Document of
The World Bank

Report No: 17157-CE

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 41.7 MILLION (US$57.0 MILLION EQUIVALENT)

TO THE

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

FOR A

MAHAWELI RESTRUCTURING AND REHABILITATION PROJECT

February 23, 1998

Rural Development Sector Unit
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of October 31, 1997)
Currency Unit = Rupees (Rs)
US$1.00 = Rs 59.1

GOVERNMENT FISCAL YEAR

(January 1 to December 31)

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AMDP	Accelerated Mahaweli Development Program
CEA	Central Environmental Authority
CECB	Central Engineering Consultancy Bureau
DCFO	Distributory Canal Farmers' Organization
DG	Director General
EA	Environmental Assessment
EU	European Union
ERR	Economic Rate of Return
FCGs	Field Canal Groups
GOSL	Government of Sri Lanka
HAO&M	Headworks, Administration, Operation and Maintenance
HRD	Human Resource Development
IDA	International Development Association
IDOs	Institutional Development Officers
IIMI	International Irrigation Management Institute
IOVs	Institutional Organizer Volunteers
LDD	Livestock Development Division
MAC	Mahaweli Architectural Company
MECA	Mahaweli Engineering and Construction Agency
MLE	Mahaweli Livestock Enterprises
MMD	Ministry of Mahaweli Development
MOUs	Memoranda of Understanding
NIRP	National Irrigation Rehabilitation Project
NCB	National Competitive Bidding
NGO	Non-Governmental Organization
NWRC	National Water Resources Council
OECF	Overseas Economic Cooperation Fund
O&M	Operation and Maintenance
PD	Project Director
PERC	Public Enterprise Reform Commission
PIM	Participatory Irrigation Management
PIP	Project Implementation Plan
PIU	Project Implementation Unit
PSC	Project Steering Committee
RDA	Road Development Authority
SABUs	Stand Alone Business Units
SDB	Standard Bidding Documents
SOE	Statement of Expenses
TVA	Tennessee Valley Authority
USAID	United States Agency for International Development
VESP	Voluntary Early Separation Package

Vice President: Mieko Nishimizu
Country Director: Roberto Bentjerodt
Sector Managers: Ridwan Ali/Michael Baxter
Task Leader: Douglas W. Lister

SRI LANKA
MAHAWELI RESTRUCTURING AND REHABILITATION PROJECT

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Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Project Appraisal Document

South Asia Region

Date: February 23, 1998	Task Leader: Douglas W. Lister
Country Manager/Director: Roberto Bentjerodt	Sector Managers: Ridwan Ali/Michael Baxter
Project ID: LK-PA-34212 Sector: Rural Development	Program Objective Category: EN
Lending Instrument: SIL	Program of Targeted Intervention: [ ] Yes [x] No

Project Financing Data [ ] **Loan** [x] **Credit** [ ] **Guarantee** [ ] **Other [Specify]**

For Loans/Credits/Others:

Amount (US$m/SDRm): US57.0m/SDR$41.7m
Proposed terms: [ ] Multicurrency [ ] Single currency, specify
Grace period (years): Standard (10) [ ] Standard Variable [ ] Fixed [ ] LIBOR-based
Years to maturity: 40 years
Commitment fee: Standard (a variable rate between 0 and 0.5% of the undisbursed Credit balance annually, set by the Executive Directors of IDA)
Service charge: Standard

Financing plan (US$m):

Source	Local	Foreign	Total
Government	14.2	0.0	14.2
Farmers Organizations	3.0	0.0	3.0
IDA	45.2	11.8	57.0
Total	**62.4**	**11.8**	**74.2**

Borrower: Democratic Socialist Republic of Sri Lanka (GOSL)
Guarantor: N/A
Responsible agency(ies): Mahaweli Authority of Sri Lanka (MASL)

Estimated disbursements (IDA FY/US$M):	FY99	FY00	FY01	FY02	FY03
Annual	25.4	5.4	8.4	9.2	8.6
Cumulative	25.4	30.8	39.2	48.4	57.0

Project implementation period: 5 years Expected effectiveness date: July 1, 1998 Closing Date: Dec.31, 2003

OSD PAD Form: July 30, 1997

A: Project Development Objective

1. Project development objective and key performance indicators (see Annex 1):

- The primary objective of the project is to shift the focus of the Mahaweli Authority of Sri Lanka (MASL) from project implementation to river basin management, thereby ensuring that the natural resources in the Mahaweli River basin/watershed are managed more efficiently, productively and sustainably. This would be accomplished through institutional restructuring and reengineering of MASL, including mobilizing the resources of: (a) distributory canal farmers' organizations (DCFOs) in the operation and maintenance (O&M) of the tertiary irrigation facilities; (b) the private sector in the management of commercial activities; and (c) line agencies in the O&M of MASL-constructed infrastructure. A secondary objective is to improve agricultural productivity through rehabilitation, improvement and better O&M of the irrigation facilities in System H.

- Achievement of the primary objective would be evaluated based on the reduced claim of MASL on the Government budget. Achievement of the secondary objective would be assessed on the basis of the irrigated crop area harvested per unit of irrigation water in System H in any given crop season. Progress towards achieving these objectives would be measured based on the monitorable indicators as shown in **Annex 1.**

B: Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project (see Annex 1):

CAS document number: Report No.15633-CE Date of latest CAS discussion: June 13, 1996

- Improve fiscal discipline by reducing the heavy burden of MASL on the budget (20% in 1996, of Ministry of Irrigation, Power and Energy and Ministry of Agriculture, Lands and Forestry expenditures).
- Promote private sector led, environmentally sustainable development by mobilizing the resources of DCFOs and the private sector within an environmentally friendly regulatory environment.

2. Main sector issues and Government strategy:

- **Lack of fiscal discipline** has been the main failure of Sri Lanka's economic management and the root of many of its economic problems. In 1995, the overall fiscal deficit (excluding grants and privatization proceeds) overshot the budget target and exceeded 10% of GDP. Prompted in part by budget pressures, the Government resumed its privatization program in March 1995 with the establishment of the high-level Public Enterprise Reform Commission (PERC). It also imposed a 10% cut on expenditures (except for foreign-aided capital investments) and increased transport fares, petroleum product prices, and excise taxes on alcohol and tobacco. The Government's inability to restrain current expenditures became more apparent in the 1996 budget, which envisaged an overall fiscal deficit of 9.5% of GDP (excluding grants and privatization proceeds). See: **"Sri Lanka: Recent Economic Developments and Prospects" (Report No. CG96-61, dated October 28, 1996), and the upcoming "Economic Update for May 1998 Aid Group Meeting".**

- Sri Lanka's agricultural policies have been characterized by a strong **pro-irrigated agriculture bias**, driven largely by the objective of rice self-sufficiency. Plantation crops (tea, rubber and coconut), which are mostly exported, receive very little protection, while close to 5% of GDP goes to supporting often non-competitive rice production. One of the main instruments for delivering this protection is massive unrecovered irrigation costs, estimated at US$250 million or 3% of GDP annually (the other being high-than-world prices paid by consumers for rice, estimated at another US$125 million or 2% of GDP annually). The main beneficiary of these irrigation subsidies is production from large-scale irrigation schemes like Mahaweli which have no cost recovery. By contrast, production based on minor irrigation benefits less, and rainfed agriculture not at all. The Government's strategy for reducing the pro-irrigated agriculture bias is to turn over responsibility for the O&M of the large-scale schemes to DCFOs, following the example of the minor irrigation schemes being rehabilitated under the ongoing IDA-financed National Irrigation Rehabilitation Project, NIRP (Cr. 2260-CE). See: **"Sri Lanka - Nonplantation Crop Sector Policy Alternatives" (Report No. 14564-CE, dated March 20, 1996).**

- **Lack of local involvement in natural resource management and protection,** to carry out environmental policies formulated by the Ministry of Environment and Forestry with enforcement from the Central Environmental Authority (CEA). The Government's strategy is to promote involvement of area development authorities like MASL, Provincial Councils and Divisional Secretariats as well as to strengthen natural resource management capacities of the line ministries (project approving agencies). See: **Sri Lanka - Environmental Action 1 Project (Report No. 15261-CE, dated February 24, 1997).**

3. Sector issues to be addressed by the project and strategic choices:

- Heavy budgetary burden of overextended and overstaffed MASL performing services which could be provided more efficiently, productively and sustainably by DCFOs (O&M of the tertiary irrigation facilities), the private sector (e.g., civil engineering design, architectural services, manufacture of dairy products) or other government agencies (e.g. O&M of roads, schools, health clinics, post offices, police stations, etc.). If implemented successfully, the project would create precedents and have favorable implications for broader civil service reform.

- Need to improve efficiency and cost effectiveness of government agencies providing services to agriculture.

- Need to reduce subsidies to large-scale irrigation by promoting DCFOs to take over O&M of the tertiary irrigation facilities.

- Need for improved natural resources management in the ecologically fragile Mahaweli River basin.

C: Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

Component	Category	Cost Incl. Contingencies (US$M)	% of Total
• Institutional		**29.5**	**40**
Restructuring/Reengineering	Policy/Institution-Building	25.3	34
MASL Rightsizing & Staff Retraining/Redeployment (of which Voluntary Early Separation Package and		(24.0)	(32)
Staff Retraining (VESP))	Policy/Institution-Building	(1.3)	(2)
Promoting Farmer Sustainability	Policy/Institution-Building	1.2	2
Privatizing Business Units	Policy/Institution-Building	0.4	1
Handing Over Infrastructure to Line Agencies		0.0	0
Strengthening Natural Resource Mang.	Policy/Institution-Building	2.6	3
• Irrigation Rehabilitation and Improvement in System H	Physical	**44.7**	**60**
Total		**74.2**	**100**

2. Key policy and institutional reforms supported by the project:

The project would support public sector rationalization by "rightsizing", retraining and redeploying of staff to enable MASL perform its new role of river basin management efficiently. It will also support privatization/commercialization of MECA and LDD.

- At the heart of the institutional restructuring program is also the transfer of O&M responsibilities to the farmers through participatory irrigation management. During the project period, the O&M responsibilities for D&F canals will be transferred to the DCFOs.

3. Benefits and target population:

- A more efficient, productive and sustainable MASL, delivering greater development impact at less cost to the Government budget and to the environment, as a result of MASL rightsizing and staff retraining/redeployment, transferring responsibility for O&M of the D and F canals to DCFOs, commercializing/privatizing business units, handing over infrastructure to national and local line agencies and strengthening natural resource management capacity.

- Increased agricultural production in System H, following rehabilitation and improvement of irrigation facilities serving 31,500 ha. Total crop production in System H is expected to increase by about 17% (from 191,370 tons to 223,170 tons) by the end of the project. Since most of this increase would be in higher value dry season (Yala) crops such as chilies, onions and potatoes, as opposed to lower value rice, the 30,200 farm families in the project area would see their incomes rise by about 30%. Rehabilitation and improvement of the irrigation facilities would provide additional benefits to local communities in the project area through increased economic activity.

4. Institutional and implementation arrangements:

Executing agencies: Ministry of Mahaweli Development (MMD) and Mahaweli Authority of Sri Lanka (MASL)

Project Oversight:

- An International Panel of Experts, based on their experience in other countries, would provide advice and international expertise to the Project Steering Committee on river basin management, commercialization/privatization and institutional strengthening in support of DCFOs turnover program. The Panel of Experts would be an adhoc body and would include representatives of river basin agencies in other countries. The Panel would be called upon for advice as and when required, but at least once a year. Assurances were obtained that GOSL/MASL would set up the Panel by September 30, 1998.

- A local High Level Project Steering Committee (PSC) has been established to provide overall policy guidance and monitor the project progress on a quarterly basis. The Project Steering Committee would be chaired by the Secretary, Ministry of Mahaweli Development (MMD) and would consist of the Director General, MASL; the Secretary General, MASL; Project Coordinator, Project Implementation Unit (PIU); Project Director, Rehabilitation Component; Director, PMU; and a representative from the Ministry of Finance and Planning. In addition, the other Heads of MASL agencies and representatives of relevant ministries would be called upon to attend PSC meetings as and when required. The High-Level Project Steering Committee, with membership satisfactory to IDA, was established as a condition of Board presentation, and assurances were obtained that it will be maintained thereafter.

- Besides the PSC, a Mahaweli River Basin Management Committee would be established to oversee MASL's mission transformation from project implementation to river basin management. The Committee would consist of Secretary, MMD; Director General, MASL; the Secretary, Irrigation and Power; Secretary, Agriculture and Lands; Secretary, Forestry and Environment; representatives from the Ministry of Provincial Councils, Department of National Planning, National Water Resources Council and Local Government, and the International Irrigation Management Institute (IIMI). Assurances were obtained that the Committee would be established by September 30, 1998. In addition, the international consultants would be hired periodically to advise and manage the restructuring/change process, and help MASL take corrective measures.

Project Coordination and Implementation:

- A Project Implementation Unit (PIU), headed by the Director General (DG), MASL, would carry out the day-to-day administration and would be the main contact for IDA. The PIU would consist of two units: one at Headquarters and other unit in System H for the rehabilitation component. The PIU at Headquarters would consist of a Project Coordinator (PC) to carry out and consolidate day-to-day overall project activities including preparation of annual work/implementation plans, consolidation of quarterly project reports and financial accounts, and monitoring of the project progress in accordance with the timebound action plan presented in the Project Implementation Plan (PIP). The PC, in consultation with the DG, would also be responsible for assigning the project tasks to all project staff including the advisers and consultants. The project would help the PC to set up a computerized data base covering all project activities including physical progress, employee statistics and skill inventory before and after VESP implementation as well as financial management. In addition, the Headquarters PIU would consist of three advisers - for strengthening of DCFOs, commercialization and river basin management -to provide leadership and advice on these project components as well as a Procurement Specialist, a Financial Controller, an officer for the transfer of infrastructure to line agencies and other key implementation staff. The Field Unit would be headed by a Project Director who would also be the Resident Project Manager of System H. The Project Director would be responsible for the implementation of the physical rehabilitation component with intensive participation of DCFOs and would work closely with the Institutional Development Advisor and the concerned staff. Both units, with staffing satisfactory to IDA, were established as a condition of Board presentation, and assurances were obtained that they will be maintained thereafter.

Implementation Arrangements by Component:

- The Headquarters-based sub-unit, headed by a PC, for the **institutional restructuring/reengineering component** would be responsible for: (a) implementation of VESP; (b) privatization of business activities; (c) strengthening of DCFOs; (d) handing over infrastructure; and (e) strengthening natural resource management. Given the urgency of implementing VESP within a short time frame and volume of disbursements involved, the DG has designated a Special Officer and necessary staff for the implementation and monitoring of VESP. Their appointments would be only for the duration of VESP implementation.

- The field-based sub-unit, headed by a PD, for **the irrigation rehabilitation and improvement component** would be based in System H. The PD would be assisted by a Project Accountant and a small core staff in addition to engineering staff of the Mahaweli Engineering and Construction Agency (MECA) and Headworks Administration, Operation and Maintenance (HAO&M) Division. The DG would appoint a Senior Engineer attached to PIU to function as the link between DG and the PD. The details of these implementation arrangements are provided in **Annex 2**.

Project Monitoring and Supervision

- PSC would be responsible for overall monitoring of the project. It would meet quarterly to review the overall progress of the project, and discuss major policy issues relating to restructuring, privatization, staffing, project finance and other project related matters.

- PIU would have direct responsibility for monitoring and evaluation of project activities and preparing Quarterly Progress Reports to be submitted to IDA not later than January 31, April 30, July 31 and October 31 of each year for the preceding three months. Assurances were obtained that the PIU would prepare annual action plans, satisfactory to IDA, and implement the project in accordance with the plans. Key development objective indicators are presented in **Annex 1.** Progress against these would be monitored as an integral part of the project implementation.

- In addition to quarterly monitoring of project activities by PIU, an external entity would be contracted to carry out more in-depth and qualitative monitoring and evaluation of the DCFOs' institutional strengthening and turn-over program and feed that information to PSC for appropriate actions/corrective measures. A local NGO would also be contracted to facilitate participatory planning and design of rehabilitation of civil works and train MASL staff to sustain the process in the future.

- A separate committee consisting of representatives of the Ministry of Finance, Ministry of Labor, Ministry of Public Administration, and trade unions would be established to monitor the separation of staff and the restructuring process, and ensure that no new staff are recruited without prior IDA approval. The committee would meet quarterly. The first review would be held no later than July 15, 1998.

- Each year, IDA would conduct at least two supervision missions, and the first mission would correspond with a project launching workshop. An Implementation Completion Report (ICR) would be prepared at least six-months prior to the Closing Date, and would focus on the achievements of the project and its impact in relation to its objectives as reflected by the key indicators presented in **Annex 1**.

- Two mid-term reviews would be carried out by December 31, 1999 and December 31, 2001, where GOSL would review the implementation of the project with IDA and other donors on the basis of supervision and progress reports, and promptly thereafter take all actions required as a result of the review. The review would focus on the key indicators presented in **Annex 1.** Assurances were obtained that two project mid-term reviews would be carried out by December 31, 1999 and December 31, 2001, where GOSL would review the implementation of the project with IDA and other donors on the basis of monitoring and evaluation reports submitted by November 30, 1999 and November 30, 2001, respectively, and promptly thereafter take all actions required as a result of the review.

Accounting, Financial Management and Auditing Arrangements:

- MASL has put in place a Financial Controller, who is a qualified professional accountant, assisted by senior accountants and necessary staff in PIU and the two sub-units to carry out the accounting and financial management of the project. The Financial Controller would be responsible for submission of all accounts according to the agreed accounting standards and would provide sufficient financial information for managing and monitoring project activities. Assurances were obtained that PIU would submit quarterly progress reports to IDA as well as audited annual accounts, including a separate opinion on expenditures financed under SOEs, no later than six months after the close of the fiscal year.

- Project financial statements would be audited annually in accordance with standards on auditing acceptable to IDA by an independent auditor. Assurances were obtained that the audit report would be submitted to IDA no later that six months after the close of the fiscal year. *Assurances were also obtained that MASL would finalize terms of reference and appoint an independent private auditor, acceptable to IDA, by project effectiveness.*

Disbursements and Retroactive Financing:

- Disbursements are projected over a period of five years from FY1999 to FY2003. **Annex 6** provides the details of Credit proceeds. To facilitate project implementation, a Special Account in US dollars would be opened with the Central Bank with an authorized allocation of US$1.0 million. GOSL has requested retroactive financing to help cover expenditures incurred toward the payment of the VESP to MASL staff between November 1, 1997 and the date of Credit signing in April/May 1998. A retroactive financing of US$5.7 million (SDR 4.17 million) has been provided for this purpose .

D: Project Rationale

1. Project alternatives considered and reasons for rejection:

- As originally proposed by the Government, the project consisted only of rehabilitation of irrigation facilities. This was considered inadequate, since it did not address the urgent need to reform MASL as an institution, reduce its burden on the budget and upgrade the irrigation facilities.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned):

Sector issue	Project	Latest Supervision (Form 590) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank/IDA-financed			
• Mahaweli Development Program (Stage I)	Mahaweli Ganga Development (US$29.0 million IDA Credit, 1970)	Satisfactory	
• Accelerated Mahaweli Development Program (Irrigation and social infrastructure on 60% of the 29,000 ha, for which water was provided from Stage I)	Mahaweli Ganga Development II (US$19.0 million IDA Credit, 1977, with cofinancing from Canada, Netherlands, UK, USA and EEC)	Satisfactory	
• Excess Water from Mahaweli Ganga	Mahaweli Ganga Technical Assistance (US$3.0 million IDA Credit, 1980)	Satisfactory	
• Accelerated Mahaweli Development Program (System C, Zones 3-6)	Mahaweli Ganga Development III (US$90.0 million IDA Credit, 1981)	Unsatisfactory	
• Accelerated Mahaweli Development Program System B, Zones 6-8)	Mahaweli Ganga Development IV (US$12.1 million Bank Loan and US$30.0 million IDA Credit, 1984, both canceled in 1990 for security reasons)	Unsatisfactory	
• Irrigation rehabilitaion	Tank Rehabilitation and Modernization (US$5.0 million IDA Credit, 1976)	Satisfactory	
• Small scale irrigation	Village Irrigation Rehabilitation Project (US$30.0 million IDA Credit, 1981)	Satisfactory	
• Major irrigation	Major Irrigation rehabilitation Project (US$17.0 million IDA Credit, 1984)	Satisfactory	
• Rehabilitation of minor irrigation facilities	National Irrigation Rehabilitation (US$29.6 million IDA Credit with cofinancing from EC, 1991)	Satisfactory	Unsatisfactory

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. Lessons learned and reflected in the project design:

The Bank/IDA has been supporting irrigation development in Sri Lanka for almost three decades. So far nine credits/loans, totaling US$264.7 million have been approved. Five important lessons of relevance for the proposed project have emerged from these projects:

- With a plethoric staff and no capital or recurrent cost recovery, MASL is not sustainable -- The project addresses this issue by rightsizing MASL and divesting some of its functions to the private sector and other government agencies.

- DCFOs should take more responsibility for the O&M of downstream facilities -- This is a major component of the proposed project.

- Privatization of commercial activities now performed by the Mahaweli Authority is important for generating incentives for farmers to invest in productivity-increasing technology -- Already the Mahaweli Livestock Enterprises (MLE) which manufactures dairy products has been privatized. The proposed project would support privatization of the Mahaweli Engineering and Construction Agency (MECA) as well as commercial parts of the Livestock Development Division (LDD) and possibly partial or full privatization of other suitable units.

- Irrigation works should be planned realistically -- Project irrigation rehabilitation and improvement works have been carefully phased over 5 years, consistent with the implementation experience of the ongoing NIRP and other irrigation rehabilitation projects in Sri Lanka.

- Environmental issues in the Mahaweli River Basin need to be addressed holistically --This is a key feature of the proposed project.

4. Indications of borrower commitment and ownership:

- Before appraisal, GOSL sought the assistance of the U.S. Tennessee Valley Authority (TVA) to prepare a restructuring/reengineering plan for MASL. Prior to negotiations, MASL had TVA carry out a workforce analysis of MASL's staff and design a voluntary early separation package (VESP) targeted at those job categories which were found to contain excess staff.

- Before negotiations, MASL engaged in an extensive process of participatory design of the irrigation rehabilitation and improvement works with DCFOs, and submitted a detailed implementation plan (DIP), sample bidding documents for civil works for the first two years, a human resource development (HRD) plan, and draft TORs for refocussing MASL on river basin management.

- The Ministry of Finance has indicated its intention to support the project with about a 20% contribution which is double the minimum 10% Government contribution required for IDA-financed projects in Sri Lanka.

- The Cabinet has approved MASL's restructuring/reorganization plan.

- As a condition of Board presentation, GOSL offered VESP to MASL staff and determined the number of staff to be separated.

5. Value added of Bank support in this project:

- IDA leadership has triggered a shift away from the state-dominated approach to development that characterized past Mahaweli projects supported by the donor community, and paved the way for a new era of private sector led, environmentally sustainable development and natural resource management in the Mahaweli River Basin. Despite strong support from the central Finance and Planning Ministries, MASL was initially reluctant to move in this direction. For over two and a half years (October 1992 when the first IDA mission visited the country until mid-1995), it engaged in protracted studies of the restructuring options, putting off any real decisions. All this changed, however, with the arrival of the new government in the spring of 1995. They appointed new more dynamic leadership at MASL who, in turn, sought the assistance of TVA, on which MASL had been modeled and which itself had been thoroughly restructured, in the design of a suitable restructuring program. IDA financed TVA's work under an ongoing project. The deepening fiscal crisis of 1995-96 lended urgency to this task, and in March 1996, MASL submitted an acceptable overall restructuring action plan. Further IDA-financed assistance from TVA in 1996/97 enabled MASL to prepare detailed restructuring options. MASL is now eager to push ahead with the restructuring/reengineering program, beginning with the implementation of the VESP for excess MASL staff, estimated at about 57% of the total. Though initiated by IDA, this change in approach would not have been possible without the strong support of the leading Mahaweli donor, the Overseas Economic Cooperation Fund (OECF) of Japan, as well as that of the United States Agency for International Development (USAID) and the European Union (EU).

E: Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (supported by Annex 4):

[ ] Cost-Benefit Analysis : ERR= 14% [x] Cost Effectiveness Analysis:

- The overall economic rate of return of the proposed project is estimated at 14%. The underlying assumptions and treatment of key variables in the derivation of the ERR are provided in **Annex 4**. The ERR is based on incremental irrigation costs and benefits only, excluding the costs and benefits of the restructuring/reengineering component, which cannot be accurately estimated. The ERR is therefore likely to be conservative.

2. *Financial* (see Annex 5):
Fiscal impact:

- The proposed project would make MASL more financially sustainable and have a positive impact on both MASL's and GOSL's budget. The various components of restructuring/reengineering MASL, including staff reductions, transferring O&M responsibility for the D and F canals to the DCFOs, privatization of business units and handing over infrastructure to line agencies, are all critical for MASL's sustainability and would all result in savings in MASL's recurrent budget.

- Savings in MASL's recurrent budget would come immediately from the reduction in MASL's wage bill as a result of the net overall reduction in staff. The staff reduction alone would reduce the recurrent budget roughly by Rs 374 million (US$6.2 million) annually after payment of the VESP, and Rs 743.6 million (US$11.5 million) annually after the project period. As a condition of Board presentation, the VESP was offered to selected categories of MASL staff found to be in excess as a result of the TVA workforce study, and a determination was made that 57% of staff should be separated. Assurances were obtained that MASL would ensure that the separation of staff accepting the VESP is completed by August 31, 1998, and that MASL would refrain from new recruitment of staff in those categories targeted by the VESP and introduce safeguards to prevent a recurrence of excessive staff.

- Further budgetary savings, estimated at Rs 288.4 million (US$4.9 million) for the first four years, and Rs.111.0 million (US$ 1.9 million) per year starting the fifth project year, would come from transferring the O&M responsibility for the D and F canals to DCFOs. Farmers would also contribute to the capital cost of irrigation rehabilitation and improvement works of the D&F canal system, mainly in the form of labor. The financial implications of 10% and 20% cost recovery were analyzed. Based on preliminary estimates of the cost of irrigation rehabilitation and improvement and present farm income, a 20% capital recovery represented about 40% of annual net farm income (inclusive of family labor). Since the project will also transfer O&M costs of D&F canals to farmers, a 20% cost recovery would be too high and might threaten the financial viability of the new DCFOs. The project therefore would require farmers to contribute a minimum of 10% to the capital cost recovery of tertiary works, representing about 20% of annual net farm income. However, GOSL would have to ensure that adequate funds are provided for O&M of the main and branch canals. Assurances were obtained from MASL that the maximum period of Joint Management would be two years during which time MASL agrees to provide technical and financial training to DCFOs. Further assurances were obtained that upon turnover of D&F canals to DCFOs, DCFOs would assume full financial and technical responsibility for their O&M. Agreement was also reached that the O&M responsibility for specific numbers of D&F canals would be tentatively turned over each year to DCFOs as follows : by June 30, 1999, turn over O&M of D&F canals to 283 DCFOs, by June 30, 2000, turn over O&M of D&F canals to another 135 DCFOs; by June 30, 2001, turn over O&M of D&F canals to additional 140 DCFOs; by June 30, 2002, turn over O&M of D&F canals to a further of 121 DCFOs; and by June 30, 2003, turn over O&M of remaining D&F canals to 78 DCFOs. A review would be undertaken to finalize the above schedule for the transfer of O&M responsibility to DCFOs. Based on that review, MASL in consultation with IDA, would adjust the above targets to be achieved during the project period. It was agreed during negotiations that the above review would be completed by July 31, 1998. Finally, assurances were obtained that farmers would make a minimum 10% contribution to the capital cost of irrigation rehabilitation and improvement of tertiary works, that GOSL would provide adequate funds for O&M of the main and branch canals and that MASL would ensure that the principles and processes for promoting farmer sustainability are applied uniformly in all Mahaweli systems.

- An additional amount of approximately Rs194.7 million (US$3.3 million) would be saved annually starting in project year four as a result of the privatization of MECA and the Livestock Development Division (LDD). MECA has been split into two stand alone business units (SABUs), Mahaweli Architectural Consultants (Pvt.) Ltd. and Mahaweli Consultancy Bureau (Pvt.) Ltd., and the commercially viable parts of LDD would be absorbed by the Mahaweli Livestock Enterprise Co. Pvt. Ltd.. During an initial three year incubation period, each unit would have a gradually increasing target for revenue generation as a share of its costs (40% in the first year, 70% in the second year and 100% in the third year) intended to allow them to mature into viable commercial enterprises. MASL would scale down its financial support proportionately. Financial projections show that these three business units have good prospects for survival under reasonable assumptions, following the successful precedent of the privatization of the Central Engineering Consultancy Bureau (CECB). At the end of the three-year incubation period, the successful business units would be incorporated and the unsuccessful ones, liquidated. Assurances were obtained that the SABUs would have a gradually increasing target of revenue generation as a share of costs, satisfactory to IDA, for the incubation period of three years. Assurances were also obtained that SABUs would submit annual accounts, audited by independent auditors acceptable to IDA, and would be liquidated if not proven viable by December 31, 2001.

- Finally, the handing over of infrastructure to line agencies would generate further savings for MASL. An assurance was obtained that GOSL would: (i) by December 15, 1998, through the Ministry of Mahaweli Development, initiate a dialogue with the relevant agencies, estimate the costs of repair of the infrastructure, and submit the complete list of all MASL constructed infrastructure to be handed over, broken down by System, including the line agency to which they are to be handed over and the funds needed to repair/rehabilitate and operate and maintain them; (ii) make adequate provision in its 1999-2003 budgets for this purpose; and (iii) ensure that the infrastructure is effectively handed over according to a time schedule satisfactory to IDA.

Overall, the project would reduce MASL expenditures by Rs 570 million or $9.5 million (about 50% of MASL current 1998 budget estimates) on an average annual basis during the five year project. The savings would be much higher after the project period and would average approximately Rs 1,049 million or $16.8 million (about 70% of 1998 budget estimate) on an annual basis. This, in turn, would make a positive impact on GOSL's overall budget deficit and would reduce the deficit of Rs.69.8 billion (US$1.2 billion) in 1997 to Rs 68.8 billion in 2003, i.e. by about 1.5%. Only the staff reductions would involve substantial budgetary costs, for VESP, but these would be one-time expenditures producing a stream of annual cost savings.

3. Technical:

- The proposed rehabilitation and improvement works are sound technically. Works similar to those proposed under this project have been carried out elsewhere in the country, notably under the Tank Rehabilitation and Modernization Project, Village Irrigation Rehabilitation Project, Major Irrigation Rehabilitation Project and the ongoing National Irrigation Rehabilitation Project (NIRP).

- Timely preparation of designs and prompt selection of contractors and consultants, including direct contracting with farmers organizations, would be key to success.

- In addition to participation at the design stage, the participation of farmers in the implementation of the irrigation rehabilitation and improvement works is essential for them to acquire the sense of ownership necessary for them to take over the O&M responsibility. This has already been introduced by the Irrigation Department under the ongoing NIRP where a turnover agreement is a prerequisite for commencement of works, and farmers are participating in construction as contractors and contributing to cost recovery as well.

- The proposed works would involve a large number of small scale, widely scattered civil works contracts within the System H area, awarded to farmers and local contractors. For these kinds of works, effective progress monitoring, prompt contract management and timely and adequate construction quality control are indispensable. MASL is committed to maintaining a Project Implementation Unit (PIU), headed by a Project Director and assisted by support staff, a computerized monitoring system and a well equipped quality control unit/laboratory in System H, to ensure that these conditions are met.

- In order to permit an immediate start of the project after credit effectiveness, MASL submitted, prior to negotiations, a detailed implementation plan (DIP) and sample bidding documents for the first two years' civil works.

4. Institutional:

a. Executing agencies:

- MASL is well equipped with experienced technical staff who have undertaken large construction works as part of the Accelerated Mahaweli Development Program. The survey, design and engineering work involved in the rehabilitation and improvement of System H would benefit from this group of engineers, technical officers and draughtsmen.

- In the field of participatory irrigation management, the Mahaweli areas are advanced, compared to other irrigated areas in Sri Lanka. The Institutional Development Unit of MASL has a core of over 40 experienced Institutional Development Officers (IDOs) assisted by 270 Institutional Organizer Volunteers (IOVs) whose function is to enlist the participation of DCFOs in decision making, coordination and management and the O&M of the D and F canals. The Unit also benefits from the Central Training Unit of MASL which plans to expand its facilities to provide training to staff and farmers.

b. Project management:

- In addition to the International Panel of Experts which would provide advice and international expertise based on the experiences of other countries, project implementation would be guided by a local High-level Project Steering Committee chaired by the Secretary, MMD, and made up of the Director General, MASL; the Secretary General, MASL; Project Coordinator, PIU; Project Director, Rehabilitation Component; Director, PMU; and a representative from the Ministry of Finance and Planning. In addition, the other Heads of MASL agencies and representatives of relevant ministries would be called upon to attend PSC meetings as and when required. This Committee would meet quarterly to review the overall progress of the project, and discuss major policy issues relating to restructuring, privatization, staffing, project finance and other project related matters. The Steering Committee would also be responsible for approving the award of the technical assistance contracts for restructuring of MASL. The PSC, with membership satisfactory to IDA, has been established as a condition of Board presentation.

- Day-to-day project management dealing with matters of finance, procurement of goods and services, disbursement and monitoring of project activities would be undertaken by a specially created PIU. The PIU, with staffing satisfactory to IDA, has been established as a condition of Board presentation.

5. *Social:*

- In the long-run, the sustainability of the project will depend on the DCFOs. Since 1992, MASL has followed a policy of encouraging and developing participatory irrigation management (PIM) in all areas under its authority. In fact, MASL's program in PIM is ahead of that of other related irrigation agencies in Sri Lanka, including the Ministry of Irrigation which is responsible for the ongoing NIRP.

- In the project area, DCFOs have been formed at the level of D and F canals. Already System H has in place over 2,500 Field Canal Groups (FCGs) which were set up with the assistance of Institutional Development Officers (IDOs) and Institutional Organizer Volunteers (IOVs). Planning and design of the rehabilitation and improvement works was done through these informal groups, over 230 of which have already been formed in System H. On completion of rehabilitation, there would be joint management of the O&M of the rehabilitated canal system by DCFOs and MASL. On completion of the period of joint management, the O&M of the D and F canal system (tertiary) would be handed over to the DCFOs.

- MASL has also been setting up System Coordinating Committees, Block Coordinating Committees and the Project Coordinating Committees. Thirty five Block Committees have already been set up in all Systems, out of which nine are in System H. In addition, there are four project committees. These federated coordination committees not only provide fora for irrigation management, but also cater to all aspects of agricultural and social development, including input supply and income generation activities. These committees principally deal with problems of water distribution, canal O&M issues and improvement works. MASL is encouraging PIM as these committees are expected in the longer-term to take over the O&M of the branch and main canals as well.

- The project would involve farmers in PIM through training, having DCFOs enter into legal agreements clearly defining their rights and responsibilities and involving farmers in all aspects of the project.

- NGOs would play an important role in training DCFOs as well as the project staff in the participatory management. In supporting the rehabilitation of System H, the project would provide the institutional framework for direct farmer participation in the planning, design, construction and the O&M of the D and F canals of System H through a participatory management process with direct farmer involvement at all stages. To strengthen DCFOs, the project proposes to use the existing cadre of social organizers (IDOs and IOVs) to act as catalysts and help farmers to organize. The project provides for training, equipment, vehicles and technical assistance through NGOs. A local NGO/NGOs would be contracted during the first twenty-four to thirty months of the project to facilitate participatory planning and design of the rehabilitation component and train MASL staff to sustain the process in the future.

6. Environmental assessment: Environmental Category [ ] A [x] B [ ] C

- As essentially an institutional reform/irrigation rehabilitation and improvement operation, the project has been classified in the "B" category. Nevertheless, an EA was carried out to evaluate the extent to which existing programs were addressing environmental problems in the Mahaweli basin and to design measures to improve overall environmental management and monitoring in the Mahaweli areas. The EA study provided the basis for the design of the natural resource management component of the project.

- This component would support the consolidation of environmental management and monitoring responsibilities, which are currently spread out over different units of MASL, through technical support to advise on institutional changes required to perform the proposed functions of the future river basin management agency. This component would also support the testing and adoption of new technologies and approaches to manage and maintain the land and water resources in the Mahaweli basin. Assurances were obtained that GOSL would: by June 30, 2000, submit the proposal for refocussing MASL on river basin management; by December 31, 2000, discuss the proposal with IDA; and by June 30, 2001, complete the refocussing of MASL taking into account any comments made by IDA and any recommendations made by the Panel of Experts.

7. Participatory approach:

a. Primary beneficiaries and other affected groups:

- The primary beneficiaries are the farmers who are organized into FCGs and DCFOs. These groups were consulted during the preparation and they participated actively in the planning and design of the rehabilitation and improvement works. NGOs also play an important role in training these farmer groups as well as staff of MASL. The project would heavily involve farmer groups and to this end MASL would work closely with local NGOs in implementation. The aim of MASL's institutional restructuring is to institute a process whereby the O&M responsibility is finally transferred to these farmer groups. Therefore in all aspects the project would adopt a more collaborative approach with clients and stakeholders than in the past.

b. Other key stakeholders:

- In addition to FCGs, DCFOs and NGOs, MASL as well as the local government institutions are directly involved in the planning and implementation of the project activities.

F: Sustainability and Risks

1. Sustainability:

- By rightsizing MASL, handing over responsibility for O&M of the D and F canals to DCFOs, privatizing business units and transferring MASL-constructed infrastructure to national and local line agencies, the project is inherently designed to ensure the sustainability of MASL in the remaining areas where Government still has an important role to play, i.e., promotion of DCFOs and associations thereof to progressively take over O&M of more of the system, upstream water management and environmental protection in the Mahaweli River basin.

2. Critical Risks (reflecting assumptions in the fourth column of Annex 1):

Risk	Risk Rating	Risk Minimization Measure
Annex 1, cell "from Outputs to Objective"		
Continued GOSL/MASL commitment to institutional restructuring/ reengineering	M	Trade unions have been consulted so as to reach a consensus on the restructuring/reengineering program. A voluntary early separation package has been designed to deal fairly with excess staff. GOSL has agreed to finance 20% of the cost of this program.
Continued interest by DCFOs in participating in the design and implementation of the irrigation rehabilitation and improvement works	M	DCFOs have already taken over the O&M responsibility for 109 field canals and are jointly managing 502 field canals. MASL and farmers have experience in the turnover process. In addition, the project provides for intensive training of IDO/IOVs and farmers. DCFOs agree to pay 10% of capital cost of rehabilitation.
Commercialized units may not reach profitability by the agreed target dates	M	Provision made for review of annual audits of accounts and for liquidation, if found unprofitable
Overall Risk Rating	M	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

3. Possible Controversial Aspects:

- **Governance**: The restructuring/reengineering of MASL involves significant staff reduction and handing over of many functions currently performed by MASL to the private sector and other agencies of Government. GOSL policy as enunciated by the President is consistent with the approach being taken under the project, but it is debatable whether if the opposition party came to power it would go along with what is proposed. If such a situation arose, it would be addressed in the context of IDA's overall dialogue with the new Government. Degree of potential controversy on a five-point scale ranging from high (5) to low (1): 2.

- A related possible controversial aspect is whether the current Government would continue with the staff reduction of the magnitude proposed if there is opposition from the trade unions. Recent GOSL efforts at privatization have met with stiff resistance from the trade unions. However, MASL has maintained a dialogue with the trade unions with a view to mitigating this possibility. Degree of potential controversy on a five-point scale ranging from high (5) to low (1): 2.

- Refocussing MASL from project implementation to river basin management may be controversial. However, discussions have already been initiated with MASL and GOSL about the need for a comprehensive river basin approach. A National Water Resources Council (NWRC) has been set up with Asian Development Bank (ADB) technical assistance for water resources policy development. NWRC has reached a consensus with the key stakeholders on the need for land and water resources management on a holistic river basin/watershed basis. Degree of potential controversy on a five-point scale ranging from high (5) to low (1): 2.

G: Main Credit Conditions

1. Effectiveness Conditions:

- Selection of project auditors, acceptable to IDA.

2. Other:

- MASL to: (i) ensure that the separation of staff accepting the VESP is completed by August 31, 1998; and (ii) refrain from new recruitment of staff in those categories targeted by VESP and take budgetary measures to prevent recurrence of excessive staff (Sector Policy/Institutional Action);

- MASL to set up an International Panel of Experts by September 30, 1998, and thereafter maintain the Panel with composition, functions and terms of reference satisfactory to IDA (Sector Policy/Institutional Action);

- MASL to maintain the PSC with adequate members, powers, functions and resources, satisfactory to IDA, for coordinating and monitoring the implementation of the project (Sector Policy/Institutional Action);

- MASL to ensure that: (i) O&M of the D and F canals is transferred to DCFOs in accordance with a time schedule satisfactory to IDA with a maximum period of two years for Joint Management followed by full technical and financial responsibility for O&M by the DCFOs; (ii) farmers contribute at least 10% of the capital cost of irrigation rehabilitation and improvement works of the D and F canals (Revenue Generation from Beneficiaries); and (iii) the principles and processes developed for promoting farmer sustainability are applied uniformly in all Mahaweli Systems (Sector Policy/Institutional Action and Revenue Generation from Beneficiaries);

- GOSL to provide adequate funds for O&M of the main and branch canals (Sector Policy/Institutional Action);

- MASL to ensure that SABUs have: (ii) a gradually increasing target for revenue generation as share of its costs, satisfactory to IDA, for the incubation period of three years; (ii) submit audited annual accounts, audited by independent auditors acceptable to IDA; and (iii) are liquidated if not viable by December 31, 2001. (Sector Policy/Institutional Actions);

- GOSL to: (i) by December 15, 1998, through MMD, submit a complete list of all MASL constructed infrastructure to be handed over, broken down by System, including the line agency to which they are to be handed over and the funds needed to repair/rehabilitate and operate and maintain them; (ii) make adequate provision in its 1999-2003 annual budgets for this purpose; and (iii) ensure that the infrastructure is effectively handed over according to the time schedule satisfactory to IDA; (Sector Policy/Institutional Actions).

- MASL to: (i) by June 30, 2000, submit to IDA the proposal for shifting the focus of MASL from project implementation to river basin management to IDA; (ii) by December 31, 2000, discuss the proposal with IDA; and (iii) by June 30, 2001, complete the refocussing of MASL taking into account any comments made by IDA and recommendations made by the Panel of Experts (Sector Policy/Institutional Action);

- By December 31, 1999 and December 31, 2001, review the implementation of the project with IDA and other donors on the basis of monitoring and evaluation reports submitted by November 30, 1999 and November 30, 2001, respectively, and promptly thereafter take all actions required as a result of the review (Monitoring and Review);

- MASL to ensure that: (a) the PIU is maintained with adequate staff, powers, functions and resources, satisfactory to IDA; (b) the PIU prepares annual action plans, satisfactory to IDA, and implements the project in accordance with the annual plans; and (c) the PIU Submit quarterly progress reports to IDA (Monitoring and Review); and

- MASL to ensure that the audited annual accounts, including a separate opinion on expenditures financed under SOEs, are submitted to IDA within six months of the end of the fiscal year (Accounts/Audits).

H. Readiness for Implementation

[x] The engineering design documents for the first two years' activities are complete and ready for the start of project implementation.

[x] The procurement documents for the first two years' activities are complete and ready for the start of project implementation.

[x] The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.

Compliance with Bank Policies

[x] This project complies with all applicable Bank policies.

Task Leader: Douglas W. Lister[1]

Country Director: Roberto Bentjerodt

[1] The task team consisted of Meena Munshi, Nihal Fernando, Guy Motha, Tetsuo Yaguchi, (SASRD), Malcolm Jansen (SASEN), Jose P. Correia Da Silva (LEGSA), Vimala Abraham (LOAAS)

Annex 1
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project
Project Design Summary

Narrative Summary	Key Performance Indicators[2]	Monitoring and Supervision	Critical Assumptions
Sector-related CAS Goal: • Improve fiscal discipline	• Reduction in budget deficit from Rs.69.8 billion in 1997 to Rs 69.0 billion in 2001 and to Rs 68.8 billion by 2003	• Annual review with Ministry of Finance	(Goal to Bank Mission) • Continued efforts to reduce the budget deficit from other sources (e.g. consumption subsidies)
• Promote private sector led, environmentally sustainable development	• Government privatization/commercialization program implemented as scheduled	• Central Bank Reports Annual review with MASL, PERC, Ministry of Finance and Planning and Ministry of Plan Implementation	• Continued pursuit of "market friendly" policies and liberal trade regime
Project Development Objectives • To shift the focus of MASL from project implementation to river basin management	• Reduced claim of MASL on the recurrent budget from Rs.1,304 million in 1998 to Rs 696 million in 2001 and to Rs 552 million by 2002	• MASL/GOSL Annual Budgets	(Objective to goal) • Continued GOSL commitment to restructuring/reengineering of MASL
• To improve agricultural productivity in System H through the rehabilitation, improvement and better O&M of irrigation facilities	• Irrigated crop area harvested per unit of irrigation water in any crop season in System H.	• MASL's Irrigation Management Monitoring Reports	• Continued progress in agricultural sector policy and institutional reform, in partnership with other donors
Project Outputs 1. MASL restructuring/ reengineering program implemented, including transferring O&M responsibility for D and F canals to DCFOs and strengthening of river basin management	1.1 Voluntary Early Separation Package (VESP) implemented with objective of 35% overall staff reduction	• Project Monitoring Reports	(Outputs to Development Objectives) • Continued commitment by MASL management to institutional restructuring/reengineering
	1.2 Turn over O&M of D and F canals to 283 DCFOs by June 1999; 418 DCFOs by June 2000; 558 DCFOs by June 2001; 679 DCFOs by June 2002; and 757 by June 2003, leading to reduction of MASL O&M expenditures	• Qualitative evaluation by an independent agency	• Continued interest by DCFOs in participating in the design and implementation of the irrigation rehabilitation and improvement works
	1.3 MECA commercialized/privatized or liquidated by end 2001	• Annual reviews and audits	• Commercialized units may not reach profitability by the agreed target dates. Provision has been made for review of annual audits of accounts and for liquidation, if found unprofitable.
	1.4 Hand over MASL constructed infrastructure to national and local line agencies in System H by June	• Project Monitoring Reports	

[2] Baseline and targeted values should be shown, with the latter divided into values expected at mid-term, end of project and full impact.

Narrative Summary	Key Performance Indicators[2]	Monitoring and Supervision	Critical Assumptions
	30, 1999; in System C and Victoria by June 30, 2000; and in System B and Kotmale by June 30, 2001 1.5 Natural resources management capacity strengthened/MASL's focus shifted from implementation to river basin management	• Notes of the International Panel of Experts and PSC	
2. System H irrigation facilities rehabilitated and improved	2.1 Irrigation facilities covering 2,918 ha rehabilitated and improved by June 30, 1999; 14,353 ha of facilities rehabilitated and improved by June 30, 2001; and 31,500 ha of facilities rehabilitated and improved by June 30, 2003.	• Quarterly Progress Reports of PIU	
Project Components/Subcomponents: [See Annex 2 for a detailed description.]: A. Institutional restructuring/reengineering	Inputs: (budget for each component)	• Supervision and Progress Reports	(Components to Ouputs)
• Voluntary Early Separation Package	US$24.0 million		
• Staff Retraining/Redeployment through provision of TA and training	US$ 1.3 million		
• Promoting farmer sustainability through provision of TA, training, vehicles and equipment	US$1.2 million		
• Privatizing business units through provision of TA and training	US$0.4 million		
• Handing over infrastructure to line agencies after repair and rehabilitation	--		
• Strengthening natural resource management capacity through provision of TA and training	USS2.6 million		
B. Irrigation rehabilitation and improvement in System H through provision of civil works, vehicles and equipment	US44.7 million		

Annex 2
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Detailed Project Description

I. INSTITUTIONAL RESTRUCTURING/REENGINEERING (US$29.5 million)

1. The institutional restructuring /reengineering component would consist of : (a) rightsizing" MASL through offering a Voluntary Early Separation Package (VESP) and retraining and redeploying MASL staff ; (b) promoting farmer sustainability; (c) commercializing/privatizing business units; (d) handing over infrastructure to national and local agencies; and (e) strengthening natural resource management.

2. **A. MASL Rightsizing and Staff Retraining/Redeployment (US$25.3 million).** This sub-component would include: (i) "rightsizing" of MASL by offering a voluntary early separation package (VESP) (US$24.0 million); and (ii) retraining and redeploying staff (US$1.3 million) to perform productive work in the new organization. MASL, with assistance from the U.S. Tennessee Valley Authority (TVA), has already started a carefully planned process designed to improve staff efficiency and productivity. The first step in this process was workforce planning, beginning with a skills inventory covering all employees. The TVA study showed that the workforce is dominated by support personnel. The TVA study also determined the core competencies needed for the new MASL that fall into three major categories: (a) river basin management; (b) promoting sustainable settler communities; and (c) commercialization/ privatization. A gap analysis was then made between the skills existing in the workforce and those which are needed to efficiently perform the functions of the new organization. Many of the skills required for the new MASL exist in the organization today and are crucial building blocks for the future. However, areas exist where critical skills are lacking or deficient.

3. Voluntary Early Separation Package (VESP). Several early retirement plans previously used in downsizing state-owned businesses in Sri Lanka were analyzed to design a sufficiently, but not overly generous voluntary early retirement program for MASL. The proposed VESP took into account the lessons of these experiences, and was designed with adequate safeguards, including specific targeting of incentives to ensure that core staff do not leave. The details of the package were discussed with the Labor Commissioner and the unions, and based on these consultations the size of the package was graduated by years of service. The projected cost of the VESP is about Rs.1,500 million (approximately US$24.0 million) for about 57% of staff. The average cost per staff is approximately Rs 240,845 (about US$3,853). GOSL is supportive of the Plan, is committed to its implementation, and has offered to fund 20% of its cost. Administrative controls would be instituted to prevent a recurrence of excessive staff.

4. The offer of VESP to eligible categories of employees and the determination of the number of staff to be separated was carried out as a condition of Board presentation. Assurances were obtained during negotiations that MASL in collaboration with the Ministry of Finance would adopt budgetary procedures which would require staffing to be tied directly to payroll cost projections on an annual basis, MASL will ensure that the separation of staff accepting the VESP is completed by August 31, 1998, and will refrain from new recruitment of staff in those categories targeted by VESP until end 2003, and will take budgetary measures to prevent recurrence of excessive staff. This would protect MASL against political pressures to hire new staff.

5. Staff Retraining and Redeployment. Once the VESP is completed, MASL's Human Resources Development Unit (HRDU) would take inventory of the remaining staff to determine the number of personnel and various skill sets available in the organization. HRDU would be responsible for retraining and redeploying this group to become productive contributors to the new MASL.

6. B. **Promoting Farmer Sustainability (US$1.2 million):** In conjunction with the System H irrigation rehabilitation and improvement program, this subcomponent would provide the institutional framework for

direct farmer participation in the planning, design, construction and the O&M of the D and F canals of System H through a participatory management process with direct representation at all stages. Planning and design of the rehabilitation would take place through Field Canal Groups (FCGs) and D Canal Farmer Organizations (DCFOs). In addition to assisting in the planning and design of the rehabilitation of the D & F canals, DCFOs would contribute to the capital costs of the rehabilitation of the D and F canals mainly through their own labor. Approximately, 30,200 farmers, formed into 268 DCFOs, are expected to participate and contribute at least 10% of the capital cost of rehabilitation the D and F canal systems. The average farmer's contribution to the capital cost of rehabilitation is estimated to be about 20% of net farm income (single season earnings), including family labor.

7. On completion of rehabilitation, MASL would follow the current practice of joint management of O&M of the rehabilitated D and F canal system. The period of joint management will be at least 12 months and a maximum of twenty-four months. At negotiations, assurances were obtained from GOSL/MASL that the maximum period of Joint Management would be two years during which time MASL would provide technical and financial training to DCFOs. On completion of the period of joint management, the O&M of the system would be turned over to the DCFOs. MASL has in place two Memoranda of Understanding (MOUs) which were signed between MASL and the DCFOs, one for Joint Management and the other for Turn Over. These MOUs outline the timing and nature of responsibilities. While DCFOs could be expected to maintain an adequate level of O & M after take over, MASL needs to provide adequate funds for O&M of the main and branch canals. Assurances to this effect were obtained during negotiations. Assurances were also obtained during negotiations that the handing over of O&M responsibility of D & F canals to DCFOs throughout all the Mahaweli systems would be carried out by MASL in accordance with an agreed time schedule. It was also agreed that a short study would be carried out to assess the present status of DCFOs and institutional strengthening program of MASL and review the proposed schedule for the transfer of O&M responsibility to DCFOs. Based on that review, MASL in consultation with IDA would adjust the targets to be achieved during the project period.

8. This sub-component also provides for training, equipment and technical assistance to DCFOs with NGO participation. Besides enabling DCFOs to carry out O&M functions effectively, the training would emphasize preventive and periodic maintenance, supervision of simple engineering works and concrete and rubble structures. To assist DCFOs in achieving financial sustainability, the training emphasis in agricultural and livestock extension would be on enhancing farmer participation in identifying and solving problems, farmer training in income generating activities, financial management, input and output marketing and bulk purchasing. At the field level, the formation and strengthening of Field Canal Turn-out Groups and DCFOs and coordinating these activities with the rehabilitation program would be undertaken jointly by the Institutional Development Officers (IDOs) and the engineering staff at the field level. Training for IDOs, Institutional Organizer Volunteers (IOVs) and farmers would be undertaken by the Human Resource Development Unit in collaboration with the Institutional Development Unit. Though IDA funding would support these activities in System H only, to ensure consistency of approach, the principles and processes developed in System H would be uniformly applied in all Mahaweli Systems C, G and UW funded by other donors and MASL. Assurances to this effect were obtained during negotiations.

9. **C. Commercializing/Privatizing Business Units (US$0.4 million).** This sub-component would provide technical assistance and training to facilitate the commercialization/privatization of the Mahaweli Engineering and Construction Agency (MECA) and the Livestock Development Division (LDD). Following the precedent of the successfully privatized Central Engineering Consultancy Bureau (CECB), MECA would be split into two units: (i) Mahaweli Architectural Consultants (Pvt.) Ltd.; and (ii) Mahaweli Consultancy Bureau (Pvt.) Ltd.. LDD would also be set up as a separate unit. These units would then go through a five-step process, as outlined in the TVA restructuring/reengineering plan, i.e. reduction of excess staff; market analysis and business planning; creation of new stand-alone business unit; business incubation period of three years; and finally registration of financially sustainable units as independent companies or liquidation of non-viable units. During the three-year incubation period, the management team and key personnel in the newly established stand-alone business units would be given professional support and training to design business plans, conduct market

analysis and prepare financial projections. At the end of the three year incubation period, the privatized unit's management team is expected to be proficient enough to run the company on commercial lines and, but if not viable, the units would be liquidated by December 31, 2001.

Detailed Action Plan for Privatization - Agreed Dates

No.	*Actions*	*Agreed Date*
1.	MASL to designate units targeted for commercialization/privatization	11/01/97
2.	Registration of companies under the relevant acts	11/30/97
3.	MASL to appoint management teams and other support staff for the targeted units	11/30/97
4.	Targeted units to develop business plans and financial projections (with quarterly break down of achievable sustainability levels)	03/31/98
5.	Project Implementation Unit (PIU) to develop and finalize TOR for consultants for the commercialization process	03/31/98
6.	Monthly progress reporting by the targeted units to the High Level Project Steering Committee (HLPSC) and quarterly assessment by HLPSC of each unit's performance	07/31/98
7.	Selection and appointment of consultants	09/30/98
8	Workforce planning, skill retraining, marketing etc. assisted by consultants	12/31/98
9.	Targeted units to achieve financial sustainability levels each year (with quarterly breakdowns as agreed in business plan).	20% by 12/31/98 40% by 12/31/99 70% by 12/31/00 100% by 12/31/01
10.	Submission of audited annual financial statements by the targeted units to HLPSC and IDA within six months from the close of the year	Every year before June 30 beginning from 06/30/99.
11.	Not less than 3 months before the end of the incubation period of each targeted unit, HLPSC will review the commercialization progress based on track record and recommend extension of incubation period or liquidation	09/30/01

10. **D. Handing Over Infrastructure to Line Agencies (No Cost).** Approximately 70-80% of infrastructure constructed by MASL in the settler communities (roads, schools, hospitals, police stations, post offices, etc.) has already been handed over to the relevant national or local line agency. For example, out of a total of 427 km of Class A and B roads constructed by MASL, 72% has already been handed over to the Road Development Authority (RDA). However, for about 965 km of Class C and D roads constructed by MASL, the Provincial Councils have not yet taken over responsibility.

11. MASL has identified most of the infrastructure facilities that need to be handed over to relevant line agencies. However, discussions with the RDA and the Ministry of Provincial Administration indicate that they do not have a complete list of all infrastructure that needs to be handed over. There is also a need to quantify any necessary repair/rehabilitation needs (e.g. for roads in poor condition) as well as the O&M costs.

12. GOSL would therefore: (i) by December 31, 1998, through the Ministry of Mahaweli Development, submit a complete list of all MASL constructed infrastructure to be handed over, broken down by System, including the line agency to which they are to be handed over and the funds needed to repair/rehabilitate and operate and maintain them; (ii) make adequate provision in its 1999-2003 annual

budgets for this purpose; and (iii) ensure that the infrastructure is effectively handed over according to the following schedule:

By June 30, 1999: Hand over remaining infrastructure in System H
By June 30, 2000: Hand over remaining infrastructure in System C and Victoria Project
By June 30, 2001: Hand over remaining infrastructure in System B Left Bank and Kotmale Project

13. **E. Strengthening Natural Resource Management (US$2.6 million):** This sub-component would support the consolidation of environmental management responsibilities, which are currently spread over different units of MASL, through technical support to advise on institutional changes required to perform the proposed functions of the future river basin management agency. It would also provide resources for adaptation of proven technologies and approaches to manage and maintain land and water resources. Project support would be for planning and implementing activities for sustainable land and water management through participatory approaches, dissemination of information, provision of training, technical guidance and mobilization of various land user groups in the basin for expansion of sustainable technologies, awareness and extension. Demonstration activities would include programs to find appropriate ways of improving land management, controlling erosion, reducing pollution and controlling deforestation. This sub-component complements the pilot land management activities carried out under the ongoing Environmental Action 1 Project. Assurances were obtained that GOSL would: by June 30, 2000, submit the proposal for refocussing MASL on river basin management; by December 31, 2000, discuss the proposal with IDA; and by June 30, 2001, complete the refocussing of MASL taking into account any comments made by IDA and any recommendations made by the Panel of Experts.

II. IRRIGATION REHABILITATION AND IMPROVEMENT (US$44.7 million)

14. This component would include essential repair and rehabilitation works and improvements where required on the irrigation systems serving about 31,500 ha in System H, most of which was developed from 1974 to 1980 under the Accelerated Mahaweli Development Program (AMDP). The rehabilitation and improvement works would involve essential repairs to reservoirs, main canals (27 km), branch canals (22 km), distributory canals (115 km), field canals (667 km), drains (62 km) and irrigation tanks (15).

15. **A. Headworks (US$12.4 million).** This subcomponent consists of major reservoirs, main and branch canals and medium tanks. The reservoirs would need only minor civil and some hydroelectro-mechanical works. The civil works are for prevention of further erosion in gullies already formed in dam embankments, and riprap protection works including provision of toe filters in certain embankments sections where seepage occurs. The hydromechanical works include repairing diversion sluice gates, spillway gates, stoplogs, etc. and replacing deteriorated and outmoded gates and stoplogs to enhance the reliability, durability and easiness in operation.

16. In the case of main and branch canals, rehabilitation works would include: earth, concrete and rubble work to restore the original performance of canals and control erosion downstream of structures and on the concave sides of canal curves; repairs of lining, and of canal spillways, turnouts, drops, troughs and regulators; repairs of drainage undercrossings and measuring flumes; and rehabilitation of bath steps. Improvements would include: provision of a limited number of bathing spots/cattle crossings, drops and turnouts; lining of sections most subject to erosion; and where required, minor works on reservoirs, anicuts, main sluices, etc. Also, the fifteen medium scale irrigation tanks would be rehabilitated mainly by repairing and strengthening dam embankment.

17. B. **Tertiary Works (US$32.3 million).** The project would also provide funds for rehabilitation and improvement of distributory (D) canals (441), field (F) canals (2544) and minor tanks (5).

weakened by encroachment or erosion; repair or replacement of structures and concrete lining. Improvements would include: earthfill to bring canal-side roads to bund top level, where applicable; lining of small sections of high banking subject to excessive erosion and leakage; and construction of new bathing spots and cattle crossings.

18. Rehabilitation works on F canals would include: earth and concrete work for reshaping of canal sections; repairs to damaged existing masonry and concrete structures; provision of missing canal related structures and facilities (such as stop planks, turnouts gates, discharge regulators, division boxes, etc.). The improvement works would include: installation of adequate numbers of measuring devices and discharge regulators; replacement of deteriorated rubble masonry structures with concrete structures; and provision of bathing platforms, cattle crossings, foot bridges, road crossings at appropriate locations, etc. Together with these works, all roads of DCs and FCs would be repaired and re-conditioned, and all existing drainage canals would be rehabilitated by clearing of vegetation, desiltation and replacement of existing temporary drainage pick-up anicuts and stick dams with permanent structures.

19. Costs include a provision of 8% for supervision and administration. The project would also provide for grading, gravelling, and formation of side drains on the roads running along side the main, branch and D canals. Such repair work would be required on about 50% of all canal-side roads. Funds would also be provided for repair of pot holes and other damaged sections on the asphalted sections of canal roads. Provision has been made for repair of road crossings and for grading and gravelling of about 50 km of market roads, which link the canal roads with the main road network.

Implementation Arrangements

20. **Project Oversight:** An International Panel of Experts, based on their experience in other countries, would provide advice and international expertise to the High Level Project Steering Committee (PSC). The Panel of Experts would be an ad hoc body and would consist of high-level representatives of river basin agencies in other countries. The Panel would be set up by September 30, 1998. They would be called up for advice as and when required but at least once a year to offer expert advice on the changing role of MASL. In addition, a local High Level Project Steering Committee (PSC) would be established to review and monitor project activities. The PSC would be chaired by the Secretary, Ministry of Mahaweli Development (MMD) and would consist of the Director General, MASL; the Secretary General, MASL; Project Coordinator, Project Implementation Unit (PIU); Project Director, Rehabilitation Component; Director, PMU; and a representative from the Ministry of Finance and Planning. In addition, the other Heads of MASL agencies and representatives of relevant ministries would be called upon to attend the PSC meetings as and when required.

Project Coordination and Implementation:

21. A Project Implementation Unit (PIU), headed by the Director General (DG), MASL, and consisting of a Project Coordinator (PC) and core staff, was established as a condition of Board Presentation. PIU would be responsible for overall implementation and coordination of all project components, in accordance with the time-bound action plan presented in the Project Implementation Plan (PIP). PIU would be responsible for project finance, procurement and disbursement matters as well as for the recruitment of consultants and contractors. PIU would consist of a headquarters-based unit for institutional restructuring/reengineering component; and a field-based unit for rehabilitation and improvement component. The heads for the two Units were appointed as a condition of Board presentation.

Implementation Arrangements by Components

22. The sub-unit for the **institutional restructuring/reengineering component** would consist of one Project Coordinator, one Special Coordinator for VESP, three advisers for commercialization, institutional strengthening of DCFOs and river basin management, and core staff needed to implement the component. The Headquarters unit would be responsible for: (a) implementation of VESP; (b) commercialization of business activities; (c) strengthening of DCFOs; (d) handing over of MASL-constructed infrastructure; and (d) natural resource management. The detailed implementation schedule for executing this component is provided in the PIP.

23. Given the urgency to implement VESP within a short time after the and volume of disbursements involved, the DG has designated a Special Officer and necessary staff (e.g. a project accountant, a legal officer, 2 assistant accountants, book keepers and other support staff) for the duration of the implementation and monitoring of VESP.

24. Commercialization of stand alone business units, strengthening of DCFOs, handing over infrastructure and natural resource management would be responsibility of the Project Coordinator (PC) and locally hired experts. To carry out the above, the key staff consisting of the PC, a project accountant, a legal officer, and essential support staff were put in place by Board Presentation.

25. The sub-unit for the **irrigation rehabilitation and improvement component** would be based in System H. This component would be implemented under the overall supervision of the Director General (DG), MASL, and a Project Director (PD) would direct all implementation actions for the rehabilitation and improvement component. The DG would appoint a Senior Engineer attached to PIU to function as the link between him and the PD (Rehabilitation). He would be designated as the Coordinator for rehabilitation component and would be a member of the Project Steering Committee.

26. The PD will be located in the System H area. The PD would be assisted by three Senior Project Engineers (SPEs) to implement tertiary and head works related activities. Tertiary works would be divided into two clusters of four management blocks each. Under PD's direction, two SPEs would be appointed to oversee each cluster. The Headworks would be grouped into one cluster and would be implemented by a third SPE. The three SPEs with a small core staff would be stationed in the PD's office in System H. The two PSEs for tertiary work clusters would be appointed from MEA and the SPE for Headworks cluster would be appointed from Headworks, Administration, Operation and Maintenance Division (HAO&M). Day to day supervision of the downstream rehabilitation work would be handled by eight Block Offices, which would serve as actual centers for all site operations. Each Block Office is staffed with an adequate numbers of engineers and technicians who would undertake planning, design and construction supervision. To facilitate communications with DCFOs, each Block Office would be staffed with Community Development Officer, Institutional Development Officer, and a number of Unit Managers.

27. **Implementation Plan.** The rehabilitation and improvement works would be implemented in five years. A schedule of implementation is shown below. As indicated, project rehabilitation and improvement works would be completed for 31,500 ha of irrigated areas by the end of the fifth year.

Works	Unit	1st year	2nd year	3rd year	4th year	5th year	Total
Headworks							
-Major reservoirs	nos	nil	1	2			3
-Medium tanks	nos	1	2	2	5	5	15
-MCs	km	8	12	40	49.5	49.0	158.5
-BCs	km	10	14	40	44.4	36.1	144.5
Tertiary works							
-Madatugama	ha	500	742	1500	1819	1519	7080
-Galnewa	ha	360	500	1000	1185	885	3930
-Meegalawa	ha	320	500	500	575	275	2170
-Tambuttegama	ha	375	500	1000	1000	175	3050
-Nochchiyagama	ha	300	393	800	1024	1023	3540
-Talawa	ha	337	500	800	997	696	3330
-Eppawala	ha	332	400	800	1084	1084	3700
Mahailluppallama	ha	394	500	1000	1403	1403	4700
Total	ha	2918	4035	7400	9086	7061	31500

Accounting, Financial Reporting and Auditing Arrangements:

28. IDA staff reviewed MASL's financial management arrangements including the internal controls, accounting and auditing and found these arrangements satisfactory. MASL has put in place a Financial Controller, who is a qualified professional accountant. He is assisted by senior accountants and necessary staff to carry out the accounting and financial reporting of the project. The Financial Controller would be responsible for submission of all accounts according to the agreed accounting standards and would provide sufficient financial information for managing and monitoring project activities.

29. PIU would ensure that independent private auditors, acceptable to IDA, would be contracted in a timely fashion to provide financial oversight. Assurances were obtained that MASL would finalize the terms of reference and select the project auditors, acceptable to IDA, by project effectiveness.

Project Monitoring and Supervision

30. PSC would be responsible for overall monitoring of the project. It would meet quarterly to review the overall progress of the project, and discuss major policy issues relating to restructuring, privatization, staffing, project finance and other project related matters. PIU would have direct responsibility for monitoring and evaluation of project activities and preparing quarterly Progress Reports to be submitted not later than January 31, April 30, July 31 and September 30 of each year for the preceding three months. Besides, PIU would prepare annual action plans, satisfactory to IDA, and implement the project in accordance with the annual plans. Key development objective indicators are presented in **Annex 1.** In addition to quarterly monitoring of project activities by PIU, an external entity would be contracted to carry our in-depth and qualitative monitoring and evaluation of the institutional strengthening and turnover program in Mahaweli System H, and feed that information to the PSC. Each year, IDA would conduct at least two supervision missions.

31. A separate committee consisting of representatives of the Ministry of Finance, Ministry of Labor, Ministry of Public Administration, and trade unions would be established to monitor the separation of staff and

the restructuring process, and ensure that no new staff are recruited without prior IDA approval. The committee would meet quarterly. The first review would be held no later than July 15, 1998.

32. Two project mid-term reviews would be carried out by December 31, 1999 and December 31, 2001, where GOSL would review the implementation of the project with IDA and other donors, and promptly thereafter take all actions required as a result of the review.

Annex 3
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Estimated Project Costs

Project Component	**Local**	**Foreign**	**Total**
	------------------US $ million--------------		
Institutional Restructuring/Reengineering			
MASL Rightsizing & Staff Training/Redeployment	24.6	0.4	25.0
(of which)			
Voluntary Early Separation Package	(23.8)	(0.0)	(23.8)
Staff Retraining & Skills Dev.	(0.7)	(0.4)	(1.1)
Promoting Farmer Sustainability	0.9	0.3	1.2
Privatizing Business Units	0.0	0.4	0.4
Handing Over Infrastructure	0.0	0.0	0.0
Strengthening Natural Resource Management	0.9	1.5	2.4
Sub-total	**26.3**	**2.6**	**28.9**
Irrigation Rehabilitation & Improvement in System H			
Headworks	8.5	2.4	11.4
Downstream Works	23.0	5.7	28.7
Sub-total	**31.5**	**8.1**	**39.6**
Total Baseline Cost	**57.8**	**10.7**	**68.5**
Physical Contingencies	2.0	0.5	2.5
Price Contingencies	2.6	0.6	3.2
Total Project Cost	**62.4**	**11.8**	**74.2**

Annex 4
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Project Economic and Financial Analysis

1. A detailed economic and financial analysis has been prepared to analyze the quantitative effects of the project in terms of: (a) overall efficiency gains in the form of increased net agricultural production benefits; (b) the income effect for the beneficiaries; and (c) fiscal impact. It should be emphasized that the ERR is derived from conservative assessments of quantifiable agricultural benefits only. The result is therefore partial since it excludes benefits of the institutional restructuring/reengineering measures that would result in the reduction in the budgetary and management burden on the government.

A. **Cost-Benefit Analysis Summary**

2. The overall economic rate of return (ERR) for the project is estimated at 14%. The underlying assumptions and the treatment of key variables in the derivation of ERR are as follows:

Main Assumptions:

(a) Prices. All values are expressed in constant 1997 Sri Lanka Rupees. For internationally traded goods, prices were derived from the latest World Bank commodity prices forecast (May 1997), while those for non-traded goods are based on domestic financial prices. Appropriate adjustments were made for freight, handling, processing and quality differentials. Non-traded outputs and inputs were expressed in border Rupees through application of a Standard Conversion Factor (SCF) of 0.9. Similarly, unskilled labor costs were adjusted by 0.9.

(b) Project benefits. Given inadequate information to quantify many of the project's environmental effects, and difficulty in quantifying benefits of restructuring MASL, the economic analysis considers agricultural production benefits in the System H rehabilitation areas only. These consist of increased cropping intensity due to increased availability of water and increased yields due to more reliable water supplies. Total benefits from the project are therefore likely to be underestimated.

(c) Project life. A project life of thirty years is assumed for economic analysis. This is the expected life of the proposed engineering works, which accounts for about 60% of the total project cost.

(d) Investment Cost. The analysis is based on project costs directly associated with the irrigation rehabilitation and improvement works: (i) all investment costs and incremental recurrent costs during the project implementation period, excluding the restructuring/reengineering of MASL component; and (ii) O&M costs (including farmers' costs) after completion of works. Economic costs include physical contingencies, and exclude price contingencies and taxes. Local costs were adjusted by the SCF of 0.9.

(e) Operation and Maintenance. As irrigation facilities and roads (including canal roads) are expected to last for an average of thirty and fifteen years, respectively, operating and maintenance costs of these have been taken into account in the analysis as recurrent costs. These incremental O&M costs are adjusted by the SCF.

Sensitivity Analysis

3. The project's viability under adverse conditions was tested using sensitivity analysis. Overall, the results appear satisfactory and are not sensitive to variations in costs and benefits. For the ERR of the project to drop to 10% (assumed opportunity cost of capital), either benefits would have to drop by 35%; benefits decrease by 15% with 20% increase in investment costs; or benefits lag by 1, 2 or 3 years with a 10%, 20% or 40% increase in costs

respectively. The test results indicate that relatively large changes would be required to reduce the project's economic viability to below acceptable levels.

Variable test	ERR %
Benefits down by 20%	11
Benefits down by 35%	10
Benefits lag by 1 year with costs up by 40%	10
Benefits lag by 2 years with costs up by 20%	10
Benefits lag by 3 years with costs up by 10%	10
Cost overruns of 30%	11
Benefits down by 15% with costs up by 20%	10

B. **Farm Income Analysis**

4. To assess the impact of the project on farmers' income, farm models were formulated on the basis of current use of irrigable land per farm. The representative farm models are based on 1.0 ha farms. Within this, individual crop areas were apportioned on the basis of average total crop areas within each season. The results of the farm budget analysis show that, at full project development, annual net farm income of farmers in the project area would increase from Rs 52,100 to Rs 69,800 (a 34% increase). The increase in income is attributed to higher crop yields, reflecting an increase in water supply and improvement in water distribution especially during the dry (Yala) season, which cannot be assumed without the project. Most of the expected gains would come from farmers cultivating tail-end land, as these farmers generally experience difficulties in receiving water. Also, a decrease in rice cropped area, as a result of modest levels of crop diversification during the dry season, will increase water availability for other field crops since rice is the most water consuming crop.

C. **Fiscal Impact**

5. In line with GOSL's objective of improving fiscal discipline, the project involves restructuring of the Mahaweli Authority of Sri Lanka (MASL) to make it more efficient, productive and sustainable, notably by reducing excess staff in certain job categories, transferring the O&M responsibilities for downstream irrigation facilities to the Distributory Canal Farmers' Organizations (DCFOs) and privatizing some of MASL's activities that could be performed more effectively and efficiently by the private sector. Analysis of the project's impact on the government budget indicates that, by taking these measures, the project would make a significant net positive contribution to the national budget. MASL was allocated Rs. 2.1 billion from budgetary resources in 1996. This declined by about 20% to Rs.1.7 billion in 1997, but recurrent budget expenditures remained the same. Two-thirds of MASL's overall allocation is the recurrent budget amounting to Rs.1.0 billion, while one third is development budget or Rs.715 million in 1997. The proposed recurrent budget for 1998 is Rs.1.304 billion, out of which salaries alone amount to Rs 987.5 million (76% of recurrent).

6. The largest budgetary benefit would come from the reduction in MASL's wage bill as a result of a net overall 57% reduction in staff.[3] This alone would reduce the recurrent budget roughly by Rs 592.0 million

[3] For more details, see Bank Staff Assessment #2--MASL Rightsizing and Staff Retraining/Redeploying.

annually. Overall, the projections show that after payment of the Voluntary Early Separation Package (VESP), there would be a total of Rs 1.870 billion savings over the five year project period. Annual average savings are about Rs 374 million.

7. The next largest positive impact on the budget would come from the privatization of the Mahaweli Engineering and Construction Agency (MECA) and the Livestock Development Division (LDD). With the privatization or liquidation of the two MECA successor companies by project Year 4, an additional amount approximately (Rs.194.66 million) would be saved annually.

8. Transferring O&M responsibilities for the distributory (D) and field (F) canals to Distributory Canal Farmers' Organizations (DCFOs) would generate additional savings for Mahaweli budget. Present financial resources allocated for O&M of irrigation facilities are insufficient and inefficiently spent. Transferring O&M responsibility of D&F canals to DCFOs would save the Government an estimated Rs.288.4 million for the first four years, and Rs.111.04 million annually thereafter.

9. The Table below shows the savings in aggregate from the staff reduction, privatization and transfer of O&M costs of D&F canals to DCFOs. Overall, the project would reduce MASL expenditures by Rs. 570.6 million (about 50% of MASL's recurrent 1998 budget) on an average annual basis during the project period of five years. The savings would be much higher after the project period and would average approximately Rs.1,049 million (about 70%) on an annual basis. This would make a positive impact on GOSL's overall budget deficit, reducing it from Rs.69.8 billion in 1997 to Rs.68.8 billion in 2003 (a reduction of about 1.5%).

Table
Aggregate Fiscal Savings
(Rs. millions)

Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Project Year 5	Total
Staff Reduction	-907.8	639.7	680.1	714.4	743.6	1,870.0
Privatization	0.0	68.1	125.5	194.7	194.7	583.0
Transfer of O&M Responsibilities	42.7	62.1	83.3	100.4	111.4	399.9
Total	**-865.1**	**769.9**	**888.9**	**1,009.5**	**1,049.7**	**2,852.9**

Annex 5
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Financial Summary

FY99 through FY03
(US$ in millions, 1997)

	Implementation Period				
	FY99	F\Y00	FY01	FY02	FY03
Project Costs					
Investment Costs	31.9	6.9	10.4	12.5	11.7
Recurrent Costs	0.1	0.1	0.2	0.2	0.2
Total	32.0	7.0	10.6	12.7	11.9
Financing Sources (% of total project costs)					
IDA	79	77	80	72	72
GOSL	20	17	15	20	20
Farmers	1	6	5	8	8
Total	100	100	100	100	100

Annex 6
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Procurement and Disbursement Arrangements

Procurement

Procurement methods (Table A)

Specific procurement arrangements summarized in Table A, are as follows:

(a) Contract packages for goods estimated to cost US$100,000 equivalent or more would be procured through ICB procedures in accordance with Bank guidelines.

(b) Contract packages for goods valued at less than US$100,000 but more than US$50,000, up to an aggregate amount of not more than US$1.4 million, would be awarded through NCB procedures using standard bidding documents (SBD) satisfactory to IDA. Goods and materials valued at less than US$50,000, but in aggregate amounting to not more than US$200,000, would be procured through national shopping, based on price quotations from at least three different suppliers.

(c) All works would be executed by contractors selected through NCB procedures, satisfactory and acceptable to IDA, except as specified below. There will be three contract categories: (i) large scale contracts valued above US$100,000 equivalent (but not to exceed US$600,000). There would be about 25 large scale contracts costing approximately about US$10.0 million; (ii) medium scale contracts valued above US$10,000 up to US$100,000, with a total of about 135 contract packages estimated to cost approximately US$11.0 million; and (iii) small scale contracts valued less than US$10,000 each. There would be two types of contracts under this category: (a) contracts to be awarded to DCFOs without competitive bidding. This procurement procedure is appropriate because most of these works are small and labor intensive and it would be cost effective to award those directly to the DCFOs. Besides, it would strengthen DCFOs' financial position and prepare them for taking over of O&M responsibilities. About 540 contracts amounting to approximately US$2.5 million would be awarded to 268 DCFOs in System H; (b) contracts to be awarded following competitive bidding. About 1,350 contracts costing approximately US$16.3 million would be awarded to DCFOs and private contractors on competitive bidding.

(d) Consultant Services would be contracted in accordance with the provisions of the Guidelines for the Selection and Employment of Consultants by World Bank Borrowers, dated January 1997. Consultancy services are estimated at US$1.4 million for the institutional restructuring/reengineering component including the river basin study, and would consist of both local and international consultants.

(e) Training estimated to cost approximately US$1.9 million covering the trainees' expenses toward subsistence, travel and fees would be procured using GOSL administrative procedures acceptable to IDA. This does not include any audio visual equipment or training material which are included under the equipment category. Detailed training plans are available in the project file and consist of training courses for DCFOs and MASL staff.

Prior review thresholds (Table B)

All contracts for goods and civil works estimated to cost US$100,000 equivalent or more would be subject to IDA's prior review of all documentation (evaluation reports and contracts). With respect to consultants estimated to cost the equivalent of $100,000 for firms, and $50,000 for individuals, all documentation (LOI, TORs, proposals, evaluation reports and contracts) will be subject to IDA's prior review. IDA prior review will not apply to documentation related to contracts for the employment of consulting firms and individual consultants valued at less than US$100,000 and US$50,000 respectively.

<u>**Disbursement**</u>

Allocation of loan proceeds (Table C)

The IDA credit of US$57.0 million would be disbursed over a period of five years, beginning in the first quarter of IDA FY99 through the end of the last quarter of FY03. The disbursement schedule shown in the Section on Financing Plan is based on completion of the proposed project by June 30, 2003. The allocation of loan proceeds by disbursement category and percentages financed are shown in Table C.

Use of statements of expenses (SOEs):

Disbursements of all expenditures would be made on the basis of statements of expenditures (SOEs), except for goods and works exceeding US$100,000 equivalent; contracts with consulting firms above US$100,000 equivalent; and with individuals above US$50,000. Supporting documentation for SOEs would not be submitted to IDA, but would be retained by MASL and made available to IDA staff during supervision.

Special Account:

The government would establish and operate, under terms and conditions satisfactory to IDA, a Special Account in the Central Bank. The Special Account would be denominated in US Dollars, with an authorized allocation of US$7.0 million for severance payments under VESP. However, the authorized allocation will be reduced to US$1.0 million after payment of VESP. MASL would be responsible for channeling funds to the implementing agencies. The Account would be operated and managed by the Director General, MASL, who would have responsibility for the preparation of withdrawal applications and have sole responsibility for submitting the withdrawal applications to IDA for payment.

Project Accounts and Audits

IDA staff reviewed MASL's financial capacity and arrangements and found them satisfactory to enable them maintain and carry out the accounting and financial reporting of the project. MASL has put in place the Financial Controller and necessary accounting staff to carry out the above functions according to the agreed accounting standards and would provide sufficient financial information for managing and monitoring project activities. MASL would maintain separate accounts of project expenditures in accordance with sound accounting practices. All project accounts and financial statements, including SOEs and Special Account, would be audited by independent auditors acceptable to IDA. MASL would have the overall responsibility for arranging annual audits by independent auditors. An audit report, including separate opinions on the operation of the special account and the use of SOEs, would be submitted to the IDA within six months of the end of the government's fiscal year.

Assurances were obtained during negotiations that all project accounts and financial statements, including SOEs and the Special Account, would be audited by independent auditors acceptable to IDA. Assurances were also sought during negotiations that a copy of the audit report and a certified copy of the financial statements would be submitted to IDA no later than six months after the close of each fiscal year as well as MASL would finalize terms of reference and select the project auditors, acceptable to IDA, by project effectiveness

Table A: Project Costs by Procurement Arrangements
(in US$ million equivalent)

Expenditure Category	Procurement Method NCB	ICB	Other	NBF	Total Cost (including contingencies)
1. Works					
1.1 Large Scale contracts	10.0 (8.0)				10.0 (8.0)
1.2 Medium Scale contracts	11.0 (9.0)				11.0 (9.0)
1.2 Small Scale Works	16.3 (12.6)		2.5a/ (1.8)	3.0c/	21.8 (14.4)
2. Goods					
2.1 Vehicles	0.3 (0.2)	1.5 (1.2)			1.8 (1.4)
2.2 Equipment	1.4 (1.2)				1.4 (1.2)
3. Servicesb/			1.4 (1.4)		1.4 (1.4)
4. Miscellaneous					
4.1 Training			1.9 (1.9)		1.9 (1.9)
4.2 Severance Pay			24.0d/ (19.2)		24.0 (19.2)
4.3 O&M			0.9 (0.6)		0.9 (0.6)
Total	39.0 (31.0)	1.5 (1.2)	30.7 (24.9)	3.0	74.2 (57.0)

Note: NBF = Not Bank Financed.
Figures in parenthesis are the amounts to be financed by the IDA credit

a/ Direct contracting to Farmers Organizations.
b/ Includes consultant services (individuals and firms), technical assistance to beneficiaries, and implementation support.
c/ To be financed by DCFOs.
d/ To be financed by IDA and GOSL.

Table B: Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
1. Works			
Minor Civil Works (17%)	US$10,000 and less	Direct Contracting to DCFOs	None
Minor Civil Works (83%)	US$10,000 and less	NCB	None
Medium Civil Works	US$10,000-100,000	NCB	None
Large Civil Works	Above US$100,000	NCB	All
2. Goods			
Vehicles and Equipment	Less than US$50,000	National Shopping	None
	US$50,000 to US$100,000	NCB	None
	Above US$100,000	ICB	All
3. Services			
Individual Consultants	Less than US$50,000	Consultant Guidelines QCBS, SBCQ,IC	TOR/shortlist
	More than US$50,000	Consultant Guidelines QCBS, SBCQ,IC	All
Firms	Less than US$100,000	Consultant Guidelines QCBS	TOR/shortlist
	More than US$100,000	Consultant Guidelines QCBS	All

QCBS: Quality and Cost Based Selection
SBCQ: Selection Based on Consultants' Qualifications
IC: Individual Consultants

Table C: Allocation of Loan Proceeds

Expenditure Category	Amount in US$million	Financing Percentage
(1) Civil Works	28.1	80% of total expenditures
(2) Vehicles and Equipment	2.5	100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 70% of local expenditures for other items procured locally
(3) Consultant Services	1.3	100% of total expenditures
(4) Training	1.7	100% of total expenditures
(5) Severance Pay	19.0	80% of total expenditures
(6) O&M Costs (vehicles & equipment)	0.5	80% of total expenditures
(7) Unallocated	3.9	
TOTAL	**57.0**	

Annex 7
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Project Processing Budget and Schedule

A. Project Budget (SW)	Planned (At final PCD stage)	Actual
	130	187.6

B. Project Schedule	Planned (At final PCD stage)	Actual
Time taken to prepare the project (months)	8	47
First IDA mission (identification)	10/18/1992	10/18/1992
Appraisal mission departure	06/29/1993	04/30/1996
Negotiations	12/15/1993	10/27/1997
Planned Date of Effectiveness	06/15/1994	07/01/1998

Prepared by: Mahaweli Authority of Sri Lanka

Preparation assistance: FAO/CP, TVA, PPF

Bank staff who worked on the project included: Douglas W. Lister, Meena Munshi, Nihal Fernando, Hope Thavaraj, Haeyoung Lee, Malcolm Jansen, Guy Motha, Tetsuo Yaguchi, P.K. Subramanian, Nancy Zhao, Julitta Rasiah, Jayantha de Mel, Mohinder Virdy, Harald Frederiksen, Stuart Bell, Charles Thomas, Geoffrey Spencer, Jose P. Correia da Silva, Syed Ahmed, Vimala Abraham

Annex 8
Sri Lanka
Mahaweli Restructuring and Rehabilitation Project

Documents in the Project File*

A. Project Implementation Plan

B. Bank Staff Assessments

1. The Mahaweli Development Program
2. MASL Rightsizing and Staff Retraining/Redeployment
3. Promoting Farmer Sustainability
4. Privatizing Business Units
5. Handing Over Infrastructure to Line Agencies
6. Strengthening Natural Resource Management
7. Irrigation Rehabilitation and Improvement
8. Fiscal Impact of MASL Restructuring/Reengineering Program

C. Other

1. Sri Lanka - Mahaweli Restructuring Project, Interim Preparation Mission, Food and Agriculture Organization of the United Nations, Rome, Investment Center, FAO/World Bank Cooperative Program (Report. No. 17/93 CP-SRL 49 - Date: 08.02.1993).

2. Technical Cooperation Programme, "Preparation of Mahaweli Restructuring Project - Sri Lanka," Terminal Statement prepared for the Government of Sri Lanka by Food and Agriculture Organization of the United Nations, Rome, 1993.

3. "Report on the Reengineering/Reorganization of the Mahaweli Authority of Sri Lanka," prepared by Gary R. Napier, Senior Project Manager, James R. Russell, Manager, Quality Assurance, Cletus B. Walles, Project Official - Foreign Affairs, Tennessee Valley Authority, Knoxville, Tennessee, January 1996.

4. "Final Report on Special Assistance for Project Sustainability (SAPS) on Mahaweli Ganga Development Project (System "C")," January 1996, SAPS Team for the Overseas Economic Cooperation Fund, Japan (OECF).

5. "Workforce Analysis Study and Staffing Plan for the Mahaweli Authority of Sri Lanka," Tennessee Valley Authority, Knoxville, Tennessee, USA, February 1997, Volume I and Volume II (Tabular Data)

6. "Technical Report and Implementation Plans," Ministry of Mahaweli Development, Mahaweli Authority of Sri Lanka, June 1997.

*Including electronic files.

Status of Bank Group Operations in Sri Lanka
IBRD Loans and IDA Credits in the Operations Portfolio

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original Amount in US$ Millions				Difference Between expected and actual disbursements a/	
					IBRD	IDA	Cancellations	Undisbursed	Orig	Frm Rev'd
Number of Closed Loans/credits: 72										
Active Loans										
LK-PE-10525	IDA30140	1998	GOSL	GENERAL EDUCATION II	0.00	70.30	0.00	69.48	0.00	0.00
LK-PE-10498	IDA29380	1997	GOSL	ENERGY SERVICES DLVY	0.00	24.20	0.00	22.09	1.81	0.00
LK-PE-10513	IDAN0140	1997	GOSL	ENVIRONMENTAL ACTION	0.00	14.80	0.00	13.12	.56	0.00
LK-PE-10526	IDA29280	1997	GOSL	HEALTH SERVICES DEV	0.00	18.80	0.00	17.33	3.28	0.00
LK-PE-10517	IDA28800	1996	GOSL	PVT SECT INFRAS DEV	0.00	77.00	0.00	70.80	10.44	0.00
LK-PE-42263	IDA28370	1996	GOSL	TELECOM REG & PUBL..	0.00	15.00	0.00	11.54	3.93	0.00
LK-PE-42266	IDA28810	1996	GOSL	TEACH ED &DEPLOYMENT	0.00	64.10	0.00	57.61	1.92	0.00
LK-PE-10467	IDA27570	1995	GOSL	COL. ENV. IMPROV.	0.00	39.00	0.00	28.36	9.19	0.00
LK-PE-10409	IDA24420	1993	GOSL	COMMUNITY WAT SUPP/S	0.00	24.30	0.00	4.15	2.18	0.00
LK-PE-10419	IDA24840	1993	GOSL	PRIVATE FINANCE DEVE	0.00	60.00	0.00	7.05	2.10	0.00
LK-PE-10420	IDA24950	1993	GOSL	COLOMBO URB TRANSPOR	0.00	20.00	0.00	8.87	8.64	0.00
LK-PE-10386	IDA22970	1992	GOSL	POWER DISTRIBUTION	0.00	50.00	0.00	26.95	24.57	0.00
LK-PE-10398	IDA23800	1992	GOSL	SECOND AGRIC.EXTENSI	0.00	14.34	0.00	7.66	2.66	0.00
LK-PE-10363	IDA21830	1991	GSL	3RD ROADS	0.00	42.50	0.00	7.35	6.22	0.00
LK-PE-10373	IDA22490	1991	GOSL/CEB	TELECOMS. II	0.00	57.00	0.00	23.02	24.32	24.32
LK-PE-10378	IDA22600	1991	GOSL	IRRIG. REHAB.	0.00	29.60	4.93	7.01	9.50	-.64
Total					0.00	620.94	4.93	382.39	111.32	23.68

	Active Loans	Closed Loans	Total
Total Disbursed (IBRD and IDA):	218.48	1,476.32	1,694.80
of which has been repaid:	0.00	172.97	172.97
Total now held by IBRD and IDA:	616.01	1,260.05	1,876.06
Amount sold :	0.00	3.59	3.59
Of which repaid :	0.00	3.59	3.59
Total Undisbursed :	382.39	11.04	393.43

a. Intended disbursements to date minus actual disbursements to date as projected at appraisal.
b. Rating of 1-4: see OD 13.05. Annex D2. Preparation of Implementation Summary (Form 590). Following the FY94 Annual Review of Portfolio performance (ARPP), a letter based system will be used (HS = highly Satisfactory, S = satisfactory, U = unsatisfactory, HU = highly unsatisfactory): see proposed Improvements in Project and Portfolio Performance Rating Methodology (SecM94-901), August 23, 1994.

Note:
Disbursement data is updated at the end of the first week of the month.

Generated by the Operations Information System (OIS)
2/25/98

Sri Lanka
STATEMENT OF IFC's
Committed and Disbursed Portfolio
As of 31-Jan-98
(In US Dollar Millions)

		Committed				Disbursed			
		IFC				IFC			
FY Approval	**Company**	**Loan**	**Equity**	**Quasi**	**Partic**	**Loan**	**Equity**	**Quasi**	**Partic**
1980/84/85/96	Lanka Orix	10.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00
1981	Lanka Hotels	0.00	.64	0.00	0.00	0.00	.64	0.00	0.00
1988/95	Union Assurance	0.00	.98	0.00	0.00	0.00	.98	0.00	0.00
1992	CKN Fund Mgmt.	0.00	.06	0.00	0.00	0.00	.06	0.00	0.00
1992	Pyramid Trust	0.00	.25	0.00	0.00	0.00	.25	0.00	0.00
1996/97	Asia Power	10.00	2.27	0.00	10.00	7.25	2.27	0.00	7.25
1997	Packages Lanka	0.00	1.11	0.00	0.00	0.00	1.11	0.00	0.00
	Total Portfolio:	20.00	5.31	0.00	10.00	9.25	5.31	0.00	7.25

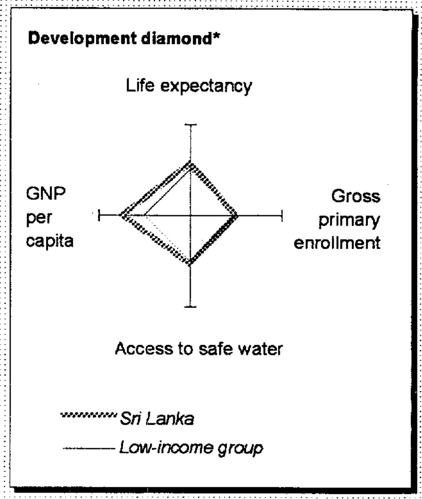
Approvals Pending Commitment

		Loan	Equity	Quasi	Partic
1996	ASIA POWER	0.00	0.00	2.50	0.00
1997	LOFAC	1.50	.26	0.00	0.00
	Total Pending Commitment:	1.50	.26	2.50	0.00

Annex 10
Sri Lanka at a Glance

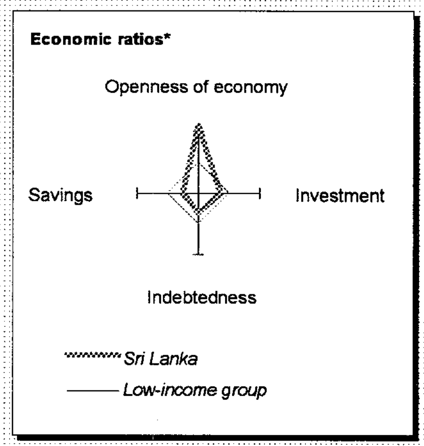
8/28/97

POVERTY and SOCIAL	Sri Lanka	South Asia	Low-income
Population mid-1996 *(millions)*	18.3	1,264	3,229
GNP per capita 1996 *(US$)*	740	380	500
GNP 1996 *(billions US$)*	13.6	481	1,601
Average annual growth, 1990-96			
Population *(%)*	1.3	1.9	1.7
Labor force *(%)*	2.0	2.1	1.7
Most recent estimate *(latest year available since 1989)*			
Poverty: headcount index *(% of population)*	22	..	..
Urban population *(% of total population)*	22	26	29
Life expectancy at birth *(years)*	72	61	63
Infant mortality *(per 1,000 live births)*	16	75	69
Child malnutrition *(% of children under 5)*	38	..	..
Access to safe water *(% of population)*	57	63	53
Illiteracy *(% of population age 15+)*	10	50	34
Gross primary enrollment *(% of school-age population)*	105	98	105
Male	106	110	112
Female	104	87	98

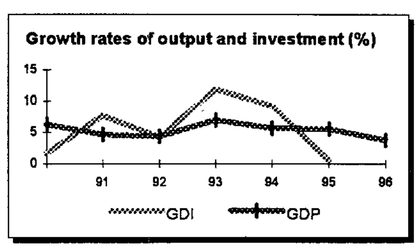


KEY ECONOMIC RATIOS and LONG-TERM TRENDS	1975	1985	1995	1996
GDP *(billions US$)*	3.8	6.0	12.9	14.0
Gross domestic investment/GDP	15.6	22.2	25.7	24.2
Exports of goods and services/GDP	27.5	26.0	35.9	..
Gross domestic savings/GDP	8.1	10.2	15.3	15.5
Gross national savings/GDP	9.7	15.5	19.8	19.9
Current account balance/GDP	-2.9	-7.0	-5.0	-3.9
Interest payments/GDP	0.5	1.9	2.1	1.8
Total debt/GDP	21.5	59.2	49.6	45.2
Total debt service/exports	26.1	16.5	7.3	..
Present value of debt/GDP	..	..	43.1	..
Present value of debt/exports	..	..	99.5	..

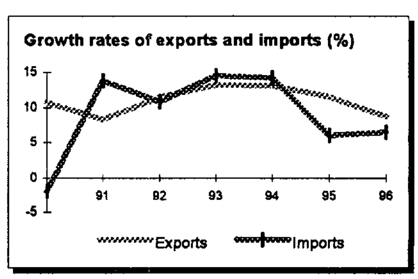
	1975-85	1986-96	1995	1996	1997-05
(average annual growth)					
GDP	5.3	4.6	5.5	3.7	4.9
GNP per capita	3.7	3.0	4.4	1.8	3.7
Exports of goods and services	*4.7*	*9.3*	11.5	8.7	7.2



STRUCTURE of the ECONOMY	1975	1985	1995	1996
(% of GDP)				
Agriculture	30.4	27.7	23.0	22.4
Industry	26.4	26.2	25.1	25.2
Manufacturing	20.1	14.7	15.7	16.2
Services	43.2	46.1	51.9	52.4
Private consumption	82.6	79.5	72.9	..
General government consumption	9.3	10.2	11.8	..
Imports of goods and services	35.0	38.0	46.3	..



	1975-85	1986-96	1995	1996
(average annual growth)				
Agriculture	4.3	*2.1*	3.3	-4.6
Industry	5.1	*5.7*	7.7	6.0
Manufacturing	4.3	*7.8*	9.2	6.5
Services	6.6	*5.1*	5.1	5.8
Private consumption	*6.1*	*4.4*	7.1	..
General government consumption	5.2	*3.7*	-1.1	..
Gross domestic investment	12.5	*2.6*	0.5	..
Imports of goods and services	*13.2*	*6.1*	6.0	6.4
Gross national product	5.4	4.3	5.9	3.1



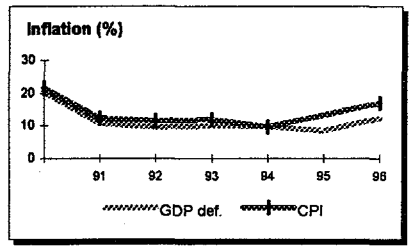
Note: 1996 data are preliminary estimates. Figures in italics are for years other than those specified.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

Sri Lanka

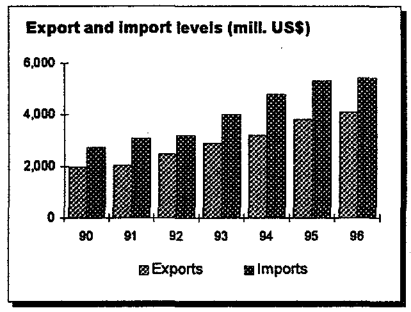
PRICES and GOVERNMENT FINANCE

	1975	1985	1995	1996
Domestic prices				
(% change)				
Consumer prices	6.6	1.5	11,5	16.8
Implicit GDP deflator	5.4	0.6	8.4	12.1
Government finance				
(% of GDP)				
Current revenue	..	22.3	20.7	20.3
Current budget balance	..	2.2	-2.0	-2.4
Overall surplus/deficit	..	-11.7	-10.1	-9.5



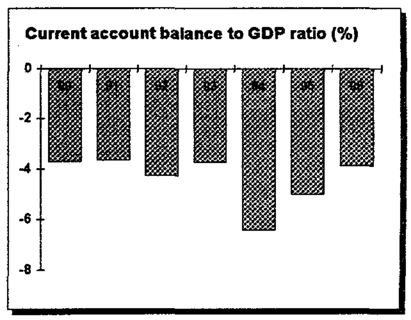
TRADE

	1975	1985	1995	1996
(millions US$)				
Total exports (fob)	..	1,333	3,798	4,097
Tea	..	442	480	616
Other agricultural goods	..	94	348	346
Manufactures	..	233	2,854	2,991
Total imports (cif)	..	1,948	5,312	5,416
Food	..	217	721	801
Fuel and energy	..	404	321	324
Capital goods	..	382	1,186	1,202
Export price index *(1987=100)*	..	96	121	124
Import price index *(1987=100)*	..	86	155	160
Terms of trade *(1987=100)*	..	111	78	78



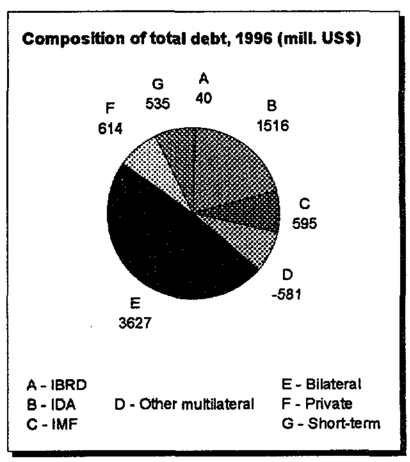
BALANCE of PAYMENTS

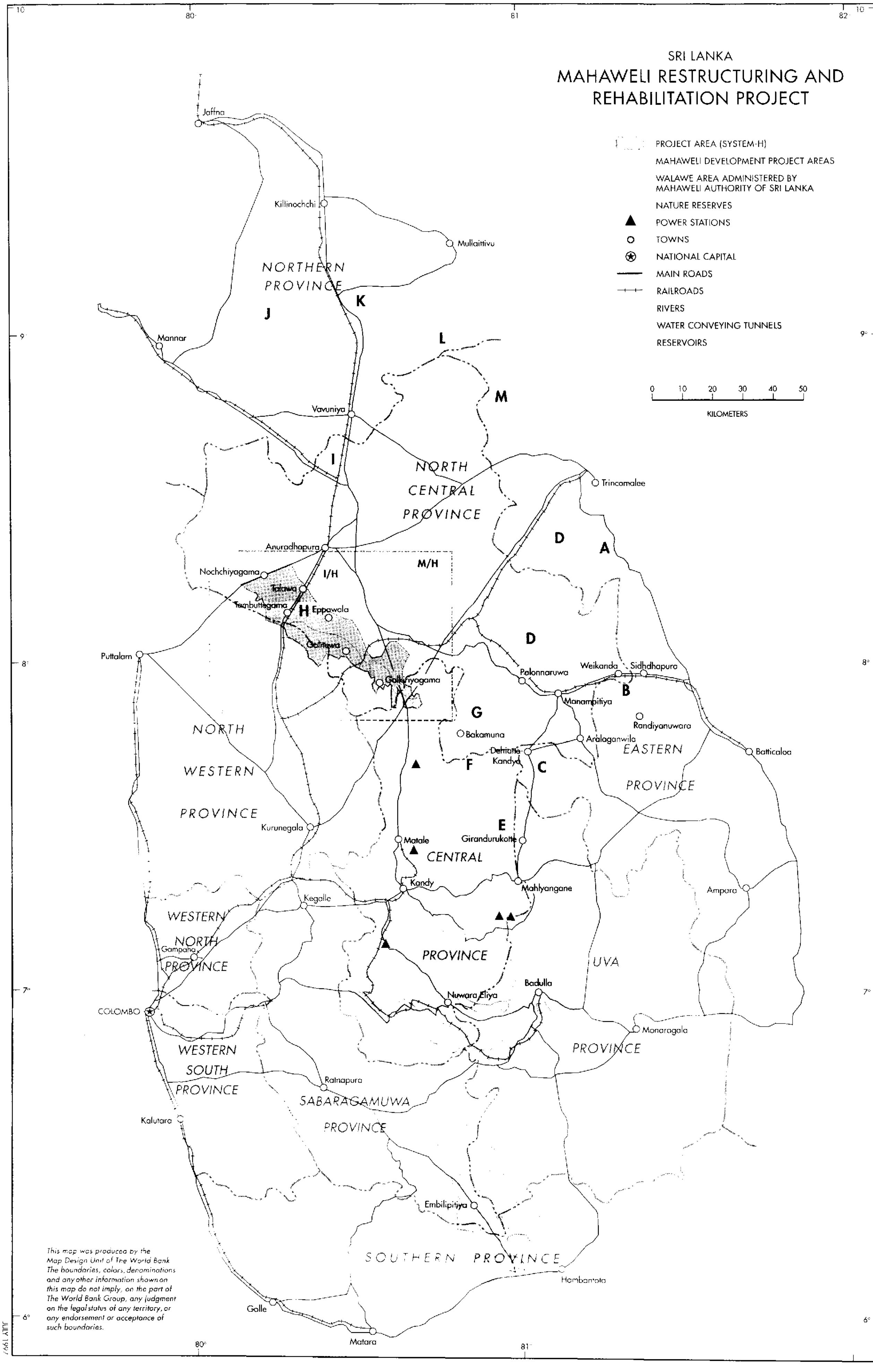
	1975	1985	1995	1996
(millions US$)				
Exports of goods and services	632	1,561	4,841	5,039
Imports of goods and services	804	2,296	6,064	6,209
Resource balance	-172	-734	-1,223	-1,170
Net income	-18	-127	-277	-248
Net current transfers	80	443	853	869
Current account balance, before official capital transfers	-110	-419	-647	-549
Financing items (net)	84	304	632	562
Changes in net reserves	26	115	15	-13
Memo:				
Reserves including gold *(mill. US$)*	57	472	2,066	2,011
Conversion rate *(local/US$)*	7.0	27.2	51.3	55.3



EXTERNAL DEBT and RESOURCE FLOWS

	1975	1985	1995	1996
(millions US$)				
Total debt outstanding and disbursed	815	3,540	6,407	6,346
IBRD	36	61	49	40
IDA	39	397	1,463	1,516
Total debt service	169	320	608	704
IBRD	6	9	12	11
IDA	0	3	19	20
Composition of net resource flows				
Official grants	56	151	174	..
Official creditors	61	297	317	..
Private creditors	-22	44	15	..
Foreign direct investment	0	26	63	..
Portfolio equity	0	0	61	..
World Bank program				
Commitments	30	137	39	156
Disbursements	19	79	106	104
Principal repayments	3	5	15	16
Net flows	16	74	92	88
Interest payments	3	8	16	15
Net transfers	14	66	76	73




SRI LANKA
MAHAWELI RESTRUCTURING AND REHABILITATION PROJECT
PROJECT AREA (SYSTEM-H)
MAHAWELI DEVELOPMENT PROJECT AREAS
WALAWE AREA ADMINISTERED BY MAHAWELI AUTHORITY OF SRI LANKA
NATURE RESERVES
POWER STATIONS
TOWNS
NATIONAL CAPITAL
MAIN ROADS
RAILROADS
RIVERS
WATER CONVEYING TUNNELS
RESERVOIRS
0 10 20 30 40 50
KILOMETERS
NORTHERN PROVINCE
NORTH CENTRAL PROVINCE
NORTH WESTERN PROVINCE
CENTRAL PROVINCE
EASTERN PROVINCE
UVA PROVINCE
WESTERN NORTH PROVINCE
WESTERN SOUTH PROVINCE
SABARAGAMUWA PROVINCE
SOUTHERN PROVINCE
Jaffna
Killinochchi
Mullaittivu
Mannar
Vavuniya
Trincomalee
Anuradhapura
Nochchiyagama
Talawa
Tambuttegama
Eppawala
Galnewa
Galkiriyagama
Puttalam
Polonnaruwa
Weikanda
Sidhdhapura
Manampitiya
Randiyanuwara
Bakamuna
Dehiattakandiya
Aralaganwila
Batticaloa
Kurunegala
Matale
Girandurukotte
Kandy
Mahiyangane
Ampara
Kegalle
Gampaha
COLOMBO
Nuwara Eliya
Badulla
Monaragala
Ratnapura
Kalutara
Embilipitiya
Hambantota
Galle
Matara
A B C D E F G H I J K L M
I/H
M/H
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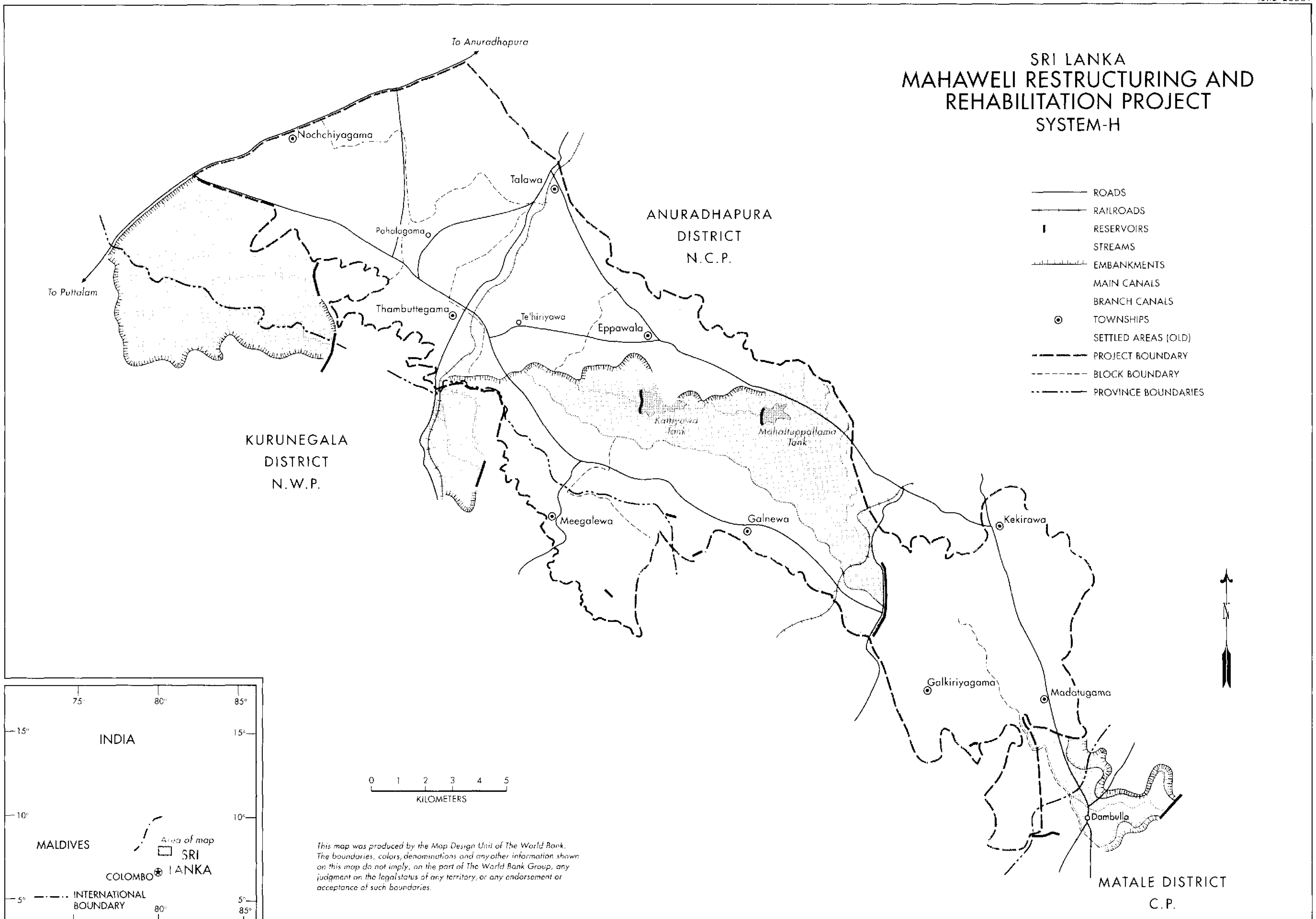

FEBRUARY 1998