

6.9

SHARED CONTROL OF NATURAL RESOURCES (SCOR)

SCOR PROGRESS
1st QUARTER 1996

May, 1996

23407 International Irrigation Management Institute (IIMI)
Sri Lanka National Program
127, Sunil Mawatha, Battaramulla, Sri Lanka

SCOR seeks to increase the users' share of control of natural resources in selected watersheds through partnership between the state and users that contributes to greater production while conserving the natural resources base. SCOR is promoting integrated planning for the use of land and water resources in two pilot watersheds and other areas with spread effects. The SCOR project is a collaborative effort of the Government of Sri Lanka, the United States Agency for International Development (USAID) and IIMI

SCOR PROGRESS AS AT END OF FIRST QUARTER 1996

1. INTRODUCTION

The first quarter of 1996 marked detailed planning for the second phase of SCOR project in both pilot watersheds. Identification of new sub-watersheds for interventions, participatory resources use survey and mapping, participatory constraint analyses and the formulation of action plans by field level task forces were main features of this planning process. The formulation of the SCOR Work plan for the Second Phase is the main output produced from this planning process.

This report presents the SCOR progress achieved at 33 sub-watersheds of Huruluwewa and Upper Nilwala Watersheds by the collective interventions of the resources users, government implementing and research agencies, and SCOR teams as at end of March 1996. Progress is reported by programme level and project level indicators supplemented by information on its spatial distribution.

Separate progress reports prepared by each pilot watershed offices with watershed specific details are available for more information.

2. UTILIZATION OF PROJECT INPUTS

2.1 Financial Inputs

ITEM	UNIT	LOP TARGET	TOTAL TO DATE	CY95 ACTUAL/PLAN
1. Budgeted expenditure	US\$ ('000)	6518	2643.36	200.2/1300.2
2. User grants ¹	US\$ ('000)	495	132.94	.97/75
3. Host country contribution ²	Rs. (M)	151.50	59.68	2.7/25

¹ This excludes research grants

² See Annex 5 for details

2.2 Budgeted Expenditure

The project recorded 76% of fund utilization during the first quarter 1996. **Annex 1** presents the actual expenditure out of the budget by major line items. **Annex 2** presents the actual expenditure out of the budgeted allocation for the quarter. **Annex 3** presents the actual

expenditure out of the budget for the year 1996. **Annex 4** presents the actual expenditure out of the budgeted allocation for the life of project.

3. PERFORMANCE IN SUMMARY BY STRATEGIC AND PERFORMANCE INDICATORS

3.1 Performance by strategic indicators

Performance (SCOR)	Last Year US\$	Y E A R 1 9 9 5				
		First quarter	Second quarter	Third quarter	Fourth quarter	Total
Planned Expenditure	3,063,797	263,930	335,224	337,466	363,563	1,300,183
Actual Expenditure	2,443,003	200,176				200,176
% Achieved	80	76				15
Host Country Contribution Planned	936,800	75,800	90,000	145,000	190,000	500,000
Actual	1,085,275	53,818				53,818
% Achieved	116	72				11

3.2 Project purpose level indicators

Strategic level indicator	Unit	LOP Target (Six years)	Total To date
1. Targeted hectares under improved production and protection techniques,	Ha	30,000	11,085
2. Value of targeted investment by the resource users in environmentally sound production practices.	\$(M)	3.0	1.04
3. Government policy decisions initiated.	#	4	3

3.3 Performance by program outcome level indicators

Programme Outcome Level Indicator	Unit	LOP Target	Total To date
1. Targeted land area covered by agreements between GSL and user groups (Extent now under protection and production practices expecting user rights)*	Ha.	5,000	479.9
2. Farm households using improved environmental techniques	#	25,000	10,458

* In accordance with the National Steering Committee decision for demonstrating action for the required policy change.

Project Purpose Level Indicator	Unit	LOP Target	Total To date
1. Number of natural resources groups operating	#	750	118
2. No. of policy/procedures, organizational changes enacted and adopted	#	4	3

Project Output Targets/Performance	LOP Target	Total To date
1. User groups organized/assisted to take joint responsibility for management of land and water resources	750	118
2. Number of new commercial activities supported by linking to markets	200	47
3. Land leasing/usufruct agreements issued for establishments and functioning of production companies and commercial activities	10	1

Project Output Targets/Performance	LOP Target	Total To date
4. Training opportunities provided to representatives of NGOs and other private sector organizations in participatory natural resources management	30,000	13,703
5. Number of officials trained in local level planning, user groups formation, support and collaboration	2,000	397
6. Number of user organizations conferred with legal status and powers	75	39
7. Number of NGOs and private sector agencies providing technical, managerial and commercial information to user groups	20	20
8. Research studies completed on natural resources issues	30	9

4. SPATIAL DISTRIBUTION OF PROJECT OUTPUT AND EFFECTS

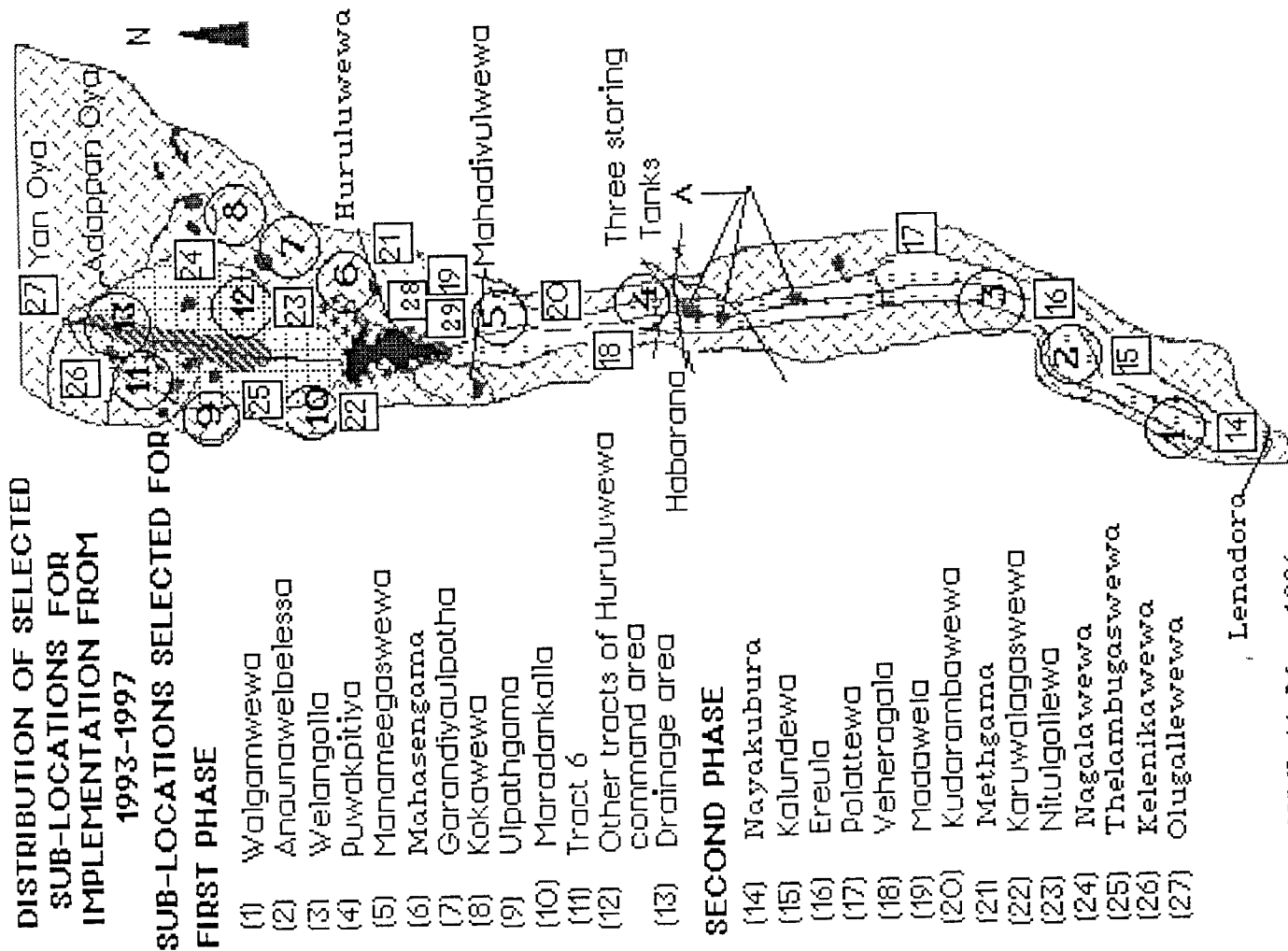
Map 1 shows the distribution of sub-locations, the targets and achievements on the anticipated effects and impact on the adoption of production and land and water conservation techniques (Strategic level indicator 1) in each sub-location with the number of farm families involved (Programme outcome level indicator ,2) under major interventions in the Huruluwewa watershed.

5. HIGHLIGHTS OF PERFORMANCE

Highlights of performance by way of achievements have been presented with the work plan for the second phase. Watershed specific information with regard to the performance during the first quarter appear in the progress reports prepared separately by the two watersheds. Those reports are available for reference.

HURULUWEWA WATERSHED

- First Phase of the Project
□ Second Phase of the Project



Targets and Achievement upto End of 1st quarter 1996

Location	Target Area (ha)	Up to end of 4th Qtr. 1995	During 1st Qtr. 1996	End of 1st Qtr. 1996	Target Farm Families	Up to end of 4th Qtr. 1995	During 1st Qtr. 1996	End of 1st Qtr. 1996
1	545.0	273.1	40.3	313.4	248	230	0	230
2	647.0	488.1	0.0	488.1	76	287	0	287
3	727.0	464.3	0.0	464.3	168	282	0	282
4	394.0	244.4	21.0	265.4	65	406	0	406
5	218.0	123.2	15.0	138.2	64	368	0	368
6	644.0	181.6	5.0	186.6	63	140	0	140
7	688.0	59.8	19.0	78.8	100	265	0	265
8	169.0	200.6	19.0	219.6	131	244	0	244
9	293.0	281.7	12.0	293.7	150	284	0	284
10	197.0	624.4	96.5	720.9	78	211	78	289
11	282.0	500.4	3.0	503.4	168	530	168	698
12	4400.0	4000.0	95.5	4095.5	9315	3105	0	3105
13	300.0	72.0	0.0	72.0			0	0
14	154.0	2.8	7.0	9.8	107	36	0	36
15	254.0	20.0	23.7	43.7	188	40	0	40
16	434.0	4.4	66.5	70.9	225	102	0	102
17	341.0	224.8	154.0	378.8	106	108	0	108
18	153.0	13.6	8.4	22.0	158	44	0	44
19	418.0	276.8	62.0	338.8	152		0	0
20	361.0	53.6	5.0	58.6	130		0	0
21	190.0		16.0	16.0	76		0	0
22	200.0	26.4	130.0	156.4	74	30	20	50
23	180.0	21.2	33.0	54.2	165	27	0	27
24	131.0		43.8	43.8	242		0	0
25	135.0		59.0	59.0	22		0	0
26	352.0	20.0	12.3	32.3	115	64	76	140
27	216.0	79.6	1.0	80.6	286		0	0
Feeder Canal	933.0		107.0	107.0	1023		0	0
Yan Oya	116.0		2.0	2.0	163		0	0
Upper part of Command	613.0		14.0	14.0	741		45	45
	14695.0	8256.8	1071.0	9327.8	14599	6783	387	7170

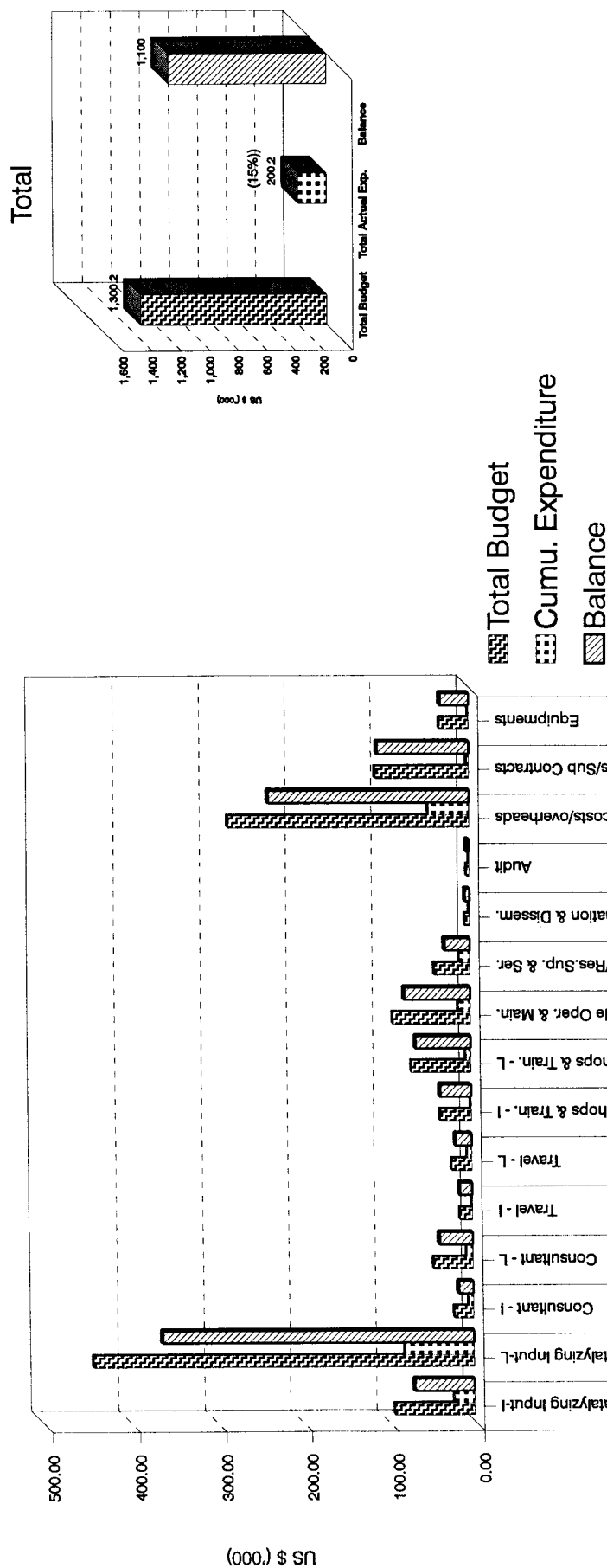
USAID – SRI LANKA
GRANT NO: 383 – 0109 – A – 00 – 3413 – 00

BUDGET VERSUS ACTUAL EXPENDITURE FOR 1ST QTR. 1996

(US \$ '000)

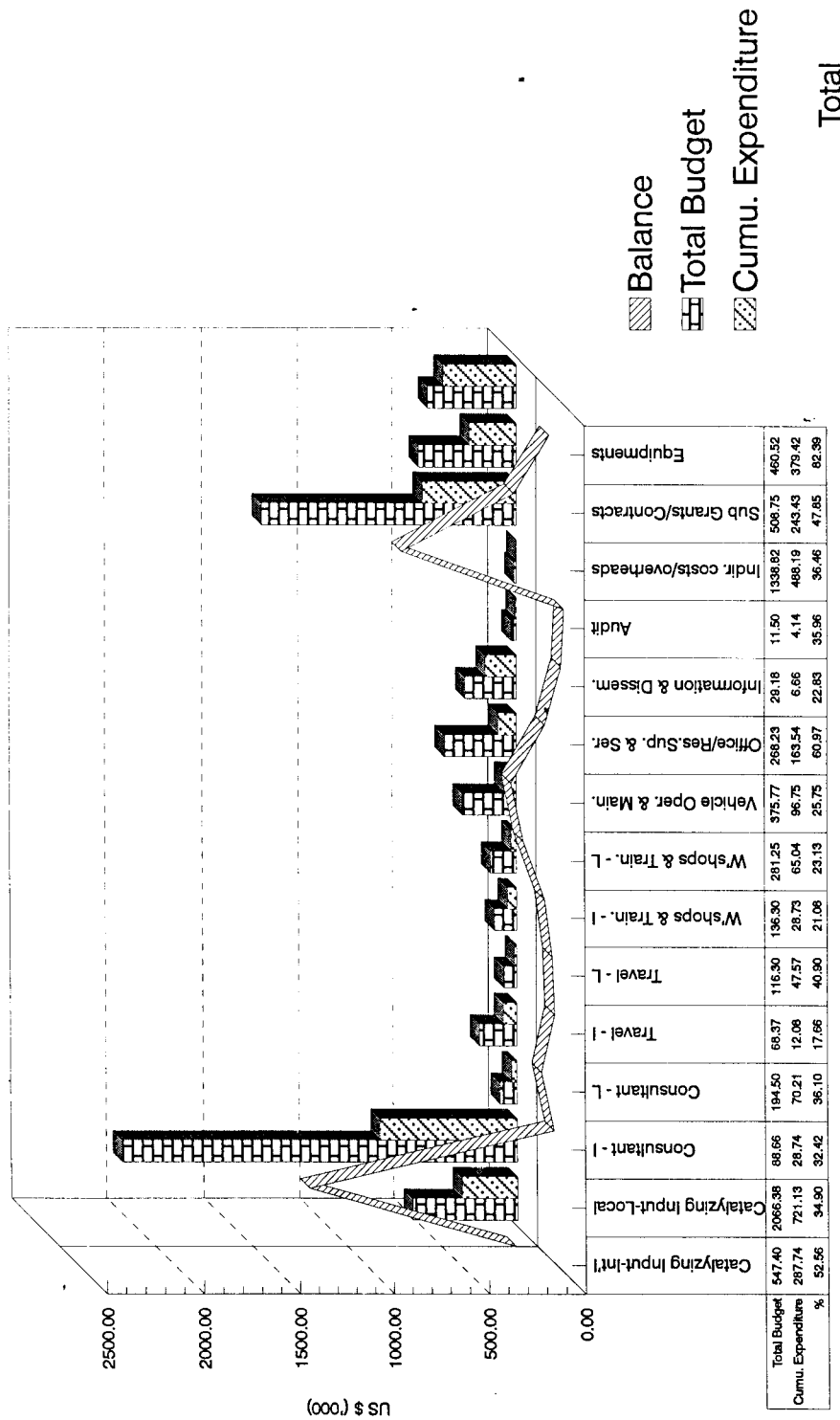
Description	Budgeted Expenditure				Actual Expenditure				Balance
	Jan.	Feb.	March	Total	Jan.	Feb.	March	Total	
Salaries Benifits & All.									
Int'l	9,500	9,500	9,500	28,500	9,483	5,850	7,667	23,000	5,500
Local	30,000	30,000	35,000	95,000	24,629	26,437	28,860	79,926	15,074
Consultant									
Int'l	300	0	5,400	5,700	0	0	5,084	5,084	616
Local	0	3,000	3,500	6,500	357	3,055	3,580	6,992	(492)
Travel									
Int'l	0	0	7,500	7,500	0	0	0	0	7,500
Local	1,925	1,925	1,925	5,775	1,523	1,442	1,838	4,803	972
Workshops & Training									
Int'l	0	0	0	0	0	0	0	0	0
Local	3,000	3,000	3,000	9,000	1,144	2,083	1,790	5,017	3,983
Other Direct Costs									
Vehicle Oper. & Main.	4,500	4,500	4,500	13,500	1,574	7,084	4,884	13,542	(42)
Office/Research	3,435	3,435	3,435	10,305	5,313	3,563	3,105	11,981	(1,676)
Supp. & Ser.									
Information & Dissemination	500	500	500	1,500	5	6	0	11	1,489
Audit	0	0	0	0	0	0	0	0	0
Indirect costs/ Overheads (32%)	16,480	17,317	23,021	58,650	13,649	15,351	18,052	47,052	11,598
Sub Grants/sub contracts	10,000	2,000	10,000	22,000	967	1,395	0	2,362	19,638
Equipments	0	0	0	0	0	0	406	406	(406)
Total	79,640	75,177	107,281	263,930	58,644	66,266	75,266	200,176	63,754

EXPENDITURE AS AT END OF MARCH OUT OF THE BUDGET OF THE YEAR 1996

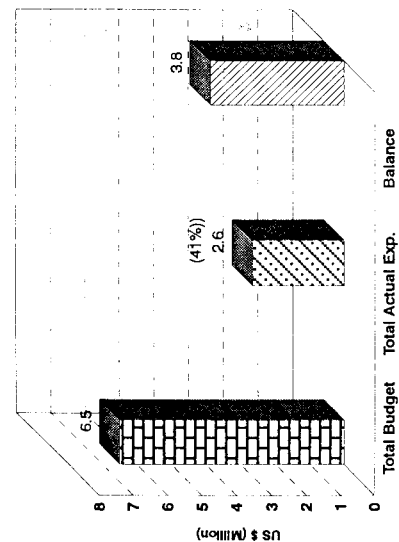


CUMULATIVE EXPENDITURE OUT OF LIFE OF PROJECT BUDGET FROM JUNE '93 TO MARCH '96

Annex 4



Total



SUMMARY REPORT ON HOST COUNTRY CONTRIBUTION (HCC)
25.10.93 – 31.03.96

Description	Nilwala		Huruluwewa		Total No.	Total HCC Rs.
	No.	HCC Rs.	No.	HCC Rs.		
Contribution of NGOs, groups, farm households, and individuals by way of time/labour, and materials supplied (persons)	7,896	1,491,582	12,755	3,115,178	20,651	4,606,760
Value of conserved capital assets	—	0	—	4,730,513		4,730,513
Value of sub Grants (No)	35	3,108,115	54	3,885,551	89	7,045,666
Govt. officers contribution (persons)	536	3,339,844	362	1,308,588	898	4,648,432
Conserved Area		5,022,850		34,294,631		39,317,481
Total		12,962,390		47,334,461		60,296,851

SCOR RESEARCH STUDIES – CURRENT STATUS (SUMMARY)
– Huruluwewa and Nilwala watersheds –
END OF 1ST QUARTER 1996

Study No	Name of study	Present status
INTEGRATED WATER MANAGEMENT		
(1)	Rainfall trends, surface water balance and vegetation change in the Maha Meegaswewa sub – watershed	Awaiting report
(2)	Baseline and M&E studies for intergrated water management in Huruluwewa watershed.	Completed
(3)	Agro – well & Ground water management in Huruluwewa watershed	Work in progress
(4)	Land consolidation in small tanks (Process documentation only)	To be commenced
(5)	Supplementary studies Land use maps (1:50000) for Nilawala & Huruluwewa Watersheds to demarcate boundaries of watersheds & sub – watersheds & to help identify to pilot intervention sites.	Completed
(6)	Complete the review of land use and prepare land use maps for Huruluwewa Watershed	Work in progress (awaiting report)
(7)	Complete the review of land use and prepare land use maps for Nilwala Watershed	Work in progress (awaiting report)
CONSERVATION FARMING IN UNDERUTILIZED HIGHLANDS (especially Chena & Scrubland)		
(8)	Effects of Conservation Measures under SCOR interventions in the Huruluwewa Watershed.	Completed (as a component of the major project)
(9)	Potential for improving Labour Productivity in Tea small holdings	Work in progress
(10)	A study on adoption of Technology in the tea sector in Upper Nilwala watershed.	Completed
PRODUCTION AND CONSERVATION IN OTHER AREAS (paddy, tea and other existing croplands)		
(11)	An analysis of demand, supply and price – relations aimed at production scheduling	Completed
(12)	Evaluation of profitability and productivity of onions, tomato and rice under different irrigation and technology regimes	Almost Completed (awaiting edited report)

Study No	Name of study	Present status
(13)	Biodiversity of Medicinal and other tree species in the Huruluwewa Watershed with emphasis on their economic utility.	Completed
(14)	Evaluation of SCOR interventions on resources management and profitability trends in Huruluwewa and Nilwala watersheds Part 1 – Bench mark establishment Part 2 – Impact Evaluation	Completed To be commenced
(15)	Study on crops/ livestock yield, profitability and other socio–economic aspects in Nilwala Watershed	Work in progress (awaiting report)
(16)	Supplementary study Feasibility study on Production & processing of Medicinal plants – a component of land & water conservation efforts in the dry zone	Completed
INTEGRATED PLANNING AND COORDINATION IN WATERSHED		
(17)	Process Documentation of SCOR	Alternative arrangements are being made.
(18)	Action Research study on Institutional support for projects of Resources user organizations	Terminated
(19)	Action research study on Special SCOR interventions in the Huruluwewa feeder canal area	Work in progress (report available on objectives 2.1, 2.2 & 2.3 of the contract)
ORGANIZATIONAL DEVELOPMENT AND SHARED CONTROL		
(20)	Impact of Land Tenure Part 1 – Literature Review Part 11 – Micro level analysis	Completed Work in progress (data are being analyzed)
(21)	Policy research related to organizational and business modes for production and protection, ranging from informal groups to production/processing/service companies	Study is being formulated
(22)	Policy research related to different modes of partnerships and legal recognition to tested modes	Study is being formulated
(23)	Development & Sustainability of user organizations in watershed management in Nilwala and Huruluwewa Watersheds.	Completed
(24)	Evaluation of Technology adoption in balancing Production & Protection in Nilwala and Huruluwewa watersheds.	Huruluwewa report is completed

SHARED CONTROL OF NATURAL RESOURCES PROJECT (SCOR)

List of Reports/Papers

End of 1st Quarter 1996

Title	Author
1. SCOR Work Plan (1993-1995)	SCOR Project
2. Land and Water Resources Management in Watersheds - Participatory Action Research Aimed at Integrating Production and Protection	C.M. Wijayaratna, Head, Sri Lanka Field Operations, IIMI, SCOR Project Leader Paper presented to the 10th Internal Program Review of IIMI, 7-11 Nov. '94 Colombo.
3. Shared Control of Natural Resources Spatial Database for Planning and Monitoring Resource Use Change.	Gamini P. Batuwitige, M&E Specialist, SCOR Paper presented to the 10th Internal Program Review of IIMI, 7-11 Nov. '94 Colombo.
4. Integrated Water Management in a Watershed Context	Nihal Fernando, Research Associate/Water Resources Engineer, SCOR Paper presented to the 10th Internal Program Review of IIMI, 7-11 Nov. '94 Colombo.
5. Shared Control of Natural Resources An Integrated Watershed Management Approach to Optimize Production and Protection	C.M. Wijayaratna, Head, Sri Lanka Field Operations, IIMI, SCOR Project Leader Presented to the Annual General Meeting and Seminar of Sri Lankan Agricultural Economics Association Peradeniya, Sri Lanka.
6. Integration Environmental and Conservation Concerns with Production Goals A Participatory Approach to Land and Water Resources Management in a Watershed Context	C.M. Wijayaratna, Head, Sri Lanka Field Operations, IIMI, SCOR Project Leader Paper presented to the 8th International Soil Conservation Conference on "Soil and Water Conservation: Challenges and Opportunities", December 4-8, 1994, New Delhi, India.
7. Planting Trees along Roads, Stream and Canal Reservation and in Watershed Areas in Sri Lanka - Present Status and Issues for Consideration	C.M. Wijayaratna, Head, Sri Lanka Field Operations, IIMI, SCOR Project Leader Anura S. Widanapathirana Monitoring and Evaluation Consultant, Participatory Forestry Project, Forest Department, Sri Lanka.

Title	Author
8. Information Technology for Policy Analysis and Change in Sustainable Integrated Watershed Resources Management	Gamini P. Batuwitige , M&E Specialist, SCOR Paper presented at the Training Course on the Use of Information Technology for Sustainable Development organized by the Asian and Pacific Development Center, Kuala Lumpur, Malaysia, on 16.08.94.
9. Review of the Monitoring and Evaluation, Organization and Theme Actualization of the Shared Control of Natural Resources (SCOR) Project	Gerald J. Karaska , Clark University, Worcester, Massachusetts, USA.
10. SCOR PROGRESS - 1st Quarter 1994 11. SCOR PROGRESS - 2nd Quarter 1994 12. SCOR PROGRESS - 3rd Quarter 1994 13. SCOR PROGRESS - 4th Quarter 1994 14. SCOR Monitor - January - March 1994 15. SCOR Monitor - April - December 1994 16. SCOR Monitor - January - August 1995 17. SCOR PROGRESS - 1st Quarter 1995 18. SCOR PROGRESS - 2nd Quarter 1995 19. SCOR PROGRESS - 3rd Quarter 1995 20. SCOR PROGRESS - 4th Quarter 1995	SCOR Project
21. Review of Progress of Shared Control of Natural Resources Project	Marcus M. Karunanayake Senior Professor of Geography, Dept. of Geography, University of Sri Jayewardenepura, Sri Lanka.
22. Adoption of Technology in the Tea Sector in Upper Nilwala Watershed	Vijith Jayamanne Bsc Student, University of Ruhuna.
23. Huruluwewa Watershed: Present Status and Proposed Interventions under the Shared Control of Natural Resources (SCOR) project (Interim Report)	Land Use Policy Planning Division, Ministry of Lands.
24. "Indigenous Rainwater Harvesting Systems in Sri Lanka: Current Status and An Eco System Approach to Revitalization".	C.M. Wijayarathna , Head, Sri Lanka Field Operations, IIMI, SCOR Project Leader Paper presented to the 7th International Rainwater Catchment System Conference, June 19-25, 1995, Beijing, China.

Title	Author
25. A Participatory Holistic Approach to Land and Water Management in Watersheds	C.M. Wijayarathna , Head, Sri Lanka Field Operations, IIMI, SCOR Project Leader Paper presented to a special seminar on "Effective Water Use through Improved Irrigation Management Information System", Irrigation Engineering Center, NIA Compound, EDSA, Quezon City, Metro Manila, Philippines, 12-15 March 1995
26. Data, Capacity Building, and Networking Needs for the use of Geographical Information Systems in Agricultural Research	Gamini P. Batuwitige , M&E Specialist, SCOR Paper presented at ARENDAL II workshop on UNEP and CGIAR cooperation on 09.05.95 to 11.05.95 in Arendal, Norway.
27. Seasonal Summary Report on Integrated Water Management in Huruluwewa Watershed (Maha 1994/95 season)	N.U. Hemakumara , Irrigation Engineer, Huruluwewa, Nihal Fernando , Research Associate/Water Resources Engineer, SCOR, B.R. Ariyaratne , Research Officer, SCOR
28. Action Research Study on Special SCOR Interventions in the Huruluwewa Feeder Canal Area	D.M. Ariyaratne , Former Director, Irrigation Management Division.
29. Nilwala Watershed: Present Status and Proposed Interventions under the Shared Control of Natural Resources (SCOR) project (Interim Report)	Land Use Policy Planning Division, Ministry of Lands.
30. Biodiversity of Medicinal and Other Tree Species in the Huruluwewa Watershed with Emphasis on their Economic Utility. (Reconnaissance Survey)	DR. B. Colin N. Peiris Senior Lecturer Horticulture, Faculty of Agric. University of Peradeniya.
31. Biodiversity of Medicinal and Other Tree Species in the Huruluwewa Watershed with Emphasis on their Economic Utility. (Identification of Genetic Diversity)	DR. B. Colin N. Peiris Senior Lecturer Horticulture, Faculty of Agric. University of Peradeniya.
32. Land Consolidation in Village Tanks (A study in Anuradhapura District)	N.M.U. Nawaratna Chief Irrigation Engineer, Dept. of Agrarian Services
33. Integrated Water Management in Huruluwewa Watershed - Maha 1994/95 season (Detailed report)	N.U. Hemakumara , Irrigation Engineer, Huruluwewa, Nihal Fernando , Research Associate/Water Resources Engineer, SCOR, B.R. Ariyaratne , Research Officer, SCOR
34. GIS Application on Sustainable Development: Review of Current Programs, National Trends Experience from Sri Lanka and Shared Control of Natural Resources Project	Gamini P. Batuwitige , M&E Specialist, SCOR Paper presented at International Conference on GIS Applications - GIS AM/FM Asia 95, Bangkok.

Title	Author
35. Managing Watershed Environment	C.M. Wijayaratna , Program Leader, Social & Environmental Analysis and SCOR Project Leader. Paper presented to the "Watershed Management Forum", University of the Philippines, Los Banos, 4-6 October, 1995.
36. Evaluation of SCOR Interventions on Resources Management and Profitability - Upper Nilwala Watershed (an interim report)	Department of Agriculture Economics, Faculty of Agriculture, University of Ruhuna, October 1995.
37. Biodiversity of Medicinal and Other Tree Species in the Huruluwewa Watershed with Emphasis on their Economic Utility. (Final Report)	Dr. B. Colin N. Peiris Senior Lecturer Horticulture, Faculty of Agricultural University of Peradeniya. November 1995.
38. Participatory Micro Hydro-Electric Power Generation	N. Edirisinghe , Research Officer (SCOR) D. Wijenayake , Watershed Management Coordinator (SCOR), Oscar Amarasinghe , Senior Lecturer, Dept of Economic & Extension, Faculty of Agriculture, University of Ruhuna, C.M. Wijayaratna , National Program Leader & SCOR Project Leader, IIMI. Paper presented to the Symposium on Rehabilitation of the Nilwala Basin, jointly organised by The Institution of Engineers, Sri Lanka and Engineering Research Unit, Faculty of Engineering Technology, The Open University of Sri Lanka, January 26 & 27, 1996.
39. Development & sustainability of user organizations in watershed management in Huruluwewa Watershed	P.G. Somaratna , Consultant March, 1996
40. Evaluation of Technology adoption in balancing Production & Protection in Huruluwewa Watershed	P.G. Somaratna , Consultant March, 1996
41. Development & sustainability of user organizations in watershed management in Nilwala Watershed	L.R. Perera , Consultant March, 1996
42. An analysis of demand, supply and price relations aimed at production scheduling	M.A.B. Anawaratna , Student, Ruhuna University
43. Evaluation of profitability and productivity of onions, tomato and rice under different irrigation and technology regimes	M.A.B. Anawaratna Student, Ruhuna University