - 0.064km	Chl. Lining (new)		Yes							0.0849m ³ /s	5,000,000.00	
32	0.064km - 1.970km	Chl. Lining (new)		Yes							0.0766m ³ /s	4,500,000.00	
33	1.970km - 2.698km	Chl. Lining (new)		Yes							0.0396m ³ /s	1,300,000.00	
												11,100,000.00	
	HLD36												
1	0.0km.	Gated Turnout	01 24" dia	Yes		x			x			15,000.00	
2	0.002km.	Drop structure(0.83m)		Yes					x			5,000.00	
3	0.046km.	Gated Turnout	01 12" dia	Yes		x			x			12,000.00	
4	0.048km.	H.P.Culvert(0.95mdiax10cm)		Yes					x			5,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (39/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)		
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ works	Other
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
5	0.148km.	R/Wall (10ml)		Yes					x			10,000.00	
6	0.150km.	Gated Turnout	01 12" dia	Yes		x			x			10,000.00	
7	0.1659km.	Drop structure(0.914m)		Yes					x			5,000.00	
8	0.1868km.	Gated Turnout (HLD36)	01 12" dia	Yes		x			x			8,000.00	
9	0.395km.	H.P.Culvert(0.6mdia.x4.8cm)		Yes					x			8,000.00	
10	0.400km.	Gated Turnout	01 12" dia	Yes		x			x			8,000.00	
11	0.405km.	Gated Turnout	01 12" dia	Yes		x			x			8,000.00	
12	0.410km.	Pipe outlet	01 6" dia	Yes					x			5,000.00	
13	0.5122km.	Pipe outlet	01 6" dia	Yes					x			3,000.00	
14	0.5222km.	Pipe outlet	01 6" dia	Yes					x			3,000.00	
15	0.770km.	Pipe outlet	01 6" dia	Yes					x			3,000.00	
16	0.785km.	Pipe outlet	01 6" dia	Yes					x			3,000.00	
17	0.750km.	Drop structure		Yes					x			5,000.00	
18	0.7719km.	Pipe outlet	01 6" dia	Yes					x			2,000.00	
19	0.8688km.	Pipe outlet	01 6" dia	Yes					x			2,000.00	
20	0.929km.	Pipe outlet	01 6" dia	Yes					x			3,000.00	
21	1.025km.	Drop structure(0.305m)		Yes					x			15,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (40/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works		Other
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
22	1.061km.	Drop structure(0.485m)		Yes					x			12,000.00	
23	0.0km.- 0.186km	Chl. Lining (new)		Yes					x		0.0256m3/s	1,100,000.00	
24	0.186km.- 0.40km	Chl. Lining (new)		Yes							0.1049m3/s	1,000,000.00	
25	0.40km.- 1.66km	Chl. Lining (new)		Yes							0.0481m3/s	3,600,000.00	
												5,850,000.00	
	HLD36A												
1	0.065km.	Drop structure(0.914m)		Yes								5,000.00	
2	0.017km.	Drop structure(0.61m)		Yes								5,000.00	
3	0.1965km.	Railways Bridge		Yes									
4	0.2155km.	Box culvert(0.9m x 0.9m)		Yes								4,000.00	
5	0.252km.	Gated Turnout	01 9" dia	Yes								10,000.00	
6	0.288km.	Plank Regulator	01 bay	Yes								30,000.00	
7	0.355km.	Ripe outlet	6"	Yes								2,000.00	
8	0.400km.	Drop sturcture(0.305m)	4"	Yes								3,000.00	
9	0.404km.	Pipe outlet	4"	Yes								2,000.00	
10	0.479km.	Pipe outlet		Yes								2,000.00	
11	0.556km.	Pipe outlet	01 4"	Yes								2,000.00	

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (42/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	LLD1								174,000.00
	LLD1A								197,937.50
	LLD2								40,050.00
	LLD3A								1,350.00
	LLD4								215,000.00
	LLD6								170,000.00
	LLD8								50,000.00
	LLD9								75,000.00
	LLD10								40,000.00
	LLD11								100,000.00
	Nalubewa Centre Canal								75,000.00
									1,138,337.50

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (43/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	LLD1								
1	10.000	820	810.000	0.212	0.8	0.95	Varing	Earth work to be done edge or road & road surface	84,000.00
2	10.000	820	810.000					Gravelling the D-chl. road	90,000.00
									174,000.00
	LLD1A								
1	0.000	537.000	537.000	0.057	0.46	0.45	Varing	Right side to be filled	140,000.00
2			537.000					E/work in rosd surface	15,750.00
3			537.000					Gravelling the D-chl. raod	42,187.50
									197,937.50
	LLD2								
1	0.000	475	475.000	0.142	0.762			Gravelling to be done in D-chl. road	40,050.00
									40,050.00
	LLD3A								
1				0.051	0.45				
2									
3	0.000	15	Only gavelling to be done						1,350.00
									1,350.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (44/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	LLD4								
1	500.000	550	50.000	0.142	0.76			E/filling in large washed area	5,000.00
2	630.000	750	120.000	0.142	0.76			E/filling in LB bund	30,000.00
3	0.000	1245	1245.000	0.142	0.76			Gravelling the D-chl. bund road	180,000.00
									215,000.00
	LLD6								
1	0.000	1350	1,350.000	0.184	0.91	0.75		Gravelling in D-chl. bund road	170,000.00
									170,000.00
	LLD8								
1	0.000	350	350.000	0.226	0.61	0.65		Gravelling in D-chl. bund road	50,000.00
									50,000.00
	LLD9								
1	0.000	3000	3000.000	0.241 dia	1.06			De-silting the chl. bed	75,000.00
									75,000.00
	LLD10								
1	0.000	335	335.000	0.1425	0.762			Gravelling the D-chl. bund road	40,000.00
									40,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (46/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
	LLD1											2,954,000.00
	LLD1A											1,986,700.00
	LLD2											1,762,500.00
	LLD3A											48,800.00
	LLD4											4,643,560.00
	LLD5											89,800.00
	LLD6											5,994,900.00
	LLD7											637,000.00
	LLD8											1,335,000.00
	LLD9											7,519,000.00
	LLD10											1,153,000.00
	LLD11											3,076,600.00
	Nalubewa Centre Canal											2,272,800.00
												33,473,660.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (47/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others					
					no need	Minor repair	Replace- ment	no need	Minor repair	Replace- ment			
	LLD1												
1		sluice Rectangular chl	2 No./0.45 dia. 0.8m x 0.95m.	Yes						x	Trapezoid chl (proposed)	2,916,000.00	
2	13.200	C.P.O	0.3 dia	No	x			x					
3	300.000	C.P.O	0.3 dia	Yes		x			x			8,000.00	
4	320.000	C.P.O	0.3 dia	Yes					x			1,000.00	
5	331.000	C.P.O	0.3 dia	Yes					x			1,000.00	
6	400.000	C.P.O	0.3 dia	Yes					x			1,000.00	
7	650.000	C.P.O	0.3 dia	Yes		x			x			9,000.00	
8	696.000	C.P.O	0.3 dia	Yes		x			x			9,000.00	
9	781.000	C.P.O	0.3 dia	Yes		x			x			9,000.00	
												2,954,000.00	
	LLD1A												
1	0.000	C.P.O	1	No									
2	5.000	C.P.O to FC1	1" dia	No									
3		Drop		Yes					x		Minor repair - 2000 R/W section - 7500	9,500.00	
4													

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (48/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
5	0-573m	Rectangular chl. section	0.5 x 0.45m						x		Trapezoid chl. Section (proposed)	1,933,200.00
6	263.700	Under crossing		Yes					x			2,000.00
7		Farm culvert to be provided (proposed)	1.2 x 0.6m	Yes								40,000.00
8	505.000	C.P.O	0.3 dia	Yes					x		Rod to be provided	2,000.00
9	537.000	C.P.O	0.3 dia	No								
												1,986,700.00
	LLD2											
1	0.000	sluice	0.46 dia	No								
2	5.000	C.P.O to FC1	0.3 dia	Yes		x			x			2,500.00
3		C.P.O to FC2	0.3 dia	Yes		x			x			11,000.00
4	11.000	Drop	0.9 dia	No								
5												
6												
7	182.000	Rectangular chl. sec	0.75 x 0.5m	Yes							To be demolish	10,000.00
8												
9	188.800	C.P.O LB	0.3 dia	No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (49/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
10		C.P.O RB	0.3 dia	No								
11	391.500	C.P.O	0.3 dia	Yes		x			x		Door to be provided	13,000.00
12	475.000	C.P.O	0.3 dia	Yes		x			x		- do -	12,000.00
13	10 to 475	Trapezoid chl. (prop.)										1,674,000.00
14		Tractor crossing to be provided	1.2m x 0.6m									40,000.00
												1,762,500.00
	LLD3A											
1	0.000	Sluice	0.38 dia	Yes					x			2,000.00
2	15.000	C.P.O	0.3 dia									
3												
4	0 to 13	Trapezium chl.										46,800.00
		section to be provided										48,800.00
	LLD4											
1	0.000	Sluice	0.457 dia	No								
2	18.000	C.P.O	0.3 dia	Yes			x				Gate to be provided	10,000.00
3	23.000	C.P.O	0.3 dia	Yes			x				Gate to be provided	10,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (50/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
4	30.000	Regulator	1.95 x 0.7m.	Yes			x					20,000.00
5				Yes								
6	18.000	C.P.O	0.3 dia	Yes			x				Gate to be provided	10,000.00
7	248.000	Drop	0.8m.	Yes							E/W to be provided in D/S of drop	20,000.00
8	260.000	Drop	0.336m.	No								
9	264.000	Tractor crossing							x		slab to be provided	10,000.00
10	507.000	Over crossing										
11	507-507	Re-plastering the inner surface of R/W chl sec	0.9 x 0.4m.									7,560.00
12	570.000	Tractor crossing		No								
13	630.000	C.P.O 2Nos.	0.3 dia				x				Gates (1' dia)to be provided 2 Nos.	20,000.00
14	707.000	C.P.O	0.3 dia				x				- do - 1No	10,000.00
15	715.000	Regulator (proposed)	0.6m. Width								New regulator proposed	40,000.00
16	960.000	Tractor crossing		No								
17	1156.000	C.P.O	0.3 dia				x				Gate to be provided	10,000.00
18	1135-1245	R/W	0.9 x 0.4m.								to be removed	10,000.00
19	10-1245	Trapezoid chl. Section to be									plastered	4,446,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (51/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace- ment	no need	Minor repair	Replace- ment		
20	1245.000	2No.gates (0.3 dia to be provided)									20,000.00	
											4,643,560.00	
	LLD5											
1	0.000	Sluice	0.38 dia	Yes							5,000.00	
2		Trapezoid chl. section to be provided									64,800.00	
3		FC1 & FC2	0.3 dia - 2Nos.	Yes			x			Gates to be provided	20,000.00	
											89,800.00	
	LLD6											
1	0.000	Sluice	2/0.46 dia	Yes					x		2,000.00	
2	18.500	C.P.O	0.3 dia						x	D/S rubble pitching to be done	24,000.00	
3	25-262	RB side of bund to be repaired	237m. long	Yes						E/W & rubble pitching to be done	563,250.00	
4	25.000	Drop								D/S to be improved	5,000.00	
5	284.000	R/W		No								
6	264-284	R/W to be provided in RB side	0.75m. height								27,000.00	
7	228.000	C.P.O LB	0.3 dia	No								
8	228.000	C.P.O RB	0.3 dia	No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (52/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	Estimated cost required (Rs.)
					no need	Minor repair	Replace- ment	no need	Minor repair	Replace- ment		
9	235.000	Tractor crossing		No								
10	242.000	Drop		Yes					x		Rubble pitching	86,500.00
11	305.000	Drop		Yes					x		R/W section	25,000.00
12	338.000	Drop		Yes					x			3,000.00
13	400.000	Drop		Yes					x			5,000.00
14	535.000	Over crossing-Drop	0.45m	No								
15	530-622	R/W	0.6 x 0.75m									77,500.00
16	622.000	C.P.O.	0.3 dia	Yes			x					10,000.00
17	650.000	Farm crossing	1.2 x 0.6m.						x			1,000.00
18	735.000	C.P.O.	0.3 dia						x		Rod to be provided	2,000.00
19	622-735	Chi. section	to be provided									126,700.00
20	735.000	Tractor crossing	to be provided									40,000.00
21	741.000	Drop							x		Rubble pitching to be done	20,000.00
22	900.000	C.P.O	0.3 dia			x					door to be provided	10,000.00
23	941-1056.5	R/W								x	To be demolish	15,000.00
24	1050.000	C.P.O	0.3 dia				x				door to be provided	10,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (53/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
25	1056-1259	conc. chl.									inner surface to be plastered	15,150.00
26	262m 1350m	Trapezoid chl. to be provided										3,916,800.00
27	1258.000	25m long bridge to be provided										1,000,000.00
28	1350.000	C.P.O.	0.3 dia								Door to be provided	10,000.00
												5,994,900.00
	LLD7											
1	0.000	sluice	0.38 dia	Yes					x			2,000.00
2	53.000	C.P.O.	0.3 dia	Yes		x					Gate to be provided	10,000.00
3	180.000	Drainage crossing	0.6 dia	Yes					x			3,000.00
4		C.P.O. (FC2)	0.3 dia	No								
5		C.P.O. (FC3)	0.3 dia	Yes		x					Gate to be provided	10,000.00
6	10 to 180	Trapezoid chl. to be provided										612,000.00
												637,000.00
	LLD8											
1	0.000	Sluice	0.457 dia	Yes					x			5,000.00
2	11.500	C.P.O.	0.3 dia	No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (54/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
3	28.400	C.P.O. LB	0.3 dia	Yes	x				x			1,000.00
4		C.P.O. RB	0.3 dia	Yes	x				x			1,000.00
5	95.000	Tractor crossing									R/W in D/S to be provided both side	20,000.00
6	170.000	C.P.O.(FC3)	0.3 dia	Yes	x				x		Door sash & culvert wall to be extend	8,000.00
7	344.000	C.P.O.	0.3 dia	No								
8	350.000	C.P.O. FC4	0.3 dia	Yes	x						Gate to be provided	10,000.00
9		C.P.O. FC5	0.3 dia	Yes	x							10,000.00
10		1.8m width regulator to be provided	1.8m. Width									20,000.00
11	10-350	Trapezoid chl. section to be provide										1,260,000.00
												1,335,000.00
	LLD9											
1	0.000	Sluice	02Nos 0.457 dia	Yes					x		4m long R/W to be provided to D/S	15,000.00
2	8.500	C.P.O.	0.3 dia	Yes		x					2Nos gate to be provided	20,000.00
3		Drop		Yes							Conc. cut off wall & back filling to be	15,000.00
4	67.700	Drop		Yes								10,000.00
5	140.000	Farm crossing		No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (55/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
6	157.200	C.P.O.	0.3 dia	Yes					x		Gate to be provided	10,000.00
7		C.P.O.	0.3 dia	Yes					x		- do -	10,000.00
8		Drop		Yes					x		10m R/W to be provided back filling	28,000.00
9	250-650	R/W	0.75height								To be removed	20,000.00
10	436.000	C.P.O.	0.3 dia	Yes		x					Gates to be provided	10,000.00
11		C.P.O.	0.3 dia	Yes		x					-do-	10,000.00
12	448.000	Bridge		No								
13		C.P.O.	0.3 dia	Yes		x			x		Chl. sec. to be repaired)	30,000.00
14											15m conc. wall to be provided LB	
15	629.000	C.P.O. to be demolish & re-construction	0.3 dia	Yes			x					40,000.00
16	670.000	Regulator							x			3,000.00
17	693.000	C.P.O.	0.3 dia	No								
18	1078.000	Regulated checked	0.3 dia	Yes								3,000.00
19	1298.000	C.P.O.		Yes					x		Door to be provided	10,000.00
20		2' dia. culvert		Yes								35,000.00
21	1475.000	C.P.O.		No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (56/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or	Gates			Concrete Works/Others		Description/ Other works	Estimated cost required (Rs.)	
22	1587.000	C.P.O.	1.8m width								Gated regulator	30,000.00
23	1625.000	Drop		No								
24	2125.000	Drop		No								
25	2332.000	C.P.O.	0.3 dia	No					x			
26	2497.000	C.P.O.	0.3 dia	No								
27	2581.000	C.P.O.	0.3 dia	Yes		x					Gated regulator	10,000.00
28		C.P.O.	0.3 dia	Yes		x					- do -	10,000.00
29	2600.000	Drop		No								
30	2797.000	C.P.O.		No								
31	2800.000	Drop		No								
32		2000m length Trapezoid chl section to										7,200,000.00
												7,519,000.00
	LLD10											
1	0.000	Sluice	0.45 dia	Yes		x						1,000.00
2	17.000	Under crossing	2' dia	Yes		x						2,000.00
3	42.000	C.P.O.	0.3 dia	Yes		x			x		R/W(6m long) to be constructed in both	30,000.00
4	163.000	C.P.O.	0.3 dia	No								

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (57/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or	Gates			Concrete Works/Others		Description/ Other works	Estimated cost required (Rs.)	
5												
6	210.000	C.P.O. to Hindogama Tank	0.3dia									
7	335.000	R/W to be provided in LB	0.6 x 0.75m.								65m length. 25m height	400,000.00
8	10 to 200	Trapezoid chl. section to be provide										720,000.00
												1,153,000.00
	LLD11											
1	0.000	Sluice	0.45 dia	Yes					x			2,000.00
2												
3	11.700	Drop		No								
4	75.000	C.P.O.	0.3 dia	No								
5	83.500	Drop		Yes					x		D/S rubble pitching to be done E/filling	6,000.00
6	125.000	Drop		Yes							D/S R/W to be provided done 10m	35,000.00
7	225.000	Turn out 2Nos.	0.3 dia	Yes					x		5m long R/W in bath side (D/S to be	25,000.00
8	350.000	Drop		Yes					x		15m long R/W in RB of D/S to be provided	40,000.00
9	539.000	Drop									30m long - do	60,000.00
10	560.000	New drop to be provided									After designs chl	50,000.00
11	560.000	Extra FC to be provided with C.P.O.	0.3 dia								According to the framers' claiming	100,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (58/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or	Gates			Concrete Works/Others		Description/ Other works	Estimated cost required (Rs.)	
12	725.000	R/W to be provided in RB 775m long)	0.75 height 75m long									135,000.00
13	736.000	C.P.O.	0.3 dia					x		Door to be provided		10,000.00
14	10 to 736	Trapezoid chl. section to be provide										2,613,600.00
												3,076,600.00
	Nalubewa Centre Canal											
1	0.000	Sluice	0.6 dia	Yes				x				1,000.00
2	30.000	Over crossing	0.6 dia	No								
3	45.000	C.P.O.	0.3 dia	Yes		x				Rod to be provided		2,000.00
4	116.500	C.P.O.	0.3 dia	Yes		x		x		Door to be provided		10,000.00
5		Regulator	1.3m width	Yes				x		R. pitching to be done R/W to be re-		23,000.00
6	185.5-235	R/W		Yes				x		Plastering		3,000.00
7	267.500	C.P.O.	0.3 dia	Yes		x				Door to be provided		10,000.00
8		LB R/W		Yes				x				60,000.00
9	366.000	Culvert		Yes				x				3,000.00
10	372.000	C.P.O.	0.3 dia	Yes		x				Door to be provided		10,000.00
11	381.000	C.P.O.	0.3 dia	No								
12	385.000	C.P.O.	0.3 dia	Yes		x				-do-		10,000.00

Table TA-1 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Irrigation Department (59/59)

Name of Scheme : Nachchaduwa

Name of Canal : High Level D-Canal (managed by ID), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								
				Need (Yes or	Gates			Concrete Works/Others			Description/ Other works	Estimated cost required (Rs.)
13	450.000	Chl. Crossing to be provided										35,000.00
14	470.000	C.P.O.	0.3 dia	Yes		x					Door to be provided	10,000.00
15		C.P.O.	0.3 dia	Yes		x					-do-	10,000.00
16												
17	510.000	C.P.O.		No								
18	588.000	C.P.O.	0.3 dia	No								
19		D/S Structure	0.3 dia						x			5,000.00
20	10 to 588	Trapezoid chl. section to be provide										2,080,800.00
												2,272,800.00

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (1/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Sena Samagi FO (1), HLD1 to 6, Extent of Land 380 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	HLD 01	Two concrete walls (RC Canal)	L 10 ft W 6 inches H 2 ft	Concrete - 1 cube Earth works 2 cu	8,200	Skilled - 1 days Labour - 8 days Labors 4 days	275 1,400 700	1,400 700
2	HLD 02	Rubble masonry wall	L 250m W 1 ft H 2 ft	RRM 37 cu Earth works 125 cu Metal 8 cu	118,400 20,800	Skilled 28 days Labors 185 days Labors 278 days Labors 18 days	7,700 32,375 48,650 3,150	32,375 48,650 3,150
3	HLD 02 canal road	Earth filling 1 km HLD canal road from HLMC to LLMC	L 1 km W 3m	Earth - 159 cu Gravel - 88 cu	79,500 176,000	Labors 353 days Labors 195 days	61,775 34,125	61,775 34,125
4	HLD 03	Side wall on both sides	L 20 ft W 1 ft H 2 ft	RRM 1 cu Earth works 3 cu Metal 1 cu	6,400 2,600	Skilled 1 days Labors 5 days Labors 7 days Labors 1 days	275 875 1,225 175	875 1,225 175
5	HLD 03 Canal road	Earth work (Filling)	L 1 km W 3m	Earth - 159 cu Gravel - 88 cu	39,750 176,000	Labors 353 days Labors 195 days	61,775 34,125	61,775 34,125
6	HLD 03	Construction of a culvert	Repair the road replacing 2 inch dia. Hume pipes 2 Nos.	2 ft dia. HP - 20ft RRM 2 cu Earth works 2 cu Metal 1 cu	14,000 6,400 2,600	Skilled 2 days Labors 10 days Labors 4 days Labors 2 days	550 1,750 700 350	1,750 700 350
7	HLD 04	Construction side walls (both sides)	L 50 ft W 1 ft H 2 ft x 2 walls	Included in rehabilitation plan of Irrigation Department of HLD4				
8	HLD 04	Construction of a culvert	2 ft dia. X 8 hume pipes across the main road	Included in rehabilitation plan of Irrigation Department of HLD4				
9	HLD 04	Construction side walls (both sides)	L 100ft W 2 ft H 2 ft rubble masonry	Included in rehabilitation plan of Irrigation Department of HLD4				
10	HLD 04 Canal Road Separating the reservations	Earth filling - Rehabilitation Survey and demarcation of reservations on all canals Earth filling 1 km on HLD 04 canal road from HLMC to LLMC	L 1 km W 3m	Included in rehabilitation plan of Irrigation Department of HLD4				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (2/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Sena Samagi FO (1), HLD1 to 6, Extent of Land 380 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
11	HLD 04A at the main canal	Construction of a water control tower with planks	Construction of 3 concrete post to control water with 3 ft high planks	Concrete - 3 cube Earth works 3 cu Others	24,600 6,000	Skilled - 3 days Labour - 23 days Labors 7 days	825 4,025 1,225	4,025 1,225
12	HLD 04A	Construction of side walls (both sides) Construction of 40 ft long 2 ft wide 2 ft high side walls on both sides of canal	L 40 ft W 2 ft H 2 ft	RRM 2 cu Earth works 6 cu Metal 1 cu	6,400 2,600	Skilled 1 days Labors 5 days Labors 13 days Labors 1 days	275 875 1,225 175	875 1,225 175
13	HLD 05	Construction of side walls (both sides) Construction of 100 ft long 2 ft wide 2 ft high side walls on both sides of canal	L 100 ft W 2 ft H 2 ft	Included in rehabilitation plan of Irrigation Department of HLD5				
14	HLD 05	Construction of side wall Construction 10 ft long 2 ft wide 1 ft high side wall	L 10 ft W 2 ft H 1 ft	RRM 1 cu Earth works 2 cu Metal 1 cu	3,200 2,600	Skilled 1 days Labors 5 days Labors 4 days Labors 2 days	275 875 700 350	875 700 350
15	HLD 05	Construction of concrete side wall Construction of a 10 ft long 6 inch wide 2 ft high concrete side wall	L 10 ft W 6 ft H 2 ft	Concrete - 1 cube Earth works 2 cu	8,200	Skilled - 1 days Labour - 8 days Labors 4 days	275 1,400 700	1,400 700
16	HLD 05 canal road	Earth filling (gravel) Earth filling 1 km on HLD 05 to 5A and rehabilitation	L 1 km W 3m	Earth - 159 cu Gravel - 88 cu	79,500 176,000	Labors 353 days Labors 195 days	61,775 34,125	61,775 34,125
17	HLD 05A	Construction of a side wall with earth Construct 200 ft long 2 ft wide 2 ft high earth wall (canal bund)	L 200 ft W 2 ft H 2 ft	Earth - 21 cubes	10,500	Labors 47 days	8,225	8,225
18	HLD 06	Construction of a side wall (rubble) Construction of 10 ft long 1 ft wide 2 ft high rubble masonry wall	L 10 ft W 1 ft H 2 ft	RRM 1 cu Earth works 2 cu Metal 1 cu	3,200 2,600	Skilled 1 days Labors 5 days Labors 2 days Labors 2 days	275 875 350 350	875 350 350

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (3/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Sena Samagi FO (1), HLD1 to 6, Extent of Land 380 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
19	HLD 06	Earth filling (gravel) canal road Earth filling 1 km on HLD 06 canal road and rehabilitation	L 1 km W 3m	Earth - 159 cu Gravel - 88 cu	79,500 176,000	Labors 353 days Labors 195 days	61,775 34,125	61,775 34,125
20	HLD 06	Construction of a side wall Construction of a 200 ft long 2 ft high side wall with bricks	L 200 ft H 2 ft	RRM 9 cu Earth works 30 cu Metal 2 cu	28,800 5,200	Skilled 7 days Labors 45 days Labors 67 days Labors 4 days	1,925 7,875 11,725 700	7,875 11,725 700
21	Drain canal between HLD 04 and HLD 05	Clearing drain canal Digging 75 m long 4 ft wide 2 ft deep drain canal	L 75 m W 4 ft H 2 ft	Earth works 29 cu		Labors 64 days	11,200	11,200
	Sub-total				1,265,550		540,450	527,800
	Grand-total				1,806,000			
	(US\$/ha)				165			

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (4/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Mahasen FO (2), HLD7 to 9, Extent of Land 498 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	FC 01 side wall	Must construct a rubble wall	L 100 m W 2' H 2 1/2' - both sides	RRM 27 cu Earth works 50 cu Metal 3 cu	86,400 7,800	Skilled 20 days Labors 135 days Labors 111 days Labors 7 days	5,500 23,625 19,425 1,225	23,625 19,425 1,225
2	FC 01 - cross canal	Must construct a rubble wall	L 20m W 2' H 2 1/2' - both sides	RRM 4 cu Earth works 10 cu Metal 1 cu	12,800 2,600	Skilled 3 days Labors 20 days Labors 22 days Labors 2 days	825 3,500 3,850 350	3,500 3,850 350
3	FC 02	Must construct a rubble wall	L 200m W 2' H 2 1/2' - both sides	RRM 36 cu Earth works 100 cu Metal 6 cu	115,200 15,600	Skilled 27 days Labors 180 days Labors 222 days Labors 13 days	7,425 31,500 38,850 2,275	31,500 38,850 2,275
4	FC 02 - cross canal	Must construct a rubble wall	L 100 m W 2' H 2 1/2' - both sides	RRM 27 cu Earth works 50 cu Metal 3 cu	86,400 7,800	Skilled 20 days Labors 135 days Labors 111 days Labors 7 days	5,500 23,625 19,425 1,225	23,625 19,425 1,225
5	FC 04 - side wall	Must construct a rubble wall	L 310m W 2' H 2 1/2' - both sides	RRM 56 cu Earth works 155 cu Metal 10 cu	179,200 26,000	Skilled 42 days Labors 280 days Labors 344 days Labors 22 days	11,550 49,000 60,200 3,850	49,000 60,200 3,850
6	FC 05 1 2 3	Three sluice with doors	must supply 3 sluice doors	Included in rehabilitation plan of Irrigation Department of HLD7				
7	FC 05 up to R.3	Must construct a side wall of FC from land side	L 500 ft W 1 1/2' H 2 1/2' both sides	Included in rehabilitation plan of Irrigation Department of HLD7				
8	FC 06 to FC 08 FC 06 field canal FC 06 structure	Must construct a rubble masonry wall (D canal) About 250m field canal earth bund should be concrete	L 600 ft W 2' H 2 1/2' both sides L 250m both sides - earth work	RRM 78 cu Earth works 216 cu Metal 14 cu	249,600 36,400	Skilled 59 days Labors 390 days Labors 480 days Labors 31 days	16,225 68,250 84,000 5,425	68,250 84,000 5,425

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (5/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Mahasen FO (2), HLD7 to 9, Extent of Land 498 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
9	FC 09 beginning & middle	Construction of drop (Rubble masonry wall) Concrete basin (Rubble masonry wall) Construction of a culvert (Rubble masonry wall)	L 20' W 1 1/2' H 2 1/2' L 25' W 1 1/2' H 2 1/2' L 65' W 1 1/2' H 2 1/2'	RRM 6 cu Earth works 17 cu Metal 1 cu HP dia 300mm - 30 ft.	19,200 2,600 10,500	Skilled 5 days Labors 30 days Labors 38 days Labors 2 days	1,375 5,250 6,650 350	5,250 6,650 350
10	Fc 09 End drain	Earth filling 40 (10' x 10' x 1)		Earth 1 cu	250	Labors 2 days	350	350
11	Fc 10	Concreting (10 - 1 ft) one wall Concreting (10 - 1 ft) one wall	Length 20 ft Length 450 ft (one side)	RRM 13 cu Earth works 72 cu Metal 2 cu	41,600 5,200	Skilled 10 days Labors 65 days Labors 160 days Labors 4 days	2,750 13,650 20,650 700	13,650 20,650 700
12	Hidogama spill canal	Construction of a side wall		Concrete 5 cu Earth works 10 cu Metal 1 cu	41,000 2,600	Skilled 5 days Labors 39 days Labors 22 days Labors 2 days	1,375 6,825 3,850 350	6,825 3,850 350
13	HLD 8 FC02	FC Rubble masonry wall	L 60' W 1 1/2 H 2'	RRM 3 cu Earth works 9 cu Metal 1 cu	9,600 2,600	Skilled 2 days Labors 15 days Labors 20 days Labors 2 days	550 2,625 3,500 350	2,625 3,500 350
		Construction of a water tank	For water distribution	Earth works 20 cu Others	5,000	Labors 44 days	7,700	7,700
		Construction of regulator	Construction of regulator	Slide gate with dia. 50 Slide dia. 300 gate Concrete 1 cu	150,000 11,500 16,400	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350
		Preparation of canal bund	Earth work of FC 500 ft long	Earth works 16 cu	13,000	Labors 36 days	6,300	6,300

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (6/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Mahasen FO (2), HLD7 to 9, Extent of Land 498 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
14	HLD 8 FC 1	Construction of water tank	Repairs of FC 1 canal	Earth works 20 cu Others	5,000	Labors 44 days	7,700	7,700
		Construction of side wall	Repairs of FC 1 canal L 30 m	Concrete 5 cu Earth works 10 cu Metal 1 cu	41,000 2,600	Skilled 5 days Labors 39 days Labors 22 days Labors 2 days	1,375 6,825 3,850 350	6,825 3,850 350
		Construction of regulator	Repairs of FC 1 canal	Slide dia. 300 gate Concrete 1 cu Earth works 1 cu	11,500 16,400	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350
		Provision of a hume pipe	Repairs of FC 1 canal	HP dia 300mm - 30 ft.	10,500			
15	HLD 9 & 9A	All the structures should be repaired	Rubble masonry wall L 100 m	RRM 18 cu Earth works 50 cu Metal 3 cu	64,000 50 7,800	Skilled 15 days Labors 100 days Labors 133 days Labors 9 days	4,125 17,500 23,275 1,575	17,500 23,275 1,575
16	HLD 7 D canal	Side wall of D canal between FC 02 and FC 03	Side wall of the canal with the bridge on cemetery road	Included in rehabilitation plan of Irrigation Department of HLD7				
17	HLD 7 D canal	From FC 5 regulator/sluice to FC6 to 10 field canal Construction of a sluice with a door near the water issuing culvert	Construction of a sluice with a door near the water issuing culvert	Included in rehabilitation plan of Irrigation Department of HLD7				
18	Dumping earth (gravel) to Field canal		gravel 500 loads	Gravel 200 cu	400,000	Labors 200 days	1,000	1,000
	Sub-total				1,715,700		643,400	584,275
	Grand-total				2,359,100			
	(US\$/ha)				165			

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (7/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Parakrama FO (3), HLD10 to 17, Extent of Land 575 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	HLD 11 /FC2 FC1 Canal	Concreting side walls and bottom of the canal (RC Canal)	L 65' ft W 3' ft H 3' ft	Concrete 4 cu Metal 1cu Earth works 10 cu	32,800 2,600	Skilled 4 days Labors 31 days Labors 2 days Labors 22 days	1,100 5,425 350 3,850	5,425 350 3,850
2	HLD 11 /FC2 Side wall of rubble masonry	One side wall should be constructed	L 15' ft, H 3' ft	RRM 1 cu Earth works 2 cu Metal 1 cu	3,200 2,600	Skilled 1 days Labors 5 days Labors 4 days Labors 2 days	275 875 700 350	875 700 350
3	HLD 12 / FC2 Repair regulator Basin & earth filling	Earth filing	Length 10' ft, W 3' ft, H 1' ft	RRM 1 cu Earth works 2 cu	3,200	Skilled 1 days Labors 5 days Labors 4 days	275 875 700	875 700
4	HLD 12 / FC2 Repair regulator Basin & earth filling	Earth filing	Length 10' ft, W 3' ft, H 1' ft	RRM 1 cu Earth works 2 cu	3,200	Skilled 1 days Labors 5 days Labors 4 days	275 875 700	875 700
5	HLD 12 / FC2	Earth filing	L 6' ft, W 3' ft, H 1' ft	Earth works 1 cu	250	Labors 2 days	350	350
6	HLD 12 / FC2	Earth filing	L 6' ft, W 3' ft, H 1' ft	Earth works 1 cu	250	Labors 2 days	350	350
7	HLD 12 / FC2	Earth filing	L 6' ft, W 3' ft, H 1' ft	Earth works 1 cu	250	Labors 2 days	350	350
8	HLD 12 / FC2	Earth filing	L 6' ft, W 3' ft, H 1' ft	Earth works 1 cu	250	Labors 2 days	350	350
9	HLD 12 / FC2	Construction of side walls of culvert and fixing door		Concrete 1 cu HP dia. 600mm Slide gate dia. 300 Earth works 1 cu Others	8,200 14,000 11,500 2,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350
10	HLD 12 / FC2	Construction of side walls of culvert and fixing door		Concrete 1 cu HP dia. 600mm Slide gate dia. 300 Earth works 1 cu Others	8,200 14,000 11,500 2,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350

Table Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (8/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Parakrama FO (3), HLD10 to 17, Extent of Land 575 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
11	HLD 12 / FC2	Construction of farm gate		Concrete 1 cu HP dia.6" Earth works 1 cu Others	8,200 2,100 2,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350
12	HLD 11 /FC2	Construction of a new road Earth filing and surface gavel	L 500m Width 12' ft	Earth - 901 cubes Gravel - 106 cubes	225,250 212,000	Labors 2000 days Labors 235 days	350,000 41,125	350,000 41,125
13	HLD 11 /FC2	Construction of canal with the road Earth work	L 500m, W 3' ft H 2 1/2' ft	Earth 200 cubes	100,000	Labors 444 days	77,700	77,700
14	HLD 11 /FC2	Side wall of additional canal Rubble masonry wall	L 150m W 9" inches H 2 1/2'	RRM 27 cu Earth works 75 cu Metal 5 cu	86,400 13,000	Skilled 20 days Labors 135 days Labors 167 days Labors 11 days	5,500 23,625 29,225 1,925	23,625 29,225 1,925
15	HLD 11 /FC2	2 small culverts	4 hume pipes for each culvert	RRM 4 cu HP 24" - 40 ft Earth works 4 cu Metal 2 cu	12,800 28,000 5,200	Skilled 3 days Labors 20 days Labors 9 days Labors 4 days	825 3,500 1,575 700	3,500 1,575 700
16	HLD 11 /FC2	Side wall of additional canal Rubble masonry wall	L 100m W 9" inches H 2 1/2'	RRM 18 cu Earth works 50 cu Metal 3 cu	57,600 7,800	Skilled 14 days Labors 90 days Labors 111 days Labors 7 days	3,850 15,750 19,425 1,225	15,750 19,425 1,225
17	HLD 11 /FC2	Two culverts for access of tractors Each needs 2 ft dia 2 hume pipes of 8' ft		RRM 4 cu HP 24" - 40 ft Earth works 4 cu Metal 2 cu	12,800 28,000 5,200	Skilled 3 days Labors 20 days Labors 9 days Labors 4 days	825 3,500 1,575 700	3,500 1,575 700

Table Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (9/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Parakrama FO (3), HLD10 to 17, Extent of Land 575 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
18	HLD 11 /FC3 upper section	D-Canal Side wall	L 150m W 2m H 1m	RRM 34 cu Earth works 75 cu Metal 5 cu	108,800 13,000	Skilled 26 days Labors 170 days Labors 167 days Labors 11 days	7,150 29,750 29,225 1,925	29,750 29,225 1,925
19	HLD 11 /FC3 upper section	FC3 Field canal Concreting side walls and bottom	L 350m W 1m H 1m	Concrete 78 cu Earth works 175 cu Metal 26 cu	639,600 67,600	Skilled 78 days Labors 605 days Labors 389 days Labors 58 days	21,450 105,875 68,075 10,150	105,875 68,075 10,150
20	HLD 11 /FC3	FC 3 lower section Field canal should be re-constructed with concrete	L 500 m, W 1m H 2 1/2 ft	Concrete 93 cu Earth works 250 cu Metal 37 cu	762,600 96,200	Skilled 93 days Labors 721 days Labors 555 days Labors 82 days	25,575 126,175 97,125 14,350	126,175 97,125 14,350
21	HLD 11 /FC3	FC3 additional field canal Earth bund	L 200m, W 3' ft H 2 ft	Earth - 68 cubes	17,000	Labors 151 days	26,425	26,425
22	HLD 11 /FC3	Field canal road Filling Earth (gravel)	Length 1 km W 3 m	Earth - 159 cu Gravel - 88 cu	79,500 176,000	Labors 353 days Labors 195 days	61,775 34,125	61,775 34,125
23	FC 3	FC 3 Field canal Entire field canal should be re-constructed with concrete	Length 1200' ft, W 3' ft H 1 1/2' ft	Concrete 50 cu Earth works 183 cu Metal 25 cu	410,000 65,000	Skilled 50 days Labors 388 days Labors 406 days Labors 56 days	13,750 67,900 71,050 9,800	67,900 71,050 9,800
23	FC3	Common threshing yard	2500 sq. ft	Earth - 40 cubes	20,000	Labors 89 days	15,575	15,575
24	FC3	Culvert near FC3 Construction of a culvert	Length 8' ft Width 8' ft	RRM 2 cu HP 24" - 20 ft Earth works 2 cu Metal 1 cu	6,400 14,000 2,600	Skilled 2 days Labors 10 days Labors 4 days Labors 2 days	550 1,750 700 350	1,750 700 350
25	HLD 12 FC 4 & 5	Concreting the D canal Concreting both sides and bottom of canal 4" inches thick	Length 1/2 km, W 3' ft, H 3 1/2' ft	Concrete 107 cu Earth works 250 cu Metal 34 cu	877,400 88,400	Skilled 107 days Labors 829 days Labors 505 days Labors 75 days	29,425 145,075 88,375 13,125	145,075 88,375 13,125

Table Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (10/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Parakrama FO (3), HLD10 to 17, Extent of Land 575 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
26	HLD 12 FC 4 & 5	FC 4 field canal Concreting both sides and bottom of canal 4" inch thick	Length 1/2 km, W 3' ft, H 3 1/2' ft	Concrete 107 cu Earth works 250 cu Metal 34 cu	877,400 88,400	Skilled 107 days Labors 829 days Labors 505 days Labors 75 days	29,425 145,075 88,375 13,125	145,075 88,375 13,125
27	HLD 12 FC 4 & 5	FC5 field canal Side wall	Length 1/2 km, W 9" inch H 4' ft	RRM 138 cu Earth works 250 cu Metal 16 cu	441,600 41,600	Skilled 104 days Labors 690 days Labors 555 days Labors 36 days	28,600 120,750 97,125 6,300	120,750 97,125 6,300
28	HLD 12 FC 4 & 5	FC 5 Additional canal Concreting both sides and bottom of canal - 4" inch thick	Length 400m W 2 1/2' ft H 3' ft	Concrete - 74 cu Metal - 24 cube Earth works 200 cu	606,800 62,400	Skilled 74 days Labors 574 days Labors 53 days Labors 444 days	20,350 100,450 9,275 77,700	100,450 9,275 77,700
29	HLD 12 FC 4 & 5	Threshing yard Repair the threshing yard with earth filling	2500 sq. ft	Earth - 40 cubes	20,000	Labors 89 days	15,575	15,575
30	HLD 12 FC 4 & 5	Field canal road Earth filling - surface gavel	Length 2 km W 3 m	Earth - 318 cu Gravel - 177 cu	159,000 354,000	Labors 706 days Labors 393 days	123,550 68,775	123,550 68,775
31	HLD 12 FC 4 & 5	2 culverts for threshing yard 1 1/2' ft dia and 2' ft dia	Length 16' ft	HP dia 450mm - 20 ft. HP dia 600mm - 20 ft. Concrete 4 cu Earth works 4 cu Metal 2 cu	10,800 14,000 32,800 5,200	Skilled 4 days Labors 31 days Labors 9 days Labors 2 days	1,100 5,425 1,575 350	5,425 1,575 350
32	HLD 12 FC 4 & 5	Field canal road 10 culverts for field canal road	Length 16' ft	HP 450mm - 200 ft. Concrete 20 cu Earth works 20 cu Metal 10 cu	108,000 164,000 26,000	Skilled 20 days Labors 155 days Labors 44 days Labors 22 days	5,500 27,125 7,700 3,850	27,125 7,700 3,850
33	HLD 12 / FC6	Replacement of sluice door of field canal		Slide gate dia. 300 - 2	23,000			

Table Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (11/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Parakrama FO (3), HLD10 to 17, Extent of Land 575 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
34	HLD 12 / FC6	Side walls of FC2 6" x 9" rubble masonry wall	Length 500' ft H 3 1/2' ft	RRM 37 cu Earth works 76 cu Metal 5 cu	118,400 13,000	Skilled 28 days Labors 185 days Labors 169 days Labors 11 days	7,700 32,375 29,575 1,925	32,375 29,575 1,925
35	HLD 12 / FC6	Rehabilitation of anicut 4" inch thick concrete wall	Length 120' ft, W 3' ft H 3 1/2' ft	Concrete - 17 cu Metal - 4 cu Earth works 18 cu	139,400 10,400	Skilled 17 days Labors 132 days Labors 9 days Labors 40 days	4,675 23,100 1,575 7,000	23,100 1,575 7,000
36	HLD 12 / FC6	FC6 field canal 6" x 9" rubble masonry wall at end of FC on both sides	Length 124' ft, W 3' ft H 3 1/2' ft	RRM 9 cu Earth works 19 cu Metal 1 cu	28,800 2,600	Skilled 7 days Labors 45 days Labors 42 days Labors 2 days	1,925 7,875 7,350 350	7,875 7,350 350
37	HLD 12 / FC6	FC5 Field canal 6" x 9" rubble masonry wall at end of FC on both sides	Length 125' ft, W 3' ft H 3 1/2' ft	RRM 9 cu Earth works 19 cu Metal 1 cu	28,800 2,600	Skilled 7 days Labors 45 days Labors 42 days Labors 2 days	1,925 7,875 7,350 350	7,875 7,350 350
38	HLD 12 / FC6	Construction of 5 culverts Hume pipes 2 x 5 = 10 nos.		HP 450mm - 100 ft. Concrete 10 cu Earth works 10 cu Metal 5 cu	54,000 82,000 13,000	Skilled 10 days Labors 78 days Labors 22 days Labors 11 days	2,750 13,650 3,850 1,925	13,650 3,850 1,925
39	FC1	Side wall of FC1 Repair side wall of canal	Length 250' ft W 1' ft H 3' ft	RRM 16 cu Earth works 38 cu Metal 2 cu	51,200 5,200	Skilled 12 days Labors 80 days Labors 84 days Labors 4 days	3,300 14,000 14,700 700	14,000 14,700 700
40	FC1	Threshing yard Rehabilitation with earth filling	2000 sq. ft	Earth - 40 cubes	20,000	Labors 89 days	15,575	15,575

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (12/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Parakrama FO (3), HLD10 to 17, Extent of Land 575 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
41	HLD 12 / FC1	Total length of the canal is repaired Additional field canal 3 meters constructed	Additional canal both sides concreted	Concrete 1 cu	8,200	Skilled 1 days	275	1,400 350 350
				Earth works 1 cu		Labors 8 days	1,400	
				Metal 1 cu	2,600	Labors 2 days	350	
42	HLD 12 / FC1	Sluice door of canal is broken		Slide gate dia. 300	11,500			
	Sub-total				7,997,150		2,936,050	2,716,875
	Grand-total				10,933,200			
	(US\$/ha)				662			

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (13/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Samagi FO (4), HLD 13 to 17, Extent of Land 374 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
1	Water issuing end of sluice	Concreting the FC bottom	L 20 m, W 3 ft H 2 ft	Concrete	3 cu	24,600	Skilled	3 days	825	4,025
				Earth works	10 cu		Labors	23 days	4,025	
				Metal	1 cu		2,600	Labors	22 days	
2	Construction of a small sluice to provide water to 6 acres of paddy	Construction of a small scale sluice (door) from main canal to provide water to paddy lands.		Concrete	1 cu	8,200	Skilled	1 days	275	1,400
				Earth works	1 cu		Labors	8 days	1,400	
				Slide gate dia. 300 HP dia.12"	1 nos 20 ft		11,500 7,000	Labors	2 days	
3	Construction of a side wall	Starting from 200m from main sluice (13) construction of a side wall	L 200 m H 4 ft	RRM	55 cu	176,000	Skilled	41 days	11,275	48,125
				Earth works	100 cu		Labors	275 days	48,125	
				Metal	6 cu		15,600	Labors	222 days	
4	Construction of a door to distribute water	Construction of 2 doors for dual water issue from the end of the above side wall		Concrete	2 cu	16,400	Skilled	2 days	550	2,800
				Earth works	2 cu		Labors	16 days	2,800	
				Slide gate dia. 300 HP dia.12"	2 nos 40 ft		23,000 14,000	Labors	4 days	
5	D canal - bottom	Concreting the bottom of D canal which provides water to FC from sluice	L 50 m W 4 ft H 4 ft	Concrete	14 cu	114,800	Skilled	14 days	3,850	19,075
				Earth works	25 cu		Labors	109 days	19,075	
				Metal	4 cu		10,400	Labors	56 days	
6	Field canal	Construction of side wall where FC divides into two	L 200 m H 1 1/2 ft	RRM	23 cu	73,600	Skilled	17 days	4,675	20,125
				Earth works	100 cu		Labors	115 days	20,125	
				Metal	6 cu		15,600	Labors	222 days	
7	Deeping the main canal	Deeping the main canal		Desilting	100 cu		Labors	222 days	38,850	38,850

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (14/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Samagi FO (4), HLD 13 to 17, Extent of Land 374 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)				
8	Concreting the FC from end of D canal	Length 200 - 350 m	L 350 m W 2 ft H 1 1/2 ft	Concrete	41 cu	336,200	Skilled	41 days	11,275	55,650		
				Earth works	175 cu		Labors	318 days	55,650			
				Metal	17 cu		44,200	Labors	389 days		68,075	68,075
9	Deeping the D canal	Deepen up to 6' ft 9" inches		Desilting	100 cu		Labors	222 days	38,850	38,850		
10	Repairs to water distribution points	Repairing each water distribution structure with concrete		Concrete	1 cu	8,200	Skilled	1 days	275	1,400		
				Earth works	1 cu		Labors	8 days	1,400			
				Slide gate dia. 300	1 nos		11,500	Labors	2 days		350	350
				HP dia. 12"	20 ft		7,000					
11	Repairs to bottom of main canal at water issue point to D canal	Concreting the bottom of water issuing point to prevent leakage.	L 20 m, W 3 ft H 2 ft	Concrete	3 cu	24,600	Skilled	3 days	825	4,025		
				Earth works	10 cu		Labors	23 days	4,025			
				Metal	1 cu		2,600	Labors	22 days		3,850	3,850
12	Side wall	Construction of a side wall in the field canal from end of D canal to east & west 75 m length	L 150 m H 1 1/2 ft	RRM	17 cu	54,400	Skilled	13 days	3,575	14,875		
				Earth works	75 cu		Labors	85 days	14,875			
				Metal	5 cu		13,000	Labors	167 days		29,225	29,225
13	Deeping the field canal	Deeping the field canal for 30 meters closer to Nachchaduwa Main Road.		Earth works	30 cu		Labors	11 days	1,925	1,925		
							Labors	2 days	350	350		
14	Construction of a cross canal	Construction of a cross canal with rubble masonry just below Nachchaduwa Main road		HP dia. 600mm	20 ft	14,000				2,800		
				Concrete	2 cu		16,400	Skilled	2 days		550	
				Earth works	2 cu			Labors	16 days		2,800	
				Metal	1 cu		2,600	Labors	4 days		700	700
15	Rehabilitation of sluice wall bottom	Prevent the water leakage from issue point and concreting the bottom of sluice wall	L 20 m, W 3 ft H 2 ft	Concrete	3 cu	24,600	Skilled	3 days	825	4,025		
				Earth works	10 cu		Labors	23 days	4,025			
				Metal	1 cu		2,600	Labors	22 days		3,850	3,850
							Labors	2 days	350	350		

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (15/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Samagi FO (4), HLD 13 to 17, Extent of Land 374 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
16	Field canal from Tank	Concreting 300 m of field canal (both sides) up to Nachchaduwa main road	L 300 m, W 3 ft H 2 ft	Concrete	47 cu	385,400	Skilled	47 days	12,925	63,700
				Earth works	150 cu		Labors	364 days	63,700	
				Metal	20 cu		52,000	Labors	333 days	
17	End of field canal	Construction of rubble masonry at the end of FC	L 300 m H 1 1/2 ft	RRM	35 cu	112,000	Skilled	26 days	7,150	30,625
				Earth works	150 cu		Labors	175 days	30,625	
				Metal	10 cu		26,000	Labors	333 days	
	Sub-total					1,650,600		763,575	704,725	
	Grand-total					2,414,175				
	(US\$/ha)					225				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (16/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ranketa FO (5), HLD19 to 25, Extent of Land 441 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
1	HLD 19 - FC1	Construction of side walls & earth filling	Length 200 m Height 2 1/2' H	RRM	36 cu	115,200	Skilled	27 days	7,425	31,500	
				Earth works	100 cu		Labors	180 days	31,500		
				Metal	6 cu		15,600	Labors	222 days		38,850
							Labors	13 days	2,275		
2	HLD 19 - Side walls	Concrete or rubble masonry wall	Length 300 m Height 3' ft	Included in rehabilitation plan of Irrigation Department of HLD19							
3	FC2 - side wall	Concrete or rubble masonry wall	Length 256 m Height 2 1/2' ft	RRM	46 cu	147,200	Skilled	35 days	9,625	40,250	
				Earth works	128 cu		Labors	230 days	40,250		
				Metal	8 cu		20,800	Labors	284 days		49,700
							Labors	18 days	3,150		
4	FC3 road & canal	Earth fill the road	Length 926 m Height 3m	Earth	147 cu	73,500	Labors	326 days	57,050	57,050	
				Gravel	82 cu	164,000	Labors	182 days	31,850	31,850	
		Concrete or rubble masonry wall	Length 926 m Height 2 1/2' ft	RRM	167 cu	534,400	Skilled	125 days	34,375	146,125	
				Earth works	463 cu		Labors	835 days	146,125		
				Metal	29 cu	75,400	Labors	1,028 days	179,900		
							Labors	64 days	11,200		
5	FC4 Canal & road	Earth fill the road	Length 250 m Height 3m	Earth	40 cu	20,000	Labors	89 days	15,575	15,575	
				Gravel	22 cu	44,000	Labors	49 days	8,575	8,575	
		Concrete or rubble masonry wall	Length 250 m Height 2 1/2' ft	RRM	45 cu	144,000	Skilled	34 days	9,350	39,375	
				Earth works	125 cu		Labors	225 days	39,375		
				Metal	8 cu	20,800	Labors	278 days	48,650		
							Labors	18 days	3,150		
6	FC5 Canal	Constriction of side walls of canal with concrete or rubble masonry	Length 492 m Height 2 1/2' ft	RRM	89 cu	284,800	Skilled	67 days	18,425	77,875	
				Earth works	246 cu		Labors	445 days	77,875		
				Metal	16 cu	41,600	Labors	546 days	95,550		
			Construction of culvert across road and causeway to drainage canal	Concreting Length 20' ft Height about - 6' feet	HP dia. 600mm	20 ft	14,000				5,425
				Concrete	4 cu	32,800	Skilled	4 days	1,100		
				Earth works	4 cu		Labors	31 days	5,425		
				Metal	2 cu	5,200	Labors	9 days	1,575		
							Labors	4 days	700		

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (18/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ranketa FO (5), HLD19 to 25, Extent of Land 441 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation				
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)				
12	HLD 21 - FC 2	Construction of canal bund and canal - concrete wall for canal	Length 15 m Height 2 1/2' ft W 2 1/2 ft	Concrete	2 cu	16,400	Skilled	2 days	550	2,800		
				Earth works	8 cu		Labors	16 days	2,800			
				Metal	2 cu		5,200	Labors	18 days		3,150	700
13	FC 3	Construction of canal bund and canal - fill the bund with earth	Length about 10 m	Earth works	5 cu		Labors	11 days	1,925	1,925		
14	HLD 21 - FC6 Canal and road	Concrete the wall, earth fill the road and digging drainage canal Canal Length 1500m Road Length 2500m	Canal Length 1500m Height 2 1/2' ft W 2 1/2 ft	Concrete	249 cu	2,041,800	Skilled	249 days	68,475	337,750		
				Earth works	750 cu		Labors	1,930 days	337,750			
				Metal	180 cu		468,000	Labors	1,665 days		291,375	291,375
			Road Length 2,500 m W 3 m	Earth	398 cu	199,000	Labors	884 days	154,700	154,700		
				Gravel	221 cu	442,000	Labors	491 days	85,925	85,925		
15	HLD 22 - Canal and drainage canal	Concrete or rubble masonry wall Drain canal wall & digging	Canal Length 350m Drainage canal wall 10 m dig 10' ft	RRM	8 cu	25,600	Skilled	6 days	1,650	7,000		
				Earth works	175 cu		Labors	40 days	7,000			
				Metal	1 cu		2,600	Labors	389 days		68,075	68,075
								Labors	2 days		350	350
16	Kuda Neubewa Tank	Arresting the leak of the Tank		Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank								
17	HLD 25 Canal & Road	Construction of side walls of canal Earth fill the road with gravel 6" dia. 2 x 10 nos.	Length of canal 1000 m width 8' ft Height 2' ft	RRM	148 cu	473,600	Skilled	111 days	30,525	129,500		
				Earth works	500 cu		Labors	740 days	129,500			
				Metal	32 cu		83,200	Labors	1,110 days		194,250	194,250
			Road Length 1,000 m W 3 m	Earth	159 cu	79,500	Labors	353 days	61,775	61,775		
				Gravel	88 cu	176,000	Labors	195 days	34,125	34,125		
Sub-total						7,098,200			3,253,300	3,028,900		
Grand-total						10,351,500						
(US\$/ha)						817						

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (19/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : 26/27 D-canal FO (6), HLD26 to 27, Extent of Land 492 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	D-canal Gate	Fix an operative with locking devices			5,000			
2	D-canal near Mr. Sunil's house	Side wall to the road side	L 30ft, w 1 ft, H 3 ft	Included in rehabilitation plan of Irrigation Department of HLD 26				
3	Reservation of canal from start to main road	Rehabilitation of road using the reservation		Included in rehabilitation plan of Irrigation Department of HLD 26				
4	D26 canal from FC1 to FC2 on Land side	Construction of a side wall	L 120m H 3ft	Included in rehabilitation plan of Irrigation Department of HLD 26				
5	Mr. Fernando's Field Turnout	Rehabilitation of turnout with concrete		Included in rehabilitation plan of Irrigation Department of HLD 26				
6	FC4 cement wall	Bottom is washed off concreting and earth filling	L 200 m W 2 ft H 1 1/2 ft	Concrete 24 cu	8,200	Skilled 24 days	6,600	32,550
				Earth works 100 cu		Labors 186 days	32,550	38,850
				Metal 10 cu	26,000	Labors 22 days	3,850	3,850
7	Near Mr. Piyadasa's Field	Brick work and Plastering	L 45 ft, height 2 ft	RRM 2 cu	6,400	Skilled 2 days	550	1,750
				Earth works 7 cu		Labors 10 days	1,750	1,750
				Metal 1 cu	2,600	Labors 16 days	2,800	2,800
						Labors 2 days	350	350
8	Near Mr. Gunatilake's Field	Construction of a crossing	2 ft dia. Hume pipes x 16 ft L x H 3.5 ft	Included in rehabilitation plan of Irrigation Department of HLD 26				
9								
10	FC1	Housing and locking device			5,000			
11	Start of cement wall	Fixing Rod and gate		12" dia Iron gate 1 no	11,500			
12	End of canal 26 -FC 6,7,8	Fixing all gates, housing etc.		Included in rehabilitation plan of Irrigation Department of HLD 26				
13	From 1080m to 2040m	Filling earth, gravel	L 960m W 8ft H 4 inches	Included in rehabilitation plan of Irrigation Department of HLD 26				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (20/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : 26/27 D-canal FO (6), HLD26 to 27, Extent of Land 492 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
14	FC1 second Turnout	Structure to divide water equally to both sides	L 10 ft W 1 ft H 2 ft.	Concrete	1 cu	8,200	Skilled 1 days	275	1,400 350
				Earth works	1 cu		Labors 8 days	1,400	
				Slide gate dia. 300	2 nos	23,000	Labors 2 days	350	
15	From irrigation buildings to Tank bed	Acquire the reservation and earth filling and gravelling	L 100 m W 3 m	Earth works	16 cu	8,000	Labors 36 days	6,300	6,300
				Gravel	9 cu	18,000	Labors 20 days	3,500	3,500
16	From Gunasin Rice Mill	Construction of 3 turnouts across road. Demarcate the FC reservation		Concrete	3 cu	24,600	Skilled 3 days	825	4,025 1,225
				Earth works	3 cu		Labors 23 days	4,025	
				Slide gate dia. 300	3 nos	34,500	Labors 7 days	1,225	
				HP dia.12"	60 ft	21,000			
17	FC4 First turnout	Rehabilitation of destroyed turnout		Concrete	1 cu	8,200	Skilled 1 days	275	1,400 350
				Earth works	1 cu		Labors 8 days	1,400	
				Slide gate dia. 300	1 nos	11,500	Labors 2 days	350	
18	Near Welegedas	Earth filling the remaining section		Earth works	10 cu		Labors 22 days	3,850	3,850
19	FC6 drain water canal near Mr. Atapattu's house	Construction of a culvert of 3 ft wide and side wall to field side		HP dia. 600mm	20 ft	14,000			1,750 700 350
				RRM	2 cu	6,400	Skilled 2 days	550	
				Earth works	2 cu		Labors 10 days	1,750	
				Metal	1 cu	2,600	Labors 4 days	700	
20	FC7 from Mr. Pemadasa's house up to Karandagaha	Construction of new side walls after removing the existing wall	L 100 ft, height 2 ft	RRM	5 cu	16,000	Skilled 4 days	1,100	4,375 5,775 350
				Earth works	15 cu		Labors 25 days	4,375	
				Metal	1 cu	2,600	Labors 33 days	5,775	
21	FC7 near Mr. Tamaragena's field	Construction of new side walls after removing the existing wall	L 100 ft, height 2 ft	RRM	5 cu	16,000	Skilled 4 days	1,100	4,375 5,775 350
				Earth works	15 cu		Labors 25 days	4,375	
				Metal	1 cu	2,600	Labors 33 days	5,775	
							Labors 2 days	350	350

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (21/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : 26/27 D-canal FO (6), HLD26 to 27, Extent of Land 492 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
22	From start of FC7	Earth filling with gravel	L 1,118m with W 6 ft H 4 inches	Earth works	107 cu	53,500	Labors	238 days	41,650	41,650
				Gravel	59 cu	118,000	Labors	131 days	22,925	22,925
23	FC8 from beginning field side	Construction of a side wall	L 535m Height 2 ft	RRM	79 cu	252,800	Skilled	59 days	16,225	
				Earth works	268 cu		Labors	395 days	69,125	69,125
				Metal	18 cu	46,800	Labors	595 days	104,125	104,125
							Labors	40 days	7,000	7,000
24	FC8 road pot holes	Earth filling with gravel	L 500 m W 2 m	Earth works	53 cu	26,500	Labors	118 days	20,650	20,650
				Gravel	27 cu	54,000	Labors	60 days	10,500	10,500
1	D canal gate	Fixing gate with locking devices		24" dia Iron gate	1 nos	40,000				
2	From main sluice to FC1	Construction of a side wall	L 15 m, height 2 ft	Included in rehabilitation plan of Irrigation Department of HLD 27						
3	From Mr. Samarasinghe's house to Mr. Jinadasa's house	Construction of a side wall to prevent spilling	L 50 m, height 2 ft	Included in rehabilitation plan of Irrigation Department of HLD 27						
4	From Mr. Marasinghe's house up to FC2 Land side	Construction of a side wall to prevent spilling	L 50 m, height 2 ft	Included in rehabilitation plan of Irrigation Department of HLD 27						
5	Near Mr. John's house	Line of steps to bathing step		Included in rehabilitation plan of Irrigation Department of HLD 27						
6	D canal below FC turnout	Construction of a culvert across road		Included in rehabilitation plan of Irrigation Department of HLD 27						
7	From Tar Road	Earth filling with gravel	L 500 m W 2 m	Included in rehabilitation plan of Irrigation Department of HLD 27						
8	Near Awane Tank Spill	Construction of a canal to obtain spill water to canal D27	L 100 m, height 2 ft	RRM	15 cu	48,000	Skilled	11 days	3,025	
				Earth works	50 cu		Labors	75 days	13,125	13,125
				Metal	4 cu	10,400	Labors	111 days	19,425	19,425
9	Fc1 Gate	Fixing rod and gate		12" dia Iron gate	1 nos	11,500				
10	FC 1.2	Rehabilitation of road with earth filling	L 500 m W 2 m	Earth works	53 cu	26,500	Labors	118 days	20,650	20,650
				Gravel	27 cu	54,000	Labors	60 days	10,500	10,500

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (22/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : 26/27 D-canal FO (6), HLD26 to 27, Extent of Land 492 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
11	FC 1.2	Rehabilitation of 2nd turnout with pipes		Concrete	1 cu	8,200	Skilled 1 days	275	1,400 350
				Earth works	1 cu		Labors 8 days	1,400	
				Slide gate dia. 300	1 nos	11,500	Labors 2 days	350	
				HP dia.12"	20 ft	7,000			
12	Mr. Edirisinghe's land	Rehabilitation of FC2 road with earth filling	L 500 m W 2 m	Earth works	53 cu	26,500	Labors 118 days	20,650	20,650
				Gravel	27 cu	54,000	Labors 60 days	10,500	10,500
13	FC2 gate	Fixing the gate		Slide gate dia. 300	1 nos	11,500			
14	FC3 canal road	Earth filling FC3 road with gravel	L 500 m W 2 m	Earth works	53 cu	26,500	Labors 118 days	20,650	20,650
				Gravel	27 cu	54,000	Labors 60 days	10,500	10,500
15	Canal in front of ASC	Construction of an over crossing		HP dia. 600mm	20 ft	14,000			1,750 700 350
				RRM	2 cu	6,400	Skilled 2 days	550	
				Earth works	2 cu		Labors 10 days	1,750	
				Metal	1 cu	2,600	Labors 4 days	700	
16	From Mr. Jinadasa's land	Rehabilitation of FC3-2 road with earth filling	L 500 m W 2 m	Earth works	53 cu	26,500	Labors 118 days	20,650	20,650
				Gravel	27 cu	54,000	Labors 60 days	10,500	10,500
17	FC4 near turnout	Construction of a 1 ft wide canal, Earth filling, side wall to the bund	L 100 m, height 2 ft	RRM	15 cu	48,000	Skilled 11 days	3,025	13,125 19,425 1,575
				Earth works	50 cu		Labors 75 days	13,125	
				Metal	4 cu	10,400	Labors 111 days	19,425	
18	Egodagama Tank	De-silting		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank					
19	Tank High Level Sluice	Rehabilitation by earth filling FC road	L 500 m W 2 m	Earth works	53 cu	26,500	Labors 118 days	20,650	20,650
				Gravel	27 cu	54,000	Labors 60 days	10,500	10,500
20	Tank Low level sluice	Rehabilitation of first turnout & pipe		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank					
21	Tank low level sluice - canal end	Culvert between atapattu - Nandapala Fields		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank					

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (23/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : 26/27 D-canal FO (6), HLD26 to 27, Extent of Land 492 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
22	FC4-4 L.L. canal road	Earth filling - gravel	L 500 m W 2 m	Earth works 53 cu Gravel 27 cu	26,500 54,000	Labors 118 days Labors 60 days	20,650 10,500	20,650 10,500
23	FC5 turnout	Fixing the gate		Included in rehabilitation plan of Irrigation Department of HLD 27				
24	FC5.1 Canal Road	Rehabilitation with earth filling		Earth works 50 cu Gravel -50 cu	25,000 10,000	Labors Labors	19,425 1,925	19,425 1,925
25	FC5.1A Canal Road	Rehabilitation with earth filling	L 500 m W 2 m	Earth works 53 cu Gravel 27 cu	26,500 54,000	Labors 118 days Labors 60 days	20,650 10,500	20,650 10,500
26	FC5.1A Canal Road	Construction of farm crossing (culvert)		HP dia. 600mm 20 ft RRM 2 cu Earth works 2 cu Metal 1 cu	14,000 6,400 2,600	Skilled 2 days Labors 10 days Labors 4 days Labors 2 days	550 1,750 700 350	1,750 700 350
27	FC6 Turnout	Rehabilitation of hume pipe with a larger		HP dia.18" 20 ft	10,800			
28	Canal between FC6.1 & 6.2	Construction of a side wall	L 40 m W 1 ft H 3 ft	RRM 8 cu Earth works 20 cu Metal 2 cu	25,600 5,200	Skilled 6 days Labors 40 days Labors 44 days Labors 4 days	1,650 7,000 7,700 700	7,000 7,700 700
29	FC6, 6.2, 6.3	Systematic Rehabilitation	L 1,340 m W 1 ft H 1 1/2 ft	RRM 156 cu Earth works 670 cu Metal 43 cu	499,200 111,800	Skilled 117 days Labors 780 days Labors 1487 days Labors 95 days	32,175 136,500 260,225 16,625	136,500 260,225 16,625
30	FC6-2 canal road	Rehabilitation with earth filling	L 500 m W 2 m	Earth works 53 cu Gravel 27 cu	26,500 54,000	Labors 118 days Labors 60 days	20,650 10,500	20,650 10,500
31	FC6.3 canal road	Rehabilitation with earth filling	L 500 m W 2 m	Earth works 53 cu Gravel 27 cu	26,500 54,000	Labors 118 days Labors 60 days	20,650 10,500	20,650 10,500
	Sub-total				2,498,100		1,277,125	1,208,375
	Grand-total				3,775,225			
	(US\$/ha)				267			

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (24/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ruwanmweli FO (7), HLD28 to 35, Extent of Land 491 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation					
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)					
1	Regulator	Lifting the bottom of regulator with concrete to provide water to canal 28	Length 20' ft Height 9" inches	Concrete	4 cu	32,800	Skilled	4 days	1,100	5,425			
				Earth works	3 cu		Labors	31 days			5,425		
				Metal	2 cu		5,200	Labors			7 days	1,225	1,225
2	Field canal	Side wall - rubble masonry	Length 100' ft, W 9" inches, H 1 1/2' ft	RRM	4 cu	12,800	Skilled	3 days	825	3,500			
				Earth works	15 cu		Labors	20 days			3,500		
				Metal	1 cu		2,600	Labors			33 days	5,775	5,775
3	Field canal	Side wall - rubble masonry	Length 100' ft, W 9" inches, H 1 1/2' ft	RRM	4 cu	12,800	Skilled	3 days	825	3,500			
				Earth works	15 cu		Labors	20 days			3,500		
				Metal	1 cu		2,600	Labors			33 days	5,775	5,775
4	Agricultural road	Filling earth	Length 750 m, W 12' ft	Earth works	143 cu	71,500	Labors	317 days	55,475	55,475			
				Gravel	80 cu		160,000	Labors			178 days	31,150	31,150
				Earth works	153 cu		76,500	Labors			340 days	59,500	59,500
5	HLD 29 Agricultural road	Filling earth	Length 800m, W 12' ft	Gravel	85 cu	170,000	Labors	189 days	33,075	33,075			
				Earth works	75 cu		102,400	Skilled			24 days	6,600	28,000
				Metal	5 cu		13,000	Labors			160 days	28,000	28,000
6	HLD 29 Field canal	Side wall with rubble masonry	Length 150m, W 9" inches, H 3' ft	RRM	32 cu	102,400	Labors	167 days	29,225	29,225			
				Earth works	75 cu		13,000	Labors			11 days	1,925	1,925
				Metal	5 cu		13,000	Labors			11 days	1,925	1,925
7	Amane Tank Sluice	Replace doors		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank									
8	Amane Tank Sluice	Replace doors - provide a rip-rap		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank									
9	Amane Tank Agricultural road	Filling earth, culverts for required places	Length 1500m, W 12' ft	Earth works	286 cu	143,000	Labors	635 days	111,125	111,125			
				Gravel	159 cu		318,000	Labors			353 days	61,775	61,775
				HP dia. 600mm	60 ft		42,000	Skilled			5 days	1,375	
				RRM	6 cu		19,200	Labors			30 days	5,250	5,250
				Earth works	6 cu			Labors			13 days	2,275	2,275
				Metal	3 cu		7,800	Labors			7 days	1,225	1,225

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (25/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ruwanmweli FO (7), HLD28 to 35, Extent of Land 491 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
10	Amane Tank Spill canal	Side wall for the spill canal	Length 1500m, H 4' ft	Earth works	1,500 cu	Labors ### days	582,750	582,750	
11	Amane Tank Agricultural road	Fill earth	Length 1400m, W 12' ft	Included in rehabilitation plan of Irrigation Department of 11 nos of service tank					
12	HLD 32 Sluice	Repair sluice of main canal to HLD		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank					
13	HLD 32 Field canal	Side wall - rubble masonry	Length 100m, W 9" inches, H 3' ft	RRM	21 cu	67,200	Skilled 16 days	4,400	18,375
				Earth works	50 cu		Labors 105 days	18,375	
				Metal	3 cu	7,800	Labors 111 days	19,425	
14	HLD 32 Field canal	Side wall - rubble masonry	Length 150m, W 9" inches, H 3' ft	RRM	32 cu	102,400	Skilled 24 days	6,600	28,000
				Earth works	75 cu		Labors 160 days	28,000	
				Metal	5 cu	13,000	Labors 167 days	29,225	
15	HLD 32 Agricultural road	Filling earth	Length 1400m, W 12' ft	Earth works	267 cu	133,500	Labors 593 days	103,775	103,775
				Gravel	148 cu	296,000	Labors 329 days	57,575	
16	HLD 31 Field canal	Side wall - rubble masonry	Length 500m, W 9" inches, H 4' ft	RRM	138 cu	441,600	Skilled 104 days	28,600	120,750
				Earth works	250 cu		Labors 690 days	120,750	
				Metal	16 cu	41,600	Labors 555 days	97,125	
17	HLD 31 Agricultural road	Filling earth	Length 1500m, W 12' ft	Earth works	286 cu	143,000	Labors 635 days	111,125	111,125
				Gravel	159 cu	318,000	Labors 353 days	61,775	
18	HLD 31 Drain road	Digging the drain canal	Length 500m	Earth works	500 cu		Labors ### days	194,250	194,250
19	HLD 32 Field canal	Side wall - rubble masonry	Length 20m, W 9" inches, H 2 1/2' ft	RRM	4 cu	12,800	Skilled 3 days	825	3,500
				Earth works	10 cu		Labors 20 days	3,500	
				Metal	1 cu	2,600	Labors 22 days	3,850	

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (26/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ruwanmweli FO (7), HLD28 to 35, Extent of Land 491 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
20	HLD 32 Field canal	Side wall - rubble masonry	Length 20m, W 9" inches, H 2 1/2' ft	RRM	4 cu	12,800	Skilled	3 days	825	3,500	
				Earth works	10 cu		Labors	20 days	3,500		
				Metal	1 cu	2,600	Labors	22 days	3,850		350
21	HLD 32 Field canal	Side wall - rubble masonry	Length 150m, W 9" inches, H 2' ft	RRM	22 cu	70,400	Skilled	17 days	4,675	19,250	
				Earth works	75 cu		Labors	110 days	19,250		
				Metal	5 cu	13,000	Labors	167 days	29,225		1,925
22	Ratmale Tank Sluice	Repair the sluice and replace doors		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank							
23	Ratmale Tank Sluice	Repair the sluice and replace doors		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank							
24	Ratmale Tank Tank bund	Construction of a rip-rap	Length 1200m	Included in rehabilitation plan of Irrigation Department of 11 nos of service tank							
25	HLD 34 Field canal	Side wall - rubble masonry	Length 150m, W 9" inches, H 31/2' ft	RRM	37 cu	118,400	Skilled	28 days	7,700	32,375	
				Earth works	75 cu		Labors	185 days	32,375		
				Metal	5 cu	13,000	Labors	167 days	29,225		1,925
26	HLD 34 Field canal	Side wall - rubble masonry	Length 150m, W 9" inches, H 31/2' ft	RRM	37 cu	118,400	Skilled	28 days	7,700	32,375	
				Earth works	75 cu		Labors	185 days	32,375		
				Metal	5 cu	13,000	Labors	167 days	29,225		1,925
27	HLD 34 Sluice	Construction of a sluice to provide water for 20 acres from main canal		Included in rehabilitation plan of Irrigation Department of 11 nos of service tank							
28	HLD 35 Field canal	Turnout with gates		Concrete	1 cu	8,200	Skilled	1 days	275	1,400	
				Earth works	1 cu		Labors	8 days	1,400		
				Slide gate dia. 300	1 nos	11,500	Labors	2 days	350		350
				HP dia.12"	20 ft	7,000					

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (27/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ruwanmweli FO (7), HLD28 to 35, Extent of Land 491 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
29	HLD 35 Field canal	Turnout with gates		Concrete 1 cu Earth works 1 cu Slide gate dia. 300 1 nos HP dia.12" 20 ft	8,200 11,500 7,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350
30	HLD 35 Canal bund	Side wall - rubble masonry	Length 500m, W 9" inches, H 4' ft	Included in rehabilitation plan of Irrigation Department of HLD 35				
31	HLD 35 Canal bund	Side wall - rubble masonry	Length 150m, W 9" inches, H 4' ft	Included in rehabilitation plan of Irrigation Department of HLD 35				
32	HLD 35 Canal bund	Side wall - rubble masonry	Length 70m, W 9" inches, H 3' ft	Included in rehabilitation plan of Irrigation Department of HLD 35				
33	HLD 35 Field canal	Side wall - rubble masonry	Length 800m, W 9" inches, H 3' ft	RRM 170 cu Earth works 400 cu Metal 25 cu	544,000 65,000	Skilled 128 days Labors 850 days Labors 888 days Labors 56 days	35,200 148,750 155,400 9,800	148,750 155,400 9,800
34	HLD 35 Canal road	Earth filling - gravel	Length 1500m, W 12' ft	Included in rehabilitation plan of Irrigation Department of HLD 35				
	Sub-total				3,795,700		2,498,300	2,390,500
	Grand-total (US\$/ha)				6,294,000 446			

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (28/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Tissa FO (8), HLD36 to 39, Extent of Land 526 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	HLD 36 - both side walls	This is a dual canal . One canal is 1 1/2' wide and 1 1/2' deep and the other is 2 1/2' wide and 1 1/2' deep. Length of the dual canal is about 800 m. This canal should be changed to a single canal with a width of 4 ft and depth of 3 ft must place outlets as per nos. of fields.	Length of 800 m, with 3 ft. height on both sides and 4 ft. width.	Included in rehabilitation plan of Irrigation Department of HLD 36				
2	Side walls of canal	Side walls of canal consists of one side by road and other side by earth bund. Canal prevents leakage or over flowing by this bund must construct. 200m long 2 1/2' ft wide 2' ft high concrete side walls (6" inch thick).	Must construct 2 concrete side walls L 200 m W 2 1/2' ft H 2' ft Widen the canal up to 2 1/2' ft.	Included in rehabilitation plan of Irrigation Department of HLD 36				
3	Side walls of canal	Side walls of canal consists of one side by road and other side by ridges of paddy field must construct two concrete walls of 100 m length 2 1/2' ft wide 1 1/2' ft height (6" inches thick) balance 100 m of the paddy field side an earth bund should be constructed.	Concrete bund - both side of canal L 100m W 2 1/2' ft H 1 1/2' ft Earth bund L 100m W 2' H 1 1/2' ft must width the canal up to 2 feet	Concrete 13 cu	106,600	Skilled 13 days Labors 101 days	3,575 17,675	17,675
				Earth works 50 cu		Labors 111 days	19,425	19,425
				Metal 6 cu	15,600	Labors 13 days	2,275	2,275
4	Side walls of D canal	Consists of 2 canals of length of 800m with 1 1/2' wide & 1 1/2' height and 2 1/2' wide & 1 1/2' height canals must construct 800m long.	Construction of 800m long 4' ft wide 3' ft high (9" thick) two walls. Provision of sufficient number of outlets for paddy fields.	Included in rehabilitation plan of Irrigation Department of HLD 36				
5	Side walls of canal	Consists of two earth bunds of 150m long must repair with two concrete walls	Construction of side walls 150m long 2 ft wide 1 1/2' ft high (6" thick)	Concrete 18 cu	147,600	Skilled 18 days Labors 140 days	4,950 24,500	24,500
				Earth works 75 cu		Labors 167 days	29,225	29,225
				Metal 7 cu	18,200	Labors 16 days	2,800	2,800
6	HLD 38 side walls of canal	Earth bunds on both sides and the length of 200m this total length should be concreted	Construction of 200m long (both sides) 2' ft wide 1 1/2' ft high 6" inch thick concrete walls	Included in rehabilitation plan of Irrigation Department of HLD 36				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (29/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Tissa FO (8), HLD36 to 39, Extent of Land 526 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
7	Side walls of canal	Since the canal bunds are made out of earth, water leakage could not be prevented.	As mentioned above the canal should be concreted about 300m. Height 5 ft	Concrete	45 cu	369,000	Skilled	45 days	12,375	61,075
							Labors	349 days	61,075	
				Earth works	150 cu		Labors	333 days	58,275	
				Metal	13 cu	33,800	Labors	29 days	5,075	5,075
8	HLD 39 - Side walls of canal	Since the canal bunds are made out of earth water leaks could not be prevented.	Construction of a 500m long 1 1/2' ft wide 1 1/2' ft high concrete wall on both sides of the canal (bottom concrete)	Included in rehabilitation plan of Irrigation Department of HLD 36						
	Sub-total					690,800			241,225	220,325
	Grand-total					932,025				
	(US\$/ha)					62				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (30/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Al-Aksa FO (9), LLD 1 to 2, Extent of Land 510 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	LLD1 all of canal	Rehabilitation of side walls of all field canals with rubble masonry and concrete	L 4300m H 1 1/2 ft	Included in rehabilitation plan of Irrigation Department of LLD1					
2	FC1, FC2	LLD1 - FC1 Iron Rod LLD1 - FC2 Iron Rod		Iron Rod 2 nos	10,000				
3	LLD1 Canal	Remove the existing masonry wall of main D canal (2730 ft) and rehabilitate the side walls	L 832m H 3 ft	Included in rehabilitation plan of Irrigation Department of LLD1					
4	LLD1 FC3, FC4	LLD1 - FC3 Iron Rod LLD1 - FC4 Iron Rod and door		Iron Rod 1 nos 24" dia Iron gate 1 nos	5,000 40,000				
5	LLD1 canal road	Filling earth and rehabilitation of D canal Road	L 832 m W 12 ft	Included in rehabilitation plan of Irrigation Department of LLD1					
6	LLD1A all of F canal	Rehabilitation of side walls of all field canals with rubble masonry and concrete	L 1800 m H 1 1/2 ft	RRM 210 cu Earth works 900 cu Metal 57 cu	672,000 148,200	Skilled 158 days Labors 1050 days Labors 1998 days Labors 127 days	43,450 183,750 349,650 22,225	183,750 349,650 22,225	
7	LLD1A	Augment - The D canal bund by 1/2' ft	L 500 m	Included in rehabilitation plan of Irrigation Department of LLD1A					
8	LLD1A Canal Road	Filling earth and rehabilitation of D canal Road	L 500 m W 12 ft	Included in rehabilitation plan of Irrigation Department of LLD1A					
9	LLD1A F canal	FC 01 to FC 07 replacing doors		12" dia Iron gate 7 nos	80,500				
10	LLD 2 FC1 to FC5	Rehabilitation of side walls of all field canals with rubble masonry and earth	L 3600m H 1 1/2 ft	RRM 420 cu Earth works 1,800 cu Metal 114 cu	1,344,000 296,400	Skilled 315 days Labors 2100 days Labors 3996 days Labors 253 days	86,625 367,500 699,300 44,275	367,500 699,300 44,275	
11	LLD2	Remove the existing masonry wall of D-canal (1500ft) and rehabilitation	L 457 m H 3 ft	Included in rehabilitation plan of Irrigation Department of LLD2					
12	LLD2 FC 1 to 5	FC1 to FC 5 Replace Iron rod		Iron Rod 5 nos	25,000				
13	LLD2 canal road	Filling earth and rehabilitation of D canal Road	L 457 m W 12 ft	Included in rehabilitation plan of Irrigation Department of LLD2					
	Sub-total				2,621,100		1,796,775	1,666,700	
	Grand-total				4,417,875				
	(US\$/ha)				301				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (31/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ekasth FO (10), LLD 3 to 4, Extent of Land 342 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
1	LLD 3 - FC 2	Construction of concrete bund	L 75 m, W 0.75 m H 0.75 m	Concrete	15 cu	123,000	Skilled	15 days	4,125	20,300	
				Earth works	38 cu		Labors	116 days	20,300		
				Metal	6 cu		15,600	Labors	84 days		14,700
2	LLD 3 - FC 2	Rehabilitation of earth bund	L 300 m, W 1 1/2 H 2 1/2	Earth works	32 cu	8,000	Labors	71 days	12,425	12,425	
3	LLD 3A	Construction of a regulator across LLC		Concrete	1 cu	8,200	Skilled	1 days	275	1,400	
				Earth works	1 cu		Labors	8 days	1,400		
				Slide gate dia. 300	1 nos		11,500	Labors	2 days		350
				HP dia.12"	20 ft		7,000				
4	LLD 3A	Rehabilitation of earth bund	L 800 m W 0.75 m H 0.75 m	Earth works	85 cu		Labors	189 days	33,075	33,075	
5	LLD 3A	Construction of concrete bund	L 75 m, W 0.75 m H 0.75 m	Concrete	15 cu	123,000	Skilled	15 days	4,125	20,300	
				Earth works	38 cu		Labors	116 days	20,300		
				Metal	6 cu		15,600	Labors	84 days		14,700
6	LLD 3B	Remove existing rubble masonry and construct a new concrete bund	L 750 m W 0.75 m H 0.75m	Concrete	146 cu	1,197,200	Skilled	146 days	40,150	198,100	
				Earth works	375 cu		Labors	1132 days	198,100		
				Metal	1 cu		2,600	Labors	833 days		145,775
				Removing	375 m			Labors	2 days		350
7	LLD 3B	Construction of earth bund	L 300m W 0.5 m H 0.75m	Earth works	102 cu	25,500	Labors	375 days	65,625	65,625	
8	LLD 3B	Rehabilitation of main agri road	L 1240m W 2.5m	Earth works	164 cu	82,000	Labors	364 days	63,700	63,700	
				Gravel	88 cu		176,000	Labors	195 days		34,125
9	LLD 3B FC1	Construction of a concrete bund	L 75 m W 0.55m H 0.75m	Concrete	13 cu	106,600	Skilled	13 days	3,575	17,675	
				Earth works	38 cu		Labors	101 days	17,675		
				Metal	4 cu		10,400	Labors	84 days		14,700
							Labors	9 days	1,575	1,575	

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (32/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ekasth FO (10), LLD 3 to 4, Extent of Land 342 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
10	LLD 3B FC1	Rehabilitation of earth bund	L 75 m W 0.55m H 0.75m	Earth works	8 cu	4,000	Labors 18 days	3,150	3,150
11	LLD 3B FC2	Construction of a concrete bund	L 640m W 0.5m, H 0.75m	Concrete	112 cu	918,400	Skilled 112 days	30,800	151,900 124,250 12,425
				Earth works	320 cu		Labors 868 days	151,900	
				Metal	32 cu	83,200	Labors 710 days	124,250	
12	LLD 3B FC2 sub canal	To provide water to new area which could be cultivated with FC2, construct a concrete bund across drain canal	L 10m W 0.5 H 0.5m	Concrete	1 cu	8,200	Skilled 1 days	275	1,400 1,925 350
				Earth works	5 cu		Labors 8 days	1,400	
				Metal	1 cu	2,600	Labors 11 days	1,925	
13	LLD 3B FC2 sub canal	Extend above concrete bund with a earth bund	L 950m, W 0.5m H 0.75m	Concrete	167 cu	1,369,400	Skilled 167 days	45,925	226,450 184,625 18,200
				Earth works	475 cu		Labors 1294 days	226,450	
				Metal	47 cu	122,200	Labors 1055 days	184,625	
14	LLD 3B FC2 sub canal	Agri road	L 600m W 2.5m	Earth works	433 cu	216,500	Labors 961 days	168,175	168,175 41,125
				Gravel	106 cu	212,000	Labors 235 days	41,125	
15	LLD 3B FC2 sub canal	Construction of a causeway across drain canal	L 12 ft W 8 ft	HP dia. 600mm	20 ft	14,000			1,750 700 350
				RMM	2 cu	6,400	Skilled 2 days	550	
				Earth works	2 cu		Labors 10 days	1,750	
				Metal	1 cu	2,600	Labors 4 days	700	
16	LLD 3B FC2 sub canal	Construction of earth wall	L 150m W 2 ft H 2,ft	Earth works	16 cu	4,000	Labors 36 days	6,300	6,300
17	LLD 4 canal	Lifting the bottom of main canal from FC3 by 1 1/2 ft, compacting earth with machine. Removing the existing rubble masonry side wall and construct a rubble masonry wall	L 1600m W 2 ft H 2 ft	Included in rehabilitation plan of Irrigation Department of LLD4					

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (33/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ekasth FO (10), LLD 3 to 4, Extent of Land 342 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
18	LLD 4 canal	Construction of a rubble masonry wall and earth bund from FC1 to Fc3	L 200 ft W 1 ft H 2 ft	Included in rehabilitation plan of Irrigation Department of LLD4					
19	LLD 4 FC1	Construction of a concrete wall on lower side	L 180 ft W 0.5' ft H 3 ft	Concrete 5 cu Earth works 27 cu Metal 2 cu	41,000 5,200	Skilled 5 days Labors 39 days Labors 60 days Labors 4 days	1,375 6,825 10,500 700	6,825 10,500 700	
20	LLD 4 FC1	Rehabilitation of earth bund	L 450 ft, W 1' ft H 2' ft	Earth works 15 cu	3,750	Labors 33 days	5,775	5,775	
21	LLD 4 FC 2	Construction of concrete bund	L 100m W 6" inches, H 3' ft	Concrete 25 cu Earth works 50 cu Metal 12 cu	205,000 31,200	Skilled 25 days Labors 194 days Labors 111 days Labors 27 days	6,875 33,950 19,425 4,725	33,950 19,425 4,725	
22	LLD 4 FC 2	Rehabilitation of earth bund	L 375m, W 1' ft, H 3' ft	Earth works 127 cu	31,750	Labors 282 days	49,350		
23	LLD 4 FC3	Construction of a agri-road on FC3 from LLD4 to LLD5	L 800m W 8' ft	Earth works 560 cu Gravel 136 cu	280,000 272,000	Labors 1243 days Labors 302 days	217,525 52,850	217,525 52,850	
24	FC3	Construction of a regulator and a concrete bund on FC3 distribution point	Regulator RC Canal L 50 m W 6" inches H 3' ft	Concrete 1 cu Earth works 1 cu Slide gate dia. 300 1 nos HP dia.12" 20 ft	8,200 11,500 7,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350	
				Concrete 13 cu Earth works 25 cu Metal 6 cu	106,600 15,600	Skilled 13 days Labors 101 days Labors 56 days Labors 13 days	3,575 17,675 9,800 2,275	17,675 9,800 2,275	
25	FC3	Rehabilitation of earth bund	L 210m W 1' ft, H 3' ft	Earth works 22 cu	5,500	Labors 49 days	8,575	8,575	

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (34/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ekasth FO (10), LLD 3 to 4, Extent of Land 342 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
26	FC 4	Construction of a concrete side wall	L 15m, W 6" inches H 2 1/2' ft	Concrete 3 cu Earth works 8 cu	24,600	Skilled 3 days Labors 23 days Labors 18 days	825 4,025 3,150	4,025 3,150
27	FC 5	Construction of a concrete side wall after removing the rubble masonry wall	L 160m, W 1 1/2' ft H 2' ft	Concrete 20 cu Earth works 80 cu Metal 7 cu Removing 80 m	164,000 18,200	Skilled 20 days Labors 155 days Labors 178 days Labors 16 days Labors 80 days	5,500 27,125 31,150 2,800 14,000	27,125 31,150 2,800 14,000
28	FC5	Rehabilitation of earth canal bund	L 375m, W 1' ft H 3' ft	Earth works 127 cu	31,750	Labors 282 days	49,350	49,350
29	LLD 4	Construction of a regulator across LLD 4 canal	Regulator	Included in rehabilitation plan of Irrigation Department of LLD4				
30	FC6	Construction of a structure to issue water to paddy field		Concrete 1 cu Earth works 1 cu Slide gate dia. 300 1 nos HP dia.12" 20 ft	8,200 11,500 7,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350
31	FC7	Rehabilitation of earth bund	L 100m, W 1' ft H 3' ft	Earth works 11 cu	2,750	Labors 24 days	4,200	4,200
32	FC8	Invalidate the present canal system and construct a new concrete canal	L 150m, W 1 1/2' ft H 1 1/2' ft	Concrete 16 cu Earth works 75 cu Metal 7 cu Removing 75 m	131,200 18,200	Skilled 16 days Labors 124 days Labors 167 days Labors 16 days Labors 75 days	4,400 21,700 29,225 2,800 13,125	21,700 29,225 2,800 13,125
33	FC8	Construction of earth canal bund	L 350m, W 2' ft H 3' ft	Earth works 37 cu	9,250	Labors 82 days	14,350	14,350
34	FC9	Construction of structures in suitable places to obtain water		Concrete 1 cu Earth works 1 cu Slide gate dia. 300 1 nos HP dia.12" 20 ft	8,200 11,500 7,000	Skilled 1 days Labors 8 days Labors 2 days	275 1,400 350	1,400 350

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (35/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Ekasth FO (10), LLD 3 to 4, Extent of Land 342 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
35	FC9	Rehabilitation of earth canal with structures to issue water to lands not cultivated at present	Structure	Concrete	1 cu	8,200	Skilled	1 days	275	1,400 350
				Earth works	1 cu		Labors	8 days	1,400	
				Slide gate dia. 300	1 nos	11,500	Labors	2 days	350	
				HP dia.12"	20 ft	7,000				
			L 550m , W 2' ft, H 2' ft	Earth works	58 cu	14,500	Labors	129 days	22,575	22,575
36	FC9	Construction of an agri- road to connect Madawalagama and Yahalegama from LLD4 canal and construct a causeway across Malwatu Oya	L 200 m, W 8' ft	Earth works	119 cu	59,500	Labors	264 days	46,200	46,200
				Gravel	34 cu	68,000	Labors	75 days	13,125	13,125
	Sub-total					6,522,050		2,545,350	2,342,550	
	Grand-total					9,067,400				
	(US\$/ha)					923				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (36/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Isuru FO (11), LLD 5 to 6A, Extent of Land 313 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation				
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)				
1	LLD5 FC1	Construction of 5 water inlets for fields		Concrete	5 cu	41,000	Skilled	5 days	1,375	6,825		
				Earth works	5 cu		Labors	39 days			6,825	
				Slide gate dia. 300	5 nos		57,500	Labors			11 days	1,925
				HP dia.12"	100 ft			35,000				
2	LLD5 FC1-1	Construction of 300m canal road	L 300m W 12 ft	Earth works	286 cu	143,000	Labors	635 days	111,125	111,125		
				Gravel	76 cu		152,000	Labors			169 days	29,575
3	LLD5 FC2	Concreting the bottom of canal	L 60' ft H 1 1/2 ft W 1 1/2 ft	Concrete	2 cu	16,400	Skilled	2 days	550	2,800		
				Earth works	9 cu		Labors	16 days			2,800	
				Metal	1 cu		2,600	Labors			20 days	3,500
								Labors			2 days	
4	LLD5 FC2	Rehabilitation of canal road 300m fill earth and surface gravel	L 300m W 12 ft	Earth works	57 cu	28,500	Labors	127 days	22,225	22,225		
				Gravel	32 cu		64,000	Labors			71 days	12,425
		Culvert		HP dia. 600mm	20 ft	14,000	Skilled	2 days	550	1,750		
				RRM	2 cu		6,400	Labors			10 days	1,750
		Earth works	2 cu	2,600	Labors	4 days	700	700				
		Metal	1 cu		2,600	Labors			2 days	350		
5	LLD5 FC2-1	Construction of 5 water inlets for fields		Earth works	5 cu	10,500	Labors	11 days	1,925	1,925		
				HP dia.6"	50 ft		10,500					
				Others			10,000					
6	LLD5 FC2-2	Construction of a tractor entrance		Earth works	1 cu	500	Labors	2 days	350	350		
				HP dia.12"	12 ft		4,200					
7	LLD6 FC 1	Construction of an Entrance way for tractor		Earth works	1 cu	500	Labors	2 days	350	350		
				HP dia.12"	12 ft		4,200					
8	LLD6 FC 1	Concreting the bottom of canal Concreting 100m	L 100 m H 1 1/2 ft W 1 1/2 ft	Concrete	11 cu	90,200	Skilled	11 days	3,025	14,875		
				Earth works	50 cu		Labors	85 days			14,875	
				Metal	5 cu		13,000	Labors			111 days	19,425
								Labors			11 days	

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (37/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Isuru FO (11), LLD 5 to 6A, Extent of Land 313 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
9	LLD6 FC 2	Cross control	Filling earth to washed out cross control H 4 ft L 5 m	RRM	1 cu	3,200	Skilled	1 days	275	875	
				Earth works	3 cu		Labors	5 days	875		
				Metal	1 cu		2,600	Labors	7 days		1,225
10	LLD6 FC 2	Canal road filling earth & surface gravel	L 200m W 12 ft	Earth works	38 cu	19,000	Labors	84 days	14,700	14,700	
				Gravel	21 cu	42,000	Labors	47 days	8,225	8,225	
11	LLD6 FC 3-1	Raising the bottom of canal	L 200m H 9 inch	Earth works	19 cu	9,500	Labors	42 days	7,350	7,350	
12	LLD6 FC 3	Rehabilitation of turnout	Provide a door to the turnout	Concrete	1 cu	8,200	Skilled	1 days	275	1,400	
				Earth works	1 cu		Labors	8 days	1,400		
				Slide gate dia. 300	1 nos	11,500	Labors	2 days	350		350
				HP dia.12"	20 ft		7,000				
13	LLD6 FC 4	Concreting the canal	L 150 m H 1 1/2 ft W 1 1/2 ft	Concrete	16 cu	131,200	Skilled	16 days	4,400	21,700	
				Earth works	75 cu		Labors	124 days	21,700		
				Metal	7 cu		18,200	Labors	167 days		29,225
14	LLD6 FC 5	Construction of a turnout		Concrete	1 cu	8,200	Skilled	1 days	275	1,400	
				Earth works	1 cu		Labors	8 days	1,400		
				Slide gate dia. 300	1 nos	11,500	Labors	2 days	350		350
				HP dia.12"	20 ft		7,000				
15	LLD6 FC 5	Earth filling L 100m Filling the canal bund	L 100m H 1 1/2 ft	Earth works	22 cu	11,000	Labors	49 days	8,575	8,575	
16	LLD6 FC 6	Concreting the canal	L 150 m H 1 1/2 ft W 1 1/2 ft	Concrete	16 cu	131,200	Skilled	16 days	4,400	21,700	
				Earth works	75 cu		Labors	124 days	21,700		
				Metal	7 cu		18,200	Labors	167 days		29,225
17	LLD6 FC 6	Filling the canal road Earth filling & gravelling canal road 230 m	L 230m W 12 ft	Earth works	44 cu	22,000	Labors	98 days	17,150	17,150	
				Gravel	24 cu		48,000	Labors	53 days	9,275	9,275

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (38/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Isuru FO (11), LLD 5 to 6A, Extent of Land 313 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
18	LLD6 FC 7	Concreting the canal	L 100 m H 1 1/2 ft W 1 1/2 ft	Concrete	11 cu	90,200	Skilled	11 days	3,025	14,875
				Earth works	50 cu		Labors	85 days	14,875	
				Metal	5 cu		13,000	Labors	111 days	
19	LLD6 FC 7	Filling the canal road Earth filling & surface gravel 198 m	L 198m W 12 ft	Earth works	38 cu	19,000	Labors	84 days	14,700	14,700
				Gravel	21 cu	42,000	Labors	47 days	8,225	8,225
20	LLD6 FC 8	Concreting the canal	L 1058 m H 1 1/2 ft W 1 1/2 ft	Concrete	115 cu	943,000	Skilled	115 days	31,625	155,925
				Earth works	529 cu		Labors	891 days	155,925	
				Metal	45 cu		117,000	Labors	1174 days	
21	LLD6 FC 8	Canal road filling earth & surface gravel	L 1058m W 12 ft	Earth works	202 cu	101,000	Labors	448 days	78,400	78,400
				Gravel	112 cu	224,000	Labors	249 days	43,575	43,575
22	LLD6 FC 9	Concreting the canal	L 50 m H 1 1/2 ft W 1 1/2 ft	Concrete	5 cu	41,000	Skilled	5 days	1,375	6,825
				Earth works	25 cu		Labors	39 days	6,825	
				Metal	3 cu		7,800	Labors	56 days	
23	LLD6 FC 9	Canal road filling earth & surface gravel	L 50 m W 12 ft	Earth works	10 cu	5,000	Labors	22 days	3,850	3,850
				Gravel	5 cu	10,000	Labors	11 days	1,925	1,925
24	LLD6A 1	Construction of two nos. of tractor entrance		Earth works	2 cu	1,000	Labors	4 days	700	700
25	LLD6A 1.3	Earth filling	L 400 m W 12 ft	HP dia.12"	24 ft	8,400				
				Earth works	76 cu	38,000	Labors	169 days	29,575	29,575
26	LLD6A 1.3	Surface gravelling	L 400 m W 12 ft	Gravel	42 cu	84,000	Labors	93 days	16,275	16,275
Sub-total						3,034,000		1,108,675	1,057,525	
Grand-total						4,142,675				
(US\$/ha)						461				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (39/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Rana Mayura FO (12), LLD 6B to 8D, Extent of Land 338 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
1	LLD 8 - First Left Canal	Construction of a retaining wall on both sides of branch canal of 500m	L 500m W 9" H 3"	RRM	106 cu	339,200	Skilled	80 days	22,000	92,750	
				Earth works	250 cu		Labors	530 days	92,750		
				Metal	16 cu		41,600	Labors	555 days		97,125
2	LLD 8 Left canal Pond in the second pond	Concreting the pond and earth filing both sides	L 3 m, W 4' ft H 4' feet	Concrete	4 cu	32,800	Skilled	4 days	1,100	1,100	
				Earth works	8 cu		Labors	31 days	5,425	5,425	
				Metal	1 cu		2,600	Labors	18 days	3,150	3,150
3	LLD 8 Construction of a culvert on above branch canal at a 10 m distance	Since there is no culvert to drain the upper field 1/2 feet culvert is necessary	L 4 m	HP dia. 300mm	20 ft	7,000	Skilled	2 days	550	1,750	
				RRM	2 cu		6,400	Labors	10 days		1,750
				Earth works	2 cu		Labors	4 days	700		700
4	LLD 8 Canal	Filling the FC road with gravel and rehabilitation	L 1 km W 3m	Earth works	159 cu	79,500	Labors	353 days	61,775	61,775	
				Gravel	88 cu		176,000	Labors	195 days	34,125	34,125
5	LLD 8C	To get water from 8C culvert, it is necessary to construct a structure across Heen Ela (Low level Canal)	L 5 m W 1 ft H 2 ft	HP dia. 300mm	20 ft	7,000	Skilled	2 days	550	1,750	
				RRM	2 cu		6,400	Labors	10 days		1,750
				Earth works	2 cu		Labors	4 days	700		700
6	LLD 8C First water pond	Provide sand bags for branch canal from first water pond	L 50 m	Earth works	5 cu	2,500	Labors	11 days	1,925		
7	LLD 8C Water supply to Mahawela (field)	Lower the culvert by 1/2' feet	L 12m W 1m H 2 ft	HP dia. 300mm	20 ft	7,000	Skilled	2 days	550	1,750	
				RRM	2 cu		6,400	Labors	10 days		1,750
				Earth works	2 cu		Labors	4 days	700		700
				Metal	1 cu	2,600	Labors	2 days	350	350	

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (40/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Rana Mayura FO (12), LLD 6B to 8D, Extent of Land 338 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation					
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)						
8	LLD 8C Branch canal which supplies water to Dangaha Kumbura / fields	Concreting the water supplying culvert opening and earth filling and closing the expected hume pipe with earth	L 500m W 1m H 1m	Concrete	107 cu	877,400	Skilled	107 days	29,425	145,075				
				Earth works	250 cu		Labors	829 days	145,075					
				Metal	41 cu		106,600	Labors	555 days		97,125			
9	LLD 8C First field	Provide a water supply pipe, concreting and earth filling closing the expected pipe with earth	L 12m W 1m H 1m	HP dia. 300mm	20 ft	7,000	Skilled	2 days	550	1,750				
				RRM	2 cu	6,400					Labors	10 days	1,750	
				Earth works	2 cu	2,600					Labors	4 days	700	
				Metal	1 cu						Labors	2 days	350	
10	Near LD 8B Regulator	Construction of a bund (1 1/2' ft H) near the regulator	L 12 ft W 1 1/2ft H 1 1/2 ft	Concrete	1 cu	8,200	Skilled	1 days	275	1,400				
				Earth works	1 cu		Labors	8 days	1,400					
				Metal	1 cu		2,600	Labors	2 days		350			
11	LLD 8B	Lining both sides with rubble in canal located behind community hall	L 15 ft W 3 ft H 3 1/2 inches	RRM	1 cu	3,200	Skilled	1 days	275	875				
				Earth works	2 cu		Labors	5 days	875					
				Metal	1 cu		2,600	Labors	4 days		700			
12	LLD 8B	Construction of side walls on both sides of road in first branch canal	L 1600 ft H 1 1/2 ft	RRM	57 cu	182,400	Skilled	43 days	11,825	49,875				
				Earth works	244 cu		Labors	285 days	49,875					
				Metal	16 cu		41,600	Labors	542 days		94,850			
13	LLD 8B	Construction of water supplying culverts to paddy fields	L 15 ft W 3 ft H 3 1/2 inches	HP dia. 300mm	20 ft	7,000	Skilled	2 days	550	1,750				
				RRM	2 cu						6,400	Labors	10 days	1,750
				Earth works	2 cu						2,600	Labors	4 days	700
				Metal	1 cu							Labors	2 days	350

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (41/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Rana Mayura FO (12), LLD 6B to 8D, Extent of Land 338 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
14	LLD 8B	Construction of lower branch canal	L 500 m, H 1 1/2 ft	Earth works	111 cu	27,750	Labors 246 days	43,050	43,050
		Construction of lower branch road	L 500 m, W 10 ft	Earth works	413 cu	206,500	Labors 917 days	160,475	160,475
				Gravel	297 cu	594,000	Labors 659 days	115,325	115,325
15		Rehabilitation of first culvert from water pond and using the reservation		HP dia. 300mm	20 ft	7,000			
				RRM	2 cu	6,400	Skilled 2 days	550	
				Earth works	2 cu		Labors 10 days	1,750	1,750
				Metal	1 cu	2,600	Labors 4 days	700	700
16	LLD 8	Rehabilitation of right canal	L 2000' ft H 1 1/2' ft	RRM	12 cu	38,400	Skilled 9 days	2,475	
				Earth works	50 cu		Labors 60 days	10,500	10,500
				Metal	3 cu	7,800	Labors 111 days	19,425	19,425
		Rehabilitation of road	L 2000' ft W 8' ft	Earth works	78 cu	39,000	Labors 173 days	30,275	30,275
				Gravel	43 cu	86,000	Labors 95 days	16,625	16,625
17	LLD 8	De-silting main canal	L 400' ft W 3' ft H 1'	Desilting	12 cu	400	Labors 27 days	4,725	4,725
18	LLD 8	Construction of structure				100,000			
19	LLD 8	Rehabilitation of field canals roads	L 100' ft W 8' ft	Earth works	4 cu	2,000	Labors 9 days	1,575	1,575
				Gravel	2 cu	4,000	Labors 4 days	700	700
20	LLD 8	Rehabilitation of whole road with earth filling (gravel)	L 1 km W 3m	Earth works	159 cu	79,500	Labors 353 days	61,775	61,775
				Gravel	88 cu	176,000	Labors 195 days	34,125	34,125
21	LLD 6B sluice	Repair the leakage on both sides of sluice	L 10m W 30" inches H 6" inches	Concrete	1 cu	8,200	Skilled 1 days	275	
				Earth works	1 cu		Labors 8 days	1,400	1,400
				Slide gate dia. 300	2 nos	23,000	Labors 2 days	350	350
				HP dia. 12"	40 ft	14,000			
22	LLD 6C field canal	Construction of side wall	L 800 m H 2 ft	RRM	119 cu	380,800	Skilled 89 days	24,475	
				Earth works	400 cu		Labors 595 days	104,125	104,125
				Metal	25 cu	65,000	Labors 888 days	155,400	155,400
23	LLD 7 canal	Rehabilitation of canal road clearing and earth filling (gravel)	L 1 km W 3m	Earth works	159 cu	79,500	Labors 353 days	61,775	61,775
				Gravel	88 cu	176,000	Labors 195 days	34,125	34,125

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (42/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Rana Mayura FO (12), LLD 6B to 8D, Extent of Land 338 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
24	LLD 7 FC2	Rehabilitation of side walls in FC 2	L 150 m H 2 ft	RRM	22 cu	70,400	Skilled	17 days	4,675	19,250 29,225 1,925	
				Earth works	75 cu		Labors	110 days	19,250		
				Metal	5 cu		13,000	Labors	167 days		29,225
								Labors	11 days		1,925
25	Alkaluvila Tank main Sluice	Widening the bridge on sluice and construction of a safety fence Alkaluvila Tank main Sluice	L 10 m & 7 m		10,000						
26	LLD 6C, LLD 7 FC 1	Repairs to LLD 6C, LLD 7 FC 1 & 2 Sluice doors		Concrete	2 cu	16,400	Skilled	2 days	550	2,800 700	
				Earth works	2 cu		Labors	16 days	2,800		
				Slide gate dia. 300	2 nos		23,000	Labors	4 days		700
				HP dia.12"	40 ft		14,000				
	Sub-total				4,249,450			1,754,225	1,652,750		
	Grand-total				6,003,675						
	(US\$/ha)				618						

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (43/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Gemunu FO (13), LLD 9 to 10E, Extent of Land 426 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	LLD 9	Repair beginning section of the main canal with concrete walls & basin	L 12' W 4' H 4'	Included in rehabilitation plan of Irrigation Department of LLD9				
2	LLD 9	Concreting main canal	L 800m W 1m H 1m	Included in rehabilitation plan of Irrigation Department of LLD9				
3	LLD 9	Side walls (both side)	L 500m W 1m H 1m	Included in rehabilitation plan of Irrigation Department of LLD9				
4	LLD 9 FC2	Side walls	L 200m W 3/4m H 1/2m	RRM 30 cu Earth works 100 cu Metal 6 cu	96,000 15,600	Skilled 23 days Labors 150 days Labors 222 days Labors 13 days	6,325 26,250 38,850 2,275	26,250 38,850 2,275
5	LLD 9 FC1	Side walls	L 600m W 3/4m H 1/2m	RRM 89 cu Earth works 300 cu Metal 19 cu	284,800 49,400	Skilled 67 days Labors 445 days Labors 666 days Labors 42 days	18,425 77,875 116,550 7,350	77,875 116,550 7,350
6	LLD9 FC12	Side walls	L 100m W 3/4m H 1/2m	RRM 15 cu Earth works 50 cu Metal 3 cu	48,000 7,800	Skilled 11 days Labors 75 days Labors 111 days Labors 7 days	3,025 13,125 19,425 1,225	13,125 19,425 1,225
7	LLD9 FC13-1	Side walls	L 50m W 3/4m H 1/2m	RRM 7 cu Earth works 25 cu Metal 2 cu	22,400 5,200	Skilled 5 days Labors 35 days Labors 56 days Labors 4 days	1,375 6,125 9,800 700	6,125 9,800 700
8	LLD9 FC13-2	Side walls	L 150m W 3/4m H 1/2m	RRM 22 cu Earth works 75 cu Metal 5 cu	70,400 13,000	Skilled 17 days Labors 110 days Labors 167 days Labors 11 days	4,675 19,250 29,225 1,925	19,250 29,225 1,925
9	LLD9 FC14	Side walls	L 400m W 3/4m H 1/2m	RRM 59 cu Earth works 200 cu Metal 13 cu	188,800 33,800	Skilled 44 days Labors 295 days Labors 444 days Labors 29 days	12,100 51,625 77,700 5,075	51,625 77,700 5,075

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (44/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Gemunu FO (13), LLD 9 to 10E, Extent of Land 426 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation					
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)					
10	LLD9 FC15	Side walls	L 150m W 3/4m H 1/2m	RRM	22 cu	70,400	Skilled	17 days	4,675	19,250			
				Earth works	75 cu		Labors	110 days	19,250				
				Metal	5 cu		13,000	Labors	167 days		29,225		
							Labors	11 days	1,925		1,925		
11	LLD 10	Sluice to Hidagama Tank Construction of culvert and gate to canal to	Culvert	Included in rehabilitation plan of Irrigation Department of 11 nos of service tanks									
12	LLD 10 FC4	Side wall both sides	L 400m W 1m H 1m Both sides	RRM	110 cu	352,000	Skilled	83 days	22,825	96,250			
				Earth works	200 cu		Labors	550 days	96,250				
				Metal	13 cu		33,800	Labors	444 days		77,700		
							Labors	29 days	5,075		5,075		
13	LLD 10 FC4	Side walls	L 100m W 3/4m H 1/2m	RRM	15 cu	48,000	Skilled	11 days	3,025	13,125			
				Earth works	50 cu		Labors	75 days	13,125				
				Metal	3 cu		7,800	Labors	111 days		19,425		
							Labors	7 days	1,225		1,225		
14	LLD 10 FC3	Side walls	L 100m W 3/4m H 1/2m	RRM	15 cu	48,000	Skilled	11 days	3,025	13,125			
				Earth works	50 cu		Labors	75 days	13,125				
				Metal	3 cu		7,800	Labors	111 days		19,425		
							Labors	7 days	1,225		1,225		
		Culvert				HP dia. 600mm	20 ft	14,000				1,750	
						RRM	2 cu		6,400	Skilled	2 days		550
						Earth works	2 cu			Labors	10 days		1,750
						Metal	1 cu		2,600	Labors	4 days		700
							Labors	2 days	350	350			
15	LLD 10	Side wall	L 300m H 1 1/2m	RRM	102 cu	326,400	Skilled	77 days	21,175	89,250			
				Earth works	150 cu		Labors	510 days	89,250				
				Metal	10 cu		26,000	Labors	333 days		58,275		
								Labors	22 days		3,850	3,850	

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (45/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Gemunu FO (13), LLD 9 to 10E, Extent of Land 426 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation				
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)				
16	LLD 10	Culvert		HP dia. 600mm	20 ft	14,000						
				RRM	2 cu	6,400	Skilled	2 days	550			
				Earth works	2 cu		Labors	10 days	1,750	1,750		
				Metal	1 cu	2,600	Labors	4 days	700	700		
							Labors	2 days	350	350		
17	LLD 10 FC8	Culvert for distribution		HP dia. 600mm	20 ft	14,000						
				RRM	2 cu	6,400	Skilled	2 days	550			
				Earth works	2 cu		Labors	10 days	1,750	1,750		
				Metal	1 cu	2,600	Labors	4 days	700	700		
									Labors	2 days	350	350
				Side walls	L 100m H 1m	RRM	24 cu	76,800	Skilled	18 days	4,950	
				Earth works	50 cu		Labors	120 days	21,000	21,000		
				Metal	3 cu	7,800	Labors	111 days	19,425	19,425		
							Labors	7 days	1,225	1,225		
18	LLD 11	Side walls	L 200m H 1 1/2m	Included in rehabilitation plan of Irrigation Department of LLD11								
19	LLD 11 FC1	Side walls	L 500m H 1m	RRM	122 cu	390,400	Skilled	92 days	25,300			
				Earth works	250 cu		Labors	610 days	106,750	106,750		
				Metal	16 cu	41,600	Labors	555 days	97,125	97,125		
							Labors	36 days	6,300	6,300		
20	LLD 11 FC1	Side walls	L 150m H 1/2m	RRM	22 cu	70,400	Skilled	17 days	4,675			
				Earth works	75 cu		Labors	110 days	19,250	19,250		
				Metal	5 cu	13,000	Labors	167 days	29,225	29,225		
							Labors	11 days	1,925	1,925		
21	LLD 11 FC7	Side walls	L 600m H 1 1/2m	RRM	204 cu	652,800	Skilled	153 days	42,075			
				Earth works	300 cu		Labors	1020 days	178,500	178,500		
				Metal	19 cu	49,400	Labors	666 days	116,550	116,550		
							Labors	42 days	7,350	7,350		
22	LLD 11 to LLD 9	Road construction - Earth fill	L 1000m W 10 ft	Earth works	827 cu	413,500	Labors	1836 days	321,300	321,300		
				Gravel	212 cu	424,000	Labors	471 days	82,425	82,425		

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (46/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Gemunu FO (13), LLD 9 to 10E, Extent of Land 426 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
23	Canal from LLD 11 to Hembawa Tank	Side walls (Both sides)	L 1000m H 1 1/2m	RRM	339 cu	1,084,800	Skilled	254 days	69,850	296,625
				Earth works	500 cu		Labors	1695 days	296,625	
				Metal	32 cu	83,200	Labors	1110 days	194,250	
24	LLD 9	Culvert		Included in rehabilitation plan of Irrigation Department of LLD11						
25	LLD 11 FC1	Culvert		HP dia. 600mm	20 ft	14,000				
				RRM	2 cu	6,400	Skilled	2 days	550	1,750
				Earth works	2 cu		Labors	10 days	1,750	
				Metal	1 cu	2,600	Labors	4 days	700	
26	Hidagama Tank	Complete rehabilitation including 2 sluices		Included in rehabilitation plan of Irrigation Department of 11 nos of service tanks						
27	Hidogama Tank Drain canal	Rehabilitation of drain canals	L 3000 m	Included in rehabilitation plan of Irrigation Department of 11 nos of service tanks						
28	All FCs	Widen all FCs to standard size and bunds filling with earth Remove all the trees planted on canal bunds and earth filling	L 5,200 m	Earth works	551 cu	137,750	Labors	1223 days	214,025	214,025
29	All agricultural roads	Rehabilitation of all agricultural roads with earth filling	L 5,200 m W 3 m	Earth works	827 cu	413,500	Labors	1836 days	321,300	321,300
				Gravel	551 cu	1,102,000	Labors	1223 days	214,025	214,025
	Sub-total					6,821,350			3,474,600	3,224,900
	Grand-total					10,295,950				
	(US\$/ha)					841				

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (47/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Wiyaya FO (14), LLD11 to 11A, Extent of Land 348 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Low level spill	Width is not enough and old (100yrs.). Therefore not functioning well and cannot store water in the tank. To widen the spill and fix doors should be recommendable.	Length 100 ft. Augment 3 ft. with 6 emergency doors	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
2	High level spill	Spill and road shall be rehabilitated.	Length 100 ft. Width 20 ft.	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
3	Tank bund	Bathing step should be rehabilitated (A & B).	Width 30 ft.	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
4	Tank bund	Bathing step should be rehabilitated (C).	Length 150 ft. Height 8 ft.	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
5	Tank bed	Tank is full of vegetation heavily silted. Desilting should be necessary.	5 acres up to 1.5 ft.	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
6	Tank catchment	Since catchment area is cultivated, silting is remarkable. It is necessary to ensure reservation and re-forestation area.	Survey on catchment area Re-forestation 500 acres	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
7	Tank Bund	Widen top width of the bund for traffic	Length 1.5km Width 20 ft. Height 3 ft.	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
8	Canal and road system	Construct culverts, where drain canal interfering with the canal system	Five culverts with 2' dia.	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
9	D-Canal bund	Concrete side wall construction against leakage	Length 565 m Height 3 ft. Width 4 ft	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank					
10	D & F-Canal	Installation of bridges and culverts to across for vehicle	3 bridges over D-Canal 5 culverts over F-Canal	HP dia. 600mm RRM Earth works Metal	160 ft 16 cu 16 cu 8 cu	112,000 51,200 20,800	Skilled 12 days Labors 80 days Labors 36 days Labors 18 days	3,300 14,000 6,300 3,150	14,000 6,300 3,150

Table TA-2 Rehabilitation Plan & Cost Estimation for Nachchaduwa Scheme Proposed by Farmers' Organization (48/48)

Name of Scheme : Nachchaduwa

Name of FO, etc. : Wiyaya FO (14), LLD11 to 11A, Extent of Land 348 acres

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
11	Connection Canal	Construction of a connection canal from HLD26 up to FC7 with across road	Canal Length 900m Height 3 ft.	RRM	191 cu	611,200	Skilled	143 days	39,325	167,125	
				Earth works	450 cu		Labors	955 days	167,125		
			Road Length 900m Width of road 8 ft.	Metal	29 cu	75,400	Labors	999 days	174,825		174,825
				Earth works	572 cu	286,000	Labors	64 days	11,200		11,200
12	F-Canal	Since F-Canal is not existing, a new canal should be constructed	Length 650m	Earth works	69 cu	17,250	Labors	1270 days	222,250	222,250	
13	New Road	New construction of agricultural road	Length 300 m Width 2.5 m Height 0.6 m	Gravel	153 cu	306,000	Labors	340 days	59,500	59,500	
				Earth works	69 cu	17,250	Labors	153 days	26,775	26,775	
14	Drainage canal	Drainage canal shall be rehabilitated.	Length 4,000 m	Earth works	2,000 cu		Labors	4440 days	777,000	777,000	
15	New canal & road	Construction of a new canal to provide water to the end of D-Canal from the tank	D-canal length 900m Height 3 ft. Width 4 ft	Concrete	192 cu	1,574,400	Skilled	192 days	52,800	260,400	
				Earth works	450 cu		Labors	1488 days	260,400		
			Width of road 8 ft. Road length 900m	Metal	73 cu	189,800	Labors	999 days	174,825		174,825
				Earth works	572 cu	286,000	Labors	162 days	28,350		28,350
16	Tank bund	Rip rap protection	Length 800 m Width 3 m	Included in rehabilitation plan of Irrigation Department of 11 nos. of service tank							
17	Canal	Canals running through low area which shall be rehabilitated as concrete lining.	25 - L 200 m x 0.6 m 25A - L 100 m x 0.6 m	Concrete	96 cu	787,200	Skilled	96 days	26,400	130,200	
				Earth works	350 cu		Labors	744 days	130,200		
			25B - L 250 m x 0.6 m 25C - L 150 m x 0.6 m	Metal	35 cu	91,000	Labors	777 days	135,975		135,975
				Earth works	2,205 cu	551,250	Labors	78 days	13,650		13,650
18	All F-canal	All F-canal shall be rehabilitated as a cross section with 3-4 ft. width and 1 1/2 ft. height	Length 3.5 km	Earth works	2,205 cu	551,250	Labors	4895 days	856,625	856,625	
Sub-total						5,467,000			3,560,575	3,438,750	
Grand-total						9,027,575					
(US\$/ha)						903					

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (1/29)

Name of Scheme : Palukadawela

Place : Tank

Portion	Description of Rehabilitation and Improvement Plan		Estimated cost required (Rs.)	Remarks
Tank Bund	1	E/W in forming bund at low sections scours washways	150,000.00	
	2	Improvement. to existing dislodged Rip - rap protection	5,000.00	
	3	Improvement. To existing dislodged spots	50,000.00	
	4	Construction of new bathing spots	75,000.00	
	5	Gravelling tank bund road	150,000.00	
	6	provision of Toe filter	3,000.00	
Sluices	1	Improvement. To down stream structures of LB & RB Sluices	150,000.00	
	2	Improvement. To u/s herd wall of RB sluice & fixing gate posts	125,000.00	
	3	providing of Toe filter	30,000.00	
	4	Providing of hand rails to herd sluice	30,000.00	
Spillway	1	Removing damage existing concrete slab & providing R/F Conc. Skin cover	150,000.00	
	2	Construction. of bridge over spill way	500,000.00	
Anicuts	1	Improvements to Dangahakotuwa Amuna	350,000.00	
	2	Improvements to Alakola Amuna	250,000.00	
	3	Improvements to Kota Ela	250,000.00	
	4	Improvements to Weeradana Amuna(No.1)	350,000.00	
	5	Improvements to Weli Amuna	250,000.00	
	6	Improvements to Malgaha Kotuwa	250,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (2/29)

Name of Scheme : Palukadawela

Place : Tank

Portion	Description of Rehabilitation and Improvement Plan		Estimated cost required (Rs.)	Remarks
Anicuts	7	Improvements to Weehena Amuna	400,000.00	
	8	Improvement to Thalakola Amuna	300,000.00	
	9	Improvement to Thibbathena Amuna	300,000.00	
	10	Improvement to Weeradadana Amuna(No.2)	350,000.00	
	11	Improvement to Kontuwerwa Amuna	350,000.00	
	12	Improvement to Halmilla Ktuwa Amuna	250,000.00	
	13	Improvement to Palugaha Kotuwa Amuna	350,000.00	
	14	Improvement to Karuwala Gaha Kotuha Amuna	350,000.00	
	15	Improvement to Puranwaela Amuna	250,000.00	
	16	Improvement to Nawa Amuna	250,000.00	
	17	Proposed new anicut between Thalakola & Thibbatuhena Amuna	500,000.00	
Others	1	Construction of bridges 2 Nos.	400,000.00	
	2	Construction of causeways 4 Nos.	150,000.00	
	3	Construction of Retaining wall 60 m long	150,000.00	
Total			7,468,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (3/29)

Name of Scheme : Palukadawela

Name of Canal : Feeder Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
1	808.000	1280.000	472.000		10.67	3	1:01	Desilting on canal bed	175,000.00
2								Earth Work in filling scours & washways	60,000.00
3								Gravelling to Chl. Bund road	75,000.00
								Total Tentative Civil Cost	310,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (4/29)

Name of Scheme : Palukadawela

Name of Canal : Feeder Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works		
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
1	803.000	Gated Regulator (E) & (I)	05 Nos.	Yes		Yes			Yes			NP- Replacement of 3 Nos. spindles	60,000.00
2	803.000	Gauge Post (N)		Yes					Yes			NP- Providing gauge post	5,000.00
3	814.000	Canal Lining (N)		Yes							NP	NP- RRM pitching on canal approach to measuring device	150,000.00
4	834.000	Measuring Device (N)		Yes							NP	NP- Provision of measuring device	300,000.00
													515,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (5/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
1	0.000	3+300	3,300.000		3	2	1:01	Earth filling + Desilting + Edge Metaling + 2nd Carrying	500,000.00
2	3+300	5+100	1,800.000		3	2	1:01	- do -	200,000.00
3	5+100	5+540	440.000		3	2	1:01	- do -	50,000.00
4	5+540	7+640	2,100.000		3	2	1:01	- do -	350,000.00
5	7+640	10+060	2,420.000		3	2	1:01	- do -	260,000.00
6	10+060	10+210						Arasan Wewa	
7	10+060	10+210	150.000		1.8	2	1:01	Subway, Desilting Grading Road, Gravelling	280,000.00
8	10+060	11+580	1,370.000		1.8	2.5	1:01	Earth filling + Desilting + Grading & Gravelling road	425,000.00
9	11+580	12+380	800.000		1.8	2	1:01	- do -	225,000.00
10	12+380	12+800	420.000			3	1:01	Earth filling + Desilting + Grading & Gravelling road	800,000.00
11	12+800	14+400	1,600.000		1.8	2.5	1:01	Earth filling + Desilting + Grading & Gravelling road	300,000.00
12	14+400	14+590	190.000			3	1:01	- do -	500,000.00
13	14+590	15+780	1,190.000		1.8	3	1:01	- do -	250,000.00
14	15+780	16+260	420.000		1.8	3	1:01	- do -	75,000.00
									4,215,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (6/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
1	0.000	D/S Transition of sluice (E), (D) & (N)	-	Yes	-	-	-	-	-	Yes	No	100,000.00	
2	10.000	Retaining wall - Both side (15m) (N)	-	Yes	-	-	-	-	-	NP	NP - RRM Rt. wall	200,000.00	
3	25.000	Measuring device (N)	-	Yes	-	-	-	-	-	NP	NP - Canal Lining	150,000.00	
4	250.000	TOS to D1 (E) & (I)	1/.150mm dia	Yes	-	-	Yes	-	Yes	-	NP - u/s & d/s RRM Protection	25,000.00	
5	262.000	Foot bridge (E) & (I)	-	Yes	-	-	-	-	Yes	-	providing hand rails	5,000.00	
6	262.000	Retaining wall (N)	-	Yes	-	-	-	-	Yes	NP	NP - Extension of RRM Rt. wall	35,000.00	
7	392.000	Canal spill cum causeway (E) & (I)	-	Yes	-	-	-	-	Yes	-	No	10,000.00	
8	550.000	Bridge (4.8 m wide) (E) & (I)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s Rt. walls	30,000.00	
9	1+225	Canal. Profile (E) & (I)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s RRM Protection	10,000.00	
10	1+225	Foot bridge (E)	-	No	-	-	-	Yes	-	-	No		
11	1+	TOS to D2 (E) - (Closed)	-	No	Yes	-	-	Yes	-	-	No		
12	1+630	Canal. Profile (E)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s RRM Protection	10,000.00	
13	1+665	Canal spill cum causeway (E) & (I)	-	Yes	-	-	-	-	Yes	-	No	10,000.00	
14	1+730	Bridge (E) & (I)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s RRM Protection & providing hand rails	35,000.00	
15	2+025	Canal. Profile (E)	-	Yes	-	-	-	-	-	Yes	NP - u/s & d/s RRM Protection	15,000.00	
16	2+060	Canal spill cum causeway (E) & (I)	-	Yes	-	-	-	-	Yes	-	No	10,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (7/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
17	2+340	Bridge (E) & (I)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s RRM Protection	30,000.00	
18	2+350	Canal. Profile (E)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s RRM Protection	10,000.00	
19	2+420	Drainage under crossing (E) & (I)	-	Yes	-	-	-	-	Yes	-	NP - Canal lining	25,000.00	
20	2+625	Retaining wall (N)	-	Yes	-	-	-	-	-	NP	NP - RRM Rt. wall	70,000.00	
21	2+625	Bathing Spot (N)	-	Yes	-	-	-	-	-	NP	NP - RRM Work	20,000.00	
22	2+840	Bridge (E) & (I)	-	Yes	-	-	-	-	Yes	-	NP - u/s & d/s RRM protection & hand rails	15,000.00	
23	2+855	Canal Profile (E) & (I)		Yes						Yes	NP - u/s & d/s RRM Protection	15,000.00	
24	3+125	Bathing spot (E) & (I)		No				No			No		
25	3+160	Bathing spot (E) & (I)		No				No			No		
26	3+240	TOS (E) - (Closed)		No	Yes			No			No		
27	3+255	Canal Profile (E) & (I)		No				No			No		
28	3+260	Canal spill cum causeway (E) & (I)		Yes					Yes		No	10,000.00	
29	3+296	Bridge (E) & (I)		Yes					Yes		NP - u/s & d/s RRM Protection	40,000.00	
30	3+297	Rt. Wall to Road (N)		Yes						NP	NP - R/m Rt. Wall	20,000.00	
31	3+304	Regulator (E) & (D)		Yes	Yes					No	No - Shifted to d/s of TOS - D6		
32	3+305	TOS to D 6 (E) & (I)		Yes	Yes			-	Yes	-	NP - u/s & d/s RRM Protection	20,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (8/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
33	3+307	Gated Regulator (N)		Yes			NP			NP	NP - u/s & d/s RRM Protection	250,000.00	
34	3+505	Cabal spill cum causeway (E) & (I)		Yes					Yes		No	10,000.00	
35	3+990	Cabal spill cum causeway (E) & (I)		Yes					Yes		No	10,000.00	
36	4+150	TOS to D 8 (E) & (I)		Yes	Yes				Yes		NP - u/s & d/s RRM Protection	20,000.00	
37	4+550	Rt. Wall & Bathing spot (E) & (I)		Yes					Yes		NP - RRM work & plastering	15,000.00	
38	4+580	Bridge (E) & (I)		Yes					Yes		NP - u/s & d/s RRM Protection	75,000.00	
39	4+900	Canal spill cum causeway (E) & (I)		Yes					Yes		No	10,000.00	
41	5+100	TOS to 9 (E) & (I)		Yes			Yes		Yes		NP - u/s & d/s RRM Protection	10,000.00	
42	5+101	Regulator (E) & (D)		Yes	Yes		Yes		Yes		NP - u/s & d/s RRM Protection	150,000.00	
43	5+540	TOS to 10 (E) & (I)		Yes					Yes		NP - u/s & d/s RRM Protection	20,000.00	
44	5+545	Gated Regulator (N)		Yes			NP			NP	NP - u/s & d/s RRM Protection	250,000.00	
45	5+655	Brifge(3.4 m wide) (E) & (I)		Yes			Yes		Yes		NP - Widening Bridge Deck	125,000.00	
46	5+700	TOS to D 11 (E) & (I)	1No 225 mm dia	Yes			Yes		Yes		NP - u/s & d/s RRM Protection	25,000.00	
47	6+100	Foot ridge (E) & (I)		Yes						NP	NP - RRM work	125,000.00	
48	6+150	TOS to D 12 (E) & (I)	1No 150 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection	30,000.00	
49	6+400	Retaining Wall (N)		Yes							NP - RRM work	15,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (9/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
50	6+515	Canal Spill cum causeway (E) & (I)		No									
51	6+650	TOS to D 13 (E) & (I)	1No 225 mm dia	Yes		Yes			Yes		NP - Replace Spindle & Hume Pipe		10,000.00
52	7+180	Canal Spill corn causeway (E) & (I)		Yes					Yes		NP - Repairs to Deck Slabs		10,000.00
53	7+250	Bridge (E)		Yes					Yes		NP - u/s & d/s RRM Protection & Dr. Inlet		20,000.00
54	7+260	Canal Profile (E)		No									
55	7+430	Bathing Spots (E) & (I)		Yes					Yes	Yes	NP - RRM work & Plastering works		10,000.00
56	7+430	Retaining Wall (N)		Yes							NP - RRM work & Plastering works		25,000.00
57	7+450	Bridge (E) & (I)		Yes					Yes		NP - Widening of Bridge deck		125,000.00
58	7+490	TOS to D 15 (E) & (I)	1No 225 mm dia	No	Yes								
59	7+425	Bridge (Private)		No									
60	7+640	TOS to D16 (E) & (I)	1No 225 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection		15,000.00
61	7+955	TOS to D18 (E) & (I)	1No 150 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection		80,000.00
62	7+965	Bridge (E) & (I)		Yes					Yes		NP - Const. of Dr. inlet		10,000.00
63	8+010	Canal Profile (E)		No									
64	8+200	Drainage under crossing (E) & (I)		No									
65	8+325	TOS to D19 (E) & (I)	1No 150 mm dia	Yes			Yes		Yes		NP - u/s & d/s RRM Protection		15,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (10/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
66	8+330	Foot ridge (E)		No				Yes			No		
67	8+335	Canal spill on R B (E)		Yes				Yes			No		
68	8+940	TOS (E) - Closed		Yes	Yes			Yes			No		
69	8+960	Bridge (E) & (I)		Yes				Yes			NP - Providing of hand rails	6,000.00	
70	9+370	Drainage under crossing (E)		Yes				Yes			No		
71	9+375	TOS to D 21 (E) & (I)	1No 150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	20,000.00	
72	9+475	Bridge (Private)		No				Yes			No		
73	9+485	Canal Profile (E) & (I)		Yes							NP - u/s & d/s RRM Protection	15,000.00	
74	9+550	TOS to D 21 (E) & (I)	1No 150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	20,000.00	
75	9+550	Retaining Wall (E) & (I)		Yes							NP - Extension of Hoisting Arrangement	50,000.00	
76	10+060	Box culvert (E) & (I)		Yes							Improvements to u/s & d/s Structure	10,000.00	
77	10+177	Box culvert (Railway) (E) & (I)		Yes							Improvements to u/s & d/s Structure	10,000.00	
78	10+177	Regulator (E) & (D)		Yes			NP		Yes		NP - Provision of Housing Arrangement	100,000.00	
79	10+207	Box culvert		Yes									
80	10+210 10+470	Tunnel section (start) Tunnel section (end)		Yes						NP	NP - remedial measures to collapsing side slopes	1,000,000.00	
81	10+600	Foot bridge (E)		Yes									

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (11/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
82	10+865	Canal Profile (E) & (I)		Yes						Yes	NP - u/s & d/s RRM Protection	20,000.00	
83	10+870	Bridge (E) & (I)		Yes					Yes		NP- d/s RRM Protection	10,000.00	
84	11+190	TOS to Tract 4 - FC 1	1/150 mm dia	Yes			Yes		Yes		NP - u/s & d/s RRM Protection	20,000.00	
85	11+350	Drainage under crossing		Yes						Yes	NP - Canal Lining	50,000.00	
86	11+530	TOS to Tract 4 - FC 2	1/150 mm dia	Yes			Yes		Yes		NP - u/s & d/s RRM Protection	20,000.00	
87	11+700	Box Culvert (Nanneriya Rd) (E) & (I)		Yes				No			NP - u/s & d/s RRM Protection	10,000.00	
88	11+710	Bathing spot (E) & (I)		Yes					Yes		NP - RRM work & plastering	10,000.00	
89	12+520	TOS to Tr. 4 - D 1 (E) & (I)	1/300 mm dia	Yes					Yes		NP - u/s & d/s RRM Protection	20,000.00	
90	12+525	Bridge (E)		Yes					Yes		NP - RRM Ret Wall	20,000.00	
91	12+530	Canal spill cum causeway (E) & (I)		Yes					Yes		NP - Extension of LB & RB Ramps	20,000.00	
92	12+620	Sluice from Welihiddewa	1/150 mm dia		Yes				Yes		NP - d/s RRM Protection	10,000.00	
93	12+625	Bathing Spot (N)		Yes						Yes	NP - RRM work & plastering	20,000.00	
94	12+680	Bathing spot (E) & (I)		Yes						Yes	NP - RRM work & plastering	20,000.00	
95	12+710	Bathing spot (E) & (I)		Yes						Yes	NP - RRM work & plastering	20,000.00	
96	12+790	Canal profile & Ret. Wall (E) & (I)		Yes					Yes		NP - RRM work & plastering	10,000.00	
97	12+800	Bridge (E)		No									

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (12/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
98	12+815	TOS to Tr. 4 - D 2 (E) & (I)	1/300 mm dia	Yes							NP - u/s & d/s RRM Protection	20,000.00	
99	12+820	Regulator (E) & (D)	2/1.05 to 1.20	Yes			Yes		Yes		NP - Providing of Hoisting arrangements & steel gates.	150,000.00	
100	12+850	Bridge (3.6mm wade) (E), (D) & (N)		Yes						Yes	NP - Replace by New bridge	350,000.00	
101	12+875	Canal. Profile (E)		No							No		
102	12+940	TOS to Tr. 4 - FC 71 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	20,000.00	
103	13+350	Foot bridge (E), (D) & (N)		Yes						Yes	NP	125,000.00	
104	13+400	Drainage under crossing (E) & (I)		Yes							NP - New construction of Foot Bridge	15,000.00	
105	13+650	Canal profile (E)		No							No		
106	13+700	Bridge (E), (D) & (N)		Yes							NP - u/s & d/s RRM Protection	15,000.00	
107	13+050	Canal profile (E)		No							No		
108	14+055	Drainage under crossing (E) & (I)		Yes			Yes				NP - u/s & d/s RRM Protection	20,000.00	
109	14+250	Bridge (E) & (I)		Yes							NP - u/s & d/s RRM Protection	20,000.00	
110	14+455	Bathing Spot (E), (D) & (N)		Yes						Yes	NP - Replace, RRM work & plastering	20,000.00	
111	14+505	Bathing Spot (E), (D) & (N)		Yes						Yes	NP - Replace, RRM work & plastering	20,000.00	
112	14+605	Regulator (Plank bay) (E) & (I) Retaining Wall (E)	1/1.65 to 1.20	Yes							NP - Improvement & provision of Hoisting arrangement & steel gates	150,000.00	
113	14+615	Canal Spill cum causeway (E) & (I)		Yes			Yes		Yes			10,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (13/29)

Name of Scheme : Palukadawela

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment			
114	14+645	TOS to Tr. 5 - D 1 (E) & (I)	1/300 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	20,000.00	
115	14+665	Bridge (E) & (I)		Yes							NP - u/s & d/s RRM Protection	20,000.00	
116	15+185	Foot Bridge (E)											
117	15+600	TOS to Tr. 5 - D 2 (E) & (I)	2/250 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection	20,000.00	
118	15+605	Regulator (Plank bay) (E) & (I)	1/1.8 to 0.75	Yes					Yes		NP - Improvement & Provision of Hoisting arrangement & steel gates	150,000.00	
119	15+800	TOS to Tr. 6 - D 2 (E) & (I)	2/600 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection	20,000.00	
120	15+810	Gated Regulator (N)	1/1.8 x 0.75	Yes			Yes			NP	NP - Construct of new gated regulator	125,000.00	
121	15+015	Foot Bridge (E)		No							No		
122	16+145	Bridge (E) & (I)		Yes							NP - u/s & d/s RRM Protection	20,000.00	
												5,201,000.00	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (14/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	D6 (Tract 1)								450,000.00
	D10 (Tract 1)								650,000.00
	D10/4 (Tract 2)								750,000.00
	D1 (Tract 4)								300,000.00
	D1 (Tract 5)								600,000.00
	D2 (Tract 5)								600,000.00
	D1 (Tract 6)								750,000.00
									4,100,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (15/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	D6 (Tract 1)								
1	0.000	150	150.000		0.9	0.6	1:01	Earth work 10.0m ³ & Turfing & Gravelling	
2	150.000	266	116.000		1.5	0.6	1:01	Earth work 100m ³ & Turfing & Gravelling	
3	266.000	348	82.000		1.2	0.45	1:01	Earth work 100m ³ & Turfing & Gravelling	
4	348.000	402	54.000		0.9	0.75	01:01.5	Earth work in Improvements to Bund Road - 250m ³ & Gravelling	
5	402.000	441	39.000		0.9	0.6	1:01	Earth work in Improvements to Bund Road - 50m ³ & Gravelling	
6	441.000	499	58.000		0.9	0.6	1:01	Earth work in Improvements to Bund Road - 50m ³ & Gravelling	
7	499.000	629	130.000		1	0.6	1:01	Earth work in Improvements to Bund Road - 100m ³ & Gravelling	
8	629.000	786	157.000		1.5	0.9	1:01		
9	786.000	880	94.000		0.75	1.2	1:01		
10	880.000	Nil	231.000		0.6	0.6	1:01		
11	Nil	1340	229.000		0.3	0.45	1:01	Earth Work in Chl. Bunds - 200m ³ & Turfing	
12	1340.000	1430	90.000		0.3	0.15	1:01	Earth Work in Chl. Bunds - 100m ³ & Turfing	
								Total tentative Civil Cost	450,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (16/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	D10 (Tract 1)								
1	0.000	438	438.000		1.2	0.9	1:01	Earth Work improvements to bund & Graveling	
2	438.000	687	249.000		1.2	1.5	1:01	Earth Work improvements to bund & Graveling	
3	687.000	820	133.000		1.2	1.8	1:01	Graveling to Bund Road	
4	820.000	1274	444.000		0.6	0.9	1:01	Earth Work in improvements to Bund & Bund Road allow 450m ³ & graveling	
5	1274.000	1264	504.000		0.6	0.6	1:01	Earth Work in filling scours & graveling to bund road	
								Total tentative Civil Cost	650,000.00
	D10/4 (Tract 2)								
1	0.000	910	910.000		0.9	0.9	1:01	Earth Work 360 m ³ & graveling to bund road	
2	910.000	1000	90.000		0.75	0.9	1:01	Earth Work 100 m ³ & graveling	
3	1000.000	1250	250.000		0.6	0.75	1:01	Improvements bunds & graveling (400 m ³ E/W)	
4	1250.000	1400	150.000		0.6	0.6	1:01	No road required - Earth -Work - Allow 100m ³	
5	1400.000	1560	160.000		0.6	0.75	1:01	Allow 50m ³ Earth Work & Graveling	
6	1560.000	1920	360.000		0.45	0.6	1:01	Allow 200m ³ Earth Work & Graveling	
								Total tentative Civil cost	750,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (17/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	D1 (Tract 4)								
1	0.000	400	400.000		0.9	3	1.0.5	Desilting of canal 0.15 m & grading & Gravelling Rd	
2	400.000	600	200.000		0.75	3.5	1.0.5	Desilting of canal 0.16 m & grading & Gravelling Rd	
3	600.000	720	120.000		0.9	1.75	1.0.5	Desilting of canal 0.17 m & grading & Gravelling Rd	
								Total tentative Civil cost	300,000.00
	D1 (Tract 5)								
1	0.000	60	60.000		0.9	1.5	1:01	Improvements to bund slops & Desilting & Grading & Graveling	
2	60.000	606	546.000		0.9	0.9	1:01		
3	606.000	650	44.000		0.95	0.9	1:01	Bund Road to be raised by 0.3m	
4	650.000	960	310.000		0.8	0.6	1:01		
5	960.000	1010	50.000		0.8	0.6	1:01		
6	1010.000	1454	444.000		0.7	1.7	1:01		
7	1454.000	1484	30.000		0.8	1.4	1:01	Bund Road to be raised by 0.6m	
8	1484.000	1712	228.000		0.6	0.9	1:01		
								Total tentative Civil cost	600,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (18/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
	D2 (Tract 5)								
1	0.000	387	387.000		1	0.9	1:01	Main Repairs to bund & Desilting & Gravelling & Gravelling	
2	387.000	806	419.000		0.9	1	1:01	(allow 10 m ³ /100m for minor raps) - do -	
3	806.000	1365	559.000		0.9	1.4	1:01	- do - - do -	
4	1365.000	1770	405.000		0.75	0.9	1:01	- do - - do -	
5	1770.000	2038	268.000		0.6	0.65	1:01	- do - - do -	
								Total tentative Civil cost	600,000.00
	D1 (Tract 6)								
1	0.000	100	100.000		1.5	1.2	1:01		
2	100.000	280	180.000			1.5	1:01	Water pool - Improvements to bund slops	
3	280.000	522	242.000		1.2	1.2	1:01	Improvements to chl. Bund. - Grading & Gravelling bund Rd	
4	522.000	773	250.000		0.9	1.8	1:01	- do -	
5	773.000	812	39.000		0.9	0.9	1:01	- do -	
6	812.000	1261	449.000		0.9	0.7	1:01	- do -	
7	1261.000	1894	633.000		0.6	0.7	1:01	- do -	
8	1894.000	1925	31.000		0.45	0.7	1:01	- do -	
								Total tentative Civil cost	750,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (19/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
	D10 (Tract 2)											199,000.00
	D10/4 (Tract 2)											262,000.00
	D1 (Tract 5)											101,000.00
	D2 (Tract 5)											183,000.00
	D1 (Tract 6)											328,000.00
												1,073,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (20/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
	D10 (Tract 2)											
1	0.000	D/S Structure		Yes							NP - d/s & RRM Protection	10,000.00
2	7.500	CPO to FC (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
3	41.000	Canal Lining (E) & (I)		Yes					Yes		NP - Extension of Canal lining	20,000.00
4	84.500	FTO		No							No	
5	90.000	CPO to FC2 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
6	106.000	Regulator (E), (D) & (N)		Yes						Yes	NP - Construction of new	15,000.00
7	225.000	Foot Bridge		No							No	
8	342.000	CPO to FC 3 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
9	438.000	CPO to D 10 - 4 (E) & (I)	1/50 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
10	439.000	Regulator		No							No	
11	465.800	CPO to FC 5 (E) & (T)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
12	687.000	Box Culvert		No							No	
13	735.000	Ret. Wall		No							No	
14	739.300	CPO to FC6 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
15	827.000	FTO		No							No	
16	870.000	Box Culvert	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (21/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
17	872.000	CPO to FC 8 (E) & (I)		No							No	
18	876.000	Box Culvert		No							No	
19	886.000	CPO to FC 8 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
20	890.000	Regulator		No							No	
21	949.000	Drop structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
22	1027.000	Drop structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
23	1092.000	Drop structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
24	1150.000	Drop structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
25	1233.000	Drop structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
26	1250.000	Canal Lining (N)		Yes						NP	Concrete lining	30,000.00
27	1261.000	Drainage under crossing (E)		No							No	
28	1264.000	Pipe culvert (E)		No							No	
29	1274.000	CPO to FC 9 (E) & (I)	1/375 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
30	1399.000	FTO		No							No	
31	1508.000	CPO to FC 10 (E) & (I)	1/375 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
32	1512.000	FTO (E)		No							No	
33	1551.000	Box Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (22/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
34	1562.000	CPO to FC 11 (E) & (I)	1/375 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
35	1778.000	Box Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
												199,000.00
	D10/4 (Tract 2)											
1	0.000	D/S structure									NP - d/s RRM protection	4,000.00
2	8.000	Canal Lining (E) & (N)		Yes					Yes	NP	NP - Extension of Canal Lining	30,000.00
3	122.000	CPO FC 0 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
4	156.000	FTO (E)		No							No	
5	170.000	Drop structure (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
6	190.000	FTO (E)		No							No	
7	208.000	Drop structure (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
8	230.000	FTO (E)		No							No	
9	234.000	Drop structure (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
10	291.000	FTO (E)		No							No	
11	293.000	FTO (E)		No							No	
12	309.000	Drop structure (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
13	327.000	FTO (E)		No							No	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (23/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
14	330.000	Drop structure (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
15	480.000	CPO FC 1 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
16	484.000	Box Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
17	491.000	Ret. Wall (E)		No							No	
18	497.000	FTO (E)		No							No	
19	555.000	FTO (E)		No							No	
20	596.000	Pipe Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
21	603.000	Ret. Wall		No							No	
22	606.000	CPO to FC 2 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
23	698.000	FTO (E)		No							No	
24	820.000	CPO to FC 3 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
25	870.000	Drop structure (E) & (I)		Yes					Yes		NP - u/s RRM Protection	4,000.00
26	876.000	Canal Lining		No							No	
27	886.000	Drop structure (E) & (I)		Yes					Yes		NP - u/s RRM Protection	4,000.00
28	891.000	Canal Lining		No							No	
29	913.000	Pipe Culvert		Yes							NP - u/s & d/s RRM Protection	8,000.00
30	931.000	CPO to FCC 4,5 (E) & (I)	2/150 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection	8,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (24/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
31	932.000	Drop structure (E) & (I)		Yes					Yes		NP - u/s RRM Protection	4,000.00
32	968.000	Drop structure (E) & (I)		Yes					Yes		NP - u/s RRM Protection	4,000.00
33	1013.000	Drop structure (E) & (I)		Yes					Yes		NP - u/s RRM Protection	4,000.00
34	1050.000	FTO (E)		No							No	
35	1066.000	FTO (E)		No							No	
36	1076.000	Drop structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
37	1104.000	FTO (E)		No							No	
38	1185.000	FTO (E)		No							No	
39	1176.000	Pipe Culvert		Yes							NP - u/s & d/s RRM Protection	8,000.00
40	1251.000	FTO (E)		No							No	
41	1332.000	Canal Lining (E) & (N)		Yes					Yes	NP	NP - Replace & Extension to Canal Lining	40,000.00
42	1385.000	Drainage under crossing (E)		No							No	
43	1391.000	Pipe Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
44	1411.000	Pipe Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
45	1423.000	Canal Lining (E)		No							No	
46	1483.000	FTO (E)		No							No	
47	1488.000	CPO to FC 6 (E) & (I)	1/225 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (25/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
48	1507.000	FTO (E)		No							No	
49	1522.000	FTO (E)		No							No	
50	1557.000	Drop Structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
51	1558.000	CPO to FC 7 (E) & (I)	1/300 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
52	1558.000	CPO to FC 8 (E) & (I)	1/300 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
53	1914.000	Pipe Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
												262,000.00
	D1 (Tract 5)											
1	0.000	D/S Structure		Yes							NP - u/s & d/s RRM Protection	8,000.00
2	53.000	CPO to FC 1 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
3	606.000	CPO to FC 2 (E) & (I)	1/150 mm dia	Yes			Yes		Yes		NP - Replace gate & Improvement. Structure	15,000.00
4	994.000	Pipe culvert (N)		Yes						NP	NP - Construction of new culvert	30,000.00
5	101.000	CPO to FC 3 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
6	1040.000	Pipe culvert		Yes							NP - u/s & d/s RRM Protection	8,000.00
7	1455.000	Drainage under crossing		No							No	
8	1484.000	CPO to FC 4 (E) & (I)	1/225 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
9	1711.000	CPO to FC 5 (E) & (I)	1/300 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (26/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
10	1712.000	CPO to FC 6 (E) & (I)	1/600 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
												101,000.00
	D2 (Tract 5)											
1	0.000	D/S Structure										
2	59.000	CPO to FC 1 (E) & (I)	1/225 mm dia	Yes	Yes						NP - u/s & d/s canal lining	10,000.00
3	387.000	Box Culvert		Yes						NP	Const. of culvert	35,000.00
4	480.000	Causeway (E) & (I)		Yes	Yes					NP	Const. of causeway	50,000.00
5	806.000	CPO to FC 2 (E) & (I)	1/225 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
6	1066.000	CPO to FC 3 (E) & (I)	1/150 mm dia	Yes							NP - u/s & d/s RRM Protection	8,000.00
7	1076.000	Pipe Culvert (E)		Yes							No	
8	1364.000	CPO to FC 4 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
9	1459.000	CPO to FC 5 (E) & (I)	1/375 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
10	1462.000	CPO to FC 6 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
11	1670.000	CPO to FC 7 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
12	1676.000	CPO to FC 8 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
13	1679.000	Drop structure (E)	1/150 mm dia	Yes							No	
14	1735.000	Drop structure (E)		Yes							No	

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (27/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
15	1778.000	CPO to FC 9 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
16	1778.000	CPO to FC 10 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
17	1778.000	Drop structure (E)		Yes							No	
18	1849.000	Drop structure (E)		Yes							No	
19	1940.000	CPO to FC 11 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
20	1940.000	CPO to FC 12 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
21	1940.000	Regulator (stop Plank)		Yes							No	
												183,000.00
	D1 (Tract 6)											
1	0.000	D/S Structure		No								
2	160.000	Bathing Spots (N)		Yes							NP - RRM work & plastering	15,000.00
3	409.000	CPO to FC 1 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
4	522.000	CPO to FC 2 (E) & (I)	1/300 mm dia	Yes			Yes			Yes	NP - u/s & d/s RRM Protection	25,000.00
5	523.000	Ret. Wall on RB (N)		No								60,000.00
6	530.000	Box Culvert (N)		Yes						NP	NP - u/s & d/s RRM Protection	30,000.00
7	588.000	CPO to FC 3 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
8	659.000	CPO to FC 4 (E) & (I)	1/150 mm dia	Yes			Yes			Yes	NP - u/s & d/s RRM Protection	25,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (28/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
9	698.000	Canal Lining		No								
10	702.000	CPO to FC 5 (E) & (I)	1/300 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
11	705.000	Drop Structure		Yes							NP - u/s & d/s RRM Protection	4,000.00
12	773.000	CPO to FC 6 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
13	812.000	Drop Structure		Yes							NP - u/s RRM Protection	4,000.00
14	818.000	CPO to FC 7 (E) & (I)	1/150 mm dia	Yes			Yes			Yes	NP - u/s & d/s RRM Protection	25,000.00
15	854.000	Drop Structure		Yes							NP - u/s RRM Protection	4,000.00
16	866.000	CPO to FC 8 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
17	890.000	Drop Structure		Yes							NP - u/s RRM Protection	4,000.00
18	921.000	Drop Structure		Yes							NP - u/s RRM Protection	4,000.00
19	1044.000	Drop Structure		Yes							NP - u/s RRM Protection	4,000.00
20	1219.000	CPO to FC 9 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
21	1224.000	Canal Lining (E)		No								
22	1230.000	Drop Structure (E) & (I)	1/225 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
23	1261.000	CPO to FC 9 (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
24	1267.000	Pipe Culvert (E) & (I)		Yes							NP - u/s & d/s RRM Protection	8,000.00
25	1350.000	CPO to FC 9 A (N)	1/150 mm dia	Yes			NP			NP	NP - u/s & d/s RRM Protection	8,000.00

Table TA-3 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Irrigation Department (29/29)

Name of Scheme : Palukadawela

Name of Canal : D-Canal (managed by Irrigation Department), Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Description/ Other works	Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others				
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
26	1355.000	Drop Structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
27	1678.000	CPO to FC 10 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
28	1727.000	Drop Structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
29	1789.000	Drop Structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
30	1833.000	Drop Structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
31	1894.000	CPO to FC 11 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
32	1895.000	Drop Structure (E) & (I)		Yes							NP - u/s RRM Protection	4,000.00
33	1921.000	CPO to FC 12 (E) & (I)	1/300 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	8,000.00
34	1925.000	Pipe Culvert (E)		Yes								
												328,000.00

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (1/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 1

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Colored section of the map under I	Filling earth and turfing the colored section Length about - 400 meters, width 12 ft	Filling earth Turfing	Included in rehabilitation plan of Irrigation Department of Main canal					
2	Provision of 23 Nos. pipes to distribute water to paddy fields	Remove the existing pipes and replace them with new pipes with small structures for both sides (turnout)	Pipes 6' ft x 23 nos. Side concrete blocks 18 nos. (3' ft 1 1/2' ft x 2' ft)	Concrete 46 cu Earth works 46 cu Slide gate dia. 300 23 nos HP dia.12" 460 ft Removing 23 nos	377,200 264,500 161,000 	Skilled 46 days Labors 357 days Labors 102 days Labors 51 days	12,650 62,475 17,850 8,925	62,475 17,850 8,925	
	Sub-total				802,700		92,975	80,325	
	Grand-total				895,675				

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (2/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
1	Removing earth heaps from tank	Remove earth by dozer machine from tank bed and push rocks beyond tank bund up to sluice sill level. Left over earth dump on narrow places of canal bund with tractors	1 acre 1 mile	Desilting Soil haulage	2,860 cu 2,860 cu	1,144,000 486,200				
2	D9 canal - outlet to lot no. 78	At present the pipe is broken, because this water is obtained by cutting through the road and the road is damaged must provide a pipe to the width of the road must demarcate the reservation (pipe inlet)	24 ft long	HP dia. 6 inch Concrete Earth works Metal	24 ft 1 cu 1 cu 1 cu	5,040 8,200 2,600	Skilled Labors Labors Labors	1 days 8 days 2 days 2 days	275 1,400 350 350	1,400 350 350
3	D9 canal outlet to lot no. 79	- as mentioned above-	as mentioned above	HP dia. 6 inch Concrete Earth works Metal	24 ft 1 cu 1 cu 1 cu	5,040 8,200 2,600	Skilled Labors Labors Labors	1 days 8 days 2 days 2 days	275 1,400 350 350	1,400 350 350
4	D10 / 3 field canal gate	The rod and the door should be replaced and cover with concrete and apply anti-corrosive paint (turnout)	9" inch gate	Included in rehabilitation plan of Irrigation Department of D10/Tract 2						
5	D10 / 3 canal road	Fill the pet holes with earth and gravel compact with a roller and hand over to farmers (earth filling)	Length 500m W 3 m	Earth works Gravel	80 cu 53 cu	40,000 106,000	Labors Labors	178 days 118 days	31,150 20,650	31,150 20,650
6	Side wall near D10/5 canal	Since water of leaking from this earth canal bund must construct a rubble masonry wall, plaster to prevent leaking and hand over to farmers for maintaining.	Length 50m, W 30 cm H 75 cm	Included in rehabilitation plan of Irrigation Department of D10/Tract 2						
7	D10/5 field canal gate	as per no.4	as per no.4	Included in rehabilitation plan of Irrigation Department of D10/Tract 2						
8	Side wall of D10 near D10/6 canal	As per no.6	As per no.6	Included in rehabilitation plan of Irrigation Department of D10/Tract 2						
9	D10/4/1 field canal bund	Earth filling, compact, turfing	Length 150m, bed width 45 cm, Height 75 cm	Earth works Turfing	51 cu 23 sq	12,750	Labors Labors	113 days 16 days	19,775 2,800	19,775 2,800

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (3/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
10	D10/7 canal road	As per no.5	As per no.5	Earth works 80 cu Gravel 53 cu	40,000 106,000	Labors 178 days Labors 118 days	31,150 20,650	31,150 20,650	
11	D10/7 canal outlet to lot no. 157	As per no.2	As per no.2	HP dia. 6 inch 24 ft Concrete 1 cu Earth works 1 cu Metal 1 cu	5,040 8,200 2,600	Skilled 1 days Labors 8 days Labors 2 days Labors 2 days	275 1,400 350 350	1,400 350 350	
12	D10/7 canal outlet to lot no. 158	As per No.11	As per No.11	HP dia. 6 inch 24 ft Concrete 1 cu Earth works 1 cu Metal 1 cu	5,040 8,200 2,600	Skilled 1 days Labors 8 days Labors 2 days Labors 2 days	275 1,400 350 350	1,400 350 350	
13	D10/7 canal outlet to lot no. 159	As per No.11	As per No.11	HP dia. 6 inch 24 ft Concrete 1 cu Earth works 1 cu Metal 1 cu	5,040 8,200 2,600	Skilled 1 days Labors 8 days Labors 2 days Labors 2 days	275 1,400 350 350	1,400 350 350	
14	D10/7 canal outlet to lot no. 160	As per No.11	As per No.11	HP dia. 6 inch 24 ft Concrete 1 cu Earth works 1 cu Metal 1 cu	5,040 8,200 2,600	Skilled 1 days Labors 8 days Labors 2 days Labors 2 days	275 1,400 350 350	1,400 350 350	
15	D 10/7 canal outlet upper lot	Pipe outlet	Length 30' ft 6" inches dia pipes	HP dia. 6 inch 30 ft Concrete 1 cu Earth works 1 cu Metal 1 cu	6,300 8,200 2,600	Skilled 1 days Labors 8 days Labors 2 days Labors 2 days	275 1,400 350 350	1,400 350 350	
16	D 10/8 canal road	As per No. 5	Length 500m, W 10' ft	Earth works 80 cu Gravel 53 cu	40,000 106,000	Labors 178 days Labors 118 days	31,150 20,650	31,150 20,650	
17	D10/9 canal road	As per No. 5	Length 600m, W 10' ft	Earth works 95 cu Gravel 64 cu	47,500 128,000	Labors 211 days Labors 142 days	36,925 24,850	36,925 24,850	

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (4/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
18	D10/9 side wall on the beginning of canal	presently the bund is dilapidated and cracked. Remove old masonry wall and concrete the wall 4" inches	Length one side 3 m x 2 sides H 5ft	Included in rehabilitation plan of Irrigation Department of D10/Tract 2						
19	Side wall near drain pipe of D10/9 canal	- do -	- do -	Concrete	1 cu	8,200	Skilled	1 days	275	275
							Labors	8 days	1,400	1,400
				Earth works	2 cu		Labors	4 days	700	700
				Metal	1 cu	2,600	Labors	2 days	350	350
				Removing	3 m		Labors	3 days	525	525
20	Darin canal anicut near lot 187	Both sides are heavily washed off must fill with earth and compact construct a concrete bund across canal and fix gates to release water when necessary	Concrete bund 3 ft high, L 10m	Concrete	2 cu	16,400	Skilled	2 days	550	550
							Labors	16 days	2,800	2,800
				Earth works	5 cu		Labors	11 days	1,925	1,925
				Metal	1 cu	2,600	Labors	2 days	350	350
			Gate	Concrete	2 cu	16,400	Skilled	2 days	550	
							Labors	16 days	2,800	2,800
				Earth works	2 cu		Labors	4 days	700	700
				Sluice Gate	1 nos	300,000				
21	D10/10 canal road	Clear the road of scrub and grass earth filling and compacting and compact with gravel by roller.	Length 500m	Earth works	80 cu	40,000	Labors	178 days	31,150	31,150
				Gravel	53 cu	106,000	Labors	118 days	20,650	20,650
22	D10/10 canal sluice rod	Remove the broken rod and fix a new one with concrete sides.	4 ft high	Rod 4 ft	1 nos	5,000				
23	Inlet pipe to lot no. 185	as per No. 2	Length 12' ft	HP dia. 6 inch	12 ft	2,520				
				Concrete	1 cu	8,200	Skilled	1 days	275	
							Labors	8 days	1,400	1,400
				Earth works	1 cu		Labors	2 days	350	350
				Metal	1 cu	2,600	Labors	2 days	350	350
24	Inlet to lot no 186	As sama as No. 2	Length 12' ft	HP dia. 6 inch	12 ft	2,520				
				Concrete	1 cu	8,200	Skilled	1 days	275	
							Labors	8 days	1,400	1,400
				Earth works	1 cu		Labors	2 days	350	350
				Metal	1 cu	2,600	Labors	2 days	350	350

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (5/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
25	D10/11 canal gate rod	As sama as No. 4	Sama as No. 4	Included in rehabilitation plan of Irrigation Department of D10/Tract 2					
26	D10/11 Canal road	Same as No. 5	Length 520m same as No. 5	Earth works 83 cu	41,500	Labors 184 days	32,200	32,200	
				Gravel 55 cu	110,000	Labors 122 days	21,350	21,350	
27	Inlet pipe to lot 204	Same as No. 11	Same as No. 11	HP dia. 6 inch 24 ft	5,040	Concrete 1 cu	8,200	Skilled 1 days 275	1,400
				Earth works 1 cu		Labors 8 days	1,400	350	
				Metal 1 cu	2,600	Labors 2 days	350	350	
28	Inlet pipe to lot 208	Same as No. 11	Same as No. 11	HP dia. 6 inch 24 ft	5,040	Concrete 1 cu	8,200	Skilled 1 days 275	1,400
				Earth works 1 cu		Labors 8 days	1,400	350	
				Metal 1 cu	2,600	Labors 2 days	350	350	
29	Inlet pipe to lot 224	Same as No. 2	Same as No. 2	HP dia. 6 inch 24 ft	5,040	Concrete 1 cu	8,200	Skilled 1 days 275	1,400
				Earth works 1 cu		Labors 8 days	1,400	350	
				Metal 1 cu	2,600	Labors 2 days	350	350	
30	Inlet pipe to lot 222	Same as No. 2	Length 24' ft	HP dia. 6 inch 24 ft	5,040	Concrete 1 cu	8,200	Skilled 1 days 275	1,400
				Earth works 1 cu		Labors 8 days	1,400	350	
				Metal 1 cu	2,600	Labors 2 days	350	350	
31	D11 canal	Same as No. 4	Door and rod	Included in rehabilitation plan of Irrigation Department of Main canal					
32	Inlet pipe to lot 161	Sama as No. 11	Length 18' ft	HP dia. 6 inch 18 ft	3,780	Concrete 1 cu	8,200	Skilled 1 days 275	1,400
				Earth works 1 cu		Labors 8 days	1,400	350	
				Metal 1 cu	2,600	Labors 2 days	350	350	

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (6/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
33	D11 canal road right side	Same as No. 5	Length 700m	Earth works	111 cu	55,500	Labors	246 days	43,050	43,050
				Gravel	74 cu	148,000	Labors	164 days	28,700	28,700
34	D12 canal road	Same as No. 5	Length 500m	Earth works	111 cu	55,500	Labors	246 days	43,050	43,050
				Gravel	74 cu	148,000	Labors	164 days	28,700	28,700
35	Inlet pipe to lot 165	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
36	Inlet pipe to lot 166	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
37	Inlet pipe to lot 167	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
38	D10/4/FC7 Road	Sama as No. 5	Length 700m	Earth works	111 cu	55,500	Labors	246 days	43,050	43,050
				Gravel	74 cu	148,000	Labors	164 days	28,700	28,700
39	D10/4/FC7 Right canal bund	Same as No. 9	Length 700m	Earth works	111 cu	55,500	Labors	246 days	43,050	43,050
				Gravel	74 cu	148,000	Labors	164 days	28,700	28,700
40	D10/4/FC7 side wall at the beginning of canal	Same as No. 18	Length 3m x both sides = 6m	Concrete	1 cu	8,200	Skilled	1 days	275	275
				Earth works	2 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	4 days	700	700
				Removing	3 m		Labors	2 days	350	350

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (7/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
41	D10/4/FC8 door and rod	Same as No. 4	Door and rod	Concrete 2 cu	16,400	Skilled 2 days	550	2,800	700
				Earth works 2 cu		Labors 16 days	2,800		
				Slide gate dia. 300 1 nos	11,500	Labors 4 days	700		
				HP dia.12" 20 ft	7,000				
42	D10/4/FC8 canal bund	Same as No. 6	Length 70m x both side = 140m	RRM 8 cu	25,600	Skilled 6 days	1,650	7,000	13,650
				Earth works 35 cu		Labors 40 days	7,000		
				Metal 2 cu	5,200	Labors 78 days	13,650		
				Plaster 11 sq	4,069	Labors 4 days	700		
						Skilled 8 days	2,200		
						Labors 11 days	175		175
43	D10/4/FC8 to D10/4/FC9 side wall of left side of canal	Same as No. 6	Length 75m x left side of canal	Included in rehabilitation plan of Irrigation Department of D10/Tract 2					
44	Inlet pipe to lot 291	Same as No. 23	Length 6' ft	HP dia. 6 inch 6 ft	1,260				
				Concrete 1 cu	8,200	Skilled 1 days	275		
				Earth works 1 cu		Labors 8 days	1,400		350
				Metal 1 cu	2,600	Labors 2 days	350		350
45	D10/FC12/1 canal road	Same as No. 5	Length 500m	Earth works 80 cu	40,000	Labors 178 days	31,150		31,150
				Gravel 53 cu	106,000	Labors 118 days	20,650		20,650
46	D10/FC12 canal road	Same as No. 5	Length 700m	Earth works 111 cu	55,500	Labors 246 days	43,050		43,050
				Gravel 74 cu	148,000	Labors 164 days	28,700		28,700
47	D10/FC12 side wall at the beginning of canal	Same as No. 18	Length 3 x both sides = 6m	Concrete 1 cu	8,200	Skilled 1 days	275		275
				Earth works 2 cu		Labors 8 days	1,400		1,400
				Metal 1 cu	2,600	Labors 4 days	700		700
				Removing 3 m		Labors 2 days	350		350
						Labors 3 days	525		525

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (8/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
48	Inlet pipe to lot 241	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
49	Inlet pipe to lot 242	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
50	Inlet pipe to lot 249	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
51	Inlet pipe to lot 251	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
52	Inlet pipe to lot 252	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
53	Inlet pipe to lot 254	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (9/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
54	Inlet pipe to lot 244	Same as No. 23	Length 12' ft	HP dia. 6 inch	12 ft	2,520				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
55	Inlet pipe to lot 245	Same as No. 23	Length 12' ft	HP dia. 6 inch	12 ft	2,520				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
56	D10/FC12 Lot 252 Construction of a culvert	Excavate the foundation to correct measurement, Base concrete with 1:3:6 mix - thickness 4" inches Rubble masonry wall over there and fix hume pipes and construct the wall	Culvert Hume pipes 1 1/2' dia x 8 x 2 Nos.	HP dia. 450mm	30 ft	16,200				
				Concrete	2 cu	16,400	Skilled	2 days	550	
				Earth works	2 cu		Labors	16 days	2,800	2,800
				Metal	1 cu	2,600	Labors	4 days	700	700
			RRN wall L 9 m, H 2 ft	RRM	1 cu	3,200	Skilled	1 days	275	
				Earth works	5 cu		Labors	5 days	875	875
				Earth works	5 cu		Labors	11 days	1,925	1,925
				Metal	1 cu	2,600	Labors	2 days	350	350
57	D10/4 to Weherayaya canal Road (D10)	Same as No. 5	Length 3 km, W 10' ft	Earth works	477 cu	238,500	Labors	1059 days	185,325	185,325
				Gravel	318 cu	636,000	Labors	706 days	123,550	123,550
58	Inlet Pipe Lot 106	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (10/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 2

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
59	Inlet Pipe Lot 107	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
60	Inlet Pipe Lot 108	Same as No. 11	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	
				Earth works	1 cu		Labors	8 days	1,400	1,400
				Metal	1 cu	2,600	Labors	2 days	350	350
61	Side wall of the left side of D10/4 from drain canal entry to railway tract	Same as No. 9	Length about 50m	Earth works	233 cu	116,500	Labors	517 days	90,475	90,475
				Turfing	15 sq		Labors	10 days	1,750	1,750
62	Road from Lot 98 to Lot 108	Same as No. 5	Length 700m	Earth works	111 cu	55,500	Labors	246 days	43,050	43,050
				Gravel	74 cu	148,000	Labors	164 days	28,700	28,700
	Sub-total					5,825,899		1,354,050	1,340,300	
	Grand-total					7,179,949				

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (11/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 3

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Main canal Wall from Monnanklama culvert to Keenyaganwanguwa	Construction of the wall		Included in rehabilitation plan of Irrigation Department of Main canal					
2	FC 1,2,3,4	Construction of sluices	4 nos. of turnout	Concrete 10 cu	82,000	Skilled 10 days	2,750	13,650 9,800	
				Earth works 25 cu		Labors 78 days	13,650		
				Slide gate dia. 300 5 nos	57,500	Labors 56 days	9,800		
				HP dia.12" 100 ft	35,000				
3	D1	Rehabilitation of washed out section	H 2ft L 100 m	RRM 15 cu	48,000	Skilled 11 days	3,025	13,125 19,425 1,225	
				Earth works 50 cu		Labors 75 days	13,125		
				Metal 3 cu	7,800	Labors 111 days	19,425		
		Construction of a line of steps		Concrete 1 cu	8,200	Skilled 1 days	275	1,400 350 350	
				Earth works 1 cu		Labors 8 days	1,400		
				Metal 1 cu	2,600	Labors 2 days	350		
4	D1	Construction of side walls in washed out sections	H 2ft L 100 m	RRM 15 cu	48,000	Skilled 11 days	3,025	13,125 19,425 1,225	
				Earth works 50 cu		Labors 75 days	13,125		
				Metal 3 cu	7,800	Labors 111 days	19,425		
5	D1	Demarcate reservations of canals and construction of canal roads		Earth works 100 cu		Labors 222 days	38,850	38,850	
6	Welihiddewa Tank	Constriction of side walls on dilapidated bund sections	H 5 ft L 100 m	RRM 34 cu	108,800	Skilled 26 days	7,150	29,750 38,850 1,225	
				Earth works 100 cu	50,000	Labors 170 days	29,750		
				Metal 3 cu	7,800	Labors 222 days	38,850		
		2 bathing steps		Concrete 10 cu	82,000	Skilled 10 days	2,750	13,650 11,725 700	
				Earth works 30 cu		Labors 78 days	13,650		
				Metal 2 cu	5,200	Labors 67 days	11,725		
						Labors 4 days	700	700	

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (12/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 3

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
7	D2	Construction of side walls	H 2ft L 100 m	RRM	15 cu	48,000	Skilled	11 days	3,025	13,125	
				Earth works	50 cu		Labors	75 days	13,125		
				Metal	3 cu	7,800	Labors	111 days	19,425		19,425
						Labors	7 days	1,225	1,225		
8	D2	Demarcate reservation of canals and construction of canal roads		Earth works	100 cu		Labors	222 days	38,850	38,850	
9	D2	Fixing the door	Turnout	Concrete	2 cu	16,400	Skilled	2 days	550	2,800	
				Earth works	5 cu		Labors	16 days	2,800		
				Slide gate dia. 300	1 nos	11,500	Labors	11 days	1,925		1,925
				HP dia.12"	20 ft	7,000					
10	D2	Since the culvert is in bad shape (front at D2) construct a new culvert to Janapala (colony) road		HP dia. 600mm	30 ft	21,000	Skilled	2 days	550	2,800	
				Concrete	2 cu		16,400	Labors	16 days		2,800
				Earth works	10 cu		Labors	22 days	3,850		3,850
				Metal	1 cu	2,600	Labors	2 days	350		350
	Sub-total					681,400		335,300	312,200		
	Grand-total					1,016,700					

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (13/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 4

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	Ref no. 3 Side wall of the small bund on Morrankulama rd. culvert	Side wall and earth filling	Concrete and rubble masonry wall 25' ft long foundation 1 1/2' ft deep Height 3' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
2	Ref no. 4 Main canal FC1	Fixing a door (turnout)	Material required to provide 1 6" inch door	Included in rehabilitation plan of Irrigation Department of Main canal				
3	Ref no. 5 Keenyagan bund and Mannankulama paddy fields	Repair the small bund with earth filling	Length 30' ft width 6' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
4	Ref no. 6,7,8	Connected with No. 2 - 3 nos	Material required to provide 1 6" inch door	Included in rehabilitation plan of Irrigation Department of Main canal				
5	Ref no. 9 D1 canal end	Drainage cause way and construction of ditch with steps Concrete ditch	Length 20' ft width 18' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
		Steps	10' ft long 1' ft wide					
6	Ref no. 11 to 14 Welihiddewa bund	Construction of rip-rap on	Length about 150' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
7	Ref no. 12 to 13 near low level sluice and in front of Mila tree	Construction of 2 bathing steps in Welihiddewa Tank	Length 10' ft, width 1 1/2" ft, height 8' inches , 7 steps Length & width of slope, 15' ft & 12' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
16	Ref. No. 16 D2 canal	Constriction of a side wall and filling earth	Length 30' ft foundation 1 1/2' ft middle 15" inches and top 1' ft	Included in rehabilitation plan of Irrigation Department of Main canal				

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (14/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 4

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
17	Ref. No. 17 Small bridge in front of Pahala Palukandewa Tank on Dewata Rd. (small)	Bridge	8' ft long 5' ft wide height 6' ft foundation 2' ft	Included in rehabilitation plan of Irrigation Department of Main canal					
18	Ref. No. 18 Drain pipe of Palukandewa Tank	Should repair since one hume pipe is cracked	Concreting the surface 7' ft long 5" inch wide 2" thick	Included in rehabilitation plan of Irrigation Department of Main canal					
	Sub-total						0	0	
	Grand-total						0		

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (15/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 5

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	Near 8 1/4' - 8 1/2' culvert	Extension of stepped basin	L 10' ft, W 6' ft, H 4' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
2	Below the above culvert	Construction of a side wall and earth filling	L 30' ft, W 5' ft, H 1' ft, foundation 1 1/2' deep	Included in rehabilitation plan of Irrigation Department of Main canal				
3	Near 8 3/4 post	Repairing the drain pipe, closing the expected sections with concrete	L 8' ft, W 1 1/2' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
4	Near 8 3/4 post	Repair right side bund	L 100' ft top width 6' ft	Included in rehabilitation plan of Irrigation Department of Main canal				
5A	Rambotukulama tank bund	Construction of bathing step with 7 steps	L 9' ft, W 10' ft, x 7 steps, Height of step 8" inches	Included in rehabilitation plan of Irrigation Department of Main canal				
5B	Rambotukulama tank bund	Construction of bathing step with 7 steps	- do -	Included in rehabilitation plan of Irrigation Department of Main canal				
6	Rambotukulama tank	Provide a simple sluice door to issue water to main canal	Width 5 1/2' ft height 6' ft	Concrete 2 cu	16,400	Skilled 2 days	550	2,713 777
				Earth works 2 cu		Labors 16 days	2,713	
				Metal 1 nos	11,500	Labors 4 days	777	
				HP dia. 600mm 40 ft	28,000			
				Slide gate dia. 1 nos	40,000			
7	D1 canal between 200m point	Construction of a side wall	L 150' ft, H 4' ft	RRM 13 cu	41,600	Skilled 10 days	2,750	11,375 8,925 350
				Earth works 23 cu		Labors 65 days	11,375	
				Metal 1 cu	2,600	Labors 51 days	8,925	
8	Construction of a side wall near No. paddy land	About 20' ft long	L 20' ft, W 1' ft, H 3' ft	RRM 1 cu	3,200	Skilled 1 days	275	875 1,225 350
				Earth works 3 cu		Labors 5 days	875	
				Metal 1 cu	2,600	Labors 7 days	1,225	
9	FC 1/1 canal	Construction of basin and repairs to pipe line	L 12' ft, W 1' ft, H 3' ft	Concrete 1 cu	8,200	Skilled 1 days	275	1,400 700 350
				Earth works 2 cu		Labors 8 days	1,400	
				Metal 1 cu	2,600	Labors 4 days	700	
				HP dia.6" 10 ft	2,100	Labors 2 days	350	

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (16/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 5

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
10	D canal near No. 2 homestead (upland)	Construction of side wall and a bridge	L 10' ft, W 1' ft, H 3' ft 2' ft concrete slab	RRM	1 cu	3,200	Skilled	1 days	275	875 700 350	
				Earth works	2 cu		Labors	5 days	875		
				Metal	1 cu		2,600	Labors	4 days		700
				2' ft concrete	2 cu		16,400	Labors	2 days		350
				Reinforced bar	280 kg		16,800				
11	Bear FC2 canal	Construction of a side wall	L 30' ft, W 1' ft, H 3' ft	RRM	8 cu	25,600	Skilled	6 days	1,650	7,000 7,700 700	
				Earth works	20 cu		Labors	40 days	7,000		
				Metal	2 cu		5,200	Labors	44 days		7,700
12	Below FC2 canal	Rehabilitation of both sides of D1 canal	Length 300' ft	Earth works	31 cu	7,750	Labors	69 days	12,075	12,075	
13	Near Dumbuluwewa Pond	Repairs to drainage pipe	Length 6' ft	HP dia. 600mm	6 ft	4,200	Skilled	2 days	550	2,800 700 350	
				Concrete	2 cu		16,400	Labors	16 days		2,800
				Earth works	2 cu			Labors	4 days		700
				Metal	1 cu		2,600	Labors	2 days		350
14	Near No. 7 Homestead (upland)	Construction of a side wall with steps and a structure	L 50' ft, W 1' ft, 3' ft	RRM	3 cu	9,600	Skilled	2 days	550	2,625 3,150 350	
				Earth works	8 cu			Labors	15 days		2,625
				Metal	1 cu		2,600	Labors	18 days		3,150
15	1000m Inside D canal	Side wall for both sides	L 200' ft, W 1' ft, H 3' ft	RRM	13 cu	41,600	Skilled	10 days	2,750	11,375 11,725 700	
				Earth works	30 cu			Labors	65 days		11,375
				Metal	2 cu		5,200	Labors	67 days		11,725
16	Foot path between No. 9 & 10 upland lots	Construction of a culvert across D1 canal	L 8' ft, W 6' ft, H 4' ft	HP dia. 600mm	8 ft	5,600	Skilled	2 days	550	2,800 700 350	
				Concrete	2 cu		16,400	Labors	16 days		2,800
				Earth works	2 cu			Labors	4 days		700
				Metal	1 cu		2,600	Labors	2 days		350
17	Near 1000m	Construction of a drain pipe laying a pipe line to send out rain water	L 24' ft, W 1' ft, H 3' ft L 6' ft x 4 Nos. hume pipes	HP dia. 600mm	24 ft	16,800	Skilled	2 days	550	2,800 700 350	
				Concrete	2 cu		16,400	Labors	16 days		2,800
				Earth works	2 cu			Labors	4 days		700
				Metal	1 cu		2,600	Labors	2 days		350
18	D1 canal above FC4	Construction of bund with earth filling	L 75' ft, W 8' ft, H 2' ft	Earth works	8 cu	2,000	Labors	18 days	3,150	3,150	

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (17/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 5

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
19	FC6 between No. 46 and No. 47 paddy field	Construction of a structure to drain water	L 6' ft, W 8" inches H 4' ft	Concrete 1 cu Earth works 2 cu Metal 1 cu	8,200 2,600	Skilled 1 days Labors 8 days Labors 4 days Labors 2 days	275 1,400 700 350	1,400 700 350
20	Between FC6 - 47 & 50	Rehabilitate canal bund with earth filling - construction of a basin below 100' ft	L 300' ft, W 6' ft, H 3' ft	Earth works 40 cu Concrete 12 cu Metal 13 cu	20,000 98,400 33,800	Labors 89 days Skilled 12 days Labors 93 days Labors 29 days	15,575 3,300 16,275 5,075	15,575 16,275 5,075
21	FC6 Drain step	Construction of drain step 5' ft below the present area		Concrete 1 cu Earth works 2 cu Metal 1 cu	8,200 2,600	Skilled 1 days Labors 8 days Labors 4 days Labors 2 days	275 1,400 700 350	1,400 700 350
22	FC 2/5 canal below lot No. 290 (paddy)	Drain pipe to drain rain water	L 24' ft, wall on both sides W 2'ft H 3' ft	HP dia. 600mm 24 ft Concrete 2 cu Earth works 2 cu Metal 1 cu	16,800 16,400 2,600	Skilled 2 days Labors 16 days Labors 4 days Labors 2 days	550 2,800 700 350	2,800 700 350
23	Culvert below 9 1/4 post (main canal)	Stepped trench to prevent rain water coming in	L 15' ft, W 1' ft - slope of 3 steps to canal lengthing the basin of culvert by 2 feet	Included in rehabilitation plan of Irrigation Department of Main canal				
24	Both sides near 0 1/2 post (main canal)	Laying a pipe line deeping the canal	L 126' ft - 21 hume pipes	Included in rehabilitation plan of Irrigation Department of Main canal				
25	Beginning of canal B2	Stepped trench to prevent rain water flow - lengthening the basin by 2' ft	L 15' ft, W 1' ft - slope of 3 steps to canal	Concrete 1 cu Earth works 2 cu Metal 1 cu	8,200 2,600	Skilled 1 days Labors 8 days Labors 4 days Labors 2 days	275 1,400 700 350	1,400 700 350
26	D2 - FC1 Paddy lot	Rehabilitate bund by earth filling	L 100' ft, W 3' ft	Earth works 10 cu	2,500	Labors 22 days	3,850	3,850
27	FC 1/1 canal second drain	Lowering the step	L 1 1/2' ft W 6" inches about 9 inches	Concrete 1 cu Earth works 2 cu Metal 1 cu	8,200 2,600	Skilled 1 days Labors 8 days Labors 4 days Labors 2 days	275 1,400 700 350	1,400 700 350

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (18/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 5

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
28	Foot path between No. 71 and 72 uplands in D2 canal	Construction of a culvert with basin	L 8' ft, W 6' ft, H 4' ft, Basin length 4' ft H 2' ft	HP dia. 600mm	8 ft	5,600	Skilled	2 days	550	2,800 700 350
				Concrete	2 cu	16,400	Labors	16 days	2,800	
				Earth works	2 cu		Labors	4 days	700	
				Metal	1 cu	2,600	Labors	2 days	350	
29	Upland lots 69, 70 of B2 canal - Foot path	Construction of a culvert with basin	L 8' ft, W 6' ft, H 4' ft, Basin length 4' ft H 2' ft	HP dia. 600mm	8 ft	5,600	Skilled	2 days	550	2,800 700 350
				Concrete	2 cu	16,400	Labors	16 days	2,800	
				Earth works	2 cu		Labors	4 days	700	
				Metal	1 cu	2,600	Labors	2 days	350	
30	In the sama place (29)	Construction of a drain pipe for rain water	L 24 ft - 1' ft dia. - pipes side walls L 2' ft -W 9" inches H 3' ft	HP dia. 600mm	24 ft	16,800	Skilled	2 days	550	2,800 700 350
				Concrete	2 cu	16,400	Labors	16 days	2,800	
				Earth works	2 cu		Labors	4 days	700	
				Metal	1 cu	2,600	Labors	2 days	350	
31	D2 canal FC 1/2	Rehabilitation of canal bund with earth filling both sides about 500' ft below second drain	L 500' ft W 12' ft road side W 6'ft other side	Earth works	52 cu	13,000	Labors	115 days	20,125	20,125
32	Between FC 16 and FC 17	Augmenting the existing bund and construct a new bund	L 160 ft, W 8' ft, H 1 1/2' new bund 4' ft	Earth works	17 cu	4,250	Labors	38 days	6,650	6,650
33 and 35	FC 16 canal Paddy lot Nos. 72 & 73	Provide inlet pipes	L 12' ft, W 2' ft, H 3 1/2' ft (2 pipes)	HP dia. 6 inch	24 ft	5,040	Skilled	2 days	550	2,800 700 700
				Concrete	2 cu	16,400	Labors	16 days	2,800	
				Earth works	2 cu		Labors	4 days	700	
				Metal	2 cu	5,200	Labors	4 days	700	
34	FC 3/16 canal	Lowering the step of the drain point	L 15" inches, W 6" inches, H 3" inches	Concrete	1 cu	8,200	Skilled	1 days	275	1,400 700 350
				Earth works	2 cu		Labors	8 days	1,400	
				Earth works	2 cu		Labors	4 days	700	
				Metal	1 cu	2,600	Labors	2 days	350	
36	FC16 canal	Construction of a concrete wall in front of 7 th drain step	L 10' ft, W 1' ft, H 4' ft	Concrete	2 cu	16,400	Skilled	2 days	550	2,800 2,275 350
				Earth works	6 cu		Labors	16 days	2,800	
				Earth works	6 cu		Labors	13 days	2,275	
				Metal	1 cu	2,600	Labors	2 days	350	

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (19/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 5

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
37	Fc16 canal (Hole)	Repair the broken pipe line and construction of a basin at end of canal	L 24' ft (pipes) Basin L 20' ft, H 3' ft	HP dia. 6 inch	24 ft	5,040				
				Concrete	2 cu	16,400	Skilled	2 days	550	2,800
				Earth works	2 cu		Labors	16 days	2,800	700
				Metal	2 cu	5,200	Labors	4 days	700	700
38	FC16 canal (same as above place)	Construction of a causeway laying hume pipes for road	L 126' ft, W 10' ft, H 3' ft Hume pipes L 6' ft 2' ft dia. x 2 nos.	HP dia. 600mm	6 ft	4,200				
				Concrete	2 cu	16,400	Skilled	2 days	550	2,800
				Earth works	2 cu		Labors	16 days	2,800	700
				Metal	1 cu	2,600	Labors	4 days	700	350
							Labors	2 days	350	700
							Side wall H 4' ft , W 1' ft L 126 ft	RRM	11 cu	35,200
				Earth works	19 cu		Labors	55 days	9,625	7,350
				Metal	2 cu	5,200	Labors	42 days	7,350	700
							Labors	4 days	700	700
39	FC 1/17 canal	Construction of an inlet pipe to lot no. 53 and a level step	L 3' ft, W 9" inch, H 2 1/2' ft both sides	HP dia. 6 inch	3 ft	630				
				Concrete	1 cu	8,200	Skilled	1 days	275	1,400
				Earth works	1 cu		Labors	8 days	1,400	350
				Metal	1 cu	2,600	Labors	2 days	350	350
40	Clear to FC16 canal	Construction of a culvert	L 8' ft, W 6' ft, H 4' ft basin L 4' ft, W 1' ft, H 4' ft	HP dia. 600mm	8 ft	5,600				
				Concrete	2 cu	16,400	Skilled	2 days	550	2,800
				Earth works	2 cu		Labors	16 days	2,800	700
				Metal	1 cu	2,600	Labors	4 days	700	350
							Labors	2 days	350	350
41	FC16 from 2nd water	Reduce the depth of canal and augment the	L 400' ft, W 10' ft	Earth works	41 cu	10,250	Labors	91 days	15,925	15,925
42	D1 & D2 all field canals	Rehabilitation of all canal roads	D1 canal :	Earth works	588 cu	294,000	Labors	1305 days	228,375	228,375
			L 6739'ft, W 18' ft	Gravel	392 cu	784,000	Labors	870 days	152,250	152,250
			D1 FC all field canals :	Earth works	465 cu	232,500	Labors	1032 days	180,600	180,600
			L 7995' ft, W 12' ft	Gravel	310 cu	620,000	Labors	688 days	120,400	120,400
			D2 canal :	Earth works	716 cu	358,000	Labors	1590 days	278,250	278,250
			L 8203' ft, W 18' ft	Gravel	477 cu	954,000	Labors	1059 days	185,325	185,325
D2 FC all field canals :	Earth works	494 cu	247,000	Labors	1097 days	191,975	191,975			
			L 8500' ft, W 12' ft	Gravel	330 cu	660,000	Labors	733 days	128,275	128,275

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (20/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 5

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participatio		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
43	FC 3/16 canal	Leveling the pipe line, Re- adjust the pipes	Length 18' ft	HP dia. 6 inch	18 ft	3,780				
				Concrete	1 cu	8,200	Skilled	1 days	275	1,400
				Earth works	1 cu		Labors	8 days	1,400	350
				Metal	1 cu	2,600	Labors	2 days	350	350
44	FC 3/16 canal	Lowering the upper step of first water lowering point	Length 15" inches, W 4" inches, H 4" inches	Concrete	1 cu	8,200	Skilled	1 days	275	1,400
				Earth works	2 cu		Labors	8 days	1,400	700
				Metal	1 cu	2,600	Labors	4 days	700	700
							Labors	2 days	350	350
45	FC 6/17 canal	Construction of a culvert	L 10' ft, W 8' ft, H 2' ft	HP dia. 300mm	10 ft	3,500				
				Concrete	2 cu	16,400	Skilled	2 days	550	2,800
				Earth works	2 cu		Labors	16 days	2,800	700
				Metal	1 cu	2,600	Labors	4 days	700	350
46	Drainage canal to Rambawela (pond)	Construction of a structure to store water (To prevent wash off of canal) From every 25' ft to 75' ft	L 3' ft, W 9" inches, H 2 1/2' ft	Concrete	1 cu	8,200	Skilled	1 days	275	1,400
				Earth works	2 cu		Labors	8 days	1,400	700
				Metal	1 cu	2,600	Labors	4 days	700	350
							Labors	2 days	350	350
47	Connected with map ref no. 46 - drainage canal to above pond	- do -	- do -	Concrete	1 cu	8,200	Skilled	1 days	275	1,400
				Earth works	2 cu		Labors	8 days	1,400	700
				Metal	1 cu	2,600	Labors	4 days	700	700
							Labors	2 days	350	350
Sub-total						5,128,840		1,758,715	1,734,240	
Grand-total						6,887,555				

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (21/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Tract 6

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	FC1 to FC2	Canal is silted because for a long time silt coming with water is deposited in the bottom of canal. SuiTable TA-4 to use backhoe to remove soil	L 100m W 8' ft, Height 5' ft	Desilting 127 cu	50,800	Labors 282 days	49,350	49,350
2	Elu wewa Tank bund	At present tank bund is washed off and the bathing steps are washed out and broken. New bathing step should be built and to prevent bund washout should construct a rip-rap.	Rip-rap: 100 long and 2m wide Bathing step : 3m long and 2m wide	Rip rap 21 cu	63,000	Labors 47 days	8,225	8,225
				Concrete 3 cu	24,600	Skilled 3 days	825	
				Earth works 15 cu		Labors 23 days	4,025	4,025
				Metal 1 cu	2,600	Labors 33 days	5,775	5,775
3	FC5 main road	Must construct a road section of 150m at the end of FC 5 main road	150 meters 12 ft. width	Earth works 143 cu	71,500	Labors 317 days	55,475	55,475
				Gravel 38 cu	76,000	Labors 84 days	14,700	14,700
4	FC5, 1/5 FC road	Must construct the total length of 100m of FC5:1/5 field canal road	100 meters 12 ft. width	Earth works 95 cu	47,500	Labors 211 days	36,925	36,925
				Gravel 25 cu	50,000	Labors 56 days	9,800	9,800
5	From field 111 to Paluwa road - up to field 98	The existing FC road is only up to field 111. From there up to Field 98 there is no road and should construct a new one	125 meters 12 ft. width	Earth works 119 cu	59,500	Labors 264 days	46,200	46,200
				Gravel 32 cu	64,000	Labors 71 days	12,425	12,425
6	FC2	In FC2 must construct anicuts to provide water to field Nos. 98, 97, 95 & 117 (field inlet)	width 4' ft, height 3' ft	HP dia. 6 inch 40 ft	8,400			
				Concrete 4 cu	32,800	Skilled 4 days	1,100	
				Earth works 4 cu		Labors 31 days	5,425	5,425
				Metal 4 cu	10,400	Labors 9 days	1,575	1,575
	Sub-total				561,100		253,750	251,825
	Grand-total				814,850			

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (22/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Puranagama FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Ihalawewa Yaya	Construction of side walls of FC from anicut to paddy field	H 2ft L 50 m	RRM 7 cu Earth works 3 cu Metal 2 cu	22,400 5,200	Skilled 5 days Labors 35 days Labors 7 days Labors 4 days	1,375 6,125 1,225 700	6,125 1,225 700	
2	Ihalawewa anicut	Fixing doors to 4 gates of anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
3	Ihalagama Yaya spill canal	Filling the spill canal bund. Earth and gravel	L 50 m	Earth works 17 cu	4,250	Labors 38 days	6,650	6,650	
4	Ihalawewa yaya	Construction of water blockings to field canal	L 50 m	Earth works 17 cu	4,250	Labors 38 days	6,650	6,650	
5	Gedaragawela anicut	Fixing 4 gates of anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
6	Near above anicut	Construction a 40 ft side wall from anicut to paddy area	H 2ft L 40 ft	RRM 2 cu Earth works 6 cu Metal 1 cu	6,400 2,600	Skilled 2 days Labors 10 days Labors 13 days Labors 2 days	550 1,750 2,275 350	1,750 2,275 350	
7	Talakola yaya	Fixing 4 gates of anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
8	Tibutugolla	Provide a 9" inch dia. Pipe to anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
9	Talakolayaya lower anicut	Re-construction of this anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
10	Alakela anicut	Fixing 2 gates to anicuts		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
11	Gedawagawela yaya	Construction of a causeway across sluice canal		Concrete 5 cu Reinforced bar 708 kg Earth works 30 cu Metal 2 cu	41,000 42,450 5,200	Skilled 5 days Labors 39 days Labors 67 days Labors 4 days	1,375 6,825 11,725 700	6,825 11,725 700	
12	Weeradambana anicut	Fixing 5 gate doors of anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
13	Weeradambana anicut	Lifting the spill openings		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
14	Weeradambana yaya	Provide water blocks for FC within yaya	L 50 m	Earth works 17 cu	4,250	Labors 38 days	6,650	6,650	
15	Ihalawela yaya	Construction of a causeway across spill canal		Concrete 5 cu Reinforced bar 708 kg Earth works 30 cu Metal 2 cu	41,000 42,450 5,200	Skilled 5 days Labors 39 days Labors 67 days Labors 4 days	1,375 6,825 11,725 700	6,825 11,725 700	
16	Medawela anicut	Fixing 4 anicut doors		Included in rehabilitation plan of Irrigation Department of Anicut improvement					
17	Medawela yaya	Re-construction of anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement					

Table TA-4 Rehabilitation Plan & Cost Estimation for Palukadawela Scheme Proposed by Farmers' Organization (23/23)

Name of Scheme : Palukadawela

Name of FO, etc. : Puranagama FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation		
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
18	Medawela yaya	Provision of water blocks to field canal	L 50 m	Included in rehabilitation plan of Irrigation Department of Anicut improvement							
19	Malgahakotuwa anicut	Fixing 2 gates to anicuts		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
20	Malgahakotuwa yaya	Construction of anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
21	Kotuwela anicut	Fixing 4 gates to anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
22	Halmillakotuwa	Fixing 2 gates to anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
23	Halmillakotuwa	Construction of earth bund of 5' ft for Halmiyakotuwa canal	L 50 m	Earth works	17 cu	4,250	Labors	38 days	6,650	6,650	
24	Palugaha Kotuwa	Fixing 4 anicut gates									
25	Palugaha Kotuwa	Construction of side walls for canal from anicut length 400 meter	H 2ft L 400 m	RRM	59 cu	188,800	Skilled	44 days	12,100	51,625	
				Earth works	200 cu		Labors	295 days	51,625		
				Metal	13 cu	33,800	Labors	444 days	77,700		77,700
26	Palugaha Kotuwa	Construction of a causeway below anicut		Concrete	5 cu	41,000	Skilled	5 days	1,375	6,825	
				Reinforced bar	708 kg	42,450	Labors	39 days	6,825		
				Earth works	30 cu		Labors	67 days	11,725		11,725
				Metal	2 cu	5,200	Labors	4 days	700		700
27	Palugaha Kotuwa	Rehabilitation of drainage canal from Palugahakotuwa	L 200 m	Earth works	106 cu		Labors	235 days	41,125	41,125	
28	Palaha Wela	Construction of Pahala Wela Kubunggahe anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
29	Karuwalagaha anicut	Fixing 4 anicut gates		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
30	Suranwela anicut	Fixing 2 anicut gates		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
31	Suranwela anicut	Provide a spill towards weehana		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
32	New anicut	Fixing 2 anicut gates		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
33	New anicut	Provide a spill to anicut		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
34	Wagale Amuna (anicut)	Fixing 2 anicut gates		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
35	Weehana yaya	Bridge across canal		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
36	Weehana Anicut	Fixing 5 anicut gates		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
37	Hooniyan Pathkola yaya	Construction of a new anicut and a bridge		Included in rehabilitation plan of Irrigation Department of Anicut improvement							
	Sub-total					542,150			290,450	272,300	
	Grand-total					832,600					

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (1/11)

Name of Scheme : Periyakulama

Place : Tank

Portion	Description of Rehabilitation and Improvement Plan		Estimated cost required (Rs.)	Remarks
Tank Bund	1	Earth work in tank bund where necessary	2,784,000.00	
	2	Strip turfing to new earth work along tank bund	400,000.00	
	3	Gravelling along the tank bund	600,000.00	
	4	Rip - rap to U/S tank bund slope where necessary	900,000.00	
Sluices	1	Removing and replacement of new 03 Nos. tower sluice	600,000.00	
Spillway	1	Proposed spill tail canal RB1 & RB2 & LB - 2 Nos. Canal	2,000,000.00	
Others	1	Improvements to 2 Nos. of approaches from village to tank bund widening existing box culvert at LB	1,400,000.00	
	2	Earth work reduction for approaches to RB & LB tower sluice.	800,000.00	
		Total=	9,484,000.00	

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (2/11)

Name of Scheme : Periyakulama

Name of Canal : Centre Low Level M-Canal & D-Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
1	0.0m.	330m.	330.000	0.45	1.23	1.15	0.1:01.5	Const. of R/Wall is under structure's page	
2	330m.	730m.	400.000	0.3	1.23	0.92	0.1:01.5	Improvement. to main canal E/W & turfing	600,000.00
3	730m.	1250m.	520.000	0.15	0.76	0.64	0.1:01.5	- do -	700,000.00
4	0.0m.	330m.	330.000	0.45	1.23	1.15	0.1:01.5	Proposed road way including gravelling	1,200,000.00
5	0.0m.	2000m	2,000.000	0.15	0.76	0.64	0.1:01.5	Improvement. to D - canal at 18.5m main canal	900,000.00
6	0.0m.	350m.	350.000	0.12	0.76	0.64	0.1:01.5	Improvement. to D - canal at main canal - 600m	500,000.00
7	0.0m.	1.200m.	1,200.000	0.06	0.76	0.64	0.1:01.5	Improvement. to D - canal at 1.250m in main canal	700,000.00
									4,600,000.00

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (3/11)

Name of Scheme : Periyakulama

Name of Canal : Centre Low Level M-Canal & D-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
	LL M-Canal											
1	3.8 m	Proposed T.O.	6" dia. - 1 no	Yes	-	-	x	-	-	x	(Feeds 3.0acs.)	30,000.00
2	40.0 m	Replacement of farm crossing	Box culvert	Yes	-	-	-	-	-	-	Existing poor condition	26,000.00
3	85.0 m	Replacement of box culvert	Box culvert	Yes	-	-	-	-	-	-	Existing poor condition	26,000.00
4	129.0 m	Turnout (proposed)	01 no. -9" dia.	Yes	-	-	x	-	-	x	Feeds 20.0 acs.	30,000.00
5	170.0 m	Regulator (proposed)	4'-0" x 4'-0"	Yes	-	-	x	-	-	x	Wooden gated	70,000.00
6	246.0 m	Turnout (proposed)	01 no. -18" dia.	Yes	-	-	x	-	-	x	Feeds 150.0 acs.	40,000.00
7	300.0 m	Box culvert (proposed)	4'-0" x 4'-0"	Yes	-	-	-	-	-	-	Road to field	30,000.00
8	430.0 m	Box culvert (proposed)	4'-0" x 4'-0"	Yes	-	-	-	-	-	-	Road to temple	30,000.00
9	480.0 m	Turnout (proposed)	01 no. -9" dia.	Yes	-	-	x	-	-	x	Feeds 15.0 acs.	30,000.00
10	500.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 4.0 acs.	26,000.00
11	600.0 m	Turnout (proposed)	01 no. -18" dia.	Yes	-	-	x	-	-	x	Feeds 125.0 acs.	40,000.00
12	750.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 6.0 acs.	26,000.00
13	800.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 6.0 acs.	26,000.00
14	810.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 8.0 acs.	26,000.00
15	840.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 9.0 acs.	26,000.00
16	1,000.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 6.0 acs.	26,000.00

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (4/11)

Name of Scheme : Periyakulama

Name of Canal : Centre Low Level M-Canal & D-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
17	1,070.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 5.0 acs.	26,000.00
18	1,100.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 5.0 acs.	26,000.00
19	1,150.0 m	Turnout (proposed)	01 no. -9" dia.	Yes	-	-	x	-	-	x	Feeds 25.0 acs.	30,000.00
20	1,200.0 m	Turnout (proposed)	01 no. -6" dia.	Yes	-	-	x	-	-	x	Feeds 4.0 acs.	26,000.00
21	1,350.0 m	Turnout (proposed)	01 no. -9" dia.	Yes	-	-	x	-	-	x	Feeds 25.0 acs.	30,000.00
22	1,700.0 m	Turnout (proposed)	01 no. -9" dia.	Yes	-	-	x	-	-	x	Feeds 46.0 acs. (left)	30,000.00
23	1,600.0 m	Farm crossing (proposed)	H.P. 2' dia.	Yes	-	-	-	-	-	-	Farm crossing culvert	25,000.00
24	1,000.0 m	Farm crossing culvert	H.P. 2' dia.	Yes	-	-	-	-	-	-	Culvert	25,000.00
25	0 - 700.0 m	Retaining wall		Yes	-	-	-	-	-	-	Retaining wall (700m)	1,500,000.00
	LL D-Canal 1(at 246m)											
1	10.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00
2	110.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00
3	200.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00
4	300.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00
5	400.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00
6	500.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00
7	600.0 m	Farm turnout	6" dia.	Yes			x			x		6,000.00

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (5/11)

Name of Scheme : Periyakulama

Name of Canal : Centre Low Level M-Canal & D-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
8	700.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
9	800.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
10	900.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
11	1,000.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
12	1,100.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
13	1,200.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
14	1,300.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
15	1,400.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
16	1,500.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
17	1,600.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
18	1,700.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
19	1,800.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
20	1,900.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
21	500.0 m	Tractor crossing	2" dia 16' long	Yes			x			x	30,000.00	
22	900.0 m	Tractor crossing	2" dia 16' long	Yes			x			x	30,000.00	
23	1,400.0 m	Tractor crossing	2" dia 16' long	Yes			x			x	30,000.00	
24	1,900.0 m	Tractor crossing	2" dia 16' long	Yes			x			x	30,000.00	

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (6/11)

Name of Scheme : Periyakulama

Name of Canal : Centre Low Level M-Canal & D-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
	LL D-Canal 2 (at 600m)											
1	10.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
2	100.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
3	200.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
4	300.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
5	400.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
6	500.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
7	600.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
8	700.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
9	800.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
10	900.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
11	1,000.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
12	1,100.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
13	700.0 m	Tractor crossing	2' dia. H.P. 16'-0"	Yes			x			x	30,000.00	
14	1,000.0 m	Tractor crossing	2' dia. H.P. 16'-0"	Yes			x			x	30,000.00	

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (7/11)

Name of Scheme : Periyakulama

Name of Canal : Centre Low Level M-Canal & D-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replace-ment	no need	Minor repair	Replace-ment		
	LL D-Canal 3 (at 1,700m)											
1	10.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
2	100.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
3	200.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
4	300.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
5	400.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
6	500.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
7	600.0 m	Farm turnout	6" dia.	Yes			x			x	6,000.00	
8	200.0 m	Tractor crossing	2' dia. H.P. 16'-0"	Yes			x			x	30,000.00	
9	400.0 m	Tractor crossing	2' dia. H.P. 16'-0"	Yes			x			x	30,000.00	
											2,700,000.00	

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (9/11)

Name of Scheme : Periyakulama

Name of Canal : LB High Level F-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan							Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others				Description/ Other works
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
1	600.000	Farm Turnout	6" dia	Yes			x			x	F.T.O 1.0 No. - 5.0 Acs.	6,000.00
2	700.000	Farm Turnout	6" dia	Yes			x			x		6,000.00
3	800.000	Farm Turnout	6" dia	Yes			x			x		6,000.00
4	900.000	Farm Turnout	6" dia	Yes			x			x		6,000.00
5	1000.000	Farm Turnout	6" dia	Yes			x			x		6,000.00
6	1100.000	Farm Turnout	6" dia	Yes			x			x		6,000.00
7	700.000	Tractor crossing	2' dia. H.P. - 16' - 0"	Yes			x			x		30,000.00
8	1100.000	Tractor crossing	2' dia. H.P. - 16' - 0"	Yes			x			x		30,000.00
9		Over crossing	2' dia. - 16' - 0"	Yes			x			x		50,000.00
												146,000.00

Table TA-5 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Irrigation Department (11/11)

Name of Scheme : Periyakulama

Name of Canal : RB High Level F-Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ Other works	
					no need	Minor repair	Replacement	no need	Minor repair	Replacement		
1	3.000	Farm Turnout	6" dia	Yes			x			x	F.T.O. for 5.0Acs.	6,000.00
2	4.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
3	5.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
4	6.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
5	7.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
6	8.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
7	9.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
8	10.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
9	11.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
10	12.000	Farm Turnout	6" dia	Yes			x			x	- do -	6,000.00
11	5.000	Over crossing	2" dia x 20'	Yes			x			x	FC 2' dia x 20'	50,000.00
12	6.000	Tractor crossing	2" dia x 16'0	Yes			x			x	T/C	30,000.00
13	7.000	Tractor crossing	- do -	Yes			x			x	- do -	30,000.00
												170,000.00

Table TA-6 Rehabilitation Plan & Cost Estimation for Periyakulama Scheme Proposed by Farmers' Organization

Name of Scheme : Periyakulama

Name of FO, etc. : Ekamuthu FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	Periyakulama Tank	De-silting and remove soil since the tank is heavily silted	About 200 acres	Included in rehabilitation plan of Irrigation Department of Tank rehabilitation				
2	Tank bund	Augment the tank bund, widen the top width and constriction of a tarred road	Length of bund 1 mile	Included in rehabilitation plan of Irrigation Department of Tank rehabilitation				
3	3 sluice	Remove old sluices and replace with new hume pipes and doors	Widening the sluices as follows: Low level sluice - 12" East high level sluice - 9" West high level sluice - 6"	Included in rehabilitation plan of Irrigation Department of Tank rehabilitation				
4	Canal System	Rehabilitation of grown and silted canal system, construction of concrete lined canal system with necessary structures	Concrete lining 6 km of canal system with structures	Included in rehabilitation plan of Irrigation Department of M, D & F canal improvement				
5	Anicuts	Instead of old anicuts (earth) construction of new anicuts.	Construction of concrete walls for all 6 anicuts Total length 150' ft Width 2' ft Height 5' ft	Included in rehabilitation plan of Irrigation Department of M, D & F canal improvement				
	Sub-total				0		0	0
	Grand-total				0			

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (1/7)

Name of Scheme : Maha Nanneriya

Place : Tank & Anicut

Portion	Description of Rehabilitation and Improvement Plan		Estimated cost required (Rs.)	Remarks
Tank Bund	1	E/W in forming bund at low sections, scours & washways	150,000.00	
	2	Gravelling tank Bund Road	80,000.00	
	3	Improvement to Rip - rap protection	750,000.00	
	4	Improvement to Conc. Slap protection	250,000.00	
	5	provision of toe - filter	200,000.00	
Sluices	1	Improvements to tower and approach of the sluice & fixing gauge post	200,000.00	
	2	Improvements to d/s transition structure	75,000.00	
	3	provision of measuring device	50,000.00	
Spillway	1	Provision of u/s cut - off wall	100,000.00	
	2	Improvements to d/s water cushion	250,000.00	
	3	Improvements to abutments	75,000.00	
Others	1	Improvements to Elakiri Hamige Amuna	1,000,000.00	
	2	Improvements to Karandagaha Amuna	700,000.00	
	3	Improvements to Pansal Amuna	200,000.00	
	4	Improvements to Maha Akkarae Amuna	500,000.00	
	5	Improvements to Divul Akkarae Amuna	700,000.00	
	6	Improvements to Bellanvila Amuna	400,000.00	
	7	Improvements to Valie Amuna	100,000.00	
Total			5,780,000.00	

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (2/7)

Name of Scheme : Maha Nanneriya

Name of Canal : RB Main Canal, Earth Works

No.	From	To	Length (m)	Design Discharge (m ³ /s)	Cross Section			Rehabilitation/Improvement Plan	
					Bottom (m)	Height (m)	Slope (1:n)	Description of the plan	Estimated cost required (Rs.)
1	0.000	52.000	52.000	0.336	1.2	0.6	1.25	Desilting, E/W in forming canal bund & turfing	10,000.00
2	52.000	277	225.000	0.308	1.1	0.75	1.5	Desilting, E/W in forming canal bund & turfing	30,000.00
3	277.000	414	137.000	0.308	1.1	0.75	1.25	Desilting, E/W in forming canal bund & turfing	20,000.00
4	414.000	1042	628.000	0.28	1	0.6	1	Desilting, E/W in forming canal bund and turfing & Graveling road	200,000.00
5	1042.000	1505	463.000	0.252	1	0.5	1	Desilting, E/W in forming canal bund and turfing & Graveling road	130,000.00
6	1505.000	2081	576.000	0.252	0.75	0.5	1	Desilting, E/W in forming canal bund and turfing & Graveling road	180,000.00
7	2081.000	2361	280.000	0.252	0.6	0.5	1	Desilting, E/W in forming canal bund and turfing & Graveling road	100,000.00
8	2361.000	2881	520.000	0.168	0.6	0.4	1	Desilting, E/W in forming canal bund and turfing & Graveling road	200,000.00
9	2881.000	3134	253.000	0.14	0.45	0.4	1	Desilting, E/W in forming canal bund and turfing & Graveling road	80,000.00
10	3134.000	3550	416.000	0.112	0.3	0.3	1	Desilting, E/W in forming canal bund and turfing & Graveling road	100,000.00
									1,050,000.00

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (3/7)

Name of Scheme : Maha Nanneriya

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works		Other
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
1	0	D/S Str. Of Sluice (E)	-	Yes	-			-		Yes	No	125,000.00	
2	0+012	Canal Lining (N)	-	Yes						NP	NP - RRM Rt. walls & conc. Base	25,000.00	
3	0+020	Measuring Device (N)	-	Yes						NP	NP - Gauge Post	20,000.00	
4	0+052	TOS to FC 1 (E) & (I)	1/225 mm dia	Yes	Yes				Yes		NP - Replace H/pipe, u/s & d/s RRM Protection	15,000.00	
5	0+053	Canal Spill (LB) - (E)		Yes					Yes		No	5,000.00	
6	0+055	Dr. Inlet Struc. (plank bays) (E) & (I)		Yes			Yes	Yes			No	5,000.00	
7	0+065	Retaining Wall - 15m (N)	2/0.75 x 0.6	Yes						NP	NP - RRM Rt. Wall.	40,000.00	
8	0+080	Gated Regulator (N)		Yes			NP			NP	NP - u/s & d/s RRM Protection	90,000.00	
9	0+107	Retaining Wall - 12m (N)	1/1.0 x 0.75	Yes						NP	NP - RRM Rt. Wall.	30,000.00	
10	0+259	Box Culvert - (1.0x 0.75) (N)		Yes						NP	NP - u/s & d/s RRM Protection	80,000.00	
11	0+261	Rt. Walls on both sides - 20m (N)		Yes						NP	NP - RRM Rt. Wall.	100,000.00	
12	0+262	Dr. Inlet Structure (N)		Yes			NP			NP	NP - Canal Lining	10,000.00	
13	0+277	H/Pipe Culvert (600mm dia) (E) & (I)		Yes					Yes	NP	NP - u/s & d/s RRM Protection	15,000.00	
14	0+279	Rt. Walls on both sides - 5m (N)		Yes						NP	NP - RRM Rt. Wall.	25,000.00	
14'	0+332	TOS to FC 2 (E) & (I)	1/150 mm dia	Yes			Yes		Yes	NP	NP - Replace H/pipe, u/s & d/s RRM Protection	25,000.00	
15	0+332	Retaining Wall - 8m (N)		Yes						NP	NP - RRM Rt. Wall.	20,000.00	
16	0+387	TOS to FC 3 (E) & (I)		Yes						NP	NP - u/s & d/s RRM Protection	20,000.00	

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (4/7)

Name of Scheme : Maha Nanneriya

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan									
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works	Other	Estimated cost required (Rs.)
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
17	0+414	Gated Regulator (E), (D) & (N)	1/150 mm dia	Yes			NP		Yes	NP	NP - u/s & d/s RRM Protection	90,000.00	
18	0+467	Box Culvert - (1.0x 0.75) (N)	1/1.0 x 0.75	Yes						NP	NP - u/s & d/s RRM Protection	80,000.00	
19	0+468	Dr. Inlet Structure (N)		Yes						NP	NP - Canal Lining	10,000.00	
20	0+860	Box Culvert - (1.0x 0.75) - (private) (E)		Yes			NP				No		
21	0+950	Box Culvert (private) (E)		No				Yes			No		
22	1+025	Retaining Wall at LB (N) - 10m		Yes							NP - RRM Rt wall	25,000.00	
23	1+035	Box Culvert (private) (E)		No				Yes			No		
24	1+040	TOS to FC 4 (E) & (I)	1/225 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection	20,000.00	
25	1+042	Gated Regulator (N)	1/1.0 x 0.75	Yes			NP			NP	NP - u/s & d/s RRM Protection	90,000.00	
26	1+050	H/Pipe Culvert (600mm dia) (E) & (I)	-	Yes						NP	NP - u/s & d/s RRM Protection	10,000.00	
27	1+155	Dr. Inlet Structure (N)		Yes						NP	NP - Canal Lining	10,000.00	
28	1+165	FTO Structure 100mm dia (E) & (I)		Yes			NP			NP	NP - Controlling Arrangements	8,000.00	
29	1+230	Dr. Inlet Structure (N)		Yes						NP	NP - Canal Lining	10,000.00	
30	1+235	Canal Spill (E)		Yes					Yes		No	5,000.00	
31	1+240	Box Culvert - (1.0x 0.75) (N)		Yes						NP	NP - u/s & d/s RRM Protection	10,000.00	
32	1+465	Box Culvert - (1.0x 0.75) (N)		Yes						NP	NP - u/s & d/s RRM Protection	10,000.00	
33	1+480	H/Pipe Culvert (600mm dia) (E) & (N)		Yes						NP	NP - u/s & d/s RRM Protection	60,000.00	

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (5/7)

Name of Scheme : Maha Nanneriya

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/ works		Other
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
34	1+490	Retaining Wall at LB- 10m (N)		Yes						NP	NP - RRM Rt wall	25,000.00	
35	1+490	Dr. Inlet Structure (N)		Yes						NP	NP - Canal Lining	10,000.00	
36	1+503	TOS to FC 5 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	20,000.00	
37	1+505	Gated Regulator (N)	-	Yes			NP			NP	NP - u/s & d/s RRM Protection	90,000.00	
38	1+540	Canal spill cum causeway (E) & (I)		Yes					Yes		No	25,000.00	
39	1+645	Box Culvert - (1.0x 0.75) - (private)		No				Yes			No		
40	1+720	Canal spill cum causeway (E), (D) & (N)		Yes						Yes	No	200,000.00	
41	1+765	H/Pipe Culvert (600mm dia) (E) & (N)		Yes						NP	NP - u/s & d/s RRM Protection	60,000.00	
42	1+770	FTO Structure 2/100mm dia (E) & (I)		Yes			NP			NP	NP - Controlling Arrangements	8,000.00	
43	1+816	TOS to FC 6 (E) & (I)	1/150 mm dia	Yes	Yes				Yes		NP - u/s & d/s RRM Protection	20,000.00	
44	1+890	Canal spill cum causeway (E) & (I)		No					Yes		No	25,000.00	
45	1+900	Box Culvert - (1.0x 0.75) - (private)		Yes				Yes			No		
46	2+080	TOS to FC 7 (E) & (I)		Yes	Yes				Yes		NP - u/s & d/s RRM Protection	20,000.00	
47	2+081	Gated Regulator (N)	1/1.0 x 0.75	Yes			NP			NP	NP - u/s & d/s RRM Protection	90,000.00	
48	2+212	FTO Structure 100mm dia (E) & (I)		Yes			NP			NP	NP - Controlling Arrangements	8,000.00	
49	2+321	FTO Structure 101mm dia (E) & (I)		Yes			NP			NP	NP - Controlling Arrangements	8,000.00	
50	2+330	FTO Structure 102mm dia (E) & (I)		Yes			NP			NP	NP - Controlling Arrangements	8,000.00	

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (6/7)

Name of Scheme : Maha Nanneriya

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works		Other
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
51	2+360	TOS to FC 8 (E) & (I)	1/150 mm dia	Yes	Yes						NP - u/s & d/s RRM Protection	20,000.00	
52	2+361	Gated Regulator (N)	1/0.75 x 0.75	Yes			NP			NP	NP - u/s & d/s RRM Protection	75,000.00	
53	2+460	Canal spill cum causeway (E) & (I)		Yes						Yes	NP - Replacement of deck slab	40,000.00	
54	2+530	H/Pipe Culvert (450mm dia) (E)		Yes						NP	NP - u/s & d/s RRM Protection	10,000.00	
55	2+600	H/Pipe Culvert (450mm dia) (E)		Yes						NP	NP - u/s & d/s RRM Protection	10,000.00	
56	2+610	TOS to FC 9 (E) & (I)	1/225 mm dia	Yes			Yes			Yes	NP - u/s & d/s RRM Protection	40,000.00	
57	2+710	TOS to FC 10 (E) & (I)	1/150 mm dia	Yes			Yes				NP - u/s & d/s RRM Protection	20,000.00	
58	2+729	Drop Structure H=1.0m (E), (D) & (N)		Yes						NP	NP - u/s & d/s RRM Protection	40,000.00	
59	2+880	TOS to FC 11 (E) & (I)	1/300 mm dia	Yes			NP			NP	NP - u/s & d/s RRM Protection	45,000.00	
60	2+881	Gated Regulator (N)	1/0.75 x 0.75	Yes			NP			NP	NP - u/s & d/s RRM Protection	75,000.00	
61	2+881	Drop Structure H=1.0m (E), (D) & (N)		Yes						NP	NP - u/s & d/s RRM Protection	40,000.00	
62	2+941	Drop Structure (Rt.), H=1.0m		No			NP			No	NP - u/s & d/s RRM Protection	10,000.00	
63	2+943	FTO Structure (75mm dia) (E) & (I)		Yes			Yes			NP	NP - Controlling Arrangements	8,000.00	
64	3+006	TOS to FC 12	1/225 mm dia	Yes						Yes	NP - u/s & d/s RRM Protection	40,000.00	
65	3+008	Drop Structure H=1.0m (E)		No							No		
66	3+010	H/Pipe Culvert (450mm dia) (E) & (I)		Yes						No	NP - u/s & d/s RRM Protection	10,000.00	
67	3+133	TOS to FC 13	1/225 mm dia	Yes			Yes			Yes	NP - u/s & d/s RRM Protection	40,000.00	

Table TA-7 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Irrigation Department (7/7)

Name of Scheme : Maha Nanneriya

Name of Canal : RB Main Canal, Structure

No.	Chainage (km)	Name of structure	Nos. of gates and their sizes	Rehabilitation/Improvement Plan								Estimated cost required (Rs.)	
				Need (Yes or No)	Gates			Concrete Works/Others			Description/works		Other
					no need	Minor repair	Replacement	no need	Minor repair	Replacement			
68		Gated Regulator (N)	1/0.75 x 0.75	Yes			NP			NP	NP - u/s & d/s RRM Protection	75,000.00	
69	3+135	Drop Structure H=1.0m (E) & (I)		Yes							NP - u/s & d/s RRM Protection	10,000.00	
70	3+138	H/Pipe Culvert (450mm dia) (E) & (I)		Yes							NP - u/s & d/s RRM Protection	10,000.00	
71	3+205	Drop Structure H=1.0m		Yes							NP - u/s & d/s RRM Protection	10,000.00	
72	3+280	TOS to FC 14 (E) & (I)	1/150 mm dia	Yes			Yes				NP - u/s & d/s RRM Protection	20,000.00	
73	3+281	Drop Structure (Rt.), H=1.0m		No						No	NP - d/s RRM Protection	5,000.00	
74	3+400	Drop Structure H=1.0m		Yes							NP - u/s & d/s RRM Protection	15,000.00	
75	3+490	Drainage Under Crossing		Yes						NP	NP - Canal Lining	80,000.00	
												2,453,000.00	

TOS : Turnout structure

NP : New proposal

(D) : To be demolish

FTO : Farm turnout

Dr. : Drainage

(I) : To be improved

RRM : Random rubble masonry

(N) : New

dia : Diameter

Rt. : Retaining

(E) : Existing

Table TA-8 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Farmers' Organization (1/4)

Name of Scheme : Maha Nanneriya

Name of FO, etc. : Ekabadda FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	Tank Bund	Rip-rap rehabilitation of tank bund from slabbed section to sluice side Earth filling Gravel filling		Included in rehabilitation plan of Irrigation Department of tank improvement				
2	Tank Spill	Remove old rip-rap concrete slabs and earthfill gravel and concrete slabs		Included in rehabilitation plan of Irrigation Department of tank improvement				
3	Structure of back of sluice	Remove the old structure and construct a new one with a concrete foundation	L 10' ft x 2 sides L 20' ft W 10' ft x 2 sides - W 16' ft L of bottom 10' ft, W 4' ft	Included in rehabilitation plan of Irrigation Department of tank improvement				
3	Irrigation canal	De-silt totally	L 2 3/4 miles W 2 1/2' ft	Included in rehabilitation plan of Irrigation Department of main canal improvement				
4	Weli amuna (Earth anicut)	Remove old anicut and re-construct with hume pipes	L 18' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement				
5.1	Earth anicut	Fixing doors to water control bund, fix adjustable doors with concrete posts	L 4' ft x L sections Height - 4' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement				
5.2	Earth anicut	Filling earth to anicut wall	L 100' ft, W 2 1/2' ft H 1' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement				
5.3	Main canal	Fixing a new control door. Adjustable with concrete post as in 5.1	L 4' ft, H 4' ft	Included in rehabilitation plan of Irrigation Department of main canal improvement				
6	Main canal (1st field canal)	Fixing a new door with pipe retaining 2 nd door	L 12' ft, W 2' ft, H 4' ft	Included in rehabilitation plan of Irrigation Department of main canal improvement				
7.1	Main canal 1-spill	Construction of a 3' ft concrete wall over existing spill and a concrete causeway	L 20' ft, W 1' ft, H 3' ft	Included in rehabilitation plan of Irrigation Department of main canal improvement				
7.2	Main canal 2,3,4,5 Spill drains & causeways	Raising spill drains by 3" inches and concreting causeways	L 20' ft, W 1' ft, H 3' ft	Included in rehabilitation plan of Irrigation Department of main canal improvement				
7.3	Main canals	Construction of a new spill drain	L 15' ft, W 1' ft, H 2' ft	Included in rehabilitation plan of Irrigation Department of main canal improvement				

Table TA-8 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Farmers' Organization (2/4)

Name of Scheme : Maha Nanneriya

Name of FO, etc. : Ekabadda FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
8	Main canal culvert No. 3	New construction with side walls	L 18' ft with 3' ft dia x s hume pipes, construct a new culvert	Included in rehabilitation plan of Irrigation Department of main canal improvement				
	Main canal gate No. 4	Construction of a concrete wall to fix a control gate		Included in rehabilitation plan of Irrigation Department of main canal improvement				
9	Between door 5 & 6	Construction of a new gate		Included in rehabilitation plan of Irrigation Department of main canal improvement				
10	Between door 6 & 7	Fixing a new door & hume pipes (Turnout with gates)		Included in rehabilitation plan of Irrigation Department of main canal improvement				
11	Gate No. 8	Fixing the door and construction of concrete post		Included in rehabilitation plan of Irrigation Department of main canal improvement				
	FC 10	Fixing a new gate to FC 10		Included in rehabilitation plan of Irrigation Department of field canal improvement				
	FC 11	Fixing a new gate to FC 11		Included in rehabilitation plan of Irrigation Department of field canal improvement				
	Sluice No. 5	Replacing sluice No. 5		Included in rehabilitation plan of Irrigation Department of field canal improvement				
	Sluice No. 6	Replacing sluice No. 6		Included in rehabilitation plan of Irrigation Department of field canal improvement				
	Sluice No. 8	Replacing sluice No. 8		Included in rehabilitation plan of Irrigation Department of field canal improvement				
	Ihalagama Road	Earth and gravel filling	L 200' ft, W 10' ft	Earth works 10 cu	5,000	Labors 22 days	3,850	3,850
				Gravel 6 cu	12,000	Labors 13 days	2,275	2,275
10.2	Culvert to Road	New construction	L 10' ft, W 4' ft, H 2' 10"	HP dia. 600mm 20 ft	14,000			
				Concrete 2 cu	16,400	Skilled 2 days	550	
						Labors 16 days	2,800	2,800
				Earth works 10 cu		Labors 22 days	3,850	3,850
				Metal 1 cu	2,600	Labors 2 days	350	350

Table TA-8 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Farmers' Organization (3/4)

Name of Scheme : Maha Nanneriya

Name of FO, etc. : Ekabadda FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation			
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)			
10.3	Road construction	Earth and gravel filling with side drains	L 200' ft, W 10 ft	Earth works	10 cu	5,000	Labors	22 days	3,850	3,850	
			Drain L 200 ft	Gravel	6 cu	12,000	Labors	13 days	2,275	2,275	
				Earth works	30 cu		Labors	67 days	11,725	11,725	
10.4	Road construction	Earth and gravel filling with side drains	L 500' ft, W 12 ft	Earth works	29 cu	14,500	Labors	64 days	11,200	11,200	
			Drain L 500 ft	Gravel	19 cu	38,000	Labors	42 days	7,350	7,350	
				Earth works	76 cu		Labors	169 days	29,575	29,575	
10.5	Road construction	Earth and gravel filling with side drains	L 700' ft, W 18' ft	Earth works	61 cu	30,500	Labors	135 days	23,625	23,625	
			Drain L 700 ft	Gravel	41 cu	82,000	Labors	91 days	15,925	15,925	
				Earth works	107 cu		Labors	238 days	41,650	41,650	
10.6	Road construction	Earth and gravel filling with side drains	L 200' ft, W 10 ft	Earth works	10 cu	5,000	Labors	22 days	3,850	3,850	
			Drain L 200 ft	Gravel	6 cu	12,000	Labors	13 days	2,275	2,275	
				Earth works	30 cu		Labors	67 days	11,725	11,725	
10.7	Road construction	Earth and gravel filling with side drains	L 500' ft, W 10' ft	Earth works	24 cu	12,000	Labors	53 days	9,275	9,275	
			Drain L 500 ft	Gravel	16 cu	32,000	Labors	36 days	6,300	6,300	
				Earth works	76 cu		Labors	169 days	29,575	29,575	
	Road to maha akkaraya from Wannu Amunukole Junction	Filling pot holes, construction of causeways with hume pipes, filling earth	Length 2 miles	Earth works	339 cu	169,500	Labors	753 days	131,775	131,775	
				Gravel	170 cu	340,000	Labors	377 days	65,975	65,975	
			Culvert	HP dia. 600mm	20 ft	14,000					
				Concrete	2 cu	16,400	Skilled	2 days	550		
							Labors	16 days	2,800	2,800	
				Earth works	10 cu		Labors	22 days	3,850	3,850	
			Metal	1 cu	2,600	Labors	2 days	350	350		
	Pansal Amuna (Anicut)	Fixing hume pipes to provide water to Mahawela	3" inches dia. 2 pipes	Included in rehabilitation plan of Irrigation Department of anicut improvement							
12	Karandagaha Amuna (Anicut)	Construction of a spill	L 20' ft, W 2' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement							
13	Elakirihami's Amuna	Construction of a spill and a spill wall	L 30' ft, H 6' ft L 348' ft, W 4' ft, H 6" inches	Included in rehabilitation plan of Irrigation Department of anicut improvement							

Table TA-8 Rehabilitation Plan & Cost Estimation for Maha Nanneriya Scheme Proposed by Farmers' Organization (4/4)

Name of Scheme : Maha Nanneriya

Name of FO, etc. : Ekabadda FO

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
14	Mahaakkarayaya Amuna	Filling holes with earth	L 69' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement					
		Construction of 3 turnouts							
		Construction of a new wall	L 20' ft, W 2' ft, H 3' ft						
15	Divul Akkarayaya Amuna (Anicut)	Construction of a spill flood water	L 20' ft, W 1 1/2' ft H 4' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement					
16	Bellanwala Amuna	Construction of a spill flood water	L 10' ft, W 1' ft, H 4' ft	Included in rehabilitation plan of Irrigation Department of anicut improvement					
17	Tank	De-silting the tank	Water spread area 14 sq. miles	Included in rehabilitation plan of Irrigation Department of tank improvement					
	Sub-total				835,500			429,150	428,050
	Grand-total				1,264,650				
	(US\$/ha)				113				

Table TA-9 Rehabilitation Plan & Cost Estimation for Minor Cascade Proposed by Farmers' Organization (1/6)

Name of Scheme : Kallanchiya, Minor Scheme

Name of FO, etc. : Nidahas FO, Extent of Land 8.1 ha

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work			Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)		
1	Tank bund	Presently 10' ft wide Height 12' ft Turfing and providing a rip-rap	Length 500m Width 3.0 m	Earth Works	64 cu	32,000	Labors	142 days	24,850	24,850
				Rip rap	27 cu	81,000	Labors	60 days	10,500	10,500
				Turfing	161 sq		Labors	113 days	19,775	19,775
				Gravel	53 cu	106,000	Labors	118 days	20,650	20,650
2	spill & causeway	Construction of spill & causeway Spill is broken and there is no causeway Widen the spill and augment construction of causeway with rubble masonry	Length of spill - 100' ft	RRM	30 cu	96,000	Skilled	23 days	6,325	40,775
				Earth works	60 cu		Labors	233 days	40,775	40,775
				Metal	5 cu	13,000	Labors	133 days	23,275	23,275
			Causeway - 50' ft	Earth works	60 cu		Labors	133 days	23,275	23,275
3	Repairs to sluice	Presently in dilapidated condition Fixing a new door and hume pipes iron cages in front and back	Length 75' ft	Concrete	3 cu	24,600	Skilled	3 days	825	4,025
				Reinforced bar	425 kg	25,470	Labors	23 days	4,025	4,025
				Earth works	30 cu		Labors	67 days	11,725	11,725
				Slide gate dia. 600	1 no	41,000				
				HP dia. 600mm	75 ft	52,500				
Metal	3 cu	7,800	Labors	7 days	1,225	1,225				
4	Rehabilitation of canal system with structures	Presently in a dilapidated condition & no structures Construction of two canals from sluice with structures Length of canals - 2000 meters	Farm Turnout - 20 nos	HP dia. 6 inch	140 ft	29,400	Skilled	20 days	5,500	27,125
				Concrete	20 cu	164,000	Labors	155 days	27,125	27,125
				Earth works	20 cu		Labors	44 days	7,700	7,700
				Metal	20 cu	52,000	Labors	44 days	7,700	7,700
5	Rehabilitation of present main canal	Digging the canal and providing a rubble masonry wall on road side	Length of canal 1000m Width 3' ft H 3 ft	RRM	106 cu	339,200	Skilled	80 days	22,000	92,750
				Earth works	500 cu		Labors	530 days	92,750	92,750
				Metal	16 cu	41,600	Labors	1110 days	194,250	194,250
6	Construction of a feeder canal to take from Yayanluliya Pond	Opening up of a new canal by Back hoe machine removing forest & roots	Length 1500m width 10' ft	Clearing	2 ac.	20,000				
				Ripping	2 ac.	10,000				
				Earth Excavation	331 cu	66,200				
Sub-total						1,201,770		552,475	517,825	
Grand-total						1,754,000				
(US\$/ha)						3,050				

Table TA-9 Rehabilitation Plan & Cost Estimation for Minor Cascade Proposed by Farmers' Organization (2/6)

Name of Scheme : Arthikulama, Minor Scheme

Name of FO, etc. : Samagi FO, Extent of Land 12.1 ha

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Tank bund	Since the existing tank bund is not strong enough, earth work is necessary To prevent erosion of tank bund should turf the bund	L 350 m W 1.8 m H 3.35 m	Earth Works 41 cu Rip rap 19 cu Gravel 22 cu	20,500 57,000 44,000	Labors 91 days Labors 42 days Labors 49 days	15,925 7,350 8,575	15,925 7,350 8,575	
			L 350m, W 30' ft	Turfing 344 sq		Labors 241 days	42,175	42,175	
2	Two sluices	Since both sluice doors and leaking should repair or replace	L 60 ft - 2 nos	Concrete 6 cu	49,200	Skilled 6 days Labors 47 days	1,650 8,225	8,225 23,275 3,150 700	
				Reinforced bar 849 kg	50,940	Labors 133 days	23,275		
				Earth works 60 cu					
				Slide gate dia. 600 2 nos	82,000				
				HP dia. 600mm 120 ft	84,000				
			Metal 8 cu	20,800	Labors 18 days	3,150			
3	Construction of two bathing steps	It is required to construct 2 new bathing step for villages	L 25' ft, W 10' ft, x 2	Concrete 10 cu	82,000	Skilled 10 days Labors 78 days	2,750 13,650	13,650 11,725 700	
				Earth works 30 cu		Labors 67 days	11,725		
				Metal 2 cu	5,200	Labors 4 days	700		
4	Tank spill	Repairs to between down places since it is not in good condition	L 50' ft, W 3' ft, H 1' ft	RRM 15 cu	48,000	Skilled 11 days Labors 75 days	3,025 13,125	13,125 11,725 1,225	
				Earth works 30 cu		Labors 67 days	11,725		
				Metal 3 cu	7,800	Labors 7 days	1,225		
5	Canal system structures & construction of 2 causeways Canals 1 300m 2 400m 3 300m length 1000m width 2m	Canal system structures & construction of 2 causeways	Farm Turnout - 10 nos	HP dia. 6 inch 70 ft	14,700	Skilled 10 days Labors 78 days Labors 22 days Labors 22 days Skilled 4 days Labors 31 days Labors 44 days Labors 4 days	2,750 13,650 3,850 3,850 1,100 5,425 7,700 700	13,650 3,850 3,850 5,425 7,700 700	
				Concrete 10 cu	82,000				
				Earth works 10 cu					
				Metal 10 cu	26,000				
				Causeways - 2 nos	HP dia. 600mm 40 ft				28,000
					Concrete 4 cu				32,800
					Earth works 20 cu				
			Metal 2 cu	5,200	Labors 4 days	700			
Sub-total					740,140		207,275	196,000	
Grand-total					947,000				
(US\$/ha)					1,102				

Table TA-9 Rehabilitation Plan & Cost Estimation for Minor Cascade Proposed by Farmers' Organization (3/6)

Name of Scheme : Palumailawa (Mailewa), Minor Scheme

Name of FO, etc. : Ekamuthu FO, Extent of Land 22.0 ha

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Sluice (MID)	Construction of a new sluice since the old one in no good.	Length of the sluice - 60 ft Height of concrete wall - 5 ft	Concrete	3 cu	24,600	Skilled 3 days	825	4,025
				Reinforced bar	425 kg	25,470	Labors 23 days	4,025	
				Earth works	30 cu		Labors 67 days	11,725	
				Slide gate dia. 600	1 nos	41,000			
				HP dia. 600mm	60 ft	42,000			
				Metal	2 cu	5,200	Labors 4 days	700	
2	Canal	Filling the bunds with earth repairing, compacting & turfing	L 1/2 km, both sides W 3' ft, H 3' ft	Earth	170 cu	42,500	Labors 377 days	65,975	65,975
				Turfing	137 sq		Labors 96 days	16,800	16,800
3	Anicut & Canal	Filling the bunds with earth compacting and turfing	L 1/2 km, both sides W 3' ft, H 3' ft	Earth	170 cu	42,500	Labors 1062 days	185,850	185,850
				Turfing	137 sq		Labors 96 days	16,800	16,800
4	Anicut & Canal	Filling the bunds with earth compacting and turfing	L 1/2 km, both sides W 3' ft, H 3' ft	Earth	170 cu	42,500	Labors 377 days	65,975	65,975
				Turfing	137 sq		Labors 96 days	16,800	16,800
5	Tank bund	Filling the Tank bund with earth and turfing	L 1 km Top W 7' ft, H 2.95 m	Earth	104 cu	26,000	Labors 231 days	40,425	40,425
				Gravel	74 cu	148,000	Labors 164 days	28,700	28,700
				Turfing	710 sq		Labors 497 days	86,975	86,975
6	Agricultural Roads	Rehabilitation of existing road Fill washed out places, make side drains, surface.	L 2 km W 12' ft	Earth works	382 cu	191,000	Labors 848 days	148,400	148,400
				Gravel	254 cu	508,000	Labors 564 days	98,700	98,700
7	Spill & Spill Canal	Clearing and deepening the spill canal and rehabilitation	L 3 km W 10' ft, depth 8' ft	Clearing	4 ac.	40,000			
				Earth Excavation	3,180 cu	636,000			
Sub-total						1,814,770		788,675	787,850
Grand-total						2,603,000			
(US\$/ha)						1,666			

Table TA-9 Rehabilitation Plan & Cost Estimation for Minor Cascade Proposed by Farmers' Organization (4/6)

Name of Scheme : Tambare, Minor Scheme

Name of FO, etc. : Samagi FO, Extent of Land 20.2 ha

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation	
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)	
1	Deepening the Tank	De-silt the FSL area and remove the soil away	750 sq. m to a depth of 1 m	Desilting	265 cu	106,000			
2	Rehabilitation of Tank bund	Bund earth work Compaction with water turving Gravelling the surface rip-rap to secure bund	Width 2.43 m Length 800 m	Earth Works	90 cu	45,000	Labors 200 days	35,000	35,000
				Rip rap	42 cu	126,000	Labors 93 days	16,275	16,275
				Gravel	69 cu	138,000	Labors 153 days	26,775	26,775
				Turfing	258 sq		Labors 181 days	31,675	31,675
3	Tank spill	Rehabilitation of spill using concrete	100' ft long, 12' ft wide construct as a causeway	Concrete	31 cu	254,200	Skilled 31 days	8,525	
				Reinforced bar	4,387 kg	263,190	Labors 240 days	42,000	42,000
				Earth works	90 cu		Labors 200 days	35,000	35,000
				Metal	14 cu	36,400	Labors 31 days	5,425	5,425
4	Sluice	Provide a new door	It is sufficient to remove the old door and fix new door	Concrete	3 cu	24,600	Skilled 3 days	825	
				Reinforced bar	425 kg	25,470	Labors 23 days	4,025	4,025
				Earth works	30 cu		Labors 67 days	11,725	11,725
				Slide gate dia. 600	1 no	41,000			
				HP dia. 600mm	60 ft	42,000			
				Metal	2 cu	5,200	Labors 4 days	700	700
5	Sluice (High level)	Construction of a new high level sluice where marked in the map		Concrete	3 cu	24,600	Skilled 3 days	825	
				Reinforced bar	425 kg	25,470	Labors 23 days	4,025	4,025
				Earth works	30 cu		Labors 67 days	11,725	11,725
				Slide gate dia. 600	1 no	41,000			
				HP dia. 600mm	60 ft	42,000			
				Metal	2 cu	5,200	Labors 4 days	700	700
6	Canal System	Construction of a new canal system instead of the old system	Farm Turnout - 20 nos	HP dia. 6 inch	140 ft	29,400			
				Concrete	20 cu	164,000	Skilled 20 days	5,500	
				Earth works	20 cu		Labors 155 days	27,125	27,125
				Metal	20 cu	52,000	Labors 44 days	7,700	7,700
							Labors 44 days	7,700	7,700
	Sub-total				1,490,730		283,250	267,575	
	Grand-total				1,773,000				
	(US\$/ha)				1,236				

Table TA-9 Rehabilitation Plan & Cost Estimation for Minor Cascade Proposed by Farmers' Organization (5/6)

Name of Scheme : Ihala Nanneriya, Minor Scheme

Name of FO, etc. : Eksath FO, Extent of Land 26.0 ha

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
1	Tank bund	Should clean and augment the bund by about one foot with earth filling since there is a village on the other side of the bund the bund should be graveled and make motorable Some places should be widened because of bathing 4 places are damaged. Because of cattle, sluice to spill section is damaged. Out side of the bund is damaged near the sluice because of cattle since the tank is silted should remove the silt and deepen the tank 1. Length of the bund about 1000m 2. Width of the bund about 2 1/2 m 3. Height of the bund about 3 1/2 m	Tank bund	Earth Works 129 cu Rip rap 53 cu Gravel 86 cu Turfing 323 sq	64,500 159,000 172,000	Labors 286 days Labors 118 days Labors 191 days Labors 226 days	50,050 20,650 33,425 39,550	50,050 20,650 33,425 39,550
			Desilting	1,000 cu	400,000			
2	Sluice	Existing sluice is made about 30 yrs back. Since the door is worn water is leaking because of this a large amount of water 90 waste the sluice should be repaired. Since the control arm (iron) is rotted it is difficult to open and close the sluice	1. Sluice door 2. Iron Bar 3. Bar and nails 4. Padlocks 5. Water measuring device	Concrete 3 cu Reinforced bar 425 kg Earth works 30 cu Slide gate dia. 600 1 no HP dia. 600mm 60 ft Metal 2 cu	24,600 25,470 41,000 42,000 5,200	Skilled 3 days Labors 23 days Labors 67 days Labors 4 days	825 4,025 11,725 700	4,025 11,725 700
			1. Length - 100 ft 2. Width - 1 foot 3. Height - 4 feet	Concrete 9 cu Reinforced bar 1,274 kg Earth works 60 cu Metal 6 cu	73,800 76,410 15,600	Skilled 9 days Labors 70 days Labors 133 days Labors 13 days	2,475 12,250 23,275 2,275	2,475 12,250 23,275 2,275
3	Spill	The existing spill is in a very run-down stage. There is a continuous leak. Since the spill is in a low elevation can not stock much water in the tank. If should be raised by about 1 foot. It is better to construct a new spill	Bathing step - 3 nos	Concrete 9 cu Reinforced bar 1,274 kg Earth works 45 cu Metal 3 cu	73,800 76,410 7,800	Skilled 9 days Labors 70 days Labors 100 days Labors 7 days	2,475 12,250 17,500 1,225	2,475 12,250 17,500 1,225
4	Bathing steps	The existing two bathing steps are dilapidated Should construct 3 new bathing steps 1. Length of a Bathing step - 25 feet 2. Width of a Bathing step -10 feet						

Table TA-9 Rehabilitation Plan & Cost Estimation for Minor Cascade Proposed by Farmers' Organization (6/6)

Name of Scheme : Ihala Nanneriya, Minor Scheme

Name of FO, etc. : Eksath FO, Extent of Land 26.0 ha

No.	Place to be repaired	Existing Condition / How to repair	Description	Materials/Others		Labour required for the work		Farmers' participation
				Requirement	Expected Cost (Rs.)	Requirement	Expected Cost (Rs.)	Expected Cost (Rs.)
5	Canal System	Repair the existing irrigation canal system which provides water to paddy fields. Two pipe lines should be repaired since they are leaking from joints.	1. Length of canal 800 m 2. Width of canal 1m	HP dia. 600mm 100 ft Earth Works 271 cu	70,000 67,750	Labors 602 days	105,350	105,350
	Sub-total				1,395,340		340,025	334,250
	Grand-total				1,735,000			
	(US\$/ha)				940			