RRP:SRI 26238

ASIAN DEVELOPMENT BANK

REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

BOARD OF DIRECTORS

ON A

PROPOSED LOAN

AND

TECHNICAL ASSISTANCE GRANT

TO THE

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

FOR THE

PLANTATION REFORM PROJECT

October 1995

CURRENCY EQUIVALENTS

(as of 31 August 1995)

Currency Unit	-	Sri Lankan Rupee (SLRs)
SLRs1.00	=	$0.02
$1.00	=	SLRs49.90

The Sri Lankan rupee is allowed to float against a weighted average basket of currencies of Sri Lanka's major trading partners.

ABBREVIATIONS

CBSL	-	Central Bank of Sri Lanka
CEA	-	Central Environmental Authority
CSE	-	Colombo Stock Exchange
CTC	-	Cut, Tear and Curl Tea
DCB	-	Domestic Commercial Banks
DFCC	-	Development Finance Corporation of Ceylon
DFD	-	Development Finance Department
DFI	-	Development Finance Institution
JEDB	-	Janatha Estates Development Board
MC	-	Management Company
MIS	-	Management Information System
MPI	-	Ministry in-charge of the Plantation Industries
NAV	-	Net Asset Value
NIPM	-	National Institute of Plantation Management
PERC	-	Public Enterprises Reform Commission
PFI	-	Participating Financial Institution
PIU	-	Project Implementation Unit
PMMD	-	Plantation Management and Monitoring Division
RPC	-	Regional Plantation Company
RSS	-	Ribbed Smoke Sheet
SALT	-	Sloping Agricultural Land Technology
SLSPC	-	Sri Lanka State Plantation Corporation
SMI	-	Small and Medium Industry

NOTES

(i) The fiscal year (FY) of the Government and all PFIs (except DFCC) corresponds to the calendar year. The FY of DFCC ends on 31 March.

(ii) In this Report, "$" refers to US dollars.

CONTENTS

LOAN AND PROJECT SUMMARY

Borrower	:	Democratic Socialist Republic of Sri Lanka
Project Outline	:	The Project is designed to assist in the rehabilitation and improvement of the existing tea, rubber, and coconut estates by the private sector so as to enhance the competitive advantage of Sri Lanka's tree crop industry. The Project will also support the Government's efforts in pursuing the needed subsector policy reforms, in further restructuring the state plantations, in providing the private sector with an appropriate business framework for managing and operating the plantation estates, and in improving environmental conditions in the Project area.
Classification	:	Primary: economic growth Secondary: environment Environmental classification: B
Rationale	:	The tree crops subsector plays an important role in the economy of Sri Lanka. However, since nationalization of plantation estates in the early 1970s, the subsector has suffered from low productivity and high cost of production. To increase productivity and profitability, the subsector requires major investments for modernization and dynamic management that responds quickly to international markets. To achieve these objectives, the Government decided to restructure both the management and ownership of 23 regional plantation companies (RPCs) and, by providing an appropriate regulatory and legal infrastructure, to create a favorable environment for private entrepreneurs to manage and operate the existing estates. The Project has been designed to address the following needs: (i) to further restructure the state plantations and provide the private sector with an appropriate business framework; (ii) to address restrictive labor policies and practices while improving the social welfare status of the estate workers; (iii) to remove restrictive marketing regulations in tea export; (iv) to provide long-term loans to privatized plantation companies for the tree crop subsector; (v) to enhance the competitive position of Sri Lanka in producing tea, rubber, and coconut; and (vi) to improve environmental conditions in the plantation estates and factories in the Project area. The Project will result in increased productivity and reduced cost of production in the subsector over the medium term, thereby increasing its competitive advantage in world markets.
Objectives and Scope	:	The objectives of the Project are to (i) provide long-term loans to participating financial institutions (PFIs) to finance eligible privatized plantation companies, (ii) support policy and institutional reforms to increase productivity and profitability and maintain the competitive advantage of the tree crop industry, and (iii) improve environmental

conditions in the Project area. The Project will cover 14 districts in Sri Lanka where the 23 RPCs are located. The Project area is estimated at 191,700 hectares (ha) consisting of 95,500 ha (43 percent of the total) for tea, 58,000 ha (30 percent of the total) for rubber, 12,600 ha (3 percent of the total) for coconut, and 25,600 ha for other land uses. The estimated total number of employees in the 23 RPCs in 1994 was 327,000. The Project has two parts: Part A (credit component) and Part B (noncredit component). Part A involves (i) tree crop plantation development, (ii) processing improvement and pollution control, and (iii) provision of service vehicles and equipment. Part B includes the (i) reforestation of the watersheds, (ii) improvement of workers' living environment, (iii) institutional strengthening, and (iv) support to the Project Implementation Unit (PIU).

Cost Estimates : The estimated total Project cost is $80.0 million equivalent, of which $25.8 million (33 percent) is the foreign exchange cost and $54.2 million equivalent (67 percent) is the local currency cost.

Financing Plan :

($ million)

Component	The Bank			Local Cost			Total Cost
	Foreign Exchange	Local Cost	Total	PFIs	RPCs	The Government	
Part A: Credit	21.3	19.3	40.6	2.8	10.7	0.0	54.2
Part B: Noncredit	4.5	14.9	19.4	0.0	6.3	0.2	25.8
Total	**25.8**	**34.2**	**60.0**	**2.8**	**17.0**	**0.2**	**80.0**
Percent of Total			**75.0**	**3.5**	**21.2**	**0.3**	**100.0**

Loan Amount and Terms : The equivalent in various currencies of SDR 40,855,000 ($60.0 million) from the Bank's Special Funds resources, with a repayment period of 40 years, including a grace period of 10 years, with a service charge of 1 percent per annum to be paid semiannually.

Allocation and Relending Terms : Loan proceeds for Part A amounting to the equivalent of SDR 27,618,000 ($40.6 million) will be relent by the Government through the Central Bank of Sri Lanka (CBSL) to the PFIs for onlending to eligible subborrowers. Loan proceeds for Part B (i) and (ii) amounting to the equivalent of SDR 9,185,000 ($13.5 million) will be made available by the Government to the Ministry in-charge of the Plantation Industries (MPI), through budgetary provision, for the privatized RPCs on a grant basis. Loan proceeds for Part B (iii) amounting to the equivalent of SDR 2,942,000 ($4.3 million) will be made available by the Government to MPI,

through budgetary appropriation, for the privatized RPCs and for the National Institute of Plantation Management (NIPM) on behalf of the privatized RPCs, both on a grant basis. Loan proceeds for Part B (iv) amounting to the equivalent of SDR 626,000 ($0.9 million) will be made available by the Government to MPI through budgetary appropriation. PFIs will onlend the Bank loan to Project subborrowers at an interest rate not exceeding the weighted average prime rate of five domestic commercial banks in Sri Lanka as published monthly by CBSL. The relending rate of Bank loan from the Borrower to DFIs will be set at 6.5 percent below the onlending rate.

Period of Utilization : Until 31 December 2002

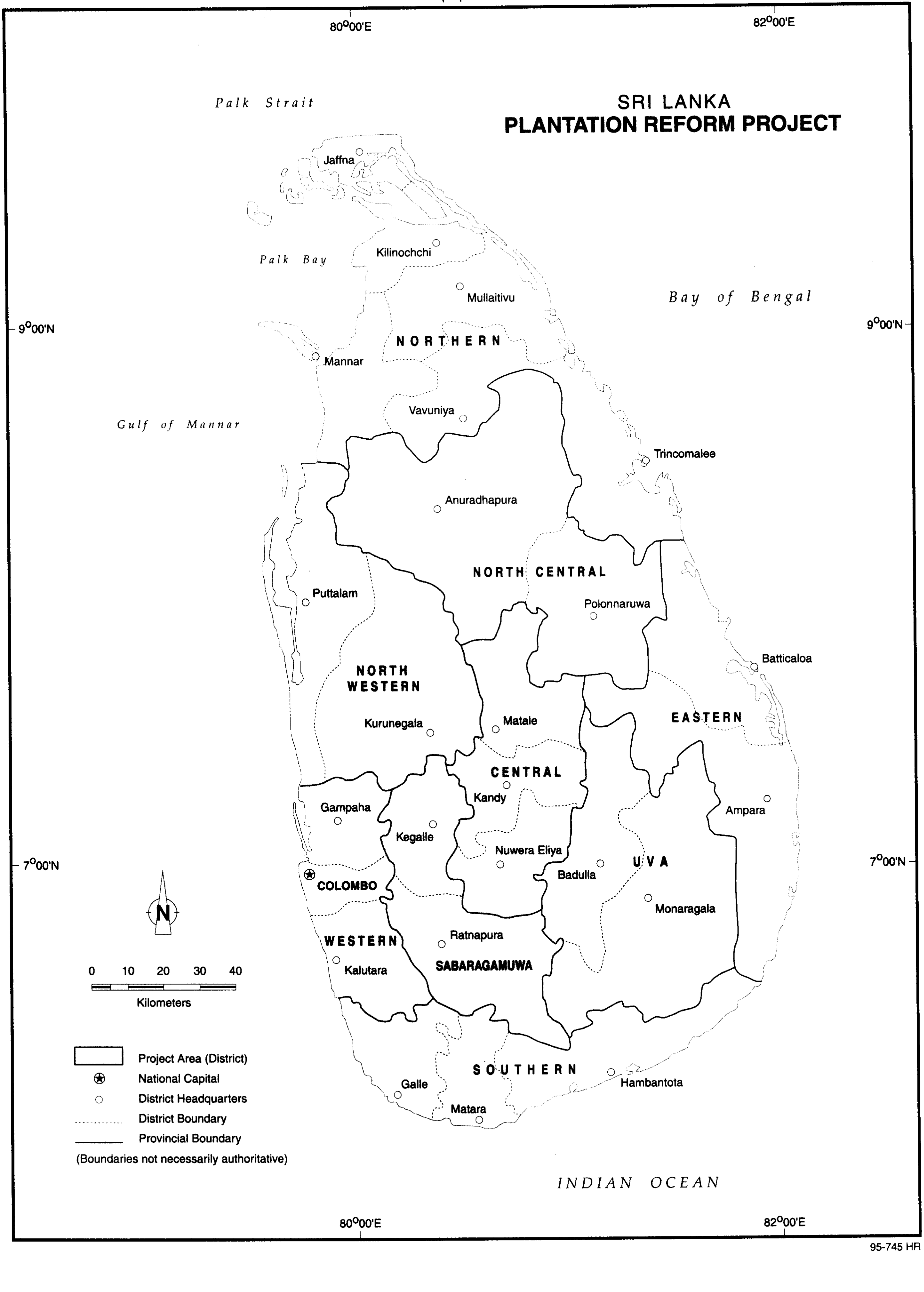
Executing Agencies : The Executing Agencies will be CBSL for Part A and MPI for Part B.

Implementation Arrangements : The implementing agencies will be PFIs for Part A and PIU under MPI for Part B. PFIs will comprise two development financial institutions (DFIs), namely, the Development Finance Corporation of Ceylon (DFCC) and the National Development Bank of Sri Lanka (NDB); and five domestic commercial banks (DCBs), namely, the Commercial Bank of Ceylon (CBC), Hatton National Bank Limited (HNB), Sampath Bank Limited, Seylan Bank, and Bank of Ceylon (BOC). A Project Coordinating Committee (PCC) chaired by the Secretary of MPI and comprising representatives of all the concerned agencies and privatized RPCs will be established to ensure interagency coordination in the implementation of Parts A and B of the Project.

Procurement : Procurement of goods under the Project will be carried out in accordance with the Bank's *Guidelines for Procurement*. The portion of the loan earmarked for Part A (credit component) will follow procurement procedures applicable to Bank loans for DFIs. All civil works for Part B (noncredit component) will be undertaken by RPCs through either force account or local competitive bidding in accordance with procedures acceptable to the Bank.

Consulting Services : The Project will provide two international consultants in the fields of estate management and estate production for about three person-months each. The consultants will be engaged by MPI in accordance with the Bank's *Guidelines on the Use of Consultants*.

Estimated Project Completion Date	:	30 June 2002
Project Benefits and Beneficiaries	:	The Project will benefit 23 privatized RPCs and about an equal number of their subsidiaries or related entities. It will help ensure the continued employment of about 15,000 staff and 312,000 plantation workers, whose security of tenure is currently at risk because of the poor performance of the estates. The Project will allow replanting of 1,000 ha of tea, 2,040 ha of rubber, and 930 ha of coconut. The yields in the replanted areas are expected to increase by 35 percent in tea, 25 percent in rubber, and 60 percent in coconut. The Project will also diversify the existing tea, rubber, and coconut plantations to high-value alternative crops. The incremental production of output at full development of the Project is estimated at about 5,200 tons (t) of tea, 6,700 t of rubber, and 1.7 million coconuts annually. This will result in additional export revenues estimated at $15.8 million per annum. The Project will generate annual savings of SLRs1.0 billion ($20 million) for the Government, which will be relieved of the losses incurred by the public estates. The economic internal rate of return of the Project is estimated at about 22.5 percent. In addition, the Project will generate considerable social and environmental benefits in terms of the improved social welfare status of the estate workers, employment generation, and reforestation of the watersheds in the Project area.
Technical Assistance	:	A technical assistance (TA) grant for Tree Crop Plantation Planning and Monitoring will be provided by the Bank. The main objective of the TA will be to assist the Government in planning and implementing policy and institutional reforms and in monitoring the impact of the reforms to be undertaken during the Project period. The TA cost is estimated at $500,000, of which the Bank will provide a grant of $400,000 equivalent and the Government will finance the remaining cost of $100,000.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SRI LANKA
PLANTATION REFORM PROJECT
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(Boundaries not necessarily authoritative)
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I. THE PROPOSAL

1. I submit for your approval the following Report and Recommendation on a proposed loan to the Democratic Socialist Republic of Sri Lanka for the Plantation Reform Project (the Project). The Report also describes proposed technical assistance for Tree Crop Plantation Planning and Monitoring, and if the proposed loan is approved by the Board, I, acting under the authority delegated to me by the Board, shall approve the technical assistance.

II. INTRODUCTION

2. The proposed Project was prepared under a Bank technical assistance (TA) in 1993.[1] At the completion of the TA, the Government requested the Bank to field a Fact-finding Mission for the proposed Project which was undertaken in September 1993. However, further processing of the Project by the Bank was deferred because the Government could not make a firm commitment to the privatization of the state plantation sector in view of general elections in August 1994, the Presidential election in November 1994, and subsequent political changes in the country. Following the Cabinet's decision in early April 1995 to further restructure the state plantation sector by allowing private groups to have a financial stake in the sector, a follow-up Fact-finding Mission was fielded from 17 April to 4 May 1995 and an Appraisal Mission[2] from 17 to 31 July 1995 to assess the objectives, scope, cost estimates, financing plan, and implementation arrangements of the proposed Project. This Report is based on the findings of the Missions and on discussions with officials of the Government, participating financial institutions (PFIs), prospective beneficiaries, trade unions, and major aid agencies involved in the agriculture sector in Sri Lanka.

III. BACKGROUND

A. The Tree Crops Subsector

1. Importance of Tree Crops in the National Economy

3. Agriculture plays an important role in the Sri Lankan economy, contributing about 21 percent of the gross domestic product (GDP) and 22 percent of export earnings, and employing about 35 percent of the labor force in 1994. The crop sector can be divided into three main subsectors: (i) the paddy subsector, which contributes about 13 percent of GDP and employs 25 percent of the labor force; (ii) the tree crops subsector, which accounts for 8 percent of GDP and 19 percent of export earnings, and employs 20 percent of the labor force; and (iii) the minor crops subsector, which is not well documented but is important in its contribution to employment, income generation, and a balanced nutrient intake.

4. Tea, rubber and coconut are the major tree crops grown in Sri Lanka, comprising a total area of 222,000 hectares (ha), 196,000 ha, and 416,000 ha, respectively (see Appendix 1). The crops are planted by both large estates and smallholder farmers. For many decades, the tree crops subsector was the highest foreign exchange earner and one of the largest sources of direct or indirect employment for the population. However, over the past 20 years, since nationalization of private estates by the Government in the early 1970s, the subsector has underperformed, causing

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1 TA No. 1869-SRI: Sustainable Development for Tree Crop Plantations, for $350,000, approved on 16 April 1993.

2 The Mission consisted of D. Nangju (Sr. Agronomist/Mission Leader); T.Q. Canh (Programs Officer); A.T. Loh (Project Economist); S. Nanwani (Counsel); and D.C. Wijesekera (Financial Analyst/Staff Consultant).

a loss of scarce resources. Sri Lanka's share of the world's tea exports fell from 40 percent in 1970 to 19.5 percent in 1991. The country lost ground to newcomers such as Kenya, which increased its production nearly ninefold to reach almost the same level as Sri Lanka's. Similarly, Sri Lanka lost its share of the rubber market over the same period, when Thailand almost doubled its share. The country is no longer a major supplier of coconut products to the international market because of a huge internal demand and declining productivity and cropped area of coconut.

5. The main reasons behind the decline of tree crops production in Sri Lanka are low productivity and high cost of production in the state-owned estates (see Appendix 1). Tea yields in the country are about 50 percent lower than those in India and Kenya. The cost of tea production in Sri Lanka is about 25 percent higher than in India and Kenya. The same problem affects rubber production and, to some extent, coconut production. Private smallholders have generally performed better than the public estates.

2. External and Internal Factors

6. Although the stagnation in the tree crops subsector in Sri Lanka was partly caused by external factors such as the decline of the world tea and rubber prices and strong competition from new entrants, the real causes of the decline and loss of competitiveness in world markets were internal problems caused by the Government's interventions. The major internal factors include the following:

(i) Nationalization of the tea, rubber, and coconut industries. The Land Reform Laws of 1972 and 1975 limited private landholding to a maximum of 20 ha and led the Government to take over about 502 tea, rubber, and coconut estates from private landowners. These nationalized estates were placed under two state corporations, the Janatha Estates Development Board (JEDB) and Sri Lanka State Plantation Corporation (SLSPC), which became the owners and operators of 130,000 ha of land under tea (about 55 percent of the total), 64,000 ha of land under rubber (about 35 percent of the total), and 22,000 ha of land under coconut (about 3 percent of the total). The two corporations also controlled more than 400 tea and rubber factories. They provided employment to nearly 450,000 people or 8 percent of the total work force in the country. In 1990, they accounted for about 51 percent of the total tea production, 32 percent of the total rubber production, and 2 percent of the total coconut production in the country. The threat of nationalization of estates prior to the land reforms of 1972 and 1975 scared private plantation owners from making new investments. In addition, under JEDB and SLSPC, the productivity of the nationalized estates started to decline because the management was weak and bureaucratic, and the industry suffered from inefficiencies. Except for a few profitable years, the period of management by JEDB and SLSPC was characterized by large losses, waste, and inefficiency that put a burden on the Government (see Appendix 1). By 1992, the annual operating losses were estimated at SLRs1.5 billion ($30 million) for JEDB and SLRs0.5 billion ($10 million) for SLSPC, and these losses had to be taken over by the Government.

(ii) Fiscal and monetary policies. The Government levied heavy taxes (export duties, ad valorem taxes, and cess) on tree crops to support its ambitious public investment program such as the Mahaweli Development Program in the 1970s and to make large transfers to other unprofitable public enterprises.

Even though these taxes were scaled back in the 1980s, the remaining distortions were still strong disincentives to long-term investment until recent years. Import substitution policies and protection to the domestic manufacturing industry also had adverse price effects on the tree crops industries. In addition, the high inflation of the 1970s and 1980s, caused by massive budget deficits (20 percent of GDP in 1980 and 16 percent in 1988), was not offset by adequate movements in the nominal exchange rate. Together with import taxes, inflation imposed the equivalent of about 25 to 30 percent indirect taxes on tree crops. Lowering the import duties and ad valorem taxes in 1985 and the depreciation of the rupee in 1989 came late to help a much weakened industry face tough international competition.

(iii) Regulatory policies. The Government's continuous interventions in the labor market — increasing wages and benefits — drove up production costs without due regard to parallel increases in productivity. Labor practices such as the mandatory six-day week employment for plantation workers without any relevance to the seasonal changes in agricultural operations, and restrictions in moving labor around plantations produced sizable fixed operating overheads. Labor costs now account for over 60 percent of the total cost of production. Because of these and other factors,[1] the profit margins in state plantations were often negative, and the shortfall was met from public borrowings. Only in the private smallholder sector, not directly affected by state-mandated wages and norms, were returns mostly positive in 1980 to 1990. In addition, the marketing of tree crops was severely constrained by outdated regulations that controlled everything from production to crop disposal. The forced sale of tea and rubber through noncompetitive Colombo auctions kept prices low and shifted profits from the growers to the exporters.

3. Restructuring Program

7. The Government became aware of the serious problems in the tree crops subsector in the early 1980s and subsequently took steps to rehabilitate it with foreign technical and financial assistance. The first determined effort to reduce the restrictive taxes and expand investments was made in 1984. The Fourth Tree Crops Project, cofinanced by the World Bank and the Bank, and the Governments of the Netherlands, Norway, and the United Kingdom, provided $211.8 million to improve public sector estates during 1986 to 1991. Two projects in 1989 (the Smallholders Tea Development Project[2] financed by the Bank and the Smallholders Rubber Rehabilitation Project financed by the World Bank) were directed toward the private sector (smallholders) for medium-term investment needs. Although they addressed some investment needs, these projects did not target critical problem areas, such as labor productivity, cost of production, taxation and restrictions on marketing, and managerial efficiency. Because these problems are interrelated and affect the growth of the tree crops subsector as a whole, the project lending modality alone could not improve productivity and efficiency.

8. In the late 1980s, many Government officials believed that the efficiency of the plantation estates could not be achieved under public sector management and some estates should be returned to the private sector. In 1990, the Government, with the assistance of the World Bank,

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1 Other factors include low crop productivity, poor management and surplus labor.

2 Loan No. 955-SRI(SF), for $25 million, approved on 21 February 1989.

set up a task force to look into the privatization of the plantations. Based on the recommendations of the Task Force, in June 1992 the Government restructured the tree crop subsector to improve the performance of public estates.[1] Under the restructuring program, which was supported by the Bank-assisted Second Agriculture Program Loan,[2] the Government took 449 tea, rubber, and coconut estates from the two state corporations and gave control (under a 99-year lease) over the estates to 22 newly created regional plantation companies (RPCs) under the Conversion of Corporations and Government-owned Business Undertakings into Public Companies Act of 1987. Another RPC was later created from some of the remaining 53 estates to bring the total number of RPCs to 23.[3] However, these companies are still wholly state-owned, and only operational management has been handed to another set of 23 private management companies (MCs) under separate management contracts that include profit sharing. The management contracts run initially for five and a half years and are renewable thereafter, depending on the MCs' performance.

9. The Government had expected that privatizing management (but not ownership) would enable the public estates to be run more effectively and would attract investments. This assumption, however, was not realized. Moreover, the Government sent a wrong signal to the market by declaring a 30 percent mandatory wage increase in 1993, despite inefficient labor practices, which thwarted the private managers' efforts to increase productivity and lower costs. At the time of the management transfer from the Government to the private companies, the combined liability of JEDB and SLSPC was over SLRs5 billion ($100 million) in long-term and short-term debt. Most of it was held by the two nationalized banks, the People's Bank and the Bank of Ceylon, which had heavy debt portfolios. These institutions were not willing or able to provide more credit to the plantations. The Government expected that MCs would provide the long-term capital, but the contractual arrangement and ownership restriction did not foster investment from the private companies. Further, if MCs were able to secure loans, the debt would still accrue to the Government since it owned the holding companies. To finance the operation of the plantation companies, the Government borrowed about SLRs2 billion ($40 million) by the end of 1994 in short-term overdrafts from local commercial banks, and issued debentures worth SLRs2.1 billion ($42 million), for most of which the Government Employee Provident Fund and the Employee Trust Fund subscribed. Although some MCs were able to reduce the losses of RPCs (seven of them were able to make profits in two years), the short-term nature of the contract was a disincentive for MCs to perform as entrepreneurs.

10. To stop the deteriorating conditions and to take effective long-term measures to resuscitate the plantation sector, on 5 April 1995 the Government decided to further restructure the state plantation sector by allowing the private sector to have a financial stake in the plantations so that the Government will be relieved of the burden of subsidizing the sector. This will be done by giving the RPCs a long-term lease of about 50 years, and capitalizing the 23 RPCs, taking into account the assets and market values. Once capitalized, the assets of the RPCs will be privatized through the sale of shares about 51 percent of which will be sold to the present MCs and other private investors, and 20 percent to the general public, while 10 percent will be given to the estate employees, and the remaining 19 percent will be retained by the Government (see Appendix 2). The privatization of RPCs will be supervised and monitored by the newly created Public Enterprises

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1 Because privatization is a very sensitive issue in Sri Lanka, particularly among the trade unions, the Government has used different terms for the same idea, e.g. reform, restructuring, and peoplization.

2 Loan No. 1127-SRI(SF), for $60 million, approved on 26 November 1991.

3 The Restructuring Program did not cover the existing 41 marginal estates, and the marketing and warehousing facilities still owned by JEDB and SLSPC.

Reform Commission (PERC)[1] in close cooperation with the Ministry in-charge of the Plantation Industries (MPI).

4. Outlook

11. The foregoing shows that the failure of the tree crops subsector in Sri Lanka to retain its world competitiveness was attributed largely to internal factors caused by the Government. The subsector was adversely affected by the expropriation of private estates over 20 ha and disruptive labor unions that drove state plantations to inefficiency and the brink of insolvency. The subsector still retains its comparative advantage in world markets, but only marginally. Timely action can save it from going under. This requires a bold commitment on the part of the Government to implement the needed reforms quickly and let the highly motivated and entrepreneurial private sector restore the industry's comparative advantage in world markets. However, to restore the industry's comparative advantage, the private sector will require capital to rehabilitate and improve the existing estates and factories. The proposed Project has been designed to meet the needs of the industry.

12. Although projections of international demand for tea and rubber are mixed, the potential for specialty tea and rubber is very good. Sri Lanka has an advantage over Kenya and Indonesia in such items as specialty tea, flavored tea, instant tea, and packeted tea, which is expected to provide the direction for future growth. Sri Lanka's comparative advantage is also high in specialty rubber such as high grade crepe, and it can easily find outlets for these through appropriate marketing that includes development of special niches and direct marketing to specialty buyers overseas. The outlook for coconut is also bright because Sri Lanka has strong comparative advantage for producing coconut.

B. Government Policies and Plans

13. Before 1984 the Government's development efforts in the agriculture sector focused on a major irrigation and land settlement scheme known as the Accelerated Mahaweli Development Program designed to expedite implementation of a number of large-scale power and irrigation projects. Attainment of a high degree of self-reliance in paddy production was a major target of the program that tended to benefit paddy production rather than tree crops production, and resulted in imbalanced development among the subsectors. The Government sought to address these constraints through the adoption of strategies set out in the National Agriculture, Food, and Nutrition Strategy, 1984, which advocated investments in the tree crops subsector.

14. The major goals for agriculture, according to the Public Investment Program (1993-1996), are to (i) optimize the production of basic food items including rice, milk, sugar, fish, and pulses, to achieve a high degree of self-reliance in these commodities; (ii) increase the productivity of tree crops to expand agricultural export earnings and improve the balance of payments; (iii) promote diversification and agro-industries; and (iv) increase income levels and employment opportunities in the rural areas. To achieve these goals, the Government's strategy is to (i) rehabilitate the existing irrigation facilities and improve the management of land, water, forestry, and other natural resources; (ii) ensure the adequacy of producer incentives and marketing infrastructure for agricultural commodities; (iii) achieve more balanced regional development in agriculture; (iv) restructure and streamline the key institutions in the agriculture sector; and (v) implement policy

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[1] Under a small-scale technical assistance for *Support to Public Enterprises Reform in the Agriculture Sector* (TA No. 2315-SRI, for $100,000, approved on 29 March 1995), the Bank is providing a privatization expert to assist PERC.

adjustments conducive to increased productivity and market-oriented agriculture, including a greater role of the private sector in agricultural development and marketing of agricultural input and output.

15. With regard to the tree crops subsector, the Government stated in April 1995 that the major policies of the Government will be to (i) promote active private sector participation on a transparent and competitive basis so as to achieve high investment levels and rapid growth, (ii) provide clearly targeted assistance to the needy sectors of the industry such as smallholders and estate workers, (iii) encourage collective agreements between employers and employees to minimize conflicts and to protect worker rights, (iv) continue state participation in research and extension in a cost-effective manner, and (v) promote environment-friendly and sustainable agriculture and industry.

16. To implement the policy statements, the Government adopted an ambitious Action Plan for 1995-1999 for the tree crops subsector in which (i) the 23 RPCs will be privatized through the sale of shares to the private sector and general public during April 1995 to March 1996; (ii) selected JEDB and SLSPC-managed estates will be brought under one organization to be owned and managed by the State by 30 June 1995, and the remaining estates will be privatized as appropriate by the end of 1996; (iii) signing of a collective agreement between RPCs and worker unions will be concluded by 30 June 1995;[1] (iv) the ongoing relocation of excess JEDB/SLSPC staff to other State agencies with vacancies will be concluded by 31 March 1996; and (v) a five-year program of investment worth SLRs3,000 million ($60 million) will commence during the latter half of 1995, with assistance from external agencies.

17. Because of the complexity of the privatization process, implementation of the action plan has been delayed. The Government, however, is fully committed to improve the productivity and profitability of the state plantation sector through greater private sector participation and has since revised the action plan to make it more realistic and achievable (see para. 26). The proposed Project is in line with the Government's policies, plans, and commitment for the tree crops subsector.

C. External Assistance to the Sector

18. Over the period 1984-1994, the Bank and the World Bank have been the two main sources of external assistance in the development of the plantation sector in Sri Lanka. During the past decade, the major Bank-financed projects in the sector have been (i) the Plantation Sector Project,[2] (ii) the Perennial Crops Development Project,[3] and (iii) the Smallholder Tea Development Project.[4] The Fourth Tree Crop Project, cofinanced by the World Bank, the Bank, the Netherlands, Norway, and the United Kingdom, focused on improving the state plantations during 1986-1993. The Swedish International Development Authority (SIDA) commenced in 1984 an Integrated Rural Development Program for the Badulla district, with the prime objective of improving the standard of public health, education and social conditions of estate labor. In 1986, SIDA approved a Plantation Schools Education Development Program to improve education in Tamil schools in the plantation areas. The Norwegian Agency for Development Corporation (NORAD) supported in 1993 a program encompassing the construction and repair of housing for plantation workers, the upgrading of

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[1] Negotiations for a collective agreement between RPCs and labor unions are ongoing.

[2] Loan No. 712-SRI(SF), for $45.0 million, approved in December 1984, for which a Project Performance Audit Report (PPAR) was issued in February 1995. This Project forms part of the Fourth Tree Crop Project cofinanced by the World Bank and other sources.

[3] Loan No. 899-SRI(SF), for $17.3 million, approved in August 1988.

[4] Loan No. 955-SRI(SF), for $25.0 million, approved in February 1989.

hospitals and child care facilities, and the training of health personnel. A summary of major external assistance to Sri Lanka for the tree crops subsector is given in Appendix 3.

19. Of the nine investment projects financed by the Bank in the tree crops subsector since 1968, seven have been completed[1] and two are under implementation. The performance of the completed projects was generally satisfactory, while the ongoing projects initially had problems of slow implementation but have now made rapid progress.

D. Lessons Learned

20. To support tree crops development in Sri Lanka, since 1968 the Bank has approved 9 investment projects totaling $154.3 million and 11 TA projects amounting to $2.6 million. Seven projects have been completed and PCRs prepared while PPARs are available for four projects. Of the four, three projects were assessed as partly successful and one project (Plantation Sector Project) was rated successful. The major problems identified were inadequate maintenance, shortage of qualified personnel, inadequate technical and managerial capability of the Executing Agency, uncertain sustainability, and declining international prices of tree crops.

21. The main lesson from these projects generally reflects the difficulty of assisting the tree crops subsector in an environment controlled and regulated by the State, and highlights the need for market-oriented entrepreneurial approaches. It underscores the following aspects: (i) letting entrepreneurs select the components of a project on the basis of their assessment of profitability has been crucial to project success, (ii) there is need to look beyond the project and analyze the institutional framework and policy environment of a particular sector, (iii) an adequate project feasibility study is critical because it could have identified the causes of the long-term decline of the sector and could have led to the design and testing of more effective measures, and (iv) both the manufacturing side and the production-side of the tea industry need to be improved if production costs are to be reduced significantly.

22. The lessons learned from the past tree crops projects have been considered in designing the proposed Project:

(i) Except for the Smallholder Tea and Perennial Crops Development Projects, the focus of Bank assistance in the past was on the development of tea and coconut in the Government-owned estates that had been managed inefficiently by JEDB and SLSPC. Under the proposed Project, the focus has shifted to support for the rehabilitation and improvement of the plantation estates and factories by the private sector. The Government has made a strong commitment to start to privatize the 23 RPCs prior to the processing

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[1] These completed projects include the following:

(i) Loan No. 2-SRI: First Modernization of Tea Factories, for $2.0 million, approved on 2 July 1968.
(ii) Loan No. 39-SRI: Second Modernization of Tea Factories, for $3.5 million, approved on 29 October 1970.
(iii) Loan No. 123-SRI(SF): Gal Oya Sugar Industry, for $2.8 million, approved on 15 February 1973.
(iv) Loan No. 369-SRI(SF): Sevanagala Sugar Development, for $33.9 million, approved on 29 November 1978.
(v) Loan No. 472-SRI(SF): Third Tea Development, for $12.8 million, approved on 7 October 1980.
(vi) Loan No. 526-SRI(SF): Coconut Development, for $12.0 million, approved on 24 September 1981.
(vii) Loan No. 712-SRI(SF): Plantation Sector, for $45.0 million, approved on 4 December 1984.

of the Project by the Bank. Under Part A of the Project, a privatized RPC is an eligible subborrower for a subloan. Under Part B of the Project, a privatized RPC is eligible for assistance in the activities provided thereunder.

(ii) The institutional and policy reforms needed to support the privatization program and the implementation of the Project have been included in the design of the Project (see para. 26). This is in line with the recommendations of the PPAR for the Plantation Sector Project.

(iii) A thorough feasibility study of the Project was undertaken under a Bank TA, complemented by a World Bank sector study on tree crops. In this process, appropriate consultation was carried out with all concerned parties, including the prospective beneficiaries.

(iv) The Project covers the rehabilitation and improvement of both the production and processing of tree crops. The subprojects to be financed by the Project will be formulated by the private investors on the basis of their assessment of profitability.

E. The Bank's Sectoral Strategy

23. The prime developmental concern in Sri Lanka is the need to reduce unemployment and poverty. Finding solutions to these two problems lies at the center of the Government's development agenda and forms the core of the Bank's medium-term operational strategy for the country.[1] The cornerstone of the Government's strategy to reduce poverty and unemployment is to move the economy to a higher growth plane. The principal objective of the Bank's medium-term operational strategy will be to contribute toward a reduction in both unemployment and poverty through (i) an accelerated rate of economic growth; (ii) improved access of the poor and underprivileged to productive assets, thus allowing a more productive use of their most abundant asset, labor; and (iii) protection or improvement of the environment.

24. Agriculture will remain the principal sector for Bank operations since it is a vital sector in Sri Lanka in terms of employment and it accounts for a significant share of GDP and export earnings. Agriculture is considered the most important point of access for efforts to reduce poverty and unemployment since these problems are most acute in the rural areas. The major thrust of Bank assistance in the agriculture sector will be to continue the enhancement of policy and institutional reforms begun under the two Bank-assisted program loans (see para. 25) in the following areas: the rationalization of price, subsidy, and market policies; the removal of export taxes on tree crops; the promotion of increased participation by farmers' organizations in the management and operation of selected irrigation systems; the commercialization and privatization of public sector enterprises; and the streamlining of the Government agencies providing support services to farmers. In support of this policy-based thrust, project assistance will focus on the rehabilitation and improvement of the existing tea, rubber, and coconut estates to improve their comparative advantage to generate foreign exchange earnings and employment opportunities. In this context, the Project as designed is in accord with the sectoral strategy and consistent with the Bank's Operational Strategy in Sri Lanka.

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[1] See the Country Operational Strategy Study dated 7 September 1993.

F. Policy Dialogue

25. The overall policy issues in the agriculture sector have been extensively addressed by the Bank since 1989 under the First Agriculture Project Loan (APL I)[1] and then under the Second Agriculture Project Loan (APL II).[2] Under APL I the issues of subsidies on fertilizer and on farm commodities were addressed by encouraging the Government to phase out the subsidies. Under APL II the main objective of the state plantation sector restructuring program was to improve the performance of the sector, initially by introducing private sector management. The first step in this direction was to split the existing 12 regional boards covering about 450 of the 502 plantation estates managed by JEDB and SLSPC into 23 limited-liability companies. These companies would then be managed and operated on a contract basis by private MCs. Considering the scope and magnitude of the tasks involved in the restructuring program, the World Bank, in coordination with the Bank, provided the Government with a grant to finance a series of activities to support the restructuring program. The activities comprise (i) valuation of individual plantation estates and formation of limited-liability public companies, (ii) preparation of management contracts for the estate companies, (iii) preparation of a policy and regulatory framework for the plantation sector, (iv) assessment of nonviable estates remaining under JEDB and SLSPC to determine their optimum use and ensure adequate employment including formulation of disposition options, and (v) preparation of a strategic planning and coordination of the plantation restructuring program. The restructuring of the state plantation companies has been accomplished in accordance with the schedule agreed upon by the Government and the World Bank with the assistance of APL II.

26. By March 1995, the management contracts were running into their third year. However, although there have been some improvements in the state plantations' financial performance, productivity, and profitability, the Government continued to finance investment costs and to bear the losses of RPCs. To overcome this problem and supported by the Bank's TA grant[3] and a study by the World Bank,[4] the Government finally took a significant step forward to further restructuring the state plantation sector by giving substantial ownership and participation to the private sector (see para. 10). The Government and the Bank also agreed that to ensure that the proposed Project will be able to achieve its objectives, it should be accompanied by policy and institutional reforms to establish an environment conducive to the private sector. The principal element of the strategy will be to restructure the state plantation sector rapidly, to remove the macroeconomic distortions, and to back the restructuring program with full institutional support. In the course of the policy dialogue between the Government and the Bank, it was agreed that the Government would adopt a short-term to medium-term action plan to implement these reforms (see Appendix 4).

IV. THE PROJECT

A. Rationale

27. The proposed Project is in line with the sectoral strategy of the Government and the Bank, which is to accelerate the rate of economic growth so as to reduce unemployment and poverty. In its policy statement, the Government made a commitment (i) promote economic growth through greater private sector participation and (ii) increased efficiency and productivity of the tree

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[1] Loan No. 994-SRI(SF), for $80.0 million, approved in November 1989.

[2] Loan No. 1127-SRI, for $60.0 million, approved on 26 November 1991.

[3] TA No. 1869-SRI: Sustainable Development of Tree Crop Plantations for $350,000, approved on 16 April 1993.

[4] *Sri Lanka: Tree Crops Strategy*, July 1994, World Bank Report No. 12356-CE.

crops subsector to generate additional export earnings and to increase income. The tree crops subsector plays an important role in the economy of Sri Lanka, but during the past 20 years it has suffered from low productivity and high cost of production. To increase productivity, the subsector requires major investments for modernization, and dynamic management that responds quickly to international markets. To achieve these objectives, the Government decided to restructure both the management and ownership of the 23 RPCs and to provide appropriate regulatory and legal infrastructure that fosters healthy competition. Under this environment, private entrepreneurs managing and operating the estates will be willing to take the risks and rewards of their decisions. The Project has been designed to support the Government's restructuring initiatives and the private sectors' participation in the restructuring efforts by addressing the following needs: (i) to restructure further the State plantations and provide the private sector with the appropriate business framework (i.e., long-term lease and privatization of ownership) set on a solid basis; (ii) to eliminate restrictive labor policies and practices, while improving the social welfare status of the estate workers; (iii) to remove restrictive marketing regulations on tea exports; and (iv) to provide long-term loans to privatized plantation companies for the tree crop subsector. These needs will be addressed through the adoption of a short-term to medium-term action plan that has been prepared and will be implemented prior to and during Project implementation (see Appendix 4).

28. In addressing the subsector issues, the proposed Project will increase productivity and reduce the cost of production in the tree subsector over the medium term, thereby increasing the competitive advantage of the subsector in world markets. The policy climate that will ensure the success of the Project is favorable since the Government has recognized the poor performance of the two State-owned corporations and is fully committed to the restructuring of the plantation sector. Since the Government has had substantial experience in privatizing public enterprises in the past and the ongoing Bank-assisted TA provides practical advice to the Government in the privatization of the plantation companies, it is expected that the Government will not have any major problem in carrying out restructuring in the tree crops subsector.[1]

B. Objectives and Scope

29. The long-term goals of the Project are to increase the export earning potential of the tree crops subsector by improving its competitive advantage in world markets, to provide sustainable employment and income to estate laborers and to enhance the environment. To achieve these goals, the main objectives of the Project are to (i) support policy and institutional reforms in the tree crops subsector to increase productivity and profitability, and maintain the competitive advantage of Sri Lanka's tree crop industry; (ii) provide long-term loans to PFIs to finance eligible privatized regional plantation companies in the tree crops subsector; and (iii) improve environmental conditions in the Project area (see the Project Logical Framework in Appendix 5).

30. The Project area covers the tea, rubber, and coconut estates of the 23 RPCs. These estates are located in 14 districts in the central and southern part of Sri Lanka, namely: Badulla, Colombo, Galle, Gampaha, Kalutara, Kandy, Kegalle, Kurunegala, Matale, Matara, Monaragala, Nuwera Eliya, Puttalam, and Ratnapura (see map). The Project area is estimated at 191,700 ha consisting of 95,500 ha for tea, 58,000 ha for rubber, 12,600 ha for coconut, and 25,600 ha for other uses (see Appendix 2, Table 1). The total number of employees in the 23 RPCs in 1994 was estimated at 327,000 consisting of 15,000 staff and 312,000 laborers.

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1 Status of the current privatization efforts is given in para. 59.

31. The Project will have the following components:

1. **Part A: Credit Component**

(i) Tree crop plantation development. To improve the environmental sustainability of the plantations on those RPCs that are to be privatized, the Project will support the introduction of sloping agricultural land technology (SALT), soil conservation techniques, cover crops, and other measures to reduce soil erosion on sloping land. To improve the productivity of the estates of the RPCs to be privatized, the Project will provide support for the maintenance of the existing areas of immature tea and rubber trees, which had been planted prior to Project commencement; in-filling of old tea in mature fields; replacement of old tea and termite-infested tea bushes with high-yielding, vegetatively propagated materials; replanting of old rubber and coconut; and diversification to other high-value crops.

(ii) Improved processing and pollution control. To increase the efficiencies and capacities of the existing factories of the privatized RPCs, the Project will finance the rehabilitation and improvement of worn-out, antiquated, orthodox tea factories and cut, tear, and curl tea (CTC)[1] manufacturing factories; conversion of a few orthodox tea factories to CTC tea factories; improvement of crepe, sole crepe, and ribbed smoke-sheet (RSS) rubber factories; upgrading of latex concentrate factories; and construction of a pilot decaffeinated tea plant, latex concentrate plants, and rubber wood processing factories. The necessary effluent treatment plants, process modification, and control of the working environment for all factories supported under the Project will be provided with funds under the Project, so that both internal and external environmental conditions will be considerably improved over the current situation.

(iii) Service vehicles and equipment. To replace the old and nonfunctioning vehicles and equipment, the Project will finance subprojects through the procurement of service vehicles, tractors, motorcycles, and agricultural and office equipment required by the estates of the privatized RPCs. The Project will also support the rehabilitation and construction of about 23 small run-of-the-river micro-hydropower plants[2] to reduce pressure on fuelwood harvesting and generate low-cost electricity for the estates.

2. **Part B: Noncredit Component**

(i) Reforestation of watersheds. The Project will provide financial support for planting of suitable timber species including fuelwood species for thinning in watersheds of the estates of the privatized RPCs. The reforestation program will have a favorable impact on the environment because the trees will be planted at high densities to protect the watersheds from soil erosion.

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[1] Generally produced at low elevations.

[2] Most of these micro-hydropower plants are small (less than 1,000 kW) and do not involve the construction of a dam nor resettlement of people. They will have a positive impact on the environment by reducing the consumption of fuelwood in the tea estates.

(ii) Improvement of workers' living environment. To improve living conditions, the local environment, and the welfare of the estate workers, the Project will support the rehabilitation and improvement of labor and labor-supervisory quarters, latrines, water supply, and farm roads within the estates of the privatized RPCs. These civil works will be undertaken by the RPCs with the provision that the workers will contribute toward the costs of improvement works by providing labor, while skilled workers and construction materials will be provided by the Project.

(iii) Institutional strengthening. The Project will provide training to upgrade the technical and managerial capacities of staff of privatized RPCs and the National Institute of Plantation Management (NIPM). The training will also be designed to expose them to the latest developments in the tea, rubber, and coconut estates, including state-of-the-art pollution control and environmental management techniques. Surplus laborers in some estates will be retrained so that they can obtain employment outside the plantation industry. Consultant services of 6 person-months will be provided to improve the quality of training courses offered by NIPM.

(iv) Support to PIU. The Project will provide support to the establishment and operation of the Project Implementation Unit (PIU) at MPI through provision of Project staff, equipment,[1] service vehicles, and incremental operating and administration costs. PIU staff will also be trained in monitoring and evaluation techniques, including assessment of the adequacy of implementation of the environmental measures proposed under the Project.

C. Cost Estimates

32. Considering the needs and absorption capacity of the RPCs to consolidate their operations and achieve financial viability over the next five years (1996-2000), it is estimated that the investment requirements to finance subprojects will be in the order of $80.0 million consisting of $25.8 million in foreign exchange and $54.2 million in local cost equivalent (see Table 1 and Appendix 6). The cost estimates are based on unit rates prevailing in the Project area in July 1995.

D. Financing Plan

33. It is proposed that the Bank provide a loan of $60 million from the Bank's Special Fund resources to finance 75 percent of the total cost estimates of $80 million. The other $20 million of the resources required for the Project will be provided by PFIs, the 23 privatized RPCs (subborrowers), and the Government. PFIs are expected to contribute about 5 percent of the investment costs under Part A, while the subborrowers are expected to provide an equity contribution in cash or in kind of about 20 percent (for Part A) to about 25 percent (for Part B) of the costs. The Government will contribute about 25 percent of the total cost of support to PIU. The overall financing plan for the Project is summarized in Table 2. The proposed financing plan is considered appropriate in view of the fact that the Project will support a substantial structural reform in the subsector and will have significant economic, social, and environmental impacts in the rural

[1] The Project will provide a total of six computers and printers, three each for PIU and Central Bank of Sri Lanka (CBSL).

areas; the existing banking system does not have long-term funds to meet the demand in the tree crops subsector; and the Government's budget is under severe constraints.

Table 1: Summary of Project Cost Estimates
($ million)

Component	Foreign Exchange Cost	Local Currency Cost	Total Cost
Part A: Credit			
1. Tree Crops Development	2.9	16.6	19.5
2. Processing Improvement and Pollution Control	10.2	5.9	16.1
3. Service Vehicles and Equipment	5.5	2.4	7.9
Subtotal	**18.6**	**24.9**	**43.5**
Part B: Noncredit			
1. Reforestation	0.7	3.8	4.5
2. Improvement of Workers' Living Environment	1.9	7.6	9.5
3. Institutional Strengthening	0.5	4.3	4.8
4. Support to PIU	0.2	0.7	0.9
Subtotal	**3.3**	**16.4**	**19.7**
Total Base Cost	22.0	41.3	63.3
Physical Contingencies[a]	1.1	2.1	3.2
Price Escalation[b]	2.0	10.9	12.9
Recovery of Prior TA Financing[c]	0.1	0.0	0.1
Service Charge During Construction	0.6	-	0.6
TOTAL COST	**25.8**	**54.2**[d]	**80.0**

[a] Physical contingencies at 5 percent for all items.
[b] Annual factor for foreign exchange 3.75 percent (1996-2001).
Annual factor for local currency: 8 percent (1996-2001).
[c] TA No. 1869-SRI.
[d] Including taxes and duties of $4.4 million equivalent.

Table 2: Summary of the Financing Plan
($ million)

Component	The Bank: Foreign Exchange	The Bank: Local Cost	The Bank: Total	Local Cost: PFIs	Local Cost: RPCs	Local Cost: The Government	Total Cost
Part A: Credit	21.3	19.3	40.6	2.8	10.7	0.0	54.2
Part B: Noncredit	4.5	14.9	19.4	0.0	6.3	0.2	25.8
Total	**25.8**	**34.2**	**60.0**	**2.8**	**17.0**	**0.2**	**80.0**
Percent of Total			**75.0**	**3.5**	**21.2**	**0.3**	**100.0**

E. Implementation Arrangements

1. Project Management and Organization

34. There will be two Executing Agencies for the Project. The Central Bank of Sri Lanka (CBSL) will be the Executing Agency for Part A of the Project, and the Ministry in-charge of the Plantation Industries (MPI) will be the Executing Agency for Part B. Each will be responsible for the overall supervision, control, and execution of the part assigned to it. MPI will be responsible for overall supervision, management, and implementation of the Project, including reporting, monitoring, and evaluation.

35. PFIs will be the implementing agencies of Part A. Based on the eligibility criteria agreed upon with the Government (see para. 47), PFIs will include two development financial institutions (DFIs), namely the Development Finance Corporation of Ceylon (DFCC) and National Development Bank of Sri Lanka (NDB), and five domestic commercial banks (DCBs), namely, Commercial Bank of Ceylon (CBC), Hatton National Bank Limited (HNB), Sampath Bank Limited (Sampath), Seylan Bank Limited (Seylan), and Bank of Ceylon (BOC). CBSL will have the authority to designate one other DCB as a PFI, subject to the Bank's approval, provided the DCB satisfies the eligibility criteria for PFIs.

36. Prior to loan appraisal, the Government appointed senior Government officials from CBSL and MPI as Project Managers who will be responsible for day-to-day implementation and management of Part A and Part B of the Project, respectively. Since the Plantation Management and Monitoring Division (PMMD) under MPI will be phased out by the Government after completion of the privatization of the 23 RPCs, MPI has established PIU to implement Part B of the Project. PIU will be headed by the Project Manager for Part B of the Project. PIU will be supported by adequate technical and administrative staff, and will be provided with adequate support facilities. The responsibilities of PIU will include (i) reviewing the five-year rehabilitation and improvement plans submitted by the privatized RPCs to ensure that the plans are consistent with the Project objectives and are within the Project scope; (ii) providing technical and advisory assistance to the privatized RPCs for Project activities; (iii) channelling Project funds to the privatized RPCs for Project activities to be carried out under Part B; (iv) carrying out socioeconomic and other surveys in the Project area; (v) inspecting, monitoring, and evaluating Project activities including environmental measures required to be undertaken by the subborrowers; and (vi) preparing semiannual progress reports on overall Project implementation and the Project completion report.

37. The responsibilities of CBSL under the Project will be carried out by its Development Finance Department (DFD). These responsibilities will include (i) preparing the Financing Agreements to be entered into with PFIs on terms and conditions satisfactory to the Bank (see para. 40); (ii) channelling credit funds to PFIs and making arrangements to receive repayments from PFIs; (iii) monitoring the progress of implementation of Part A of the Project; and (iv) preparing semiannual progress reports related to Part A for submission to PIU. CBSL will furnish the Bank with a copy of each Financing Agreement entered into by CBSL with the concerned PFI upon execution of each agreement.

38. The Government will establish a Project Coordination Committee (PCC) for the purpose of ensuring interagency coordination in the implementation of Parts A and B of the Project. PCC will be chaired by the Secretary of MPI. Other members will be representatives from the Ministry of Finance and Planning, CBSL, PERC, PIU, at least one PFI, and at least one privatized RPC. PCC will meet as often as required, but at least once every three months.

2. Financing Arrangements

a. Lending Operations

39. The proposed loan of $60 million will be made available to Sri Lanka from the Bank's Special Funds resources at standard terms. The loan will be denominated in Special Drawing Rights (SDR) and drawn in various currencies. It will carry a service charge of 1 percent per annum, payable semiannually. Relending and onlending will be denominated in Sri Lanka rupees (SLRs). The foreign exchange risk will be borne by the Borrower.

40. For Part A (about $40.6 million), the Borrower will relend the proceeds of the Bank loan to PFIs under financing agreements on terms and conditions satisfactory to the Bank. Each PFI will onlend to eligible subborrowers on the basis of its own standard loan documentation acceptable to the Bank and enter into subloan agreements. For Part B (i) and (ii) of the Project (about $13.5 million), the Borrower will provide the proceeds of the Bank loan to MPI, through budgetary appropriation, for the privatized RPCs on a grant basis. For Part B (iii) of the Project (about $4.3 million), the Borrower will make available to MPI, through budgetary appropriation, for the privatized RPCs and for NIPM on behalf of the privatized RPCs, both on a grant basis. MPI, through PIU, will provide or utilize the loan proceeds required for Part B (i), (ii), and (iii) taking into consideration the size of the privatized RPC's estates and the amount of the concerned RPC's total subloans under Part A of the Project approved annually. The provision of a grant for Part B is justifiable because these components are not financially attractive to the private sector, but they will have significant social and environmental impacts on the employees and general population in the Project area. For Part B (iv) of the Project (about $0.9 million), the Borrower will make available to MPI, through budgetary appropriation, for the PIU.

b. Relending and Onlending Terms under Part A

41. PFIs will onlend proceeds of the Bank loan to the subborrowers at an interest rate not exceeding the average weighted prime rate (AWPR) based on an index of interest rates charged by five (which number is determined by CBSL) commercial banks in Sri Lanka to their prime customers. AWPR, compiled and published on a monthly basis by CBSL, is an interest rate charged by these banks for loans to their most valued clients. Taking into consideration the costs of intermediation and supervision of credit, premium for any guarantee fee that might be payable by PFIs, provision for bad debts and a small profit margin, the interest spread required by PFIs for lending under the Project is estimated at 6.5 percent. This spread compares favorably with a spread of 7 to 8 percent charged to small and medium subborrowers in the ongoing credit projects financed by the Bank and the World Bank.[1] The elements comprising the interest spread are shown in Table 3.

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[1] e.g. in *Perennial Crops Development Project* and *Smallholder Tea Development Project* financed by the Bank, and the *Small and Medium Industry Project* financed by the Bank and the World Bank.

Table 3: Elements of Interest Spread
(percent)

Administration Cost	2.0
Provision for Bad debts	1.5
Profit and Reserves	1.5
Subtotal	5.0
Guarantee Fee	1.5
Total	**6.5**

The Government and the Bank agreed that the relending rate of the Bank loan from the Borrower to PFIs will be set at 6.5 percent below the onlending rate to cover the Borrower's foreign exchange risks, service charge, and other costs. The proposed relending and onlending rates and interest spread are justifiable for the following reasons: (i) they would ensure that the Government's privatization program is successfully implemented; (ii) the costs of intermediation and supervision of credit will be small because the number of subborrowers is small, there being only 23 RPCs, but the subloan size is relatively large, with a minimum of $100,000 and a maximum of $3.0 million; (iii) the subborrowers will all be public quoted companies and thus they are subject to transparency of operation and close monitoring by the Colombo Stock Exchange; in addition, their financial accounts will be audited and they will have to comply with the requirements of the Companies Act; (iv) the majority shareholder will invariably be a blue chip quoted company with close banking relationships with PFIs, an established credit history, and a proven record of good corporate governance; and (v) a credit guarantee scheme, funded by means of a margin of 1.5 percent covering credit expenditures, will be provided under the Project.

c. CBSL Loan Guarantee

42. Considering that the estate lands under RPCs are Government property under leasehold to the plantation companies, the mortgage value of such lands would be highly discounted. Under generally accepted banking norms, leasehold rights are not usually given collateral value and are not included in the calculation of collateral adequacy. The extension of the CBSL guarantee presently available under the Bank and the World Bank-financed Small and Medium Industry Project (SMI) would provide a valuable security for PFIs and could also help justify the charging of prime rate for subloans. Accordingly, the Government has agreed to cause CBSL or any other institution acceptable to Government and the Bank to provide a loan guarantee for a portion of each subloan financed from the loan under the relending facility, for which CBSL or such institution will charge a premium fee of 1.5 percent to ensure that the scheme is self-financing. The guaranteed cover will be set at the following limits as a percentage of the refinanced subloan:

(i)	for Part A (i) of the Project	70 percent
(ii)	for Part A (ii) and (iii) of the Project	50 percent

d. Allocation of Loan Proceeds

43. The loan will be available to PFIs and subborrowers for commitment on a first-come-first-served basis. However, except as the Bank may otherwise agree, the aggregate amount of the loan proceeds available for the total subloans made to an eligible subborrower should not exceed

the equivalent of $5 million. In this context, a subborrower means both a privatized RPC and any subsidiary of the privatized RPC.

e. Loan Utilization Period

44. Applications for subloans must be submitted to the Bank for approval for withdrawal within four years after the date of loan effectiveness, and applications for disbursements within six years after the date of loan effectiveness.

f. Amortization

45. The amortization period of the Bank loan is 40 years including a 10-year grace period. Relending by CBSL to PFIs will be for a fixed period of up to 15 years, including a grace period of up to 5 years. Subloans from PFIs to subborrowers will have a maturity of up to 15 years, including a grace period of up to 5 years. The repayment and grace periods will vary with the economic life of the assets financed and gestation period of the crops, and consistent with the repayment capacity of the subborrowers. PFIs will set the amortization, maturities, and grace periods of the subloans to match the projected cash flows and economic life of the subprojects financed.

g. Revolving Funds

46. Any funds received by PFIs through subloan repayments before PFIs' loan repayments to the Government are due should be utilized for lending to eligible subprojects.

h. Eligibility Criteria for PFIs

47. The following are eligibility criteria for the initial and continuing participation of PFIs in the Project:

(i) a minimum annual collection ratio for the total portfolio of 80 percent, calculated every six months;

(ii) a maximum portfolio infection ratio[1] of 20 percent;

(iii) a minimum return on average assets (after tax) of 2 percent for DFIs and 1 percent for DCBs;

(iv) a maximum long-term debt/equity ratio of 8:1 for DFIs and for DCBs, in compliance with the capital/risk adjusted assets ratio set by CBSL in accordance with the Basle Guidelines for capital adequacy;

(v) no arrears or default on any loans or refinancing granted by the Government or CBSL; and

(vi) compliance with CBSL's guidelines and Basle Guidelines on covenants for financial soundness in terms of capital adequacy liquidity, profitability, and

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[1] Infection ratio is the result obtained by dividing (i) aggregate of loans and leases provided by any PFI with installments past the due date by more than six months by (ii) the aggregate of loans and leases provided by that PFI.

solvency, including compliance with CBSL's limits set for single borrower and loans to PFI directors, officers, and related interests.

All the selected PFIs meet the above eligibility criteria.

i. Criteria for Selection of Subborrowers and Subprojects

48. Only privatized plantation companies and their subsidiaries are eligible to borrow and receive subloans from PFIs. A subproject refers to the specific project covering one or more of the subcomponents described in Part A of the Project to be carried out by a subborrower utilizing the proceeds of the subloan. The subproject should meet the following criteria: (i) it is included in the scope of the Project, (ii) its financial internal rate of return (FIRR) is higher than the prevailing prime rate of the PFI concerned in real terms, and (iii) its economic internal rate of return (EIRR) is at least 10 percent for subloans above $1.0 million equivalent.

j. Eligible Expenditures and Subproject Financing Plan

49. In the case of the procurement of imported vehicles and equipment, the percentage of financing by the Bank for subprojects for each subborrower can increase to as high as 100 percent of the direct foreign exchange expenditures, provided that the aggregate share of Bank financing is limited to an average of 75 percent of the total subproject costs. The other 25 percent of the subproject costs will be financed by PFIs or the subborrowers, or both. Proceeds of the subloan for the subproject will be used to finance expenditures on goods that are produced in and supplied from, and services that are supplied from Bank member countries.

k. Subloan Size

50. The subloan size will be at least $100,000 equivalent, but not more than $3.0 million equivalent. The subborrowers will be encouraged to package their subloans to facilitate processing by PFIs.

l. Free Limit of Subloans

51. The free limit of subloans will be $1.0 million equivalent for DFIs and $0.5 million equivalent for DCBs below which PFIs do not require prior approval from the Bank for disbursing the credit to the subborrowers. Subloans exceeding these free limits will require prior approval from the Bank.

3. Project Implementation Schedule

52. The Project will be implemented over a six-year period (see Appendix 7). The expected Project completion date is 30 June 2002. During the first year, Project activities will focus on preparatory works such as restructuring of 23 RPCs and preparation of five-year rehabilitation and improvement plans. Thereafter, the privatized RPCs will undertake in-filling, replanting, and agricultural diversification programs; procurement of vehicles and equipment; rehabilitation and improvement of the existing factories; reforestation; improvement of estate infrastructure and institutional strengthening based on the rehabilitation and improvement plans submitted by each of these RPCs to CBSL and PIU within six months after its privatization.

53. A comprehensive midterm review will be carried out by the Government, CBSL, and the Bank on all aspects of the Project in the third year of Project implementation or at any date as

may be agreed upon by the parties. The review will focus on Project design and implementation arrangements, particularly with regard to financing arrangements of the Project. Based on the findings of this review, adjustments in Project design and implementation will be considered by the Government, CBSL, and the Bank.

4. Procurement

54. Procurement of all goods and services under Part A of the Project will be undertaken by the subborrowers. For procurement of goods and services to be financed by subloans under Part A, CBSL shall cause PFIs to require the subborrowers to demonstrate that the procurement procedures they adopted are appropriate in the circumstances. CBSL shall cause PFIs to ensure and certify to the Bank that the goods and services to be financed by such subloan will be purchased at a reasonable price, account being taken also of relevant factors such as time of delivery, efficiency and reliability of the goods, their suitability for the subproject and the availability of maintenance facilities and spare parts, and in the case of services, the quality of services and the competence of the parties rendering them. Procurement of all goods and services under Part B of the Project will be carried out in accordance with the Bank's *Guidelines for Procurement*. International competitive bidding will be used for a supply contract for equipment or materials estimated at $500,000 or more, and international shopping will be used for a contract costing less than $500,000 equivalent. Activities, including civil works, relating to Part B (i) and (ii) of the Project may be carried out by the privatized RPCs on a force account basis because the works are small and scattered over a large area, and are unlikely to be attractive to international contractors. Any civil works contracts relating to Part B (i) and (ii) of the Project, which are not carried out by the privatized RPC concerned may be awarded by the privatized RPCs on the basis of local competitive bidding among contractors in accordance with procedures acceptable to MPI and the Bank. Selection and engagement of contractors will be subject to the approval of the Bank. After award, three copies of each such contract will be furnished to the Bank by the privatized RPC concerned through PIU.

5. Consulting Services and Training

55. The Project will provide for two international consultants in the fields of estate management and estate production for about 3 person-months each to improve the quality of training courses offered by NIPM. The terms of reference (TOR) of the consultants will be agreed upon between PIU and the Bank. The consultants will be engaged by MPI through PIU in accordance with the Bank's *Guidelines on the Use of Consultants*.

56. Within 12 months after loan effectiveness, PIU will submit to the Bank for approval a comprehensive training program of the domestic and overseas training to be provided under the Project.

6. Benefit Monitoring and Evaluation

57. PIU will monitor and evaluate the Project benefits in coordination with the PFIs and privatized RPCs. PIU will develop a detailed management information system (MIS) under which each privatized RPC will submit, through PIU, a quarterly progress report to the Government describing (i) the amount of grants and loans received and utilized; (ii) the physical accomplishments in relation to the plan targets; (iii) the yields, areas, and production of crops; (iv) the products processed and sold; (v) expenditures and income; and (vi) any other relevant information. During the first year of Project implementation, PIU will conduct a benchmark socioeconomic survey of a representative sample of the plantation estates assisted under the

Project. During the Project implementation period, PIU will monitor relevant indicators to assess the performance of the Project. PIU will carry out an impact evaluation study upon Project completion. The costs of the benchmark socioeconomic surveys and the monitoring and evaluation activities will be financed under a TA grant (see para. 69).

58. The Government through CBSL will cause PFIs to monitor and evaluate the benefits of the completed subprojects in accordance with a schedule to be agreed upon by the Government, PFIs, and the Bank. All PFIs have recently been provided training by the Bank for this purpose.

7. Retroactive Financing

59. In September 1995, shares of two RPCs (Kotagala and Bogawantawala Plantation Companies) were offered for sale to the private sector through the Colombo Stock Exchange. Sufficient applications for these shares have been received to establish the "clearing price" for the 51 percent shares to be purchased by the existing management companies. It is proposed that Kegalle and Agalawatte Plantation Companies be in the second batch for privatization. The remaining RPCs will be privatized in the succeeding months. Since the majority shareholders of the newly privatized companies are likely to be the existing management companies, they will be able to commence the rehabilitation and improvement programs immediately as they have already formulated their five-year investment plans and are familiar with the existing estates. To facilitate the implementation of these investment plans in a timely manner, the Bank will provide retroactive financing to finance eligible expenditures incurred under Parts A and B of the Project by the privatized RPCs from the date of loan approval by the Bank to the date of loan effectiveness, subject to a maximum amount equivalent to $1,500,000. PFIs will provide bridging finance to the privatized companies until the Bank loan becomes effective.

8. Disbursements, Accounts, Reports and Audit

60. Immediately after loan effectiveness, the Government will establish an imprest account in CBSL with two ledgers (one for Part A and other for Part B) to expedite disbursement of loan proceeds. The imprest account will be established, managed, replenished, and liquidated in accordance with the Bank's *Guidelines on Imprest Fund and Statement of Expenditures Procedures* dated November 1986, as amended from time to time, and with detailed arrangements agreed upon by the Government and the Bank. The initial amount to be deposited in the imprest account will not exceed $3.0 million. Advances will be made semiannually on the basis of the anticipated demand for credit by PFIs and for the noncredit components by the privatized RPCs.

61. The statement of expenditures (SOE) procedures may be used for reimbursement of eligible expenditures under the Project and to liquidate advances from the imprest account in accordance with the Bank's *Guidelines on Imprest Fund and Statement of Expenditures Procedures* dated November 1986, as amended from time to time, and with detailed arrangements agreed upon by the Government and the Bank. The individual payment that may be reimbursed or liquidated under SOE expenditure will not exceed $50,000 for each item of expenditure. To liquidate the advances provided by the Bank to CBSL and MPI, the Project Managers will submit to the Bank every six months certifications of liquidations of the advance supported by the following three SOEs: (i) the first SOE will summarize disbursements from CBSL to PFIs, (ii) the second SOE will summarize disbursements from MPI to the RPCs, and (iii) the third SOE will summarize payments from PFIs to the subborrowers.

62. CBSL and MPI will maintain separate accounts and financial statements for the Project and will have these audited annually by auditors acceptable to the Bank or by the Auditor General of Sri Lanka whose continued acceptability to the Bank would depend on the auditor's continued good performance. The audited accounts will be provided to the Bank within 12 months, at the end of the fiscal year to which they relate. PFIs that are involved in the delivery of credit under the Project will be required to submit their audited financial statements to CBSL not later than 12 months after the end of each related fiscal year.

63. PIU in coordination with CBSL will furnish the Bank with semiannual progress reports on the overall carrying out of the Project covering both Parts A and B. Within three months of the completion of the Project, MPI (through PIU) in coordination with CBSL will submit a Project completion report that will also review the impact of the Project on the beneficiaries and the utilization of loan proceeds.

F. Executing Agencies

64. CBSL will be the Executing Agency for Part A of the Project. CBSL functions under the traditional concept of central banking, which includes (i) supervision over financial institutions, (ii) formulation of monetary policies and implementation of monetary measures to ensure stability of the financial system, (iii) acting as the banker for the Government, and (iv) provision of credit facilities and guarantee schemes for development-oriented or Government-directed programs. Within CBSL, DFD will be directly responsible for planning, supervision, coordination, monitoring, and evaluation of Part A of the Project. DFD manages credit guarantee schemes, which at present covers subloans for small-scale and medium-scale industries (SMI I - IV). DFD has a total staff strength of 42 personnel consisting of 23 professional staff, 15 nonprofessional staff, and 4 subordinate staff. It is headed by a Director who is assisted by 2 deputy directors, 1 senior project analyst, 12 project analysts, and 6 assistant project analysts. CBSL has had considerable experience as an Executing Agency for a number of externally financed credit projects such as the World Bank-financed Small-scale and Medium-scale Industry Project, International Development Association (IDA)-financed Enterprise Development Project, and USAID-financed Low-Income Housing Project.

65. MPI, the Executing Agency for Part B of the Project, has had considerable experience as Executing Agency for a large number of tree crop projects financed by the Bank, World Bank, and other external agencies. Its performance in the implementation of those Projects has been satisfactory.

G. Environmental and Social Measures

1. Environmental Measures

66. The Project is not expected to have significant adverse environmental impacts and therefore has been classified as Category B project. A summary initial environmental examination concluded that the potential negative impacts of the Project are few and localized, and can be easily mitigated as they arise during Project implementation and operation. The environmental impacts of the Project can be classified into four broad areas of concern:

(i) Project design. The Project design will enhance the environment by reforesting watersheds with fuelwood and timber species, thereby reducing soil erosion and runoff in the Project area.

(ii) Agricultural development. Agricultural development under the Project will not involve clearing of forest areas since this component will focus on increasing productivity in the existing tea, rubber, and coconut estates. However, replanting tea and rubber on sloping lands may be expected to cause some soil erosion and excessive runoff. To minimize these problems, cover crops will be used under immature rubber trees, mulches and crop residues will be spread on soils where infilling and replanting of tea are undertaken, and SALT will be adopted in tea grown at high elevation.

(iii) Rehabilitation and construction of factories. The effluent of rubber factories contains toxic substances such as ammonia and formic acid, which may reduce water quality in the streams and rivers in the Project area. To protect water resources from these toxic substances, the Project will support the construction of effluent treatment plants in the existing and newly built rubber factories in accordance with guidelines issued by the Central Environment Authority (CEA) of Sri Lanka. PFIs will ensure that in subprojects involving rehabilitation and construction of factories, the guidelines, standards, and license conditions issued by the CEA will be followed by subborrowers in the construction and operation of effluent treatment plants and in the protection of the working environment; and in the absence of these guidelines and standards relating to the working environment, the occupational health and safety standards of the World Health Organization will be followed.

(iv) Project operation. A small increase in the application of chemical fertilizers and pesticides can be expected as a result of the efforts to increase productivity in the existing estates. At present, herbicides, insecticides, and fungicides are being used to control weeds, insect pests, and fungal diseases in some estates in the Project area. The significant increase in pesticide application could have serious impacts on human health, aquatic ecology, and wildlife. To protect estate workers and the environment from that possibility, appropriate measures will be taken. The Government will ask the privatized RPCs using pesticides in the plantation estates (i) to do so in accordance with appropriate standards, including those stated in the Bank's *Handbook on the Use of Pesticides in the Asia-Pacific Region*; and (ii) to ensure that their estate workers are trained on the principles of integrated pest management emphasizing host plant resistance, biological control, and cultural control, rather than relying solely on the use of pesticides, in accordance with the Bank's *Handbook for Incorporation of Integrated Pest Management in Agriculture Projects*.

2. Social Measures

67. The Government's plan to privatize the state plantation sector has, since 1992, been opposed by the estate workers who are organized in several trade unions, of which the Ceylon Workers Congress and the Lanka Jathika Estate Workers Union are the most dominant. Much of this opposition was attributed to the trade unions' lack of understanding of the advantages of privatization. With the continuing dialogue between the Government and the trade unions, and between labor and management, the objection of the trade unions on the proposed privatization has been softening, although some workers feel that privatization may have an adverse effect on their socioeconomic status.

68. The Project design has incorporated the following measures to minimize the adverse impact of the Project on the socioeconomic status of 327,000 estate workers in the Project area.[1]

(i) Employment opportunities. The estate workers are concerned that after privatization, the new management will reduce the number of staff and workers in their estates to reduce the cost of production, particularly in the estates where there is surplus labor. Under the Project, the problem of surplus labor[2] in some estates will be resolved through redeployment of surplus labor to agricultural diversification activities, transfer of surplus labor to other estates where there is a shortage of labor, incentives to encourage early retirement, and training and skills development to enable surplus workers to find employment off the estates.

(ii) Determination of wages and benefits. Many workers are concerned that with privatization, their wages and benefits will be reduced, given the large component of labor wage in the cost of production. In the past, wage hikes made the difference between profitability and insolvency of the plantation estates. In this regard, the Government has stated that it has, since June 1995, ceased mandating labor wages and benefits in the plantation sector. Thus, the determination of appropriate levels of labor wages, work norms, and benefits to staff and workers in the privately owned estates will be resolved through collective bargaining agreements entered into by the management of the privatized RPCs with their workers' trade unions. In the past, labor and management relations in Sri Lanka were generally antagonistic since the two parties did not appreciate the need for social partnership and the importance of working with each other. In the future, however, the new management of RPCs and the trade unions will have to learn to work together to improve the productivity and profitability of RPCs as they are all shareholders of the privatized plantation companies and will bear the direct consequences of future losses and gains in the companies.

(iii) Housing and social welfare. At the time of the nationalization of the estates in 1975, there was a legacy of poverty, poor health, and other indicators of adverse social welfare among the estates' population. In recognition of the deplorable situation, JEDB and SLSPC established a Social Welfare and Social Development Division that, with assistance from external agencies, made impressive improvements in housing, water supply and sanitation, education, and health indicators of the estate workers. Infant mortality rates of the estate population were reduced from 80 in 1970 to below 30 per 1,000 thousand births by 1993. However, a recent survey indicated that 58 percent of the residents live in overcrowded conditions, 76 percent of the existing houses require some form of structural upgrading, 46 percent have no water source, and 62 percent have no individual latrines. To improve the existing situation, the Project will support the rehabilitation and improvement of staff and labor quarters, latrines, water supply, and farm roads within the estates.

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1 In designing the Project, the Mission consulted the MCs and the representatives of the estate workers who are the prospective beneficiaries of the Project.

2 It is estimated that there are about 6,800 surplus laborers in the 23 RPCs.

(iv) Women in development. More than 50 percent of the estate laborers are women. Tea and rubber estates are dependent on a female work force for many of the crucial tasks that require greater care and manual dexterity. In tea estates, women comprise the vast majority of pluckers and are solely relied upon for programmed plucking, which requires care and precision so as not to damage tea bushes. On rubber estates, both women and men are employed as tree tappers although only women are assigned the work of bud-grafting. Since 1984, women have been granted equality in the level of wages paid. However, they work longer hours than their male counterparts and are still responsible for the household chores, which leaves them little time for self-development or community participation. Despite the rapid development of health and education facilities in Sri Lanka, the literacy rate and health indicators among women in the estate sector are lower than the national average, despite a marked improvement over the last decade. The Social Welfare Program being implemented by the Plantation Housing and Social Welfare Trust with assistance from the Dutch and Norwegian Governments includes initiatives to address this disparity. The estates provide free day-care centers to young women with small children so that the children can be looked after by estate staff while the mothers work in the estates. In addition, the Project will help ensure the security of tenure of the female workers by increasing the productivity and profitability of the tree crop industry.

H. Technical Assistance

69. Because the Government does not have adequate expertise on privatization and policy reforms, and the short-term to medium-term action plan (see para. 26) needs to be planned, implemented, and monitored properly, a TA grant for Tree Crop Plantation Planning and Monitoring will be provided by the Bank. The main objective of the TA will be to assist the Government in planning and implementing the reforms, and monitoring the impact of the reforms to be undertaken in the tree crops subsector. The TA will include workshops, socioeconomic surveys, policy studies, and consulting services. Workshops to be attended by all the agencies concerned will discuss the policy reforms to be undertaken by the Government. Consulting services will be provided by a team of international and domestic consultants with expertise in agricultural policy and institutional development (international), agricultural economics (domestic), and financial analysis (domestic). About 48 person-months of consulting services from a suitably qualified firm, comprising about 4 person-months of international consultants and about 44 person-months of domestic consultants, will be required. TOR for the consulting services are presented in Appendix 8. The Executing Agency for the TA will be MPI. The consultants will be engaged by the Bank in accordance with the Bank's *Guidelines on the Use of Consultants*.

70. The total cost of the TA is estimated at $500,000, of which amount the Government has requested the Bank to provide $400,000 equivalent as a grant. The remaining cost of $100,000 equivalent will be financed by the Government (see Appendix 8).

V. PROJECT JUSTIFICATION

A. Financial and Economic Analysis

71. Financial and economic analyses have been carried out to determine the viability of the subprojects, RPCs, and the overall Project. The analyses are based on the assumptions set out in Appendix 9.

1. Benefits and Beneficiaries

72. The Project will assist the Government to restructure the state plantations and to improve and rehabilitate the existing estates through provision of long-term loans and grants to the privatized plantation companies. The major beneficiaries of the Project will be 23 privatized companies (and about an equal number of their subsidiaries), each of which will invest initially about SLRs100 million ($2 million) in equity and SLRs150 million ($3 million) in debenture issues, and collectively another SLRs800 million ($16 million) (excluding loans and grants from the Project) within the next five years. The Project will help ensure the continued employment of about 15,000 staff and 312,000 plantation workers, whose security of tenure are currently at risk because of the poor performance of the state plantations.

73. The quantifiable financial and economic benefits of the Project consist of (i) a projected increase at full development stage, of 5,200 t of tea, 6,700 t of rubber, and 1.7 million coconuts from replanting of old stands, in-filling of vacant spots and better management of the estates; (ii) an increase in the yields in the replanted areas by 35 percent in tea, 25 percent in rubber, and 100 percent in coconut; (iii) increased market share of CTC tea (a growing market) through rehabilitation and construction of CTC plants since over 90 percent of Sri Lanka's current output comprises orthodox tea, which has a dwindling and limited market; (iv) added value through improved processing of rubber; (v) diversification to high-value alternative crops; (vi) savings to the Government, which will no longer bear the losses of RPCs; these savings are estimated at SLRs1 billion ($20 million) per annum; and (vii) an expected increase in export earnings by $15.8 million per year.

2. Subprojects

74. The subprojects include replanting tea, rubber, and coconut; in-filling tea; diversification from tea, rubber, and coconut to high-value crops such as spices and fruits; and establishment and expansion of CTC factories. The FIRR and the EIRR of the subprojects summarized in Table 4, indicate that the subprojects are viable except for replanting tea in mid-country areas.[1] Mid-country tea suffers from low productivity and lacks the flavor or color of high and low country tea, which command premium prices in the world markets. The results of the analysis implies that judicious packaging of subprojects, including improvement in processing and crop diversification (which gives a high rate of return), is most needed in mid-country areas to ensure the profitability of tea in these areas.

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1 Unless the FIRR of the mid-country is higher than the prevailing domestic bank prime rate in real terms, it will not qualify for financing under the Project (see para. 48).

Table 4: Economic and Financial Internal Rates of Return

Item	FIRR (%)	EIRR (%)
Tea Replanting		
High country	12.4	16.3
Mid-country	6.5	9.1
Low country	13.4	17.9
Tea In-filling		
High country	18.5	66.3
Mid-country	10.1	18.3
Low country	20.5	47.8
Rubber Replanting	15.4	18.7
Coconut Replanting	19.0	25.1
Diversification		
Cinnamon	27.9	22.3
Rambutan	34.7	47.9
Pineapple	28.2	58.8
Banana	28.9	30.3
CTC Factories	18.9 - 33.1	-

3. Regional Plantation Companies

75. Financial analysis carried out for three RPCs selected on the basis of major crops grown and the general operating area indicates the potential financial viability of the plantation companies. The analysis, based on the RPCs' proposed medium-term plans (which includes a package of selected subprojects), indicates that the RPCs are potentially profitable with good management and a well-planned package of subprojects (see Table 5).

Table 5: FIRRs of Representative RPCs

RPC	Crops	Location	FIRR (%)
Agarapatanu	Tea only	High country	19.1
Kelani Valley	Tea and rubber	Mid-country	20.4
Kurunegala	Coconut and rubber	Low country	19.2

4. Overall Project

76. The overall Project is viable with a FIRR of 19.5 percent and an EIRR of 22.5 percent. The FIRR and the EIRR estimated for the tea, rubber, and coconut components indicate that all three components are viable (see Table 6). The rubber component has the highest rate of return followed

by the tea component. The coconut component has lower rates of return as the coconut estates are currently operating efficiently and there is less scope for increasing labor efficiency.

Table 6: Results of Financial and Economic Analysis

Item	FIRR (%)	EIRR (%)
Overall Project	19.5	22.5
Tea Component	19.8	23.5
Rubber Component	24.2	25.6
Coconut Component	14.8	19.6

5. Sensitivity Analysis

77. Sensitivity analysis was undertaken to indicate the effect on Project viability of such adverse changes as an increase in Project cost, reduction in Project benefits (due to decrease in price or reduction in yield), increase in operating costs (due possibly to increase in wages), and delay in benefit realization.

78. The results indicate that the Project is more sensitive to changes in Project cost than to changes in benefit or operating cost (see Table 7). The Project remains viable with an EIRR of 19.3 percent even when it is affected by both cost increase and benefit reduction. The Project is sensitive to delays in realization of benefits, but the EIRR remains at 16 percent even if benefits are delayed by two years. The sensitivity analysis indicates that the Project is resilient in the face of adverse conditions. The analysis also indicates that although the rubber component has the highest EIRR, it is also the most sensitive to adverse changes in cost and benefits.

Table 7: Results of Sensitivity Analysis

				EIRR (%)
Item	Overall Project	Tea	Rubber	Coconut
Base Case	22.5	24.5	25.6	19.6
10% Increase in Project Costs	20.1	21.2	20.7	18.2
Sensitivity Indicator	1.1	1.0	1.9	0.7
10% Decrease in Revenue	21.5	22.7	22.4	17.9
Sensitivity Indicator	0.5	0.3	1.3	0.8
10% Increase in Operating Cost	20.8	21.8	21.4	19.1
Sensitivity Indicator	0.8	0.7	1.7	0.2
10% Increase in Capital Cost and 10% Decrease in Revenue	19.3	20.4	19.8	16.7
1-year Delay in Benefits	19.7	19.4	18.8	17.6
2-year Delay in Benefits	16.1	16.8	16.1	15.8

6. Project Risks

79. A major risk to the Project is the possibility of Government intervention in labor issues. In the past, the Government's decision to raise labor wages and welfare benefits without parallel increases in labor productivity was largely responsible for the huge losses incurred by the estates. It is estimated that the impact of the last wage bill alone, increasing the minimum wage and gratuity provisions, accounted for an aggregate increase in the annual operating costs of RPCs by SLRs1.1 billion ($22 million). Unfortunately, this was not matched by or tied to corresponding increases in labor productivity. To minimize this risk, the restructuring plan approved by the Cabinet in April 1995 stipulates that labor issues such as wages, benefits and work norms will be resolved through collective bargaining between the trade unions and RPC management. Thus, Government nonintervention on labor issues will be clearly spelled out to attract private companies to offer bids for the 51 percent controlling shares.

80. Second, serious social problems can result from the possible displacement of excess labor, which is substantial in some estates. In addition, RPCs will have heavy financial requirements for severance payments for redundant workers. On this account, the noncredit component of the Project provides (i) skills training for excess laborers to allow them to shift to other productive activities, (ii) transfer of surplus labor to adjacent estates where there is a shortage of labor, (iii) training and skills development to enable surplus workers to find employment off the estates, and (iv) incentives to encourage early retirement.

81. Third, Project viability can be adversely affected by the low prices of tea and rubber in the world markets since the bulk of these products will be exported. However, since the Project will result in increased efficiencies, increased productivity, and lower operating costs, these could provide sufficient buffer against lower or stagnating world prices and maintain Sri Lanka's competitiveness in the world markets. Crop diversification to be implemented under the Project will also reduce this risk.

82. Finally, there is a risk that privatization of the 23 RPCs will not be implemented by the Government on schedule because of a lack of Government commitment to privatization or a strong opposition to privatization by the trade unions. The Project will reduce this concern by (i) requiring the Government to privatize at least four RPCs as a condition for loan effectiveness, and (ii) providing credit only to RPCs that have been privatized by the Government.

B. Environment

83. The Project will generally have a positive impact on the environment as the Project components have been designed to improve the environmental conditions in the Project area and, to some extent also, its surrounding areas. First, the introduction of SALT, soil conservation techniques, cover crops, and other measures coupled with the reforestation of watersheds will reduce soil erosion, and sedimentation of rivers and reservoirs downstream of the estates. Second, the construction of micro-hydropower plants and reforestation of the watersheds will reduce fuelwood collection from the forest area. Third, the construction of necessary effluent treatment plants in the existing and new rubber factories, coupled with reduction of soil erosion, will improve the water quality of rivers and streams in the Project area. Fourth, the rehabilitation of labor quarters, latrines, water supply, and farm roads will improve sanitary conditions and living conditions and thus make the living environment more attractive. Fifth, the introduction of integrated pest management will reduce the use of pesticides in the estates. Sixth, the implementation of measures to meet the international occupational health and safety standards in the tea, rubber, and coconut factories will improve working conditions in the factories. Finally, the training to be undertaken for

PIU staff under the Project will improve their institutional capability for monitoring and evaluating the environmental mitigation measures.

C. Social Dimensions

84. The Project's social benefits include (i) the rehabilitation of houses and living areas for 35,000 estate workers and staff; (ii) the security of tenure of the present 327,000 work force; (iii) upgrading of technical and managerial skills of 1,800 management and supervisory staff of the 23 RPCs; and (iv) skills training for about 6,800 surplus workers to allow them to be gainfully engaged in alternative income-generating activities. It is difficult to quantify the impact of the noncredit components of the Project, but these measures will definitely uplift the socioeconomic status of the estate workers, enhance labor productivity, and help foster industrial peace. Given the tradition of the powerful trade unions and their opposition to the privatization of RPCs, the importance of these components cannot be overemphasized.

VI. ASSURANCES

A. Specific Assurances

85. The Borrower and CBSL have given the following specific assurances, in addition to the standard assurances, which have been incorporated in the legal documents.

(i) By 30 June 1996, the Borrower will execute at least 50 percent of the leases of the estates assigned to the 23 RPCs, each for a period of 50 years, for the purposes of privatization of these RPCS.

(ii) By 30 June 1997, the Borrower will complete the privatization of the 23 RPCs, through the sale of at least 51 percent of the issued shares in each of these RPCs to the private sector.

(iii) By 31 December 1996, the Borrower will review the performance of the 41 marginal estates managed by JEDB and SLSPC. Based on this review, the Borrower will, by 30 June 1997, restructure these estates to lessen the Borrower's burden in taking up the losses incurred by these estates.

(iv) By 31 December 1997, the Borrower will privatize the marketing and warehousing facilities managed by JEDB and SLSPC.

(v) The Borrower will cause the management of privatized RPCs to enter into collective bargaining agreements with their workers' trade unions on wages, work norms, health, on-the-job training, welfare, and other employment-related matters.

(vi) By 30 June 1997, the Borrower will carry out a study to eliminate all constraints on the sale and marketing of tree crops for the purpose of liberalizing the marketing of tree crops.

(vii) The Borrower will review the present allocation of 50 percent sale of tea products outside auctions and eliminate all restrictions on direct sale outside auctions by 31 December 1997.

(viii) By 30 June 1997, the Borrower will carry out a study to determine the feasibility of establishing an International Trade Center to be operated and maintained by the private sector for the promotion of tree crop exports.

(ix) By 31 December 1997, the Borrower will reconstitute the Board of Governors of the Tea Research Institute, the Rubber Research Institute, the Coconut Research Institute, the Sri Lanka Tea Board, and NIPM by having substantial representation from the private sector to promote private sector participation in the plantation industry.

(x) By 30 June 1997, the Borrower will carry out a study to examine the efficiency and effectiveness of cess-supported activities in the plantation sector, and propose recommendations on improving the management and use of cess funds for these activities.

B. Conditions of Loan Effectiveness

86. As conditions of loan effectiveness, the following have to be satisfied:

(i) Financing Agreements satisfactory to the Bank between the Government (represented by CBSL) and at least two PFIs will have to be in place and are to be fully effective and legally binding upon the parties in accordance with their term, subject only to the effectiveness of the Bank loan; and

(ii) the Government will have privatized at least four RPCs through the sale of at least 51 percent of the issued shares in each of these RPCs to the private sector.

VII. RECOMMENDATION

87. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank and recommend that the Board approve the loan in various currencies equivalent to Special Drawing Rights 40,855,000 to the Democratic Socialist Republic of Sri Lanka for the Plantation Reform Project, with a service charge at the rate of 1 percent per annum and with an amortization of 40 years, including a grace period of 10 years and such other terms and conditions as are substantially in accordance with those set forth in the draft Loan and Project Agreements presented to the Board.

MITSUO SATO
President

6 October 1995

APPENDIXES

SUPPLEMENTARY APPENDIXES

(available on request)

THE TREE CROPS SUBSECTOR

Table 1: Tree Crop Industry (1992)

Item	% share of GDP[a]	Growth Rate[b]	Area ('000 ha)	Area (% Agric. land)	Employ-ment ('000)	Employ-ment (% of total)	Export Value (SLRs million)	Export (% of Total)
Agriculture	17.6	1.1	1,709	100.0	1,876	45.5	30,818	22.3
Tree Crops	4.4	1.1	833	48.7	832	20.1	25,793	18.6
Tea	2.0	1.3	222	13.0	686	16.6	19,911	14.4
Rubber	0.5	1.0	196	11.4	n.a.	n.a.	3,086	2.0
Coconut	1.9	-6.0	416	24.3	135	3	2,796	3.1

[a] At constant 1982 prices.
[b] Change from 1992.

Sources: Central Bank of Sri Lanka, *Annual Report 1993* (Table 3); Department of Census and Statistics, 1991; *Plantation Sector Statistical Pocket Book*, 1993; Chandramani 1991; and Mission estimates.

Table 2: Tea Production ('000 metric tons)

Item	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
State	152.3	140.5	159.6	159.3	153.7	147.0	153.0	138.0	147.2	148.6	101.2
Private	35.5	38.7	48.4	54.8	57.6	66.3	73.9	68.9	85.9	92.1	77.7
Total	187.8	179.2	208.0	214.1	211.3	213.3	226.9	206.9	233.1	240.7	178.9
World	1,947.0	2,055.0	2,193.0	2,290.0	2,281.0	2,347.0	2,476.0	2,428.0	2,516.0	2,537.0	-

Source: *ITC Bulletin*, 1991; *Plantation Statistics Pocket Book*, 1994.

Table 3: World Export of Tea (%) by Country

Country	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Sri Lanka	22.1	18.1	21.7	20.7	21.3	20.6	20.9	18.0	19.0	19.5	17.6
India	23.2	23.9	23.0	22.4	20.9	20.9	21.0	19.5	18.5	18.8	16.8
China	12.9	14.3	15.4	14.4	17.7	17.9	18.8	18.1	17.3	17.1	17.4
Kenya	9.7	11.5	9.7	13.2	12.0	13.9	13.1	14.4	15.0	16.2	16.5
Indonesia	7.8	7.9	9.1	9.5	8.1	9.3	8.8	10.2	9.8	10.2	12.0
Malawi	4.5	4.1	3.9	3.9	4.1	3.4	3.5	3.6	3.8	3.8	3.8
South America	5.3	6.1	5.5	4.2	4.8	4.2	4.1	4.7	4.8	4.2	4.4
Others	14.5	14.1	11.7	11.6	11.1	9.7	9.8	11.6	11.8	10.2	9.9

Source: International Tea Committee, *Annual Bulletin of Statistics*, 1991. *Plantation Sector Statistical Pocket Book*, 1994.

Table 4: Tea Productivity and Profitability: Domestic and International Comparison (1991)

Item	Sri Lanka		Northern India	Southern India	Kenya	Indonesia	Malawi
	State	Private[a]					
Yield (kg/ha)	1,268.00	2,442.00	2,127.00	2,300.00	2,237.00	1,645.00	1,929.00
Green leaf intake per plucker	13.52	24.59	26.22	25.24	48.00	n.a.	n.a.
Labor per ha	3.21	2.70	2.67	2.50	2.20	n.a.	n.a.
Cost of production (COP) ($/kg)	1.87	1.54	1.52	1.39	0.94	n.a.	n.a
Labor cost (as % of COP)	50	n.a.	39	50	n.a.	n.a.	n.a.
Revenue ($/ha)	2,574.00	4,957.00	4,318.00	4,669.00	4,338.00	n.a.	n.a.
Gross profit ($/ha)	203.00	1,196.00	1,085.00	1,472.00	2,438.00	n.a.	n.a.

Data source: *Henderson Report*, Table K; FTCP PCR 1992, Annex-I, Table 18; *Plantation Sector Statistical Pocket Book*, 1993; USDA *Annual Tea Report*, 1992.

[a] Low elevation only (75% of private production).

Table 5: Rubber Yields and Cost of Production (COP) in Private and State Sectors

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Private yields (kg/ha)	558	601	719	760	737	895	765	814	720	n.a.	n.a.	n.a.	n.a.
State yields (kg/ha)	1,046	1,027	1,050	1,029	1,006	976	962	904	828	946	876	n.a.	n.a.
COP (SLRs/kg) Private	-	-	-	9.60	12.50	10.93	11.37	13.41	15.00	17.83	19.96	20.50	23.00
COP (SLRs/kg) State	-	-	-	14.02	17.27	18.70	20.25	24.68	26.29	28.74	33.28	36.50	40.68

Source: *Plantation Sector Statistical Pocket Book*, 1994; Suan Tan, 1991.

Table 6: Coconut Area, Yields, and Production

Item	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Area ('000 ha)	416	411	408	404	400	396	392	388	384	380	376
Yield (nuts/ha)	6,067	5,618	4,702	7,331	7,607	5,795	4,948	6,410	6,602	5,755	6,115
Output (million nuts)	2,521	2,312	1,942	2,958	3,039	2,292	1,937	2,484	2,532	2,184	2,296
Domestic Consumption (million nuts)	1,893	1,740	1,660	2,027	1,877	1,731	1,701	1,896	2,018	1,796	1,859
Export (million nuts)	628	572	282	931	1,162	561	236	588	514	388	437

Source: *Plantation Sector Statistical Pocket Book*, 1994.

Table 7: Corporate Profit/Loss Compared with Capital Expenditure, Total Area, Tea and Rubber Production, Cost of Production (COP) and Net Sale Average (NSA) of Janatha Estates Development Board (JEDB) (1976–1992)

Item	Apr–Dec 1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Jun 1992
Profit and Loss (SLRs million)	117.00	237.90	(127.70)	(124.20)	(26.10)	(69.10)	6.30	849.20	957.70	(232.70)	(484.40)	(335.50)	(586.40)	(118.70)	(255.90)	(1,017.90)	(1,318.80)
Capital Expenditure (SLRs million)	26.60	67.30	140.80	102.40	153.20	179.70	251.60	696.90	771.60	650.90	744.70	715.00	643.20	762.20	809.40	932.70	481.60
Total Area (ha)	–	77,155	92,260	99,789	103,739	103,720	88,947	95,484	100,468	99,359	99,784	97,197	94,940	93,879	93,462	93,356	6,706
Tea																	
Production (million kg)	–	71.80	77.10	82.60	77.30	85.50	69.90	64.90	79.30	77.6	73.80	72.50	74.40	69.40	72.10	70.80	26.20
COP (SLRs/kg)	7.44	7.78	11.60	12.91	16.20	17.00	20.96	24.11	30.50	36.51	37.95	40.11	48.10	52.68	58.85	62.23	73.21
NSA (SLRs/kg)	9.30	13.15	10.75	12.01	16.53	16.88	22.76	38.43	43.78	32.27	30.26	35.99	41.20	55.54	61.70	53.29	61.29
Rubber																	
Production (million kg)	–	14.60	21.90	25.70	22.80	22.00	18.60	18.20	21.30	18.90	18.70	17.50	17.90	15.10	17.00	16.00	6.00
COP (SLRs/kg)	3.28	3.75	6.61	8.37	8.65	9.13	10.22	11.13	13.08	17.75	18.45	20.12	24.82	29.95	29.38	30.74	39.20
NSA (SLRs/kg)	6.34	5.24	7.69	12.15	10.27	10.55	11.03	16.11	15.51	17.77	21.81	20.38	27.85	26.11	26.04	25.43	29.38

Table 8: Corporate Profit/Loss Compared with Capital Expenditure, Total Area, Tea and Rubber Production, Cost of Production (COP), and Net Sales Average (NSA) of the Sri Lanka State Plantation Corporation (SLSPC) (1970/71–1992)

Item	1970/71	1971/72	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Jun 1992
Net Profit/Loss (SLRs million) (Before Taxation)	0.45	1.57	1.74	10.82	4.31	174.20	338.80	(47.60)	(50.6)	18.30	(145.70)	20.60	873.90	731.00	(98.10)	(198.00)	15.90	(233.60)	271.40	(142.60)	(634.63)	(453.37)
Capital Expenditure (SLRs million)	2.43	3.26	2.47	12.37	3.67	21.50	39.00	102.60	91.20	153.90	167.70	184.90	207.50	402.20	450.30	522.60	722.70	719.90	617.90	517.50	641.16	397.30
Total Area (ha)	5,299	13,309	12,378	29,609	39,871	106,751	143,983	147,872	140,580	140,850	145,147	145,030	144,943	144,122	139,586	138,359	137,359	135,529	135,491	134,725	134,045	132,177
Tea																						
Production (million kg)	0.75	5.15	5.67	10.97	16.03	55.40	70.50	70.60	80.80	77.90	80.40	70.00	64.70	72.70	73.10	70.90	67.90	69.50	63.40	66.42	67.95	24.09
COP (SLRs/kg)	*	*	*	*	6.20	7.11	8.89	14.43	13.58	17.32	18.43	22.13	25.40	35.57	35.58	35.24	37.79	44.53	50.89	58.29	60.01	68.06
NSA (SLRs/kg)	*	*	*	*	6.65	9.02	13.63	14.23	13.16	18.31	18.17	23.93	41.83	44.89	32.61	32.13	38.77	41.39	58.34	64.91	55.24	63.58
Rubber																						
Production (million kg)	0.49	0.90	0.87	1.96	3.93	16.26	22.30	23.70	25.10	27.70	28.00	23.30	22.70	25.20	22.10	23.30	22.10	22.10	19.40	22.35	23.66	8.52
COP (SLRs/kg)	*	*	*	*	3.20	3.09	4.71	7.39	9.93	9.12	8.84	10.50	11.74	15.03	16.79	18.95	20.08	24.04	28.49	29.65	25.90	35.67
NSA (SLRs/kg)	*	*	*	*	4.05	5.79	4.48	7.53	11.68	9.22	9.80	11.04	16.50	15.14	17.39	21.28	20.02	26.52	24.87	24.56	21.53	29.67

* Not available.

Table 9: Area and Production of Tea, Rubber, and Coconut for the State and Private Sector

Sector	Tea				Rubber				Coconut			
	Area ('000 ha)	%	Production (million kg)	%	Area ('000 ha)	%	Production (million kg)	%	Area ('000 ha)	%	Production (million kg)	%
1970												
Private	237.0	97.7	207.0	97.6	201.0	100.0	159.0	100.0	445.0	100.0	2,500.0	100.0
State	6.0	2.3	5.0	2.4	–	–	–	–	–	–	–	–
Total	243.0	100.0	212.0	100.0	201.0	100.0	159.0	100.0	445.0	100.0	2,500.0	100.0
1993												
Private	88.0	45.6	125.0	54.1	103.0	64.1	74.0	70.9	404.0	97.0	2,070.0	95.7
State	105.0	54.4	106.0	45.9	58.0	35.9	30.0	29.1	12.0	3.0	94.0	4.3
Total	**193.0**	**100.0**	**231.0**	**100.0**	**161.0**	**100.0**	**104.0**	**100.0**	**416.0**	**100.0**	**2,164.0**	**100.0**

Source: MPI

RESTRUCTURING OF THE STATE-OWNED REGIONAL PLANTATION COMPANIES

A. Overview and Rationale

1. Tea, rubber, and coconut play a major role in the economy of Sri Lanka as they account for 5 percent of gross domestic product (GDP) and 19 percent of export earnings, and employ about 20 percent of the labor force. However, their output suffered a continuous decline over the past 20 years resulting in loss of export revenues and serious erosion of Sri Lanka's previously dominant market share in the three commodities.

2. The decline of the plantation sector was partially caused by external factors such as the decline in world tea and rubber prices and the strong competition from new entrants (e.g., Kenya for tea). However, it is now recognized that past Government policies and direct involvement in the operations of plantations were the major causes of the problems besetting the sector. The adverse results include (i) the inefficient operations of the state-owned plantation corporation due to the nationalization of the large private estates, (ii) taxation policies that were biased against plantation crops, and (iii) labor and wage policies that increased labor costs in the state plantations without any link to productivity. Realizing the serious problems affecting the tree crops subsector, the Government decided to restructure the state plantation sector to improve its performance.

B. Restructuring Program of 1992

3. In July 1990, a Task Force created to look into the privatization of the plantation, recommended breaking up the State-owned plantations into smaller units to be managed by the private sector. In June 1992, the Government removed 449 out of 502 estates from the State corporations and grouped them into 22 regional plantation companies (RPCs), which are 100 percent publicly owned, limited liability companies. Management was handed over to 22 private management companies (MCs) under a five-and-a-half-year contract. A 23rd RPC was later formed from the remaining estates and put under a similar management setup. Groupings were based on profit potentials projected at between SLRs2.1 million ($42,000) to SLRs14.5 million ($290,000) per year based on historical trends (see Table 1).

4. Improved cultural and operating practices did result in an operating profit (net of interest charges) for a majority of RPCs, but the Government continued to incur overall losses from RPCs' operations, which amounted to SLRs1.48 billion ($29.6 million) in 1993 and SLRs976 million ($19.5 million) as of end 1994 (see Tables 2 and 3). Moreover, the management contracts did not make provisions nor were they conducive for MCs to a have financial stake in RPCs. The Government continued to provide financial support through the budget or debenture guarantees to meet the investment needs of RPCs, while it solely absorbed losses from the estates. It became clear that the mere privatization of the management of RPCs could not arrest the drain on Government resources.

5. A Committee chaired by the Secretary of Finance submitted a report in February 1995 that in essence, proposed further restructuring of RPCs to allow full private sector participation in their ownership. The objective of the restructuring is to give the private sector the opportunity to act as entrepreneurs in the management of plantations and to take on both the risks and benefits in RPCs' business operations.

Table 1: Key Statistics of Regional Plantation Companies

Regional Plantation Company	No. of Estates	Cultivated Area (ha) – 1993: Tea	Rubber	Coconut	Fuelwood	Timber	Others	Total Area (ha)	Production (Jan–Dec 1994): Tea ('000 kg)	Rubber ('000 kg)	Coconut ('000 nuts)	No. of Labor (1993)	No. of Staff (1993)
1 Hapugastenne Plantations Ltd.	23	6,578	1,719	–	1,946	96	1,028	16,865	8,947	969	–	18,511	746
2 Watawala Plantations Ltd.	19	5,289	2,700	22	669	35	1,393 [a]	12,346	8,261	1,786	51	17,959	905
3 Balangoda Plantations Ltd.	24	6,297	1,899	67	818	301	676	12,657	9,674	1,262	–	17,492	1,076
4 Kahawatte Plantations Ltd.	18	5,676	2,801	48	1,276	344	460	13,464	5,282	1,879	–	15,557	843
5 Bogawantalawa Plantations Ltd.	28	5,210	6,307	407	80	353	777	15,669	8,504	4,721	2,307	20,062	906
6 Malwatte Valley Plantations Ltd.	26	5,867	2,824	42	957	32	287	12,145	7,986	2,049	156	18,000	1,076
7 Maskeliya Plantations Ltd.	21	6,466	–	–	921	61	89	10,271	8,904	–	–	19,151	522
8 Agalawatte Plantations Ltd.	17	2,302	6,404	28	–	223	556	11,299	3,037	4,145	27	11,121	517
9 Talawakelle Plantations Ltd.	19	5,017	308	–	243	61	303	7,391	8,014	202	–	14,750	515
10 Kelani Valley Plantations Ltd.	27	4,505	4,859	23	413	102	271	13,200	6,290	3,233	–	17,130	833
11 Horana Plantations Ltd.	15	2,958	2,853	–	108	39	313	7,856	3,889	1,957	–	10,333	488
12 Agarapatana Plantations Ltd.	23	7,621	20	–	863	49	12	10,480	11,428	9	–	22,258	966
13 Maturata Plantations Ltd.	19	5,951	395	149	602	267	292	11,618	8,556	336	302	15,902	786
14 Elpitiya Plantations Ltd.	17	3,650	2,929	161	240	14	1,142	9,820	7,448	1,824	286	13,234	731
15 Madulsima Plantations Ltd.	12	4,224	–	–	1,181	–	–	7,373	6,034	–	–	11,111	394
16 Kegalle Plantations Ltd.	19	1,614	5,546	395	168	–	424	9,811	3,077	5,460	1,442	9,027	599
17 Pussellawa Plantations Ltd.	21	3,624	5,388	113	304	132	569	11,148	4,211	4,073	351	12,444	642
18 Kotagala Plantations Ltd.	23	3,398	6,649	41	478	28	346	12,816	5,193	4,918	–	15,526	802
19 Namunukula Plantations Ltd.	21	4,010	4,167	313	324		1,160	12,540	7,268	2,909	1,615	13,883	817
20 Uda Pussellawa Plantations Ltd.	15	4,284	275	29	172	110	242	6,092	5,191	225	121	12,384	661
21 Chilaw Plantations Ltd.	13	–	–	5,507	–	–	496	6,854	–	–	21,382	829	181
22 Kurunegala Plantations Ltd.	13	–	–	5,274	–	–	758	6,538	–	138	19,451	1,305	297
23 Elkaduwa Plantations Ltd.	10	–	–	4,213	–	–	–	4,213	1,079	174	1,358	3,653	248
Total	**443**	**94,541**	**58,043**	**16,832**	**11,763**	**2,247**	**11,594**	**242,466**	**138,273**	**42,269**	**48,849**	**311,622**	**15,551**

[a] Includes an oil palm area of 1,024 ha with production of 2,500 tons FFB.

Source: PMMD

Table 2: Profit and Loss Statement of JEDB, SLSPC and RPCs (1991, 1993 and 1994) (SLRs million)

Year	JEDB	SLSPC	RPCs	Total
1991	(1,017.9)	(634.6)	(0.0)	(1,652.5)
1993	(230.5)	(98.9)	(1,401.9)	(1,731.3)
1994	(132.6)	(117.8)	(976.5)	(1,226.5)

Table 3: Profit and Loss Statements of Individual RPCs Under MCs (1992–1994) (SLRs million)

Regional Plantation Company	1992 Jun–Dec	1993 Jan–Dec	1994 Jan–Dec
Hapugastenne	(49.6)	(33.0)	(106.7)
Watawala	(37.7)	(65.1)	(47.2)
Balangoda	(78.3)	(88.3)	(96.5)
Kahawatta	(39.6)	(61.9)	(108.0)
Bogawantawala	(17.3)	(55.0)	10.3
Malwatta Valley	(81.2)	(74.6)	(113.2)
Maskeliya	(95.3)	(101.9)	(32.2)
Agalawatte	(9.4)	(55.5)	(3.7)
Talawakelle	(42.0)	(58.4)	(19.3)
Kelani Valley	(31.8)	(35.4)	8.9
Horana	(11.9)	(76.5)	(2.9)
Agarapatana	(87.6)	(115.1)	(61.4)
Maturata	(90.0)	(112.2)	(115.3)
Elpitiya	(11.9)	(121.1)	(110.1)
Madulsima	(35.7)	(31.7)	(37.1)
Kegalle	2.6	(21.1)	17.4
Pussellawa	(16.5)	(96.6)	(17.3)
Kotagala	0.6	(61.6)	37.4
Namunukula	(8.3)	(87.5)	(80.3)
Udapussellawa	(68.6)	(91.4)	(95.4)
Chilaw	14.9	35.2	13.2
Kurunegala	5.9	6.8	15.1
Elkaduwa	0.0	0.0	(39.0)
Total	**(796.1)**	**(1,401.0)**	**(976.5)**

Source: PMMD

Note: Figures in parentheses indicate losses.

C. Restructuring Program of 1995

6. On 5 April 1995, the Cabinet approved most of the recommendations of the Committee, which will (i) encourage full private sector involvement in the state plantation sector, (ii) relieve the Government from directly supporting the public estates and prevent its exposure to the business risks of RPCs, (iii) aim at increasing estate productivity and profitability of RPCs while protecting labor welfare, and (iv) ensure transparency in the privatization process. The following are the main features of the Cabinet's decision:

(i) The Government will continue to own the land of the 23 RPCs, maintaining the present grouping of plantations;

(ii) The Government will lease the plantations to RPCs for 50 years;

(iii) RPCs will be capitalized at about SLRs200 million each, with most of the shares to be sold through the Colombo Stock Exchange (CSE) to ensure full transparency, under the following allocation:

51 percent controlling interest to be sold on an "all or nothing basis" to a private entity that will be responsible for operating the RPC;

20 percent to be sold to the general public;

10 percent to be given free to plantation workers;

19 percent to be retained by the Government for eventual sale to the general public within two years of the sale of the 51 percent controlling interest. The Government will retain a "Golden Share" in each RPC, the features of which are described below.

(iv) Mechanics for selling the shares in CSE: The issued share capital of each RPC will be set at about SLRs200 million, with 20 million ordinary shares and one "Golden Share," all at SLRs10 par value per share. Market pricing of RPC shares will follow CSE procedures that will allow RPC listing, as shown:

(a) RPC will offer for sale to the general public the minimum percentage required by CSE to obtain listing of RPC (10 to 25 percent);

(b) Bidders will be required to submit bids specifying price per share and the number of shares to be purchased;

(c) Bids will be filled "from the top," i.e., priority of sale will be from the highest to the lowest bidder until all available shares offered are sold;

(d) The controlling share of 51 percent will be sold at market price. The market price will be the lowest price at which all

available shares are cleared, but not lower than the par value of SLRs10 per share.

(v) The following are eligible buyers for the 51 percent controlling interest:

(a) Present MCs for RPCs with operational profits as of the end of 1994 (excluding interest expenses) will have the right of first refusal for controlling shares;

(b) In RPCs where a qualified MC does not exercise its option or where the present MC is not allowed such an option, the controlling shares will be offered to other investors, foreign or local, also on an "all or nothing" basis;

(c) The controlling shareholder will be required to purchase — or arrange for other parties to purchase — about SLRs150 million five-year transferrable debentures at 6 percent interest rate per annum, to be issued by RPC, to ensure funds for working capital and servicing of debts of the RPC. The debentures may be converted to common shares anytime after two years of issue at the original market price and must be converted to shares at the prevailing market price on the fifth year of issue;

(d) "Non-national" participation in equity will be limited to a maximum of 49 percent of issued shares to ensure local investors' participation in the controlling interest;

(e) The controlling shareholder shall negotiate for a collective agreement with the RPC trade union to ensure the protection of workers' rights and welfare;

(vi) A National Unit Trust will be set up to rationalize the administration and servicing of the 20 percent share, which will be allocated for sale to all households in Sri Lanka.

(vii) The features of the Golden Share are as follows:

(a) The Golden Share Holder's concurrence is needed for

- subleasing of any portion of the estate originally leased to RPC;
- amendments to the Articles of Association of RPC that would affect the Golden Share Holder's rights;

(b) The Golden Share Holder will also have the right to

- examine the books and accounts of RPC;

- require periodic reports on the operations and activities of RPC;

- require meetings with the Board of Directors of RPC to discuss any issue related to RPC's operation of "interest to the Government";

(c) Only the Government can own the Golden Share.

D. Methodology for Valuation and Capitalization of RPCs

7. Based on external audit reports as of the end of 1993, the average net asset value (NAV) of each RPC (mostly due to land) is about SLRs500 million. Capitalizing the full amount of NAV will make RPC unaffordable to investors, considering that they need to put up additional investments for capital assets and operational funds. Reducing NAV will mean losses to the Government. The Committee proposed an innovative way of valuing RPCs that will achieve the twin objectives of making it affordable to attract private investors and ensuring that the Government will obtain revenues (present and future) based on the full value of RPCs. This will be done by (i) partially capitalizing NAV to an affordable level (set at about SLRs200 million), and (ii) recognizing a lease rent receivable equal to the difference between NAV and the partial capitalization of NAV. Thus, the initial consolidated balance sheet of an RPC (assuming NAV = SLRs500 million) at time of stock offering will be as follows:

RPC Balance Sheet
(in SLRs million)

Net Asset Value (RPC)	SLRs500
Total Assets	**SLRs500**
Long-term Lease Payable	SLRs300
Shareholders Equity	SLRs200
Total Liabilities and Equity	**SLRs500**

8. The lease rental receivable, however, will be calculated as the net present value (NPV) of future lease rentals due over the life of the leasehold, using an acceptable deflator factor (e.g., projected inflation rate). Thus, the annual nominal lease to be actually paid by RPC to the Government will progressively increase yearly (applying the same factor) so that the Government will receive future lease rentals on a "real price basis."

9. Given the need to relieve RPCs of the heavy interest expenses on their present debt and the need for working capital funds, the controlling interest shareholder will be required to take up convertible and transferrable debenture issues of the company at a concessionary 6 percent interest rate. Thus, upon completion of the privatization process, the balance sheet of a typical restructured RPC will be as follows:

RPC Balance Sheet
(in SLRs million)

Cash on Hand	SLRs150
Net Asset Value (RPC)	SLRs500
Total Assets	**SLRs650**
Long-term Lease Payable	SLRs300
Convertible Debentures	SLRs150
Shareholders Equity	SLRs200
Total Liabilities and Equity	**SLRs650**

E. Implementation Details

10. The Government is committed to offer the sale of the shares of five RPCs at the CSE within the next six months, starting with two RPCs by September 1995. The Public Enterprise Reform Commission (PERC) was given full authority to implement the privatization process using the full technical capacity of the Plantation Management and Monitoring Division (PMMD), which has developed years of experience in the evolution of RPCs.

11. The procedural guidelines for the privatization process are as follows:

(i) PERC will have overall responsibility for the privatization of RPCs, to be overseen by a Steering Committee, chaired by the Minister of MPI and made up of the Chairman of PERC, Secretary of the Ministry of Plantation Industries, Deputy Secretary of Treasury, Chairman of JEDB/SLSPC, and the Director General of PERC;

(ii) Major policy matters and politically sensitive issues arising from the privatization process will be acted upon by the Steering Committee;

(iii) The privatization process will be in accordance with the Cabinet Decision of 12 April 1995, and any needed amendments to the same will be raised in the Cabinet by the MPI Minister;

(iv) All technical support will be undertaken by PMMD;

(v) All newspaper advertisements and other public information relating to RPC privatization will be under the name of PERC.

12. The Government will provide a clearer definition of the Rights of the Golden Share Holder, particularly those pertaining to "national interests," to ensure that these rights will not be misused to justify Government intervention in the normal business affairs of RPCs. The Government (by itself and as a Golden Share Holder) is committed not to intervene in wage, work norms, benefits, and other labor issues of RPCs. Such issues will be resolved through collective bargaining agreements between RPCs and the trade unions.

13. PERC proposed that free shares for each qualified worker should have set limits (e.g., equal to the shares that could be bought from the worker's gross six months salary). This will help ensure equitable distribution, including the allocation of free shares for workers who may be hired in the future.

14. The Government will make provisions for the possible renewal of the 50-year lease of estates to RPCs as an incentive to protect and nurture the estate assets up to the end of the first 50-year lease.

15. Special care needs to be taken to minimize social problems that could result from the displacement of excess labor, reported to be quite substantial in some RPCs. Trade unions will be persuaded to lift restrictions on their members' movements between and among estates to allow labor-surplus estates to supply labor-deficit estates.

Appendix 3

EXTERNAL ASSISTANCE TO SRI LANKA FOR THE TREE CROPS SUBSECTOR (1984–1994)

Financing Source	Project	Type of Financial Assistance	Loan or Grant Amount (million)	Year of Approval
The Bank				
	Plantation Sector	Loan	$ 45.0	1984
	Perennial Crops Development	Loan	$ 17.3	1988
	Smallholder Tea Development	Loan	$ 25.0	1989
Netherlands				
	Fourth Tree Crops	Loan	$ 8.0	1985
NORAD (Norway)				
	Fourth Tree Crops	Loan	$ 5.5	1985
	Welfare Program in the Plantation Sector	Grant	NKr 8.8	1993
ODA (United Kingdom)				
	Fourth Tree Crops	Loan	$ 5.5	1985
SIDA (Sweden)				
	Integrated Rural Development in Badulla District	Grant	SKr 6.3	1984
	Plantation Schools Education Development Program	Grant	SKr 46.3	1986
World Bank				
	Fourth Tree Crops	Loan	$ 55.0	1985
	Second Smallholder Rubber Rehabilitation	Loan	$ 23.5	1989

Sources: External Affairs Department, Ministry of Finance
UNDP

SHORT-TERM TO MEDIUM-TERM ACTION PLAN FOR INCREASING THE PRODUCTIVITY AND PROFITABILITY OF THE STATE PLANTATION SECTOR

		Target Date
A.	**Restructuring the State Plantation Sector**	
1.	The Government to execute at least 50 percent of the leases of the estates assigned to the 23 regional plantation companies (RPCs), each for a period of 50 years, for the purposes of privatization of these RPCs.	30 Jun 1996
2.	The Government to restructure the 23 RPCs by selling their shares to the private management companies (MCs) and other private investors (51 percent), and general public (20 percent). About 10 percent of the shares will be given free to the estate employees, while the remaining 19 percent of the stock will be retained by the Government.	30 Jun 1997
3.	The Government to review the performance of Janatha Estates Development Board (JEDB) and Sri Lanka State Plantation Corporation (SLSPC) including their 41 marginal estates. Based on this review, restructure these estates within one year to lessen the Government's burden in subsidizing them.	31 Dec 1996
4.	The Government to privatize marketing and warehousing facilities managed by JEDB and SLSPC.	31 Dec 1997
B.	**Institutional Support to the Restructuring Program**	
1.	The Government to allow the new management of privatized RPCs and labor unions to enter into collective bargaining as a means to determine wages, work norms, and benefit package for the estate workers.	30 Jun 1996
2.	The Government to carry out a study to eliminate all constraints on the sale, marketing, and disposal of tree crops in line with the recommendations of the Task Force on Regulatory Reforms of the Plantation Sector in June 1992. Based on the results of the study, liberalize the marketing of tree crops within one year.	30 Jun 1997

		Target Date
3.	The Government to review the present allocation of 50 percent sale of tea products outside the auctions with a view to eliminate all restrictions on direct sale outside the auctions within two-three years.	31 Dec 1997
4.	The Government to examine the possibility of establishing an International Trade Center to be operated and maintained by the private sector for promotion of tree crops exports.	30 Jun 1997
5.	The Government to reconstitute the Board of Directors (or the Board of Governors) of the cess-financed research institutions (i.e., Tea Research Institute, Rubber Research Institute, and Coconut Research Institute), Sri Lanka Tea Board, and the National Institute of Plantation Management with substantial representation from the private sector to promote private sector participation in the plantation industry.	31 Dec 1997

C. Removal of Macroeconomic Distortions

1.	The Government to examine the efficiency and effectiveness of cess-supported activities and propose recommendations for improvement in the management and use of cess funds for these activities.	30 Jun 1997

PROJECT LOGICAL FRAMEWORK

Design Summary	Targets	Monitoring Mechanisms	Risks/Assumptions
1. Sector/Area Goals			
1.1 To promote economic growth through increases in productivity and production of tree crop plantations.	Incremental production valued at $15.5 million per annum to increase by 2011.	Socioeconomic surveys at the beginning, midterm, completion, and full development of the Project.	Development process and momentum initiated under the Project are maintained by the privatized RPC.
1.2 To generate foreign exchange earnings.	Foreign exchange earnings to increase by $14 million/year by 2011.		
1.3 To achieve gainful employment of estate workers.	About 312,000 estate laborers will be gainfully employed by 2011.		
2. Objectives/Purpose			
2.1 To improve profitability and productivity of tree crops.	(i) Green leaf intake to increase from 8-9 kg/person-day to 10-12 kg/person-day and task size for tapping to increase from 250 trees to 350 trees by 2001.	Progress reports. Project Completion Report (PCR) and Project Performance Audit Report (PPAR).	Project implementation is effective and timely. Banking system is conducive to efficient processing, appraising and monitoring of subloans to privatized plantation companies.
	(ii) Crop yields to increase by 2111 as follows: - highland tea from 1,939 kg/ha to 2,666 kg/ha - mid-country tea from 1,875 kg/ha to 2,034 kg/ha - lowland tea from 1,988 kg/ha to 2,660 kg/ha - rubber from 1,000 kg/ha to 1,542 kg/ha - coconut from 3,500 nuts/ha to 8,420 nuts/ha	Progress reports. PCR and PPAR.	Privatized RPCs and labor unions forge an effective collaborative partnership. Privatized RPCs utilize Project fund efficiently and effectively. Climatic factors are favorable for crop production. International prices of export tree crops are attractive to producers.
	(iii) EIRR of subproject will be at least 10 percent and FIRR at least above average weighted prime rate (AWPR) in real terms.	Progress reports. PCR and PPAR.	

Design Summary		Targets	Monitoring Mechanisms	Risks/Assumptions
2.2 To support policy and institutional reforms in the tree crops subsector.	(i)	Short-term to medium-term action plan implemented by 1998.	Progress reports. PCR and PPAR.	Political environment is favorable for implementing the action plan. The Government is committed to implement the action plan.
2.3 To improve environmental conditions in the Project area and its surrounding areas.	(i)	4,500 ha watersheds reforested by 2002.	Progress reports. PCR and PPAR.	
	(ii)	23 micro-hydropower plants constructed by 1999.		
	(iii)	35,000 labor and 600 staff quarters rehabilitated by 2002.		
	(iv)	Pollution control measures in the existing agro-processing plants installed by 1999.		
3. Project Components/Outputs				
3.1 Rehabilitation and improvement of existing estates.	(i)	1,050 ha of tea to be replanted by 2002.	Progress reports and Review Missions.	Privatized RPCs are committed to implement the Project. Participating financial institutions continue to maintain commitment for financing of subprojects. Profitable cultivation systems are adopted by privatized RPCs. Local construction procedure is effective. Estate infrastructure is maintained effectively by privatized RPCs and local community.
	(ii)	Tea in-filling of 2,500 ha to be completed by 2002.		
	(iii)	Immature tea of 574 ha to be maintained by 2000.		
	(iv)	2,040 ha of rubber to be replanted by 2002.		
	(v)	Immature rubber of 1,309 ha to be maintained by 2000.		
	(vi)	930 ha of coconut to be replanted by 2002.		
	(vii)	Immature coconut of 344 ha to be maintained.		
	(viii)	100 ha of tree crop lands to be diversified by 2002.		
3.2 Rehabilitation and improvement of existing factories.	(i)	30 tea factories and 22 rubber factories to be rehabilitated by 2000.	Progress reports and Review Missions.	
	(ii)	New 5 cut, tear, and curl tea (CTC) factories, 2 latex concentrate factories, 1 rubberwood factory to be built by 2001.		
3.3 Procurement of vehicles and equipment.	(i)	All vehicles and equipment required by the plantation companies to be procured by 1998. 23 micro-hydropower plants to be constructed by 1999.	Progress reports and Review Missions.	

Design Summary		Targets		Monitoring Mechanisms	Risks/Assumptions
3.4	Reforestation of watersheds.	(i)	2,500 ha of fuelwood plantations to be established by 2002.	Progress reports and Review Missions.	Privatized RPCs are committed to implement the Project.
		(ii)	2,000 ha of timber plantations to be established by 2002.		Participating financial institutions continue to maintain commitment fo financing of subprojects.
3.5	Improvement of estate infrastructure.	(i)	35,000 labor and 600 staff quarters to be rehabilitated by 2002.	Progress reports and Review Missions.	Profitable cultivation systems are adopted by privatized RPCs. Local construction procedure is effective.
3.6	Institutional strengthening.	(i)	1,827 staff members and 6,830 workers of RPCs to be trained locally by 2002.	Progress reports and Review Missions.	Estate infrastructure is maintained effectively by privatized RPCs and local community.
		(ii)	100 staff members of RPCs to be trained overseas by 1998.		
		(iii)	6 person-months of international consultancy to be provided by 1997.		
3.7	Support for Project Implementation Unit (PIU).	(i)	12 staff including Project Manager and plantation expert to be recruited by 1996.	Progress reports and Review Missions.	
		(ii)	Vehicles, office equipment, and furniture to be provided by 1996.		

Design Summary	Targets	Monitoring Mechanisms	Risks/Assumptions
4. Activities	**Inputs**		
4.1 Tea, rubber, and coconut field development. - Tea replanting - Tea in-filling - Immature tea upkeep - Rubber replanting - Immature rubber upkeep - Coconut replanting - Crop diversification	An investment of $19.6 million.	Progress reports and Review Missions.	Privatized RPCs adopt improved cultivation techniques. Skills of estate laborers are upgraded. Privatized RPCs adopt modern processing technology. Vigorous market penetration abroad is mounted.
4.2 Processing - Construction of CTC tea manufacture and decaffeinated tea - Rehabilitation of orthodox tea factories - Rubber/latex manufacture - Copra/palm oil manufacture	An investment of $16.1 million.	Progress reports and Review Missions.	Coordination and cooperation with local community and Forest Department are undertaken by privatized RPCs in reforestation of watersheds. Qualified local contractors are selected to undertake rehabilitation of estate infrastructure.
4.3 Procurement of vehicles and equipment	An investment of $7.9 million.	Progress reports and Review Mission.	Each of the privatized RPCs prepares a comprehensive five-year rehabilitation and improvement plan.
4.4 Reforestation of watersheds - Establishment of timber plantations - Establishment of fuelwood plantations	An investment of $4.5 million.	Progress reports and Review Mission.	Competent and dedicated estate managers are engaged by privatized RPCs to manage the estates.
4.5 Estate infrastructure development - Construction of water supplies and latrines - Rehabilitation of roads - Rehabilitation of staff and labor quarters	An investment of $9.5 million.	Progress reports and Review Mission.	
4.6 Institutional strengthening - local training - overseas training - consultant services	An investment of $4.9 million.	Progress reports and Review Mission.	
4.7 Support for PIU - establishment of PIU - procurement of vehicles and office equipment - hiring of contractual staff	An investment of $0.9 million. Contingencies - $16.1 million Total cost - $80.0 million	Progress reports and Review Mission.	

PROJECT COST ESTIMATES AND FINANCING PLAN

Table 1: Project Cost Estimates
($ million)

Component	Local Cost	Foreign Exchange Cost	Total
PART A			
I. Tree Crop Plantation Development			
Tea Replanting	5.09	0.90	5.98
Tea In–filling	1.19	0.21	1.39
Immature Tea Upkeep	2.45	0.43	2.89
Rubber Replanting	3.32	0.59	3.91
Immature Rubber Upkeep	1.14	0.20	1.34
Coconut Replanting/Underplanting	1.74	0.31	2.05
Crop Diversification			
– Tea Lands	1.28	0.23	1.50
– Rubber Lands	0.21	0.04	0.25
– Coconut Lands	0.21	0.04	0.25
Subtotal	**16.62**	**2.93**	**19.56**
II. Processing Improvement and Pollution Control			
Cut, Tear, and Curl (CTC) Tea Manufacture	1.35	3.15	4.50
Orthodox Manufacture	1.35	3.15	4.50
Decaffeinated Tea Machinery	0.02	0.04	0.06
Tea Factory Building	0.88	0.22	1.10
Rubber Factory Buildings	0.78	0.19	0.96
Rubber Machinery	0.51	1.20	1.71
Latex Centrifuge	0.45	1.05	1.50
Effluent Treatment Plants	0.30	0.70	1.00
Rubber Wood Processing	0.23	0.52	0.75
Subtotal	**5.86**	**10.22**	**16.08**
III. Vehicles and Equipment			
Transport Vehicles and Agricultural Equipment	1.50	3.50	5.00
Office Equipment	0.15	0.35	0.50
Workshops	0.13	0.30	0.43
Laboratory Equipment	0.13	0.29	0.42
Micro–hydropower Plants	0.45	1.05	1.50
Subtotal	**2.36**	**5.50**	**7.85**

Component	Local Cost	Foreign Exchange Cost	Total
PART B			
I. Reforestation	**3.83**	**0.68**	**4.50**
II. Improvement of Workers' Living Environment			
Rehabilitation of Staff and Workers Quarters	5.60	1.40	7.00
Supporting Infrastructure	2.00	0.50	2.50
Subtotal	**7.60**	**1.90**	**9.50**
III. Institutional Strengthening			
Local Training	4.33	0.00	433.00
Overseas Training	0.00	0.40	0.40
International Consultants	0.00	0.12	0.12
Subtotal	**4.33**	**0.52**	**4.85**
IV. Support for Project Implementation Unit (PIU)	0.65	0.23	0.88
V. Feasibility Study	0.00	0.10	0.10
Total Base Cost	**41.25**	**22.07**	**63.32**
Physical Contingencies	2.06	1.10	3.16
Price Contingencies	10.89	2.02	12.91
Interest during Construction	0.00	0.61	0.61
Grand Total Cost	**54.20**	**25.80**	**80.00**

Table 2: Project Components by Year
($ million)

Component	1996	1997	1998	1999	2000	2001	Total
I. Tree Crop Plantation Development							
Tea Replanting	0.22	0.48	0.98	1.59	1.19	1.52	5.98
Tea In–filling	0.42	0.48	0.26	0.16	0.07	0.00	1.39
Immature Tea Upkeep	0.15	0.36	0.62	0.93	0.50	0.33	2.89
Immature Rubber Upkeep	0.50	0.36	0.25	0.16	0.08	0.00	1.34
Replanting/Upkeep of Immature Coconut	0.24	0.30	0.38	0.40	0.40	0.33	2.05
Crop Diversification							
– Tea Lands	0.15	0.30	0.30	0.30	0.30	0.15	1.50
– Rubber Lands	0.03	0.05	0.05	0.05	0.05	0.03	0.25
– Coconut Lands	0.03	0.05	0.05	0.05	0.05	0.03	0.25
Subtotal	**1.79**	**2.71**	**3.56**	**4.69**	**3.78**	**3.02**	**19.56**
Physical Contingencies	0.09	0.14	0.18	0.23	0.19	0.15	0.98
Price Contingencies	0.07	0.32	0.73	1.40	1.51	1.53	5.56
Subtotal including Contingencies	**1.95**	**3.17**	**4.47**	**6.33**	**5.48**	**4.69**	**26.10**
II. Processing Improvement and Pollution Control							
CTC Tea Manufacture	0.45	1.35	1.35	1.35	0.00	0.00	4.50
Orthodox Manufacture	0.45	1.35	1.35	1.35	0.00	0.00	4.50
Decaffeinated Tea Machinery	0.00	0.06	0.00	0.00	0.00	0.00	0.06
Tea Factory Building	0.10	0.10	0.30	0.30	0.30	0.00	1.10
Rubber Factory Buildings	0.08	0.56	0.12	0.12	0.08	0.00	0.96
Rubber Machinery	0.17	0.51	0.51	0.51	0.00	0.00	1.71
Latex Centrifuge	0.15	0.45	0.45	0.45	0.00	0.00	1.50
Effluent Treatment Plants	0.10	0.30	0.60	0.00	0.00	0.00	1.00
Rubber Wood Processing	0.08	0.23	0.23	0.23	0.00	0.00	0.75
Subtotal	**1.57**	**4.91**	**4.91**	**4.31**	**0.38**	**0.00**	**16.08**
Physical Contingencies	0.08	0.25	0.25	0.22	0.02	0.00	0.80
Price Contingencies	0.04	0.42	0.70	0.89	0.15	0.00	2.21
Subtotal including Contingencies	**1.69**	**5.58**	**5.86**	**5.42**	**0.55**	**0.00**	**19.10**
III. Vehicles and Equipment							
Transport Vehicles and Agricultural Equipment	1.25	3.00	0.75	0.00	0.00	0.00	5.00
Office Equipment	0.13	0.25	0.08	0.05	0.00	0.00	0.50
Workshops	0.11	0.32	0.00	0.00	0.00	0.00	0.43
Laboratory Equipment	0.11	0.32	0.00	0.00	0.00	0.00	0.42
Micro–hydropower Plants	0.30	0.45	0.45	0.30	0.00	0.00	1.50
Subtotal	**1.89**	**4.34**	**1.28**	**0.35**	**0.00**	**0.00**	**7.85**
Physical Contingencies	0.09	0.22	0.06	0.02	0.00	0.00	0.39
Price Contingencies	0.05	0.35	0.18	0.07	0.00	0.00	0.65
Subtotal including Contingencies	**2.03**	**4.90**	**1.51**	**0.44**	**0.00**	**0.00**	**8.89**

	Component	1996	1997	1998	1999	2000	2001	Total
PART B								
I.	**Reforestation**	0.45	0.90	1.35	0.90	0.45	0.45	4.50
	Physical Contingencies	0.02	0.05	0.07	0.05	0.02	0.02	0.23
	Price Contingencies	0.02	0.11	0.28	0.27	0.18	0.23	1.08
	Subtotal including Contingencies	**0.49**	**1.05**	**1.69**	**1.21**	**0.65**	**0.70**	5.80
II.	**Improvement of Workers' Living Environment**							
	Rehabilitation of Staff and Workers Quarters	0.70	1.40	2.10	1.40	0.70	0.70	7.00
	Supporting Infrastructure	0.25	0.50	0.75	0.50	0.25	0.25	2.50
	Subtotal	**0.95**	**1.90**	**2.85**	**1.90**	**0.95**	**0.95**	**9.50**
	Physical Contingencies	0.05	0.10	0.14	0.10	0.05	0.05	0.48
	Price Contingencies	0.04	0.22	0.57	0.55	0.37	0.47	2.21
	Subtotal including Contingencies	**1.03**	**2.21**	**3.56**	**2.54**	**1.36**	**1.46**	**12.18**
III.	**Institutional Strengthening**							
	Local Training	0.43	1.08	1.52	0.87	0.43	0.00	4.33
	Overseas Training	0.08	0.16	0.16	0.00	0.00	0.00	0.40
	International Consultants	0.12	0.00	0.00	0.00	0.00	0.00	0.12
	Subtotal	**0.63**	**1.24**	**1.68**	**0.87**	**0.43**	**0.00**	**7.85**
	Physical Contingencies	0.03	0.06	0.08	0.04	0.02	0.00	0.24
	Price Contingencies	0.02	0.15	0.36	0.28	0.19	0.00	1.00
	Subtotal including Contingencies	**0.69**	**1.45**	**2.11**	**1.19**	**0.64**	**0.00**	**6.09**
IV.	**Support for PIU**	**0.23**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	0.88
	Physical Contingencies	0.01	0.01	0.01	0.01	0.01	0.01	0.04
	Price Contingencies	0.01	0.02	0.03	0.04	0.05	0.07	0.22
	Subtotal including Contingencies	**0.25**	**0.15**	**0.16**	**0.18**	**0.19**	**0.21**	**1.44**
V.	**Feasibility Study**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	0.10
Total Base Cost		**7.62**	**16.14**	**15.75**	**13.15**	**6.13**	**4.55**	63.32
Physical Contingencies		0.38	0.81	0.79	0.66	0.31	0.23	3.16
Price Contingencies		0.24	1.58	2.84	3.51	2.45	2.29	12.91
Interest during Construction		0.06	0.14	0.15	0.13	0.07	0.06	0.61
Grand Total Cost		**8.30**	**18.67**	**19.52**	**17.44**	**8.95**	**7.12**	**80.00**

Table 3: Financing Plan for the Project
($ million)

Component	The Bank			Local Cost			
	Foreign Cost	Local Cost	Total	PFIs	RPCs	The Government	Total
Part A (Credit)							
1. Tree Crop Development	3.48	19.29	22.78	0.90	2.42	0.00	26.10
2. Processing Improvement	11.68	0.00	11.68	1.20	6.22	0.00	19.10
3. Vehicles and Equipment	6.10	0.00	6.10	0.70	2.08	0.00	8.88
Subtotal	**21.27**	**19.29**	**40.56**	**2.80**	**10.72**	**0.00**	**54.08**
Part B (Noncredit)							
1. Reforestation	0.79	3.57	4.35	0.00	1.45	0.00	5.80
2. Improvement of Workers' Living Environment	2.22	6.92	9.14	0.00	3.05	0.00	12.18
3. Institutional Strengthening	0.58	3.75	4.32	0.00	1.77	0.00	6.09
4. Support for PIU	0.25	0.67	0.91	0.00	0.00	0.22	1.14
5. Feasibility Study	0.10	0.00	0.10	0.00	0.00	0.00	0.10
6. Interest during Construction	0.61	0.00	0.61	0.00	0.00	0.00	0.61
Subtotal	**4.54**	**14.90**	**19.44**	**0.00**	**6.26**	**0.22**	**25.92**
Total	**25.80**	**34.19**	**60.00**	**2.80**	**16.98**	**0.22**	**80.00**
Percent of Total			**75.0**	**3.5**	**21.2**	**0.03**	

Appendix 7

PROJECT IMPLEMENTATION SCHEDULE

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Part A						
1. Tree Crop Development						
a. Tea Replanting	■	■	■	■	■	■
b. Tea In-filling	■	■	■	■	■	■
c. Upkeep of Immature Tea	■	■	■	■	■	■
d. Rubber Replanting	■	■	■	■	■	■
e. Upkeep of Immature Rubber	■	■	■	■	■	■
f. Coconut Replanting/Underplanting	■	■	■	■	■	■
g. Crop Diversification		■	■	■	■	■
2. Processing Improvement						
a. Cut, Tear, and Curl Tea Manufacture	■	■	■	■		
b. Decaffeinated Tea	■	■	■			
c. Orthodox Tea Manufacture	■	■	■	■		
d. Rubber Machinery (RSS & Crepe)	■	■	■	■		
e. Latex Centrifuge	■	■	■	■	■	
f. Rubber Effluent Treatment	■	■	■			
g. Copra Processing	■	■	■			
h. Rubberwood Processing	■	■	■	■		
3. Vehicles and Equipment						
a. Vehicles and Agricultural Equipment	■	■	■			
b. Office Equipment	■	■	■			
c. Workshops	■	■	■			
d. Laboratory Equipment	■	■	■			
e. Micro-hydropower Plants	■	■	■	■		
Part B						
4. Reforestation	■	■	■	■	■	■
5. Estate Infrastructure						
a. Rehabilitation of Workers and Staff Housing	■	■	■	■	■	■
b. Water Supply	■	■	■	■	■	
c. Latrines	■	■	■	■	■	■
d. Farm Roads	■	■	■	■	■	
6. Institutional Strengthening						
a. Overseas Training	■	■	■			
b. Domestic Training	■	■	■	■	■	
c. Consulting Services	■					
7. Project Planning and Monitoring	■	■	■	■	■	■
8. Benefit Monitoring and Evaluation	■	■	■	■	■	■

TECHNICAL ASSISTANCE FOR TREE CROP PLANTATION PLANNING AND MONITORING

I. Terms of Reference for Consultant Services

A. Objective

1. The main objective of the technical assistance (TA) will be to assist the Government in planning and implementing reforms, and in monitoring the impact of reforms to be undertaken by the Government in the tree crops subsector.

B. Scope

2. The TA will include the following components:

(i) To provide a team of international and domestic consultants to assist the Government in planning and monitoring policy and institutional reforms.

(ii) To conduct socioeconomic surveys to monitor and evaluate the implementation of policy reforms and to undertake special studies related to policy and institutional issues in the tree crops sector.

(iii) To provide annual workshops to be organized by the consultants. The annual workshops to be participated in by representatives of participating financial institutions (PFIs), privatized regional plantation companies (RPCs), and concerned Government agencies will discuss and review policy reforms to be undertaken by the Government. The workshops will also consider policy papers prepared by the subject matter specialists.

C. Consultant Services

3. The team of consultants will have the following expertise.

Expertise	Person-months		
	International Consultants	Domestic Consultants	Total
Agricultural Economics (Team Leader)	-	34	34
Financial Analysis	-	10	10
Agricultural Policy and Institutional Development	4	-	4
Total	**4**	**44**	**48**

D. Specific Terms of Reference

4. The terms of reference for the consultants will include but will not necessarily be limited to, the following:

1. Agricultural Economist/Team Leader

(i) Advise the Project Implementation Unit (PIU) in MPI on design and conduct of socioeconomic surveys.

(ii) Assist PIU in the development of the management information system (MIS) and make arrangements with the privatized RPCs to collect the required information on a regular basis.

(iii) Undertake test checks in the field to ensure the reliability and accuracy of the data provided by the privatized RPCs.

(iv) Assist the Government in the implementation of a short-term to medium-term action plan for increasing the productivity and profitability of the State plantation sector.

(v) Assist the Government in the formulation of policy and institutional reforms in consultation with the agricultural policy/institutional development specialist and financial analyst on the consultant team.

(vi) Assist the Government in organizing workshops, as and when appropriate, to discuss and review policy reforms to be undertaken by the Government.

(vii) Assist PIU in monitoring and evaluating the impact of the policy and institutional reforms undertaken by the Government.

2. Financial Analyst

(i) In coordination with Central Bank of Sri Lanka (CBSL), PFIs, and subborrowers, periodically review relending and onlending terms and conditions to ensure that these (a) are appropriate to the requirements of stakeholders (i.e. PFIs, and subborrowers); (b) fully reflect the conditions in the domestic financial market, and (c) are consistent with policy objectives of the Government in the financial system. Based on this review, identify policy and institutional problems and recommend appropriate measures to resolve the problems.

(ii) Review loan and subloan disbursement performance, identify bottlenecks and inefficiencies, and recommend measures to resolve identified problems, including the holding of annual workshops and dialogues with concerned entities when needed.

(iii) Assist PIU in monitoring the financial performance of the privatized RPCs. Identify policy and implementation issues that have adversely

affected the Project, and recommend appropriate measures when needed.

3. Agricultural Policy and Institutional Development Specialist

(i) Review the existing Government policies and the institutional arrangements in the plantation sector.

(ii) Identify the policy and institutional constraints that inhibit the productivity gains and maximization of profits and productivity in the plantation sector.

(iii) Carry out a study aimed at eliminating all constraints on the sale, marketing, and disposal of the tree crops, in line with the recommendation of the Task Force on Regulatory Reforms of the Plantation Sector. Based on the results of the study, prepare for the Government's consideration, recommendations to liberalize the marketing of tree crops.

(iv) Examine the possibility of establishing an International Trade Center in the private sector for the promotion of tree crops exports. Prepare cost estimates of the International Trade Center and recommendations for implementing such a plan for the Government and private sector's consideration.

(v) Undertake a study to examine the need to reconstitute the Board of Directors of cess-financed research institutions, the Sri Lanka Tea Board, and the National Institute of Plantation Management with substantial representation from the private sector in view of the greater private sector participation in the plantation industry following the restructuring of RPCs. Assist the Government in the implementation of the results of the study.

(vi) Examine the efficiency and effectiveness of cess-supported activities and prepare recommendations for further improvement of these activities with the view of improving the management and use of cess funds.

(vii) Present to the annual workshop the proposed policy and reform package that is proposed to be undertaken by the Government.

(viii) Finalize the recommendations on the basis of the agreement reached at the annual workshop. Assist the Government in the implementation of the agreed upon reforms.

E. Reporting

5. The consultants will prepare an inception report, semiannual reports, completion report, and any other reports as required by the Bank under the TA, including the preparation of workshop materials.

II. Estimated Cost of the Technical Assistance ($'000)

Item	Foreign Exchange Cost	Local Cost	Total
A. Bank Financing			
1. Consultants			
a. Remuneration and Per Diem	82	155	237
b. International Travel	10	-	10
c. Local Travel	-	20	20
d. Socioeconomic Surveys	-	55	55
2. Workshops	-	25	25
3. Reports and Communications	2	8	10
4. Contract Negotiations	3	0	3
5. Contingencies	10	30	40
Subtotal (A)	**107**	**293**	**400**
B. Government Financing			
1. Office Space and Facilities	-	20	20
2. Counterparts' Staff and Salaries	-	30	30
3. Office Supplies	-	20	20
4. Secretarial Assistance	-	20	20
5. Contingencies	-	10	10
Subtotal (B)	**-**	**100**	**100**
Total (A+B)	**107**	**393**	**500**

FINANCIAL AND ECONOMIC ANALYSIS OF THE PROJECT

A. General Assumptions

1. Project Implementation Period

1. The Project implementation period is assumed to be 6 years starting in 1996.

2. Project Economic Life

2. The Project life is assumed to be 30 years, which is also the economic life of rubber. The economic life of tea and coconut is usually taken as 30 years but that can be extended with good cultivation practices.

3. Exchange rate

3. An exchange rate of SLRs50 to the dollar, the prevailing rate during Fact-finding, is used.

4. Standard Cost

4. The standard cost per hectare and yields are used although, in practice, costs and yields vary from estate to estate.

5. Base Cost

5. All costs and benefits are valued in 1995 constant prices.

6. Economic Costs

6. A standard conversion factor of 0.85 is used for nontraded goods and services.

7. Commodity Prices

7. The February 1995 World Bank Commodity Price Projections are used for traded inputs and outputs. The prices of fertilizer mixtures for rubber and tea are calculated based on the nutrient content and blending cost.

8. World tea prices are characterized by a wide range of price differentials for quality and flavor. For the purpose of this study, three price levels are used for the low-elevation, mid-elevation and high elevation tea. The World Bank's projected tea prices are taken as prices for lowland tea and are used as the benchmark for calculation of premiums and discounts for other tea. Highland tea is sold at a premium because of its delicate flavor; historically, the premium averages 5 percent. Mid-country tea, which lacks the flavor of highland tea and does not have a taste strong enough for the Middle East market, is sold at an average discount of 12 percent. The relationships between highland and lowland tea and mid-country and lowland tea are determined using regression analysis, and the prices for highland and mid-country teas are extrapolated.

9. Rubber in Sri Lanka is produced in various forms such as smoked sheets and crepe. The World Bank's projected price for ribbed smoke sheet (RSS) 1 is used as the average for the different grades of rubber.

10. Over 80 percent of the coconut produced in Sri Lanka is domestically consumed in the form of fresh coconut and coconut oil. As a result, the export of copra and coconut oil is negligible. Heavy domestic demand has resulted in domestic prices exceeding international prices. Nevertheless, World Bank price projections for copra were used in the financial and economic analysis to take into account the domestic price adjustment over the Project period.

11. Previously the marketing of tree crops in Sri Lanka was subject to Government restrictions, but these restrictions have been removed to a large extent. The marketing of rubber and coconuts is now liberalized. The marketing of tea has also been liberalized, but to a lesser extent, and currently 50 percent of production still has to be sold through the Colombo Auction, but indications are that RPCs would be able to sell more than 50 percent of their production directly. The export taxes and ad valorem taxes on tree crops have been abolished in 1992 under pressure of international competition. Currently only the cess remains and this is equivalent to 2 percent of the export price for tea and 5 percent for rubber and coconuts.

8. Labor

12. The cost of labor including daily wage, cost of living allowance, and other benefits is taken at SLRs83.08 per person-day. A conversion factor of 0.9 is used in the economic analysis.

13. With the present labor surplus on estates and the inability of management to relocate workers, labor productivity is low compared with international standards. Besides small task sizes for field upkeep work, tapping, and plucking, labor is used in unproductive work such as forking and cutting, and filling of pits. With the Project, it is assumed that plantation companies are able to rationalize labor and increase labor productivity by eliminating of unproductive activities and gradual increasing task size to levels comparable with other major producers. It is assumed that the green leaf intake would increase from the current 8-9 kg per workday to 10-12 kg per workday, while the task size for tappers will increase from the current 250 trees to 350 trees. Measures to increase efficiency are already being introduced by the plantation companies and this has already resulted in lowering the cost of production of tea (from SLRs90.22/kg in 1992 to SLRs75.58/kg in 1994) and coconut (from SLRs3.77/nut in 1992 to SLRs2.97/nut in 1994). The cost of production of rubber, however, increased from SLRs31.95/kg in 1992 to SLRs41.28/kg in 1994, possibly because of the incentive payments due to the increase in world prices of rubber during the period. Further lowering of the cost of production through labor rationalization is possible, but it would require the support of the Project for the full benefits to be realized.

9. Area to be Cultivated

14. The Project would replant 1,000 ha for tea, 2,040 ha for rubber, and 930 ha for coconut. In addition 790 ha and 2,280 ha of existing immature tea and rubber, respectively, will be brought to maturity and 2,500 ha of the existing tea area in-filled. Tea replanting is assumed to be carried out in areas where bushes have reached 40-50 years old or where yields are below 1,000 kg. In the case of rubber, replanting is assumed to take place where trees have reached 30 years or where all tappable bark is exhausted. Diversification of 100 ha

of tree crop lands and reforestation of 3,590 ha of watersheds will also be financed by the Project. The existing 84,000 ha of mature tea areas are assumed to continue in production throughout the Project period as the economic life of tea can extend beyond 50 years with proper cultivation methods. The area of existing mature rubber, currently 41,000 ha, is assumed to decline at 5 percent per year from year 6 onwards as the trees exhaust their tappable bark.

10. Project Benefits

15. Project benefits are expected from the increase in crop production and reduction in cost of production. Increased production is expected from the replanted areas of tea, rubber, coconuts and in-filling of existing low-density tea areas, while cost reduction is expected from to the overall improvement in the management of the cultivated areas, improved manufacturing processes, reduction in maintenance cost of transport vehicles, and increased labor productivity. Benefits are not quantified for diversification of tea, rubber and coconut land to other crops and cut, tear, and curl (CTC) tea factories, as specific details of these investments are not known as yet. Investments in environmental conservation and rehabilitation of workers' houses yield social benefits that are unquantifiable and are not included in Project benefits.

11. Without-Project Benefits

16. It is assumed that no planting of tea, rubber, coconut, fuelwood, and timber will take place without the Project. Areas identified for replanting will go out of production or, in the case of tea, will remain at present low yield levels. The existing immature areas will be brought to maturity using only 75 percent of the recommended inputs and accordingly, the yields will be 75 percent of the potential. The existing mature areas will continue at present yield levels, which are generally low. It is assumed that labor rationalization measures will be limited, thus, labor efficiency will increase only marginally.

B. Crop Budgets

17. Crop budgets on a per hectare basis are prepared for a 30-year period to indicate the cost and benefit streams for replanted areas of tea (three elevations), rubber, and coconut, in-filling of tea (three elevations), and diversification of sections of tea, rubber, and coconut lands to high-value crops such as cinnamon, rambutan, pineapple, banana, strawberry, and potatoes. The crop budgets have been prepared assuming full inputs and improved labor efficiency, and they form the basis for the economic and financial analyses of the Project.

18. Replanting of tea is assumed to take place on suitable lands that are currently under low-yielding seedling tea or heavily infested by termites. At peak production, the yield of the replanted areas is expected to reach 4,400 kg/ha.

19. In-filling of tea is assumed to take place in areas where there are at least 3,000 vacant spots. Accordingly the cost of in-filling is taken as 25 percent of replanting. The yield in the in-filled section is assumed as a fourth of the yield in replanted areas. Because of the high percentage of vacant spots, 50 percent of in-filling is assumed for the mid-country.

20. In coconut, plant density in existing lands is about 40 percent of the potential, and low-yielding indigenous tall varieties are cultivated. They will be replaced with high-yielding

TxT varieties at recommended plant densities. As a result, yield in replanted coconut lands under the Project will be doubled.

C. Financial and Economic Analysis

1. Subprojects

21. The financial and economic rates of return for replanting of tea, rubber, and coconut and in-filling of tea and diversification to other crops are summarized in Table 1. Diversification of tea, rubber, and coconut land to fruits and spices is the most attractive among the subprojects, followed by coconut and rubber replanting. Replanting of tea is generally not as attractive, but is still financially and economically viable except in the mid-country areas. However, the returns from in-filling of tea are substantial and more attractive than replanting. In-filling of tea takes place only in 25 percent of existing areas in production, the investment is low, and income forgone is minimum as the rest of the area continues in production. In such a situation, the internal rate of return is very sensitive to any changes in cost or revenue, and this accounts for the big differences in the FIRR and EIRR for in-filling (since the EIRR is calculated using economic prices that are higher, and economic costs that are discounted using the standard conversion factor).

Table 1: Economic and Financial Internal Rates of Return

Subproject	FIRR (%)	EIRR (%)
Tea Replanting		
High country	12.40	16.30
Mid-country	6.50	9.05
Low country	13.44	17.90
Tea Infilling		
High country	18.50	66.26
Mid-country	10.05	18.29
Low country	20.54	47.78
Rubber Replanting	15.44	18.72
Coconut Replanting	18.98	25.07
Diversification		
Cinnamon	27.92	22.25
Rambutan	34.69	47.88
Pineapple	28.15	58.82
Banana	28.91	30.33

22. The establishment of CTC factories will result in production of quality tea that is in demand, thereby increasing the sales price of tea. These benefits are taken into account in the overall Project, which assumes production of good quality tea. The factories are

considered necessary for the full realization of Project benefits, and economic benefits are not quantified to avoid double counting. Nevertheless, the FIRRs of CTC factories are estimated to indicate the viability of these factories and the results are set out in Table 2. The FIRRs calculated for the sample factories exceed 16 percent, indicating that the establishment of CTC factories is a financially viable proposition.

Table 2: Financial Rates of Return - Tea Factory Development CTC Projects (SLRs '000)

Company	Factory	Total Project Cost	Average Annual Output ('000 kg)	Peak Annual Revenue	Peak Recurrent Costs	FIRR (%)
Watwala	Strathpon	25,000	1,200	86,400	75,600	21.64
Balangoda	Spring Valley	37,500	1,500	108,000	94,500	17.81
Kahawatte	Kataboola	27,700	2,000	144,000	126,000	33.12
Talawakele	Holyrod	23,500	900	64,800	56,700	16.99
Elpiliya	New Peacock	22,200	1,500	108,000	94,500	30.92
	Dunsinane	22,300	1,500	108,000	94,500	30.75
Madulsima	Koeberry	14,700	620	44,640	39,060	18.86
Kegalle	Gampaha	11,500	800	57,600	50,400	31.87
Kotagala	Mt. Vernon	38,000	1,800	129,600	113,400	21.34

Assumptions:	1st year capacity	-	80%
	2nd year onwards	-	90%
	Price finished product	-	SLRs80/kg
	Cost of green leaves	-	SLRs10/kg (at 4 times volume of output)
	Manufacturing costs	-	SLRs27/kg output
	Permanent working capital	-	two months operating costs and inventories

2. Regional Plantation Companies

23. The relative viability of the subprojects as set out in Table 1 implies that the profitability of the RPCs depends greatly on their crop mix. Companies that have solely coconuts or rubber, or relatively large ares under these crops are potentially profitable. The profitability of companies with solely or relatively large areas of tea is mixed, depending on the elevation of the tea estates. Companies with relatively more tea estates in the mid-country area will tend to be less profitable. However, the potential profitability of RPCs can be improved with a well-selected package of subprojects, including a diversification program.

24. Specific details of the proposed rehabilitation programs of RPCs will only be known during Project implementation. Financial analysis is done for three RPCs, which have submitted their proposed package of subprojects (Table 3) to indicate the potential viability of these companies. The FIRRs of about 19 percent indicate that RPCs can become financially viable with good management and selection of appropriate packages of subprojects.

Table 3: FIRRs of Representative RPCs

RPC	Crops	Location	FIRR(%)
Agarapatanu	Tea only	High country	19.14
Kelani Valley	Tea and rubber	Mid-country	20.04
Kurunegala	Coconut and rubber	Low country	19.02

3. Overall Project

a. Project Benefits

25. In the replanted and existing immature tea areas, average yields will increase by 8-35 percent, while in the in-filled areas average yield increases will be 24-63 percent. The yield increase in replanted rubber and coconut lands will be 25 percent and 100 percent, respectively. The increase in yield is due to the planting of high-yielding varieties and use of recommended inputs.

26. The Project will generate an annual average incremental production of 5,214 tons (t) of tea, 6,725 t of rubber, and 3,400 t of copra, which gives an earning of $15.5 million from export of the surplus. The Project will also produce 898,000 cubic meters (m^3) of timber/fuelwood (see Table 4).

27. The tree crop development activities of the Project alone will generate additional employment of over 12.5 million person-days.

28. The Project will train 1,800 managerial and supervisory staff in technical and management subjects. About 6,800 surplus workers will be provided with skills and initial capital for self-employment. The Project will also rehabilitate about 35,000 existing houses and provide them with supporting infrastructure.

b. Project Viability

29. The FIRR and EIRR are estimated for the overall Project and the tea, rubber, and coconut components (see Table 5). The results indicate that the Project is viable with FIRR at 19.52 percent and EIRR at 22.54 percent. All three components of the Project are financially and economically viable with a rate of return above 12 percent.

Table 4: Quantitative Benefits of the Project

	Area Covered by the Project (ha)	Yield Increase: Without Project Yield (kg/ha)	Yield Increase: With Project Yield (kg/ha)	Increase in Yield (%)	Incremental Annual Production	Incremental Exports: Volume (t)	Incremental Exports: Value ($'000)	Incremental Employment Generation: Unit	Incremental Employment Generation: '000 person-days
Tea Replanting									
High country	580	1,935	2,616	35	1,489	1,489	-	3,169	1,838
Mid-country	220	1,875	2,034	8	451	451	-	3,169	697
Low country	220	1,988	2,620	32	510	510	-	3,169	634
Tea In-filling									
High country	1,447	945	1,269	34	532	532	-	1,777	2,571
Mid-country	549	899	1,115	24	181	181	-	1,777	976
Low country	499	870	1,423	63	185	185	-	1,777	886
Upkeep of Immature Tea									
High country	204	1,935	2,567	33	524	524	-	875	179
Mid-country	298	1,875	2,048	9	610	610	-	875	261
Low country	287	1,988	2,552	28	732	732	-	875	251
Rubber Replanting	2,040	1,246	1,556	25	3,174	2,539	-	1,206	2,460
Upkeep of Immature Rubber	2,282	1,000	1,556	56	3,551	2,841	-	640	1,460
Coconut Replanting[a]	930	3,000	6,400[b]	100	78	16	-	340	316
Diversification	100	-	-	-	-	-	-	175	18
Reforestation	3,590	-	250 m^3	-	898,000 m^3	-	-	510	1,831
Tea (t)	-	-	-	-	5,214	5,214	9,958	-	8,293
Rubber (t)	-	-	-	-	6,725	5,380	5,757	-	3,920
Copra (t)	-	-	-	-	3,400	320	86		316
							15,801[c]		**12,529**

[a] Coconut production in number of coconuts per unit and in million for total production and export volume.
[b] Present density is 40% of the recommended, and the varieties are low-yielding, indigenous varieties. Under replanting, high-yielding TxT varieties will be planted.
[c] Price FOB, Colombo, 1995. Per kilo of tea at $1.91, rubber at $1.07, copra at $0.27.

Table 5 : Results of Financial and Economic Analysis

Item	FIRR (%)	EIRR (%)
Overall Project	19.52	22.54
Tea Component	19.81	23.48
Rubber Component	24.18	25.56
Coconut Component	14.83	19.56

c. Sensitivity Analysis

30. Sensitivity analysis was undertaken to indicate the effect of adverse conditions on the economic viability of the Project and the three components. The analysis was done for increase in project cost, reduction in benefits (due either to a reduction in yield or decrease in price), an increase in operating cost (due possibly to increase in wages); a combination of increase in cost and reduction in benefits, and delays in realization of benefits. Sensitivity indicators were calculated to indicate the sensitivity of the Project to changes (see Table 6).

Table 6: Results of Sensitivity Analysis
EIRR (%)

Item	Overall Project	Components		
		Tea	Rubber	Coconut
Base Case	22.5	24.5	25.6	19.6
10% Increase in Project Costs	20.1	21.2	20.7	18.2
Sensitivity Indicator	1.1	1.0	1.9	0.7
10% Decrease in Revenue	21.5	22.7	22.4	17.9
Sensitivity Indicator	0.5	0.3	1.3	0.8
10% Increase in Operating Cost	20.8	21.8	21.4	19.1
Sensitivity Indicator	0.8	0.7	1.7	0.2
10% Increase in Capital Cost and 10% Decrease in Revenue	19.3	20.4	19.8	16.7
1-year Delay in Benefits	19.7	19.4	18.8	17.6
2-year Delay in Benefits	16.1	16.8	16.1	15.8

31. The sensitivity tests indicate that the Project is more sensitive to changes in Project cost than changes in benefits or operating cost. Nevertheless, the Project EIRR remains at 19.3 percent even when the Project simultaneously experiences a cost increase and a decrease in revenue. The Project is sensitive to delays in realization of benefits, but the EIRR will remain at 16 percent even if there is a two-year delay in benefit realization. The analysis also indicates that although the rubber component has the highest EIRR, it is also the most sensitive to adverse changes in Project cost and revenue.