

Document of  
the International Development Association  
acting as Administrator of the Interim Trust Fund

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Report No. P6828-CE

**MEMORANDUM AND RECOMMENDATION**  
**OF THE**  
**MANAGING DIRECTOR**  
**TO THE**  
**PRESIDENT OF THE**  
**INTERNATIONAL DEVELOPMENT ASSOCIATION**  
**ON A**  
**PROPOSED INTERIM FUND CREDIT**  
**IN AN AMOUNT OF SDR 10.7 MILLION**  
**TO**  
**SRI LANKA**  
**FOR AN**  
**ENVIRONMENTAL ACTION 1 PROJECT**

February 24, 1997

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## CURRENCY EQUIVALENTS

(January 31, 1997)

Currency Unit-Sri Lankan Rupee (SLR)

US\$1.00 = SLR 57.19

SLR 1 million = US\$ 17,486

## FISCAL YEAR

January 1 to December 31

## WEIGHTS AND MEASURES

Metric Unit System

Metric Unit		British/US Equivalent
1 centimeter (cm)	=	0.39 inch
1 meter (m)	=	39.37 inches
1 kilometer (km)	=	0.62 mile
1 hectare (ha)	=	2.47 acres
1 square kilometer (km <sup>2</sup> )	=	0.386 square mile
1 cubic meter (m <sup>3</sup> )	=	35.31 cubic feet
1 liter (l)	=	0.264 gallon (USA)
1 kilogram (kg)	=	2.205 pounds
1 metric ton (m ton)	=	2,205 pounds

## PRINCIPAL ABBREVIATIONS AND ACRONYMS USED

CAS	-	Country Assistance Strategy
CEA	-	Central Environmental Authority
CEIF	-	Community Environmental Initiatives Facility
CEIP	-	Colombo Environmental Improvement Project
CIEDP	-	Committee on Integrating Environment and Development Policy
ED	-	Environment Division
EIA	-	Environmental Impact Assessment
GOSL	-	Government of Sri Lanka
MAL&F	-	Ministry of Agriculture, Lands and Forestry
MCs	-	Microcatchments
MEIP	-	Metropolitan Environmental Improvement Program
MEPA	-	Ministry of Environment and Parliamentary Affairs
MFP	-	Ministry of Finance and Planning
MTEWA	-	Ministry of Transport, Environment and Women's Affairs
NEAP	-	National Environmental Action Plan
NGOs	-	Non-Governmental Organizations
PIP	-	Public Investment Program
SC	-	Steering Committee

Vice President:	Micko Nishimizu
Acting Director:	Fakhruddin Ahmed
Division Chief:	Ridwan Ali
Staff:	Ivar Serejski

SRI LANKA

ENVIRONMENTAL ACTION 1 PROJECT

Credit and Project Summary

**Borrower:** Democratic Socialist Republic of Sri Lanka (GOSL)

**Implementing Agencies:** Ministry of Transport, Environment and Women's Affairs (MTEWA), Ministry of Agriculture, Lands and Forestry (MAL&F), and Provincial Council Central Province

**Beneficiaries:** MTEWA, MAL&F  
Participating organizations including local government authorities, non-governmental organizations, approved societies and research organizations Provincial Council Central Province

**Poverty:** Not Applicable

**Amount:** SDR\$10.7 million (US\$ 14.8 million equivalent)

**Terms:** Credit: Standard with 40 years maturity

**Commitment Fee:** Standard (0.50% on undisbursed credit balance, beginning 60 days after signing, less any waiver)

**On Lending Terms:** Not Applicable

**Financing Plan:** See Schedule A

**Economic Rate of Return:** Not Applicable for the project as a whole. For the pilot activities in the Land Management Component 24%.

**Staff Appraisal Report** 15261-CE

**Maps** IBRD 27672 - Location of the Pilot Land Management Component  
IBRD 27673 - Agroecological Regions of Sri Lanka

**Project Identification Number** LKPA 10513

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**MEMORANDUM AND RECOMMENDATION OF THE MANAGING DIRECTOR  
TO THE PRESIDENT OF THE INTERNATIONAL DEVELOPMENT ASSOCIATION  
ON A PROPOSED INTERIM FUND CREDIT  
IN AN AMOUNT OF SDR 10.7 MILLION  
TO THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA  
FOR AN  
ENVIRONMENTAL ACTION 1 PROJECT**

1. I submit for your approval the following memorandum and recommendation on a proposed Interim Fund Credit to the Democratic Socialist Republic of Sri Lanka for SDR 10.7 million, the equivalent of US\$14.8 million, on standard IDA terms with a maturity of 40 years to help finance a project for assisting the Government of Sri Lanka (GOSL) in environmental management. The proposed project addresses policy and institutional constraints issues in the environmental sector.

2. **Country/Sector Background.** Sri Lanka is a densely populated island of 18 million people off the southern tip of India. It has a rich and varied natural resource base, a basic network of economic infrastructure, and one of the best sets of social indicators in the developing world with adult literacy of almost 90%. With these assets, Sri Lanka has the potential to match the economic performance of the newly industrializing East Asian Countries (NICs). In 1989, the Government of Sri Lanka (GOSL) reformed its economic policies. These reforms have led to a significant improvement in economic performance, a surge in private sector investment, and rapid growth in labor-intensive manufactured exports. As industrialization and tourism moves forward, it is important that Sri Lanka takes measures to ensure that further growth would not be gained at the expense of the environment or that environmental problems do not hinder the achievement of growth targets. There is a particular need for policy and institutional changes to promote efficient and more sustainable economic growth that explicitly takes environmental factors into consideration. There is also a need to take immediate remedial measures to reverse the trend of environmental degradation through pilot programs involving participatory approaches to environmental management. The proposed project is designed to help GOSL meet this need.

3. GOSL has taken initial steps to address environmental issues. On the institutional front, it established the Central Environmental Authority (CEA) under the National Environmental Act (the Act) in 1980. The Act gives a policy mandate to CEA. It also established in 1990 the Environment Division (ED) within the then Ministry of Environment and Parliamentary Affairs (MEPA) as the focal entity for environmental policy, a role yet to be effectively assumed. Sri Lanka was also one of the first developing countries to prepare a National Environmental Action Plan (NEAP 1992-96). This was further updated in 1994 (NEAP 1995-98). Finally, GOSL is now drafting new legislation, more comprehensive in scope, in order to place the environment even higher on the national agenda. Despite these initial steps, Sri Lanka remains confronted by serious environmental problems. Chief among these are land degradation and the continuous threat to the forest and other vulnerable ecosystems from shifting cultivation. Air, water, and soil pollution caused by industrialization and tourism is another serious problem. Several donor agencies, including the Bank Group, have been assisting GOSL in tackling some of these problems.

4. **Country Assistance Strategy.** The World Bank Group's country assistance strategy for Sri Lanka is designed to help Sri Lanka realize its goal of economic growth and poverty reduction comparable to that of its more prosperous East Asian neighbors. To support the growth objective, Bank Group efforts concentrate on: fiscal restraint, the reduction in losses of public enterprises through accelerated privatization, the elimination of unproductive subsidies, and the promotion of sustainable private-sector led growth. Central to this objective is the need to provide for a conducive institutional and policy framework for private investment and for public investment in infrastructure, to help stimulate a supply response and to ensure that growth will not be at the expense of the natural environment or the quality of urban life. To address the poverty reduction objective, the Bank Group's approach highlights creating jobs and raising rural incomes by improving the environment for private sector growth, particularly in

agriculture. This project fits into the Bank Group's country assistance strategy discussed by the Executive Directors on June 13, 1996 as it would strengthen the institutional and policy framework for environmental management leading to cost-effective and fiscally sustainable increases in selective areas of environmental policy making and enforcement that belong in the private sector, while promoting the contracting out of environmental services currently undertaken by the public sector. The institutional strengthening component of this project will establish and support sustainable mechanisms of coordination between NGOs, public and private sector entities, and external donors in addressing policy and investment issues for the promotion of environmental management. Also, the project will continue the investigation of economic policy-environment linkages in view of the promotion of market-driven interventions for environmental management.

5. **Project Objectives.** The primary objective of the proposed project is to assist GOSL in strengthening the institutional and policy framework for environmental management within which the IDA and other donors would provide assistance for improved environmental management. In particular, the project would: (i) support the government's strategy of restructuring MTEWA's ED and strengthening of CEA to better carry out its analytical, monitoring and enforcement responsibilities; (ii) support ongoing efforts to integrate environmental considerations in the overall development planning process; and (iii) help GOSL take immediate remedial measures to reverse the trend of environmental degradation through pilot programs involving participatory approaches to environmental management.

6. **Project Description.** To meet the above objectives, the project would inter alia support the following components: (a) **Institutional Strengthening** providing for (i) restructuring ED within MTEWA to allow it to play a central role in environmental policy, planning, and coordination at the national level; (ii) restructuring and strengthening CEA through establishment of a staff development program, enhancement of the Industrial Licensing and Inspection Program, development of environmental codes of practice for small industries, improvement of capacity for Environmental Impact Assessment (EIA), and strengthening of the environmental information system; (iii) provision of office and technical facilities to accommodate both ED and CEA; providing incremental staff, training, consultancy services, civil works, and equipment; and (iv) a policy subcomponent including a policy letter and a policy action plan that would broadly define legal, institutional, and policy changes that are required for sound environmental management. The policy subcomponent would also include studies of the linkages between sector and economy-wide policies and the environment. In addition, this subcomponent would support an annual review of the environmental implications of the Public Investment Program (PIP); (b) **A Community Environmental Initiatives Facility (CEIF)** would be set up to finance well-planned environmental activities at the grass-roots level within the priority NEAP/PIP sectors and in which other donors could also participate. CEIF aims at involving communities through participatory methods in implementing demonstration activities, providing facilities to train local communities in participatory work in the field of environment and conservation. CEIF would provide a mechanism for pooling resources and is a vehicle for private sector and NGO participation and for decentralizing environmental activities; and (c) **Selected pilot activities in land management**, which are currently severely underfunded. This component aims at minimizing the extent of land degradation in pilot areas with community participation, thereby increasing agricultural productivity as well as reducing the risk of erosion and its associated on-farm and off-farm impacts. The attached maps show the provinces, district and agro-ecological regions boundaries, and the location of the pilot land management component. The Staff Appraisal Report, No. 15261-CE, is being circulated separately.

7. **Project Cost and Financing.** The total project cost over the five year period (FY97-FY02) is estimated to be Rs. 1322 million (US\$20.7 million) with a foreign exchange component of Rs.494.40 million or 37%. This amount includes a Project Preparation Facility (PPF) advance of US\$1.1 million to accelerate project activities before credit effectiveness. Project base costs are estimated at US\$18.65 million; physical contingencies are estimated to be US\$0.80 million, and price contingencies are estimated to be US\$1.30 million. IDA, GOSL, and the local communities would jointly finance the

project. IDA would provide a credit of SDR 10.7 million (US\$14.8 million), local communities Rs. 157.20 million (US\$2.5 million), which would be in labor, material or cash, and GOSL the remaining Rs.218.5 million (US\$3.4 million) including the financing of taxes. IDA's credit would finance 71% of project costs, including 100% of foreign exchange costs and 70% of local costs. Schedule A shows a breakdown of project costs and the financing plan, while Schedule B shows amounts and methods of procurement and disbursements, and the disbursement schedule.

8. **Project Implementation.** MTEWA would be responsible for overall coordination of project implementation and would be IDA's main contact regarding implementation. MTEWA would have principal responsibility for the institutional component including the policy subcomponent (in close collaboration with the Ministry of Finance and Planning (MFP)). The Ministry of Agriculture, Land and Forests would be responsible for the pilot land management component. NGOs and communities would also play an important part in the planning and implementation of the land management component and CEIF. A Steering Committee (SC) headed by the Secretary, MTEWA, would meet once every three months to ensure coordinated implementation of project activities. The inter-sectoral nature of many environmental concerns and the diverse information required for effective management mean, inevitably, that several agencies have to be involved in the steering of overall environmental policy work, including this project. The Committee on Integrating Environment and Development Policy (CIEDP), chaired by the Secretary, MFP, as well as Secretary, MTEWA, would meet once a year to review environment-related activities in the PIP, NEAP, Policy Action Plan, and this project.

9. **Lessons Learned from Bank-Group Assisted Projects.** The proposed project integrates the lessons learned from environmental projects supported by the Bank/IDA. The principal lessons reflected in the design of this project include: (a) Institutions: (i) no ideal blueprint exists for environmental institutions, but the establishment of formal high-level agencies for setting policies and ensuring enforcement should significantly improve environmental management; (ii) strengthening national and subnational institutional and technical capabilities for environmental management is of critical importance; and (iii) community and NGO participation can play an important role in support of public sector environmental institutions; (b) Policies: (i) political support of environmental objectives must be secured and (ii) environmental regulations need to be accompanied by an optimum reliance on economic incentives; and (c) Investments: (i) success of environmental projects is conditioned by adequate institutional capacity and technical information and a supportive policy environment and (ii) coordinated donor assistance should increase for investments prioritized under environmental strategies and action plans.

10. **Project Sustainability.** The only project component with a long-term impact on GOSL's budget is the institutional strengthening component. Some expenditures introduced by the project would become part of GOSL's ongoing recurrent cost after project completion. In both ED and CEA, the budgetary impact is significant with current expenditures rising by 39% and 33%, respectively, from 1996 to the end of the five year project. However, the incremental recurrent cost, in 1995 constant prices, by the end of the project is only 0.2% of MTEWA's budgeted expenditures in 1995. The IDA credit would finance incremental cost on a declining basis, and it is expected that the incremental cost would be compensated by the overall gain in economic efficiency (e.g., through pollution abatement) due to the institutional strengthening under the project. GOSL has also indicated a willingness to sustain the ED and CEA expenditures and activities after completion of the project.

11. However, stringent budgetary conditions are likely to prevail over the next few years, which suggest that additional measures are necessary to ensure fiscal sustainability. As part of the project, a provision is made for technical assistance in order to undertake a study of the license fee structure with a view to improve cost-recovery in the first project year. The recommendations of this study would be jointly discussed by IDA and GOSL, and an action plan would be implemented. Preliminary analysis indicates that modest increases in the current fee structure could offset the increased recurrent expenditure resulting from the project.

12. **Actions Agreed.** At Negotiations, agreements were reached on the following: (a) a Policy Unit would be established within ED by July 31, 1997; (b) the updated NEAP would be issued no later than September 30, 1997; (c) the studies on staff incentives, private sector involvement and an appropriate license fee structure would commence by September 30, 1997 and, by March 31, 1998, the GOSL would furnish to IDA the action plans based on the results of the studies and would carry out these plans after IDA review/approval; (d) an NGO support program satisfactory to IDA would be finalized by September 30, 1997, and implemented soon after; (e) criteria and procedures satisfactory to IDA would be employed for the evaluation, selection and supervision of CEIF subprojects; (f) a Special Account would be established and held in the Central Bank of Sri Lanka; (g) all project accounts and financial statements, including Statements of Expenditure and the Special Account, would be audited by independent auditors acceptable to IDA and a copy of the audit report and of the financial statements would be submitted to IDA no later than six months after the close of each fiscal year; (h) the SC and the CIEDP with membership, responsibilities, and resources satisfactory to IDA would be established no later than July 31, 1997, and maintained; (i) MTEWA's ED and CEA will recruit the additional staff according to the timetable agreed with IDA; (j) the arrangements satisfactory to IDA for the administration and management of the CEIF; (k) five Microcatchment (MC) plans satisfactory to IDA for the pilot land management component would be prepared no later than September 30, 1997, and five other MC would be prepared no later than April 30, 1998; (l) GOSL will ensure that its Forestry Department extend the term of existing permit holders on reservations for a minimum period of five years subject to the lessee carrying out the management practices stipulated; (m) two in-depth reviews would jointly be carried out by GOSL and IDA. The first would be undertaken by September 30, 1998 and the second by June 30, 2000. Three third-party supervisions would also be carried out during the life of the project; and (n) a list of monitorable indicators, satisfactory to IDA, to measure the degree of attainment of project objectives and efficiency of project implementation. Conditions of disbursement for the pilot land management component would be: (o) a Memorandum of Understanding, satisfactory to IDA, between MTEWA, MAL&F, and the Provincial Department of Agriculture of the Central Province shall have been concluded and entered into effect; (p) the Land Steering Committee shall have been established; (q) the Natural Resource Management Specialist and catalysts required for the first year's implementation program have been recruited; and (r) the standard 30-year lease agreement has been prepared and utilized, to IDA's satisfaction. It was also agreed that prior to credit effectiveness, major consultancies would be appointed.

13. **Environmental Aspects.** This project would address the two major areas of environmental management: (i) proactive environmental processes: ensuring a sustainable NEAP process and its inclusion in the overall development planning of Sri Lanka would allow the identification of investment opportunities that are important for their sustainability/environmental merit that may not necessarily be identified through "traditional" development planning processes; and (ii) impact assessment processes: by supporting government delivery of impact assessment services, the project would lead to an improved consideration of the environmental impacts of public and private investments. The project emphasis on institutional development and policy action would therefore lead to long-term environmental benefits that have a potential to improve the decision-making process toward sustainable development. Most environmental benefits under these two components would span beyond the life of this five-year project.

14. The two investment components would lead to demonstrable and measurable improvement in environmental conditions. CEIF would promote environmental management, in both rural and urban environments, for the most vulnerable of people, who are arguably the first victims of environmental decay. By targeting CEIF resources to environmental problems in low-income areas, the project would be increasing the probability of having funds reach the most important environmental hot spots with respect to their impact on health and living conditions of the poor. By using a grass-roots, participatory approach to environmental rehabilitation, the project would increase the impact and sustainability of these actions. Finally, the investment on land management component, by stressing low-cost, vegetative treatments to land rehabilitation, would lead to measurable improvement in the land-carrying capacity and reduce the adverse impact of soil erosion both on-site and downstream of rehabilitated areas. The "Environment

Assessment” category for the proposed project would be B. There are no ongoing or anticipated future resettlement issues related to project activities.

15. **Project Benefits.** The proposed project is the initial five-year phase of an expected long-term program that would assist Sri Lanka in meeting its environmental challenges through proper institutional and policy changes as well as through investments in environmental protection and conservation activities at the local level. Estimates during project preparation indicate that the annual costs of four areas of environmental degradation (soil, forests, energy, and coastal resources) amount to more than 2.5% of Sri Lanka’s GNP. These are the costs of inaction and provide a guide of the potential benefits from investments made to address environmental issues. The order of magnitude of this degradation underscores the urgency to take corrective actions. Policy actions, institutional strengthening and site-specific rehabilitation activities should provide substantial benefits. These benefits would extend well beyond the five-year project period. Specifically, the project would: (a) help GOSL meet its environmental challenges through strengthening of the policy formulation process and through institutional, operational, and regulatory changes; (b) help in more sustainable development through integration of environmental objectives with broader development goals; (c) provide through institutional strengthening a focal entity for environment policy, planning, and coordination and the institutional basis for regulatory and enforcement activities; (d) provide health benefits especially in areas affected by industrial and mining pollutants through improved environmental monitoring and regulation; (e) improve productivity and income of small and marginal farmers and reduce reservoir siltation through cost-effective land management in the hilly wet zone area; (f) provide local communities through CEIF with a facility to implement high priority environmental and conservation activities within NEAP; and (g) develop and test approaches to participatory environmental initiatives and land management which have potential for wider replication.

16. Institutional strengthening and the policy reform component is by far the largest component in the project. The benefits of this component are diffused and cannot be quantified. However, the institutional strengthening approach supported by the project resulted from an economic analysis that tested its low-cost characteristic as well as its financial sustainability. The benefits of the proposed CEIF activities are unknown at this stage, but eligibility criteria, acceptable to IDA, will ensure that these activities are economically efficient and financially sustainable. The average weighted economic rate of return (ERR) for the land management component is 24%.

17. **Program Objectives Category.** The project would support the following IDA objectives: (a) balancing environment protection with the promotion of private sector-led growth; and (b) improving the health and well being of the poor.

18. **Participatory Approach.** The proposed project has been jointly designed with the beneficiaries. Several high-level workshops were organized during project preparation to ensure beneficiaries commitment to the project components including the policy sub-component. The pilot land management component adopts a holistic and participatory approach to involve local population as beneficiaries from the planning stage through implementation and assessment of project results. Finally, the local government authorities, NGOs, and community groups would identify, prepare, implement, and manage the sub-projects supported by the CEIF.

19. **Project Risks.** Success of the institutional component of the project could be jeopardized, in the longer term, by the problems of a low-compensation package for high-level civil servants and the difficulty to recruit and retain highly qualified staff especially in CEA. To minimize these risks, the project supports a comprehensive program including: (i) refocusing CEA’s role and reorganizing its staff; (ii) providing better incentives systems to make it more attractive for well-trained technical staff to be recruited and retained by the ED and CEA; and (iii) devolving some environmental protection functions to private or semiprivate foundations or firms, which could offer higher remuneration than the civil

service or statutory boards and would allow a more flexible response to changing enforcement requirements.

20. The project, by definition, cuts across many sectors, and consensus building on environmental policy implementation -- among line agencies, NGOs, and communities -- is a complex task. Project design has attempted to reduce this risk in the following ways: (a) clearly defining the roles of MTEWA/ED and CEA in policy planning and enforcement, with line agencies still playing a major role in implementing sector strategies; (b) utilizing existing institutions rather than creating new ones; (c) encouraging beneficiary participation by long-term measures such as the establishment of an outreach MTEWA/ED staff position; and in the short term, using participatory mechanisms for the land and CEIF component; (d) undertaking studies in areas where there is a need to clarify the links between economy-wide and sector-wide policies and the environment; and (e) reviewing and updating annually the policy reform agenda with IDA and other donors.

21. Two major risks in the land management component are that there could be delay in adoption of soil conservation techniques by the farmers and productivity increases from improved soil practices may not be fully realized. These would be addressed by providing mass awareness campaigns and farmer education programs as well as evaluating the long-term sustainability of the land treatments. While such efforts have been made in neighboring Asian countries, the longer-term feasibility of such measures needs to be studied in greater depth in the hill country context of Sri Lanka. This would be addressed by providing for a baseline study and follow-up surveys over the life of the project, various demonstrations to test the technology, and by introducing a beneficiary participation approach. The proposed component represents a step in an important learning process and should generate important awareness both of the problems and possible solutions.

22. **Sensitivity Analysis on Land Management.** Cost-benefit analyses was carried out for the land management component for two representative farm models. The overall ERR of the proposed interventions to farmers in the micro-watersheds is 16% for the first model and 28% for the second one. Sensitivity analysis shows that the ERR is robust and not sensitive to delays in project benefits. A lag in benefits by two years would reduce ERR to 10% for the first model and 20% for the second one. The sensitivity analysis also shows that it is not sensitive to shortfalls in projected yields, hence decline in projected benefits. A decline in benefits by 40% would reduce the ERR to 11% for the first model and 22% for the second one. Sensitivity analyses also indicates that if benefits decline by 30% and 75% for the first and the second models respectively, the ERR declines to 12% which is the opportunity cost of capital. Costs would have to increase to 50% and 290% for the first and second models respectively for the ERR to decline to 12%.

23. **Recommendations.** I am satisfied that the proposed Interim Fund Credit would comply with Resolution No. 184, adopted by the Board of Governors of the Association on June 26, 1996, establishing the Interim Trust Fund and I recommend that the President approve it.

Gautam Kaji  
Managing Director

Attachments  
Washington, D. C.  
February 24, 1997

## SRI LANKA

## Environmental Action 1 Project

## Estimated Cost and Financing Plan

(US\$ million)

A. PROJECT COST SUMMARY

Project Components	(Rs. Million)			(US\$ '000s)			% Foreign Exchange	% Total of Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
<b>Institutional Strengthening</b>								
Environment Division	85.26	82.22	167.48	1.55	1.50	3.05	49	16
CEA	229.30	155.40	384.70	4.17	2.82	6.99	40	38
Policy Subcomponent	5.83	50.83	56.66	0.11	0.92	1.03	90	6
<b>Subtotal</b>	<b>320.39</b>	<b>288.45</b>	<b>608.84</b>	<b>5.83</b>	<b>5.24</b>	<b>11.07</b>	<b>47</b>	<b>59</b>
<b>Community Environmental</b>								
Initiatives Facility	175.78	63.53	239.31	3.20	1.16	4.35	27	23
Pilot Land Management	144.71	32.97	177.68	2.63	0.60	3.23	19	17
<b>Total Baseline Cost</b>	<b>640.88</b>	<b>384.95</b>	<b>1,025.84</b>	<b>11.65</b>	<b>7.00</b>	<b>18.65</b>	<b>38</b>	<b>100</b>
Physical Contingencies	26.63	17.21	43.84	0.48	0.31	0.80	39	4
Price Contingencies	160.39	92.27	252.66	0.88	0.43	1.31	33	7
<b>Total Project Cost<sup>a</sup></b>	<b>827.90</b>	<b>494.43</b>	<b>1322.34</b>	<b>13.02</b>	<b>7.74</b>	<b>20.76</b>	<b>37</b>	

<sup>a</sup> Including taxes and duties estimated at US\$1.7equivalentB. FINANCING PLAN

(US\$ million)

IDA	14.8
GOSL	3.4
Communities	2.5
<b>Total</b>	<b>20.7</b>

SRI LANKA

Environmental Action 1 Project

Procurement Arrangements and Disbursements  
(US\$ million)

Project Element	ICB	NCB	Procurement Method Consulting Services	Other**	NBF***	TOTAL
Civil Works		2.90 (2.60)		0.10 (0.07)		3.00 (2.67)
Field Works				0.75 (0.71)	1.67	2.42 (0.71)
Vehicles	1.29 (0.48)	0.50 (0.20)				1.79 (0.68)
Material, Equipment and Office Furniture	1.02 (0.96)			0.23 (0.13)		1.25 (1.09)
Field Equipment		0.07 (0.05)				0.07 (0.05)
Technical Assistance						
Policy Support			0.55			
Implement. Support			1.61			
Capacity Building			0.82			
Subtotal			2.98 (2.98)			2.98 (2.98)
Studies			1.04 (1.04)			1.04 (1.04)
Training				1.17 (1.17)		1.17 (1.17)
Facility/Fund				3.42 (2.37)	0.82	4.24 (2.37)
Incremental Recurrent Costs				2.80 (2.04)		2.80 (2.04)
Total	2.31 (1.46)	3.47 (2.85)	4.02 (4.02)	8.47 (6.49)	2.49	20.76 (14.80)

\* Includes taxes and duties. Figures are rounded to the nearest US\$100,000. Figures in parentheses are the respective amounts financed by the IDA credit.

\*\* Includes force account, international and national shopping, training and project management expenditures.

\*\*\* Not Bank financed.

SRI LANKA

Environmental Action 1 Project

Schedule of Disbursements  
(SDR million)

	Category	Amount	Percentage of Expenditures to be Financed
(1)	Equipment, Materials and Vehicles (a) Institutional Strengthening and Community Environment Initiatives Facility (b) Pilot and Management	970,000 360,000	100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 80% of local expenditures for other items procured locally
(2)	Civil Works (a) Institutional Strengthening and Community Environment Initiatives Facility (b) Pilot and Management	1,700,000 40,000	90%
(3)	Field Works (a) Institutional Strengthening and Community Environment Initiatives Facility (b) Pilot Land Management	1,080,000 290,000	70%
(3)	Consultants' Services and Training (a) Institutional Strengthening and Community Environment Initiatives Facility (b) Pilot and Management	2,790,000 320,000	100%
(4)	Operating Costs (a) Institutional Strengthening and Community Environment Initiatives Facility (b) Pilot and Management	630,000 20,000	90%
(5)	Incremental Salaries (a) Institutional Strengthening and Community Environment Initiatives Facility (b) Pilot and Management	650,000 None	90% through December 31, 1998, 70% through December 31, 1999, 50% through December 31, 2001 and 25% thereafter
(6)	Refunding of Project Preparation Advance	790,000	Amount due pursuant to Section 2.02 (c) of this Agreement
(7)	Unallocated	1,060,000	
	TOTAL	10,700,000	

Estimated IDA Disbursements

IDA FY	1997	1998	1999	2000	2001	2002
Annual	0.7	2.3	4.4	4.6	2.1	0.7
Cumulative	0.7	3.0	7.4	12.0	14.1	14.8

**SRI LANKA**

**Environmental Action 1 Project**

**Time Table of Key Processing Events**

Time Taken to Prepare	Nine Months
Project Prepared by	Consultants with financial assistance from the Royal Norwegian Government
First IDA Mission	December 1994
Appraisal Mission	October 1995
Negotiations	February 1997
Planned Date of Effectiveness	June 1997

List of Relevant PPARs, PCRs  
and other Reports

World Bank, 1992. World Development Report 1992: Development and the Environment  
World Bank, 1992. Environmental Issues in World Bank Projects  
OED, 1993. World Bank Approaches to the Environment in Brazil  
World Bank, 1995, National Environmental Strategies: Learning from Experience  
World Bank, 1995. FY95 Annual Report on the Environment

This report is based on the findings of an appraisal mission which visited Sri Lanka in October 1995. Mission members included Messrs./Mme. Ivar Serejski and Nadim Khouri (Task Managers), Guy Motha, Meena Munshi (SA1AN), Christina Hartler, Pedro Alba (SA1CO); Sumith Pilapitiya (SA1SL); and Peter Browne-Cooper (Consultant). Messrs. Mohan Munasinghe (ENVPE); Tom Tsui (CMUB); Townsend Swayze (AF4AN); and John Redwood (ENVLW) were the peer reviewers. Mr. Fakhruddin Ahmed is the Acting Country Director and Ridwan Ali is the Agriculture and Natural Resources Operations Division Chief of Country Department 1, South Asia Region.

**Status of Bank Group Operations in SRI LANKA**  
**IBRD Loans and IDA Credits in the Operations Portfolio**  
**(As of December 31, 1996)**

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original amount in US\$ millions			Undisbursed	Difference between expected and actual disbursements <sup>a</sup>
					IBRD	IDA	Cancellations		
Number of Closed									
Loans/Credits:	69								
Active Loans									
LK-PE-10526	C29820	1997	GOSL	HEALTH SERVICES DEV	18.80			18.66	
LK-PE-42266	C28810	1996	GOSL	TEACH ED& DEPLOYMENT	64.10			61.68	-0.94
LK-PE-42263	C28370	1996	GOSL	TELECOM REG. & PUBL.	15.00			13.84	2.51
LK-PE-10517	C28800	1996	GOSL	PVT. SECTOR INFRAS. DEV	77.00			75.94	
LK-PE-10467	C27570	1995	GOSL	COL. ENVIRON. IMPROVE.	39.00			32.42	3.25
LK-PE-10420	C24950	1993	GOSL	COLOMBO URB. TRANSP.	20.00			11.95	7.16
LK-PE-10419	C24840	1993	GOSL	PRIVATE FINANCE DEV.	60.00			13.29	-2.33
LK-PE-10409	C24420	1993	GOSL	COMMUNITY WATER SUPP	24.30			14.07	4.95
LK-PE-10398	C23800	1992	GOSL	2ND AGR. EXTENSION	14.34			10.32	2.27
LK-PE-10386	C22970	1992	GOSL	POWER DISTRIBUTION	50.00			42.77	34.07
LK-PE-10378	C22600	1991	GOSL	IRRIG. REHAB.	29.60			22.36	13.90
LK-PE-10374	C22500	1991	GOSL	SMI IV	45.00			3.56	0.71
LK-PE-10373	C22490	1991	GOSL/CEB	TELECOMS II	57.00			33.45	32.92
LK-PE-10368	C22310	1991	GOSL	POVERTY ALLEVIATION	57.50		9.21	19.88	27.93
LK-PE-10363	C21830	1991	GOSL	3RD ROADS	42.50			17.97	11.42
LK-PE-10308	C19090	1988	GOSL	SMALLHOLDER RUBBER	23.50		5.18	6.17	8.86
TOTAL					0.00	637.64	14.39	398.33	146.68

	Active Loans	Closed Loans	Total
Total disbursed (IBRD and IDA)	236.97	1372.97	1609.94
Of which repaid	0.00	157.04	157.04
Total now held by IBRD and IDA	623.25	1175.15	1798.40
Amount sold	0.00	3.59	3.59
Of which repaid	0.00	3.59	3.59
Total undisbursed	398.36	11.45	409.81

a. Intended disbursements to date minus actual disbursements to date as projected at appraisal.

Note:

Disbursement data are updated at the end of the first week of the month.

**Sri Lanka - Statement of IFC Investments**  
**Committed and Disbursed Portfolio**  
**As of December 31, 1996**  
**(In US\$ Millions)**

<i>FY Approval</i>	<i>Company</i>	Committed				Disbursed			
		IFC				IFC			
		<i>Loan</i>	<i>Equity</i>	<i>Quasi</i>	<i>Partic</i>	<i>Loan</i>	<i>Equity</i>	<i>Quasi</i>	<i>Partic</i>
1980	Lanka Orix	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1981	Lanka Hotels	0.00	0.64	0.00	0.00	0.00	0.64	0.00	0.00
1984	Lanka Orix	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1985	Lanka Orix	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1988	Union Assurance	0.00	0.48	0.00	0.00	0.00	0.48	0.00	0.00
1992	CKN Fund Mgmt.	0.00	0.06	0.00	0.00	0.00	0.06	0.00	0.00
1992	Pyramid Trust	0.00	0.25	0.00	0.00	0.00	0.25	0.00	0.00
1993	Lanka Cellular	0.00	1.36	0.00	0.00	0.00	1.36	0.00	0.00
1994	Lanka Cellular	0.00	0.67	0.00	0.00	0.00	0.67	0.00	0.00
1995	Union Assurance	0.00	0.50	0.00	0.00	0.00	0.50	0.00	0.00
1996	Lanka Orix	10.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00
	Total Portfolio:	10.00	3.96	0.00	0.00	2.00	3.96	0.00	0.00

**Approvals Pending Commitment**

		<i>Loan</i>	<i>Equity</i>	<i>Quasi</i>	<i>Partic</i>
1996	ASIA POWER	10.00	2.50	2.50	20.00
	Total Pending Commitment:	10.00	2.50	2.50	20.00

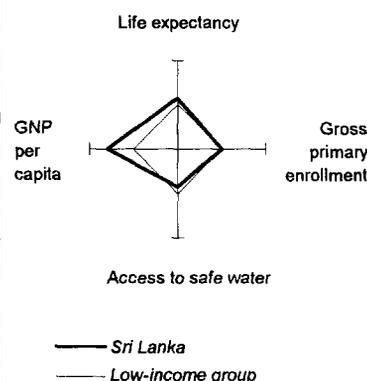
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## Sri Lanka at a glance

## POVERTY and SOCIAL

	Sri Lanka	South Asia	Low-income
Population mid-1995 (millions)	18.1	1,243	3,180
GNP per capita 1995 (US\$)	700	350	440
GNP 1995 (billions US\$)	12.6	435	1,399
<b>Average annual growth, 1990-95</b>			
Population (%)	1.3	1.9	1.7
Labor force (%)	2.0	2.1	1.7
<b>Most recent estimate (latest year available since 1989)</b>			
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	62	41
Access to safe water (% of population)	57	63	67
Illiteracy (% of population age 15+)	10	50	34
Gross primary enrollment (% of school-age population)	106	100	105
Male	106	110	112
Female	105	87	98

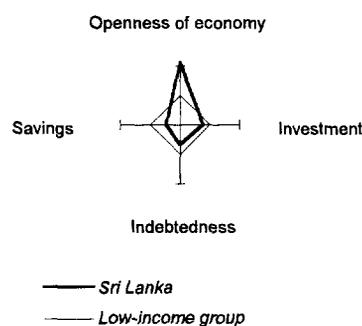
## Development diamond\*



## KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1975	1985	1994	1995	
GDP (billions US\$)	3.8	5.9	11.7	12.9	
Gross domestic investment/GDP	15.6	22.6	27.0	25.1	
Exports of goods and non-factor services/GDP	27.5	26.4	33.8	35.9	
Gross domestic savings/GDP	8.1	10.4	15.2	14.1	
Gross national savings/GDP	9.4	19.2	20.6	19.6	
Current account balance/GDP	-2.9	-7.1	-6.4	-4.2	
Interest payments/GDP	0.5	2.0	1.1	1.0	
Total debt/GDP	21.5	60.2	67.3	63.7	
Total debt service/exports	26.1	16.5	8.2	7.3	
Present value of debt/GDP	..	..	40.8	43.1	
Present value of debt/exports	..	..	99.7	99.5	
<b>(average annual growth)</b>					
GDP	5.3	4.4	5.6	5.4	4.9
GNP per capita	3.7	2.7	3.9	4.4	..
Exports of goods and nfs	4.7	9.0	13.0	6.4	7.3

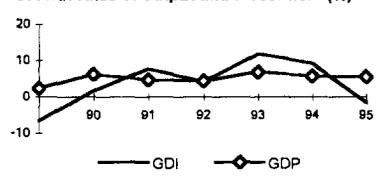
## Economic ratios\*



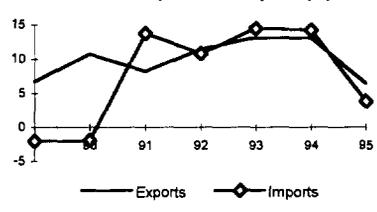
## STRUCTURE of the ECONOMY

	1975	1985	1994	1995
<b>(% of GDP)</b>				
Agriculture	30.4	27.7	23.8	23.0
Industry	26.4	26.2	24.7	25.1
Manufacturing	20.1	14.7	15.4	15.7
Services	43.2	46.1	51.5	51.9
Private consumption	82.6	79.2	75.1	74.0
General government consumption	9.3	10.4	9.7	11.8
Imports of goods and non-factor services	35.0	38.6	45.6	46.9
<b>(average annual growth)</b>				
Agriculture	4.3	1.8	3.3	3.3
Industry	5.3	5.6	8.1	7.7
Manufacturing	4.1	7.6	9.1	9.2
Services	6.6	4.8	5.2	5.1
Private consumption	6.1	4.1	5.7	7.1
General government consumption	4.1	3.5	12.2	-1.1
Gross domestic investment	14.4	2.3	9.2	-1.7
Imports of goods and non-factor services	13.2	5.5	14.2	3.8
Gross national product	5.5	4.1	5.3	5.9

## Growth rates of output and investment (%)



## Growth rates of exports and imports (%)

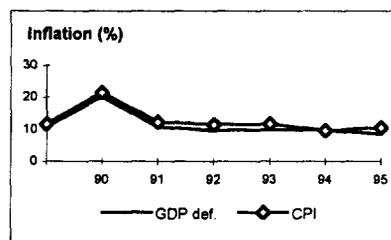


Note: 1995 data are preliminary estimates. Figures in italics are for years other than those specified.

\* 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.

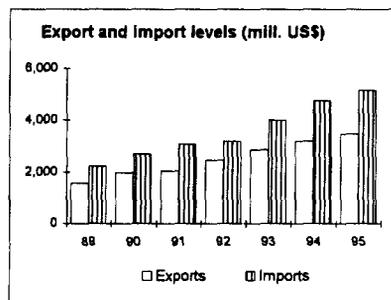
**PRICES and GOVERNMENT FINANCE**

	1975	1985	1994	1995
<b>Domestic prices</b>				
<i>(% change)</i>				
Consumer prices	6.6	1.5	9.5	10.4
Implicit GDP deflator	5.4	-1.1	9.7	8.4
<b>Government finance</b>				
<i>(% of GDP)</i>				
Current revenue	..	22.7	19.0	20.7
Current budget balance	..	2.3	-2.9	-2.0
Overall surplus/deficit	..	-11.9	-10.0	-9.7



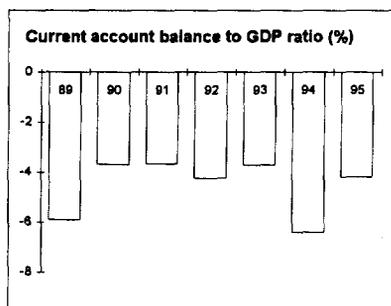
**TRADE**

	1975	1985	1994	1995
<i>(millions US\$)</i>				
Total exports (fob)	..	1,333	3,189	3,472
Tea	..	442	420	383
Other agricultural goods	..	94	278	295
Manufactures	..	233	2,131	2,440
Total imports (cif)	..	1,948	4,768	5,145
Food	..	217	589	631
Fuel and energy	..	404	296	321
Capital goods	..	382	1,358	1,430
Export price index (1987=100)	..	96	119	121
Import price index (1987=100)	..	86	148	155
Terms of trade (1987=100)	..	111	80	78



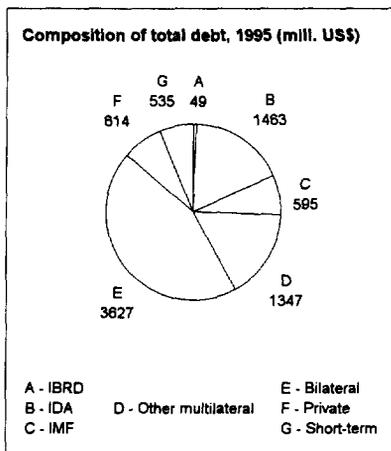
**BALANCE of PAYMENTS**

	1975	1985	1994	1995
<i>(millions US\$)</i>				
Exports of goods and non-factor services	632	1,561	3,955	4,629
Imports of goods and non-factor services	804	2,296	5,335	5,876
Resource balance	-172	-734	-1,379	-1,247
Net factor income	-18	-127	-167	-138
Net current transfers	80	443	794	841
Current account balance, before official transfers	-110	-419	-753	-544
Financing items (net)	84	304	1,001	450
Changes in net reserves	26	115	-248	94
<b>Memo:</b>				
Reserves including gold (mill. US\$)	57	472	2,035	1,910
Conversion rate (local/US\$)	7.0	27.2	49.4	51.3



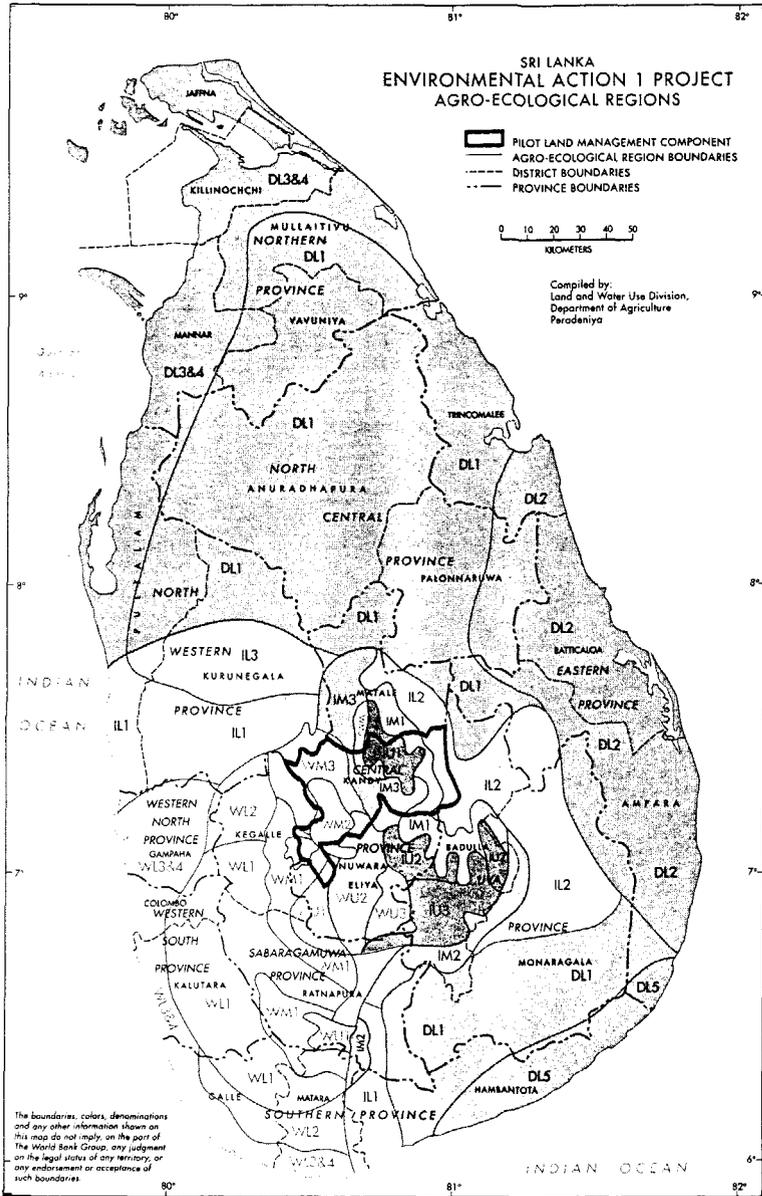
**EXTERNAL DEBT and RESOURCE FLOWS**

	1975	1985	1994	1995
<i>(millions US\$)</i>				
Total debt outstanding and disbursed	815	3,540	7,891	8,230
IBRD	36	61	54	49
IDA	39	397	1,339	1,463
Total debt service	169	320	392	409
IBRD	6	9	13	12
IDA	0	3	16	19
<b>Composition of net resource flows</b>				
Official grants	56	151	160	174
Official creditors	61	297	288	317
Private creditors	-22	44	-49	15
Foreign direct investment	0	26	166	195
Portfolio equity	0	0	112	61
<b>World Bank program</b>				
Commitments	30	137	0	39
Disbursements	19	79	78	106
Principal repayments	3	5	15	15
Net flows	16	74	63	92
Interest payments	3	8	15	16
Net transfers	14	66	48	76









DISTINGUISHING CHARACTERISTICS						
ZONE	AGRO-ECOLOGICAL REGION & SYMBOL	MONTHLY HISTOGRAMS OF 75% RAINFALL PROBABILITY FOR RESPECTIVE REGIONS	75% EXPECTANCY VALUE OF ANNUAL RAINFALL (ms.)	75% EXPECTANCY OF DRYNESS FOR PARTICULAR MONTHS	MAJOR SOIL GROUPS	TERRAIN
UP COUNTRY	WU1		>125	JAN FEB MAR MAY JUN JUL AUG SEP J.S F * * * * *	Red-Yellow Podzolic soils and Mountain Regosols.	Mountainous, steeply dissected hilly and rolling.
	WU2		> 75	J.S F .SM * * * * *	Red-Yellow Podzolic soils and Mountain Regosols.	Mountainous, steeply dissected hilly and rolling.
	WU3		> 55	J.S F .SM * * * * *	Red-Yellow Podzolic soils with dark B horizon and Red-Yellow Podzolic soils with prominent A1 horizon.	Rolling.
MID COUNTRY	WM1		>125	J.S F * * * * * .A.S	Red-Yellow Podzolic soils and Red-Yellow Podzolic Soils with semi-prominent A1 horizon.	Steeply dissected, hilly and rolling.
	WM2		> 55	J.S F .SM * * * * *	Reddish Brown Latosolic soils, Immature Brown Loams and Red-Yellow Podzolic soils.	Steeply dissected, hilly and rolling.
	WM3		> 50	J.S F .SM * * * * *	Reddish Brown Latosolic soils, Immature Brown Loams and Red-Yellow Podzolic soils.	Steeply dissected, hilly, rolling and undulating.
LOW COUNTRY	WL1		> 100	J.S F * * * * * .A.S	Red-Yellow Podzolic soils and Red-Yellow Podzolic Soils with semi-prominent A1 horizon.	Rolling and undulating.
	WL2		> 75	J.S F * * * * * .A.S	Red-Yellow Podzolic soils, Red-Yellow Podzolic soils with strongly mottled subsoil and low Humic Gley soils.	Rolling and undulating.
	WL3&4		> 60	J.S F .SM * * * * * .A.S	WL3: Red-Yellow Podzolic soils with soft and hard Laterite WL4: Red-Yellow Podzolic soils with soft and hard Laterite and Bog and Half-bog soils.	WL3: Rolling and undulating WL4: Undulating and flat.
UP COUNTRY	IU1		> 85	* * .SM * * J.S A .SS	Red-Yellow Podzolic soils and Mountain Regosols.	Mountainous, steeply dissected, hilly and rolling.
	IU2		> 55	* F.S .SM M.S J J A S	Red-Yellow Podzolic soils and Mountain Regosols.	Mountainous, steeply dissected, hilly and rolling.
	IU3		> 45	* F .SM * J J A SS	Red-Yellow Podzolic soils.	Steeply dissected, hilly and rolling.
MID COUNTRY	IM1		> 55	* * M M.S J J A SS	Reddish Brown Earths and immature Brown Loams.	Rolling, hilly and steep.
	IM2		> 45	J.S F * * J J A S	Reddish Brown Earths and immature Brown Loams.	Rolling, hilly and steep.
	IM3		> 35	* F M M.S J J A S	Immature Brown Loams, Reddish Brown Latosolic soils and Reddish Brown Earths.	Steeply dissected, hilly and rolling.
LOW COUNTRY	IL1		> 40	J F .SM * * J A .SS	Red-Yellow Podzolic soils with strongly mottled subsoil, low Humic Gley soils, Red-Yellow Podzolic soils with soft and hard Laterite and Regosols on old Red and Yellow sands.	Rolling, undulating and flat
	IL2		> 45	* F.S M M.S J J A .SS	Reddish Brown Earths, Immature Brown Loams and Low Humic Gley soils.	Rolling, hilly and undulating.
	IL3		> 35	J F .SM M.S J J A .SS	Reddish Brown Earths, Nencalic Brown soils and Low Humic Gley soils.	Undulating.
LOW COUNTRY	DL1		> 30	J.S F .SM M.S J J A SS	Reddish Brown Earths and Low Humic Gley soils.	Undulating.
	DL2		> 35	* F.S M M J J A S	Nencalic Brown soils, Reddish Brown Earths, soils on old Alluvium, Solodized Solonetz, Low Humic Gley soils and Regosols.	Undulating and flat.
	DL3&4		> 23	J.S F M M J J A .SS	DL3: Red-Yellow Latosols and Regosols DL4: Solodized Solonetz and Solonchaks.	DL3: Flat to slightly undulating. DL4: Flat
	DL5		> 20	J.S F M M J J A .SS	Reddish Brown Earths with high amount of gravel in subsoil, Low Humic Gley soils and Solodized Solonetz.	Undulating and flat.

\*Denotes wetness for the month. J.S. denotes second half of January  
.SM. denotes first half of March (Similarly for other months)





**CATALOGUERS/FILE**

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