Document of

The World Bank

FOR OFFICIAL USE ONLY

CR 1954-CV

Report No. P-4749-CV

MEMORANDUM AND RECOMMENDATION

OF THE

PRESIDENT OF THE

INTERNATIONAL DEVELOPMENT ASSOCIATION

TO THE

EXECUTIVE DIRECTORS

ON A PROPOSED CREDIT

OF SDR 3.5 MILLION

TO THE REPUBLIC OF CAPE VERDE

FOR AN

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

August 19, 1988

CURRENCY EQUIVALENTS
(As of July 1988)

Currency Unit = CV Escudo
US$1 = CV Esc. 69.30
CV Esc. 1 million = US$14,430

WEIGHTS AND MEASURES

One Kilovolt (kV)	=	1000 Volts
One Megawatt (MW)	=	1000 Kilowatts (kW)
One Gigawatt hour (GWh)	=	1 million kilowatt hours (kWh)
One barrel (bbl)	=	0.16 cubic meter
One ton of oil equivalent (toe)	=	About 7 bbl of crude oil
One meter (m)	=	3.28 feet (ft.)
1 kilometer (km)	=	0.62 mile (mi.)
1 metric ton (t)	=	2.205 pounds (lbs)

ABBREVIATIONS AND ACRONYMS

BCV	=	Bank of Cape Verde
ELECTRA	=	National Power Company
ILO	=	International Labor Organization
INIT	=	National Institute of Technological Research
MIE	=	Ministry of Industry and Energy
MPW	=	Ministry of Public Works
TRANSCOR	=	National Transport Company

FISCAL YEAR

January 1 - December 31

REPUBLIC OF CAPE VERDE

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

CREDIT AND PROJECT SUMMARY

Borrower:	The Republic of Cape Verde
Beneficiaries:	Transcor Electra Ministry of Public Works Private Sector Transport Operators
Amount:	SDR 3.5 million (US$4.7 million equivalent)
Terms:	Standard, with 40 years maturity
Relending Terms:	The Government would relend 12% of the credit (US$0.6 million) to Transcor at the prevailing Bank interest rate for 12 years including 2 years of grace and 49% of the credit (US$2.3 million) to Electra at the prevailing Bank interest rate (currently 7.59%) for 25 years including 5 years of grace. Transcor and Electra would bear the foreign exchange risk on that amount of the Credit. An amount of US $0.9 million equivalent (19% of the Credit) to finance technical assistance, studies, a workshop, and training would be passed on to Transcor and Electra as Government equity.

		US$ Million
Financing Plan:	Government	0.4
	IDA	4.7
		5.1

Economic Rate of Return: Over 25% on the new workshop and road maintenance components

Staff Appraisal Report: Not applicable

MAP: IBRD: 20561

MEMORANDUM AND RECOMMENDATION OF THE PRESIDENT OF THE INTERNATIONAL DEVELOPMENT ASSOCIATION TO THE EXECUTIVE DIRECTORS ON A PROPOSED CREDIT TO THE REPUBLIC OF CAPE VERDE FOR AN INTRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

1. The following Memorandum and Recommendation on a proposed development credit to the Republic of Cape Verde for SDR 3.5 million (US$4.7 million equivalent) is submitted for approval. The proposed credit would be on standard IDA terms with 40 years maturity and help finance an infrastructure rehabilitation and technical assistance project.

Background

2. Transport. Cape Verde comprises ten small islands scattered within a radius of about 100 miles and has a population of 350,000. Transport plays an essential role in facilitating the movement of people and goods, and fostering the economic integration of the islands. The productivity of the transport sector, however,is low because of weak management, over-staffing, outdated regulations, and controlled prices. The Government has recognized the importance of increased sectoral efficiency for the economy and has requested Bank assistance. In the port subsector, IDA is financing the Praia Port Project that has strongly contributed to improved port management, particularly in the areas of accounting and maintenance.

3. Assistance is also needed in the short term to increase the efficiency of road transport and to strengthen the Government's road maintenance capabilities. Land transport operates under archaic and restrictive regulations that have given the rights to exclusive operation for transport of passengers in two of the most populated islands to a public company (Transcor) and have limited private sector access to transport of passengers in other islands as well as freight transport in general. Promoting competition implies rescinding Transcor's special status on the islands of Santiago and Sao Vincente. At the same time, Transcor will need to be strengthened to make it more efficient and capable of competing with the private sector. Transcor's management has improved in recent years, but it faces a number of problems, such as insufficient fleet size, low fares, Government interference, lack of spare parts and the limited capacity of its workshop, which need to be addressed.

4. The highway network of some 940 km is sufficiently developed to accommodate the road transport needs of the country. However, regular maintenance of the network is not carried out for lack of expertise, spare parts and materials, leading to a gradual deterioration of the sizeable capital investment in the road system. This is of particular importance given that the topography of the islands makes road construction difficult and costly.

5. Electric Power. Electricity, which relies totally on imported petroleum fuels, plays an essential role in the country, especially in the production of water (through desalination), which is perhaps Cape Verde's scarcest natural resource and is a major bottleneck to the country's development. Cape Verde, however, will only now be preparing a master plan for the power and water sectors with financing from the Project Preparation Facility and from the proposed credit. The master plan will determine the optimal power generation and water production and distribution systems for each of the islands, taking into account different generation methods using diesel, steam and gas turbines as well as wind energy and geothermal energy sources.

6. Before undertaking large investments in the power and water sectors, however, there is a need to strengthen the local utility, Electra. It is currently operating at an overall loss and is being subsidized by the Government. Electra does not keep separate accounts for its water and power operations, but because of the high cost of water production, it is believed that power operations are subsidizing water activities. With Italian technical assistance, it has reviewed its accounting, inventory management, and control systems and has designed new systems which will separate the accounting of power and water operations. Electra now needs technical assistance in implementing the new systems, in reducing its accounts receivables which accounted for about six months of sales and reducing its very high technical and non-technical power losses from their current level of 38% to more normal levels of 12-15%. Similarly, water losses need to be reduced and a water supply project is currently under preparation that would aim at reducing the high losses and promote efficient utilization of the country's water resources, through rational pricing of services. With an advance from the Project Preparation Facility, a tariff study for the water sector is currently being implemented. A similar study for the power sector will be undertaken under the proposed project.

7. Rationale for IDA Involvement. Faced with overwhelming natural odds against it, the Government of Cape Verde has managed its economy prudently and has persistently expressed its interest in obtaining IDA's advice and financial support. IDA is financing studies in the water and power sectors that would lead to a definition of investment programs and policies. The proposed project would further IDA's current development strategy for Cape Verde which emphasizes institution building, a greater role for the private sector, aid co-ordination and direct investments to high priority projects .

8. Project Objectives. The main objectives of the project are to improve the efficiency of the transportation and power sectors, support private sector development, strengthen local institutions, examine the possibility of developing indigenous sources of energy, and preserve the capital investment already made in the country's road network.

9. Project Description. The project comprises elements of policy reform as well as investment. Policy reforms would focus on modification of the institutional framework to eliminate the restrictive regulations in the transport sector, and support rationalization of transport and power tariffs, including eliminating any subsidies and price controls. On the investment side, the project would make foreign exchange available to finance purchase of buses, vehicles and spare parts for Transcor and the private sector plus construction of a new workshop for Transcor. The project would also finance the purchase of transformers, conductors, meters and other equipment including generating equipment for reducing losses and rehabilitating Electra's plant. In addition, the project would finance urgently needed technical assistance and studies to help strengthen Transcor and Electra, as well as the road maintenance unit in the Ministry of Public Works in areas of management information and planning.

10. The project, to be implemented over 3 years, is estimated to cost US$ 5.1 million equivalent, with a foreign exchange component of US$4.7 million (92%). A breakdown of costs and the financing plan are shown in Schedule A. Amounts and methods of procurement and disbursement, and disbursement schedule are shown in Schedule B. A timetable of key project processing events and the status of Bank Group Operations in Cape Verde are given in Schedules C and D, respectively. A map is also attached. More

detailed information on the proposed project is provided in Annex I and contained in the documents listed in Annex II.

11. Agreed Actions. The Government has agreed on the following actions: (a) effectively eliminate Transcor's status as exclusive land transport operator in Praia and San Vincente and Government subsidies to it not later than December 31, 1989; (b) eliminate all Government control of prices in the land transport industry by June 30, 1989, except for the taxi service industry; (c) prepare a corporate strategic plan covering the next five years and a management information system to control costs not later than June 30, 1989; (d) prepare and furnish to the Association for its review a draft performance contract between the Government and Transcor not later than September 30, 1989; (e) sign a performance contract between the Government and Transcor acceptable to the Association not later than December 31, 1989; (f) design and implement all actions needed to improve Transcor's management, including restructuring of its tariffs not later than September 30, 1989; (g) eliminate restrictive government licensing practices in the transport sector, except those justified on technical and safety grounds by June 30, 1989; (h) submit annually to the Association for review and comment the draft work program and budget for operation of the equipment used for road maintenance works; (i) implement a new accounting, inventory management and control system for Electra by December 31, 1989; (j) reduce receivables of Electra to an average level of five months of electric power sales not later than December 31, 1989, and provide a plan by that date to reduce them to a level of three months by December 31, 1992; (k) implement measures needed to reduce power losses; (l) implement the recommendations of the power sector master plan and power tariff studies; and (m) utilize funds in the counterpart fund account to finance part of the recurrent or capital costs of priority projects in the transport sector. The recruitment of technical assistance for Transcor will be a condition of disbursement for the transport component.

12. Benefits. The main benefits expected from the project are: (i) substantial reduction in the need to import petroleum products for the power sector; (ii) reduction in the costs of power generation and increasing reliability of the system; (iii) higher availability rate of equipment and longer economic life of vehicles; (iv) reduced costs of road reconstruction; (v) reduced vehicle operating costs; (vi) greater autonomy and enhanced capabilities of the public companies, Transcor and Electra; and, (vii) increased productivity and effectiveness of the Ministry of Public Works to maintain the large and costly investments made in the road sector.

13. Risks. The main risk of the project would be the reluctance of the Government and public sector companies to carry out reforms that may be politically difficult, including the removal of subsidies. The Government is already in the process of realizing the benefits of some of these reforms and IDA's continued involvement in the transport and power sectors should ensure that this risk will be minimized.

14. Recommendation. I am satisfied that the proposed credit would comply with the Articles of Agreement of the Association and recommend that the Executive Directors approve the proposed credit.

Barber B. Conable
President

Attachments
Washington, D.C.
August 19, 1988

Schedule A

REPUBLIC OF CAPE VERDE

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

ESTIMATED COST AND FINANCING PLAN

Estimated Costs	Local	Foreign	Total
	(US$ Million)		
1. The Transport Sector 1/			
(a) Purchase of vehicles, spare parts, tires and workshop equipment			
(i) Transcor	0.03	0.53	0.56
(ii) Private Sector	0.02	0.52	0.54
(b) Spare parts and equipment for maintenance of roads	0.03	0.30	0.33
(c) New workshop for Transcor	0.05	0.15	0.20
(d) Strengthening of Transcor's management	0.00	0.10	0.10
Sub Total - Transport	0.13	1.60	1.73
2. The Power Sector			
(a) Distribution material, including transformers, conductors, meters, vehicles and other equipment 2/	0.15	1.90	2.05
(b) Generating unit and spare parts	0.05	0.19	0.24
(c) Technical Assistance, Training and Studies	0.00	0.45	0.45
Sub Total - Power	0.20	2.54	2.74
Base Costs	0.33	4.14	4.47
Physical Contengencies	0.04	0.40	0.44
Price Contengencies	0.03	0.16	0.19
Total Project Costs	0.40	4.70	5.10

Financing Plan	US$ Million
Government	0.4
IDA	4.7
TOTAL	5.1

1/ Project is exempt from taxes and duties.

2/ Exact components to be financed will be known once the loss reduction study is completed. (See Annex 1, para. 17).

Schedule B
page 1 of 2

REPUBLIC OF CAPE VERDE

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

PROCUREMENT METHODS AND DISBURSEMENT

PROCUREMENT METHODS

Project Element	US$ Million			Total
	ICB	LCB	Other (1)	Cost
1. The Transport Sector				
(a) Material, equipment, workshop, and buses (Transcor)	0.50 (0.47)		0.13 (0.12)	0.63 (0.59)
(b) Spare parts and equipment for Road Maintenance			0.37 (0.35)	0.37 (0.35)
(c) Civil Works (Workshop)		0.23 (0.17)		0.23 (0.17)
(d) Material, equipment and vehicles (Private Sector)			0.63 (0.59)	0.63 (0.59)
(e) Technical Assistance			0.12 (0.12)	0.12 (0.12)
Sub Total	0.50 (0.47)	0.23 (0.17)	1.25 (1.18)	1.98 (1.82)
2. The Power Sector				
(a) Material, equipment and Vehicles	2.10 (1.91)		0.47 (0.44)	2.57 (2.35)
(b) Spare Parts			0.06 (0.04)	0.06 (0.04)
(c) Technical Assistance and Studies			0.49 (0.49)	0.49 (0.49)
	2.10		1.02	3.12
Sub Total	(1.91)		(0.97)	(2.88)
	2.60	0.23	2.27	5.10
TOTAL	(2.38)	(0.17)	(2.15)	(4.70)

(a) Figures in parantheses denote IDA financing.

(1) Items procured under "Other" includes vehicles, equipment and spare parts and items procured by the private sector. Lots of homogenous material estimated to cost less than US$100,000 for a total of US$1.0 million will be packaged and procured by international and local shopping after receipt of quotations from a minimum of at least three suppliers from at least two different geographical locations.

DISBURSEMENTS

CATEGORY	AMOUNT (US $ Million)	% of Expenditures to be financed by IDA Credit
1. The Transport Sector		
(a) Material, Equipment, Spare parts and Vehicles (Transcor)	0.53	100% of foreign expenditures
(b) Materials and Spare parts for MPW	0.30	100% of foreign expenditures
(c) Civil Works	0.15	75% of total expenditures
(d) Technical Assistance	0.10	100% of total expenditures
(e) Material, Equipment Spare parts and Vehicles (Private Sector)	0.52	100% of foreign expenditures
2. The Power Sector		
(a) Material, Equipment, Spare parts, and Vehicles	2.09	100% of foreign expenditures
(b) Technical Assistance	0.45	100% of total expenditures
3. Unallocated	0.56	
TOTAL	4.70	

Estimated IDA Disbursements	IDA Fiscal Year 89	90	91	92
	(US$ Million)			
Annual	1.3	2.8	0.4	0.2
Cumulative	1.3	4.1	4.5	4.7

Schedule C

REPUBLIC OF CAPE VERDE

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

Timetable of Key Project Processing Events

(a)	Time taken to prepare:	Six months
(b)	Prepared by:	Government and IDA
(c)	First IDA Mission:	April 1987
(d)	Appraisal Mission Departure:	June 1987
(e)	Planned Date of Effectiveness:	December 1988
(f)	List of Relevant Documents:	None

Schedule D

THE STATUS OF BANK GROUP OPERATIONS IN CAPE VERDE

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

A. STATEMENT OF IDA CREDITS
(As of March 31, 1988)

Credit No.	Fiscal Year of Approval	Purpose	IDA 1/	Undisbursed	Closing Date
			US$ Million (Net of Cancellation)		
1322-CV	83	Praia Port	9.26	3.66	06-30-88
1579-CV	85	Industrial Finance and Promotion	5.67	4.83	12-31-91
1853-CV	88	Primary Education	4.55	4.55	06-30-94
	Total (Net Approved)		19.48		
	of which has been repaid		00.13		
	Total now-outstanding		19.35		
	Total undisbursed			13.04	

1/ The approved, cancellation, and disbursed amounts as taken from accounting have been converted to their US$ equivalents based on the current exchange rate.

REPUBLIC OF CAPE VERDE

INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE PROJECT

A. Project Background and Description

I. THE TRANSPORT SECTOR

1. Cape Verde comprises ten small islands scattered within a radius of about 100 miles and has a population of 350,000. Nine of those islands are inhabited. Settlement of the Cape Verdean islands includes two major urban concentrations at Praia, the nation's capital, and Mindelo, the commercial center, various small towns on the highway network of each island, agricultural settlements in the few fertile valleys, and isolated fishing villages. The transport sector has an essential role to play in facilitating the movement of people and goods, and fostering the economic integration of the islands.

2. The productivity of the transport sector, however, is low because of weak management, over-staffing, outdated regulations, and controlled prices. The Government has recognized the importance of increased sectoral efficiency for the economy and has requested Bank assistance. In the port subsector, IDA is financing technical assistance under the Praia Port Project that has strongly contributed to improved port management, particularly in the areas of accounting and maintenance. More assistance is needed, however, and a second transport project that would address issues such as boosting productivity, strengthening planning capabilities and restructuring pricing policies, particularly in the port, shipping and airline sub-sectors, is now under preparation.

3. In the short term, technical assistance, spare parts and materials are also needed by the road transport industry. Road transport faces two major sets of problems: (a) archaic and restrictive regulations that have given the rights to exclusive operation for transport of passengers in two of the main islands of Santiago and Sao Vicente to a public company (Transcor), and not allowed market forces to operate in the other islands as well as in the business of freight transport; and (b) the large backlog of road maintenance works due to a lack of expertise, spare parts and materials.

4. Although, Transcor's management has improved in recent years, it faces a number of problems ranging from insufficient fleet size, poor vehicle specifications, low fares, lack of cost accounting and management information systems, and Government interference. Its operations are also hampered by a lack of spare parts and the very limited capacity of its existing workshop. A new workshop and spare parts are needed to maintain equipment in operating condition and renewal of equipment is a condition to contain costs. The investments involved are modest and the economic rates of return exceed 25%. The replacement of the older buses would further contribute to the financial rehabilitation of Transcor. Assuming an expansion in private sector involvement in the sector and a moderate 5 percent annual increase in demand

for services, it is estimated that Transcor will need 14 buses over the period of 1988 - 1993. The financial projections show that it would earn a 9.4% return on its fixed assets in 1988 rising to 13% in 1993, provided tariffs are increased in 1988 and adjusted thereafter at a level needed to maintain an operating ratio below 0.9 and a debt-equity ratio of not higher than 30/70. Promoting competition would also be needed to make public transportation more responsive to needs which implies rescinding of Transcor's rights to exclusive operation and strengthening of its management to make it more efficient and capable of competing with private sector. Hence, agreement was reached on the following: (a) effective elimination of Transcor's status as exclusive operator in Praia and San Vincente and Government subsidies to it not later than December 31, 1989; (b) preparation of a corporate strategic plan covering the next five years and a management information system to control costs not later than June 30, 1989; (c) prepare and furnish to the Association for its review a draft performance contract between the Government and Transcor not later than September 30, 1989; (d) sign a performance contract between the Government and Transcor acceptable to the Association not later than December 31, 1989, which will establish performance targets, including an operating ratio no higher than 0.9 and a debt-equity ratio of 30/70, and provision for annual revaluation of fixed assets based on a methodology to be agreed with the Association; and (e) design and implement all actions needed to improve Transcor's management, including restructuring of its tariffs not later than September 30, 1989. The recruitment of technical assistance for Transcor will be a condition of disbursement for the transport component.

5. At the same time, the private sector should be encouraged to play a role in the development of transport services. The current framework provides for: (i) licensing of operators by the general directorate of land transport; (ii) limitations of one vehicle per licensee; (iii) allocation of licenses by administrative units and by areas; and (iv) the control of transport prices by Government. The rationale underlying the policy is to protect transport operators against excessive competition and users against overpricing, to keep job opportunities for those living outside the main urban areas of each island and to maintain acceptable standards of comfort. The system, however, generates inefficiencies. Hence, agreement was reached on elimination of the system of restrictive government licensing practices in the transport sector, except those justified on technical or safety grounds, by June 30, 1989, and except for taxi service, elimination of all Government control of prices in the land transport industry by the same date. Creating conditions for fair competition would imply the elimination of Transcor's subsidies amounting to CV Esc 12.5 million in 1986 and budgeted for CV sc 8 million in 1987.

6. The Ministry of Public Works (MPW) constructs and maintains the highway network. The topographic features make road construction difficult and costly. Nevertheless, the highway network of some 940 km is sufficiently developed to accommodate transport needs and there is not much justification for extension of this network at the present time. Highway maintenance, on the other hand, needs to be organized to protect the sizeable capital investment made in the subsector (road construction costs vary from US $150,000 to US $500,000 per km, depending on the terrain). With ILO assistance, successful labor intensive road programs have been initiated although progress and cost

control have sometimes been impaired by low availability of complementary equipment and spares. Consequently, MPW has been unable to keep pace with maintenance needs, creating a backlog of works that should be handled. Because many components of the network are now 20 years old or more, there will be increasing needs for periodic and routine maintenance for which a specific organization must be set up, and for which technical assistance, equipment rehabilitation and spare parts would be needed. The organization will begin setting up the database for road maintenance planning and measure vehicle operating costs which is not done at the present time. Agreement was reached that the Government would submit annually to the Association for review and comment the draft work program and budget for operation of the equipment used for road maintenance works.

II. THE ENERGY SECTOR

(i) Energy Resources and Consumption

7. Cape Verde's domestic energy resources consist of biomass (fuelwood, charcoal, and agriculture residues), wind, geothermal and solar energy. At the present time, only firewood and biomass for household energy is exploited on a significant scale. This consumption, however, has put severe pressure on the country's sparse vegetation cover and it is now estimated that 70% of the total area of the islands is wasteland. In spite of the impressive progress achieved in the Government's afforestation program, the country's maximum firewood production potential will not be sufficient to meet demand.

8. The wind regime in Cape Verde appears to fulfill most of the conditions necessary for use of this resource. The wind is strong, with an yearly mean wind speed of approximately 7 m/s and largely (95% of the time) from a single direction (Northeast). Tests carried out over a six year period confirms the potential for the use of wind energy to produce electricity. Consultants are preparing an investment proposal that is likely to be financed by DANIDA.

9. Another less important potential source of energy for power generation is the exploitation of geothermal resources on one of the less populated islands (Fogo). A Swedish group initiated a program of drilling stratigraphic wells to investigate the resource, but the program was abandoned. Iceland has now indicated its interest in assisting with evaluation of this resource, but no formal steps have been taken so far.

10. Outside of the traditional fuels, Cape Verde's energy requirements are met entirely by imported petroleum products. In 1984, domestic consumption of petroleum products was 40,000 tons, rising rapidly from 32,000 in 1980 and accounting for an increasing share of foreign exchange earnings. The major fuel users are water desalination plants (14%), power generation (14%), transportation (44%), industry and agriculture (10%) and the residential and commercial sector (18%).

(ii) Energy Sector Organization, Policy and Pricing

11. The overall institutional framework for the sector is adequate. The Ministry of Industry and Energy (MIE) is charged with the planning of supply and distribution of petroleum products, electric power, water desalination, new and renewable energy sources, energy conservation and pricing. It has two major agencies reporting to it: (i) Electra, a government-owned electric power utility; and, (ii) the National Institute for Technology Research (INIT) which is responsible for the transfer and adaptation of available technologies in the field of wind power generation, geothermal energy, biogas and solar energy.

12. The Government's objectives for the sector, as outlined in its Second 5-year Economic Development Plan (1986-1990), are to: (i) minimize the economic cost of energy and increase the reliability of its supply; (ii) combat desertification; (iii) reduce external dependence by developing domestic resources; and (iv) promote the conservation of energy. These objectives can be met by increasing the efficiency of energy use, through improvements in the power plants and distribution networks, popularizing the use of fuel efficient stoves and promoting alternative household fuels, such as LPG and kerosene. On the supply side, efforts need to concentrate on the development of the country's energy resources, the most important of which is firewood but also include wind, solar, and geothermal resources. With the assistance of the Bank-UNDP Energy Sector Management Assistance Program (ESMAP), a study is currently underway that would define a strategy for the household energy sector. The results of this study will be discussed with IDA and a plan of implementation will follow based on this study.

13. The Government as a matter of policy does not favor subsidies for commercial energy. The CIF price of petroleum products is high in Cape Verde due to the large costs associated with the transport and handling of small volumes. Retail prices of petroleum products are set at a level that appear to reasonably reflect economic costs. In the power sector, tariffs were last increased in 1985 and the average tariff was about US$0.19/kwh, with domestic customers paying US$0.24/kwh, which is relatively high.

(iii) The Power Sector

Existing Electricity Supply Facilities

14. Electra, the power utility in Cape Verde, was created in 1982 and is responsible for power and water production and distribution in Praia, the capital, on the island of Santiago, Mindelo on the island of Sao Vicente and the island of Sal. In terms of its technical operations, Electra appears to be well staffed. Electra operates three diesel plants in Praia, Mindelo and Sal with a total installed capacity of about 14 MW. In addition, Electra operates a steam turbine plant at Mindelo with a capacity of 715 kW. Since some of the islands do not have standby capacity, Electra has problems maintaining or rehabilitating its generators. Also, operating out of its headquarters in Mindelo, Electra has the difficult task of providing technical services to some 14 municipalities and towns that generate and distribute power locally using small diesel generator sets. The total capacity operated by the municipalities

amount to about 2.3 MW. Private generation by large consumers amounts to 1.9 MW. Large commercial installations, such as Sal International Airport and Hotel Morabeza in Sal have their own power plants. Given the absence of ground water in Sal and Mindelo, Electra operates a desalination plant in each of these islands.

Power Sector Planning and Development

15. Electricity production and sales in Cape Verde have been growing rapidly and represent a large share of petroleum used in the country. In 1987, electricity sales amounted to nearly 22 GWH or more than 3 times the amount sold in 1981. About 75% of total electricity used is by the residential and commercial sector and the rest by industry. The demand for electricity still exceeds the available supply as reflected in the waiting lists for connections and the relatively low numbers of connections (1 per 10 inhabitants in Praia and Mindelo, and 1 per 31 inhabitants on a country-wide basis). Electricity plays an essential role in the production of water which is perhaps Cape Verde's scarcest resource and a major bottleneck to the country's development. Yet, there is no master plan and investments in the sector have followed a haphazard pattern based on the availability of funds from donors. There is an urgent need for a power master plan that would determine the optimal power generation and water production and distribution systems taking into account not only different generation methods using diesel, steam and gas turbines but also the wind and geothermal energy sources.

16. An advance from the Project Preparation Facility was made in August 1987 that is financing the preparation of a master plan for the water supply sector. Also, funds have been included in the proposed project to finance a power master plan. The power master plan will be combined with the water supply master plan to investigate the economics of steam turbine plants in the islands with water shortage. Terms of reference for the master plans have been agreed with the Government and the studies are expected to be initiated shortly. During negotiations agreement was reached that the results and recommendations of the power master plan will be discussed with IDA before being implemented.

Electra

17. At the end of 1987, Electra had 248 employees. There is a need to strengthen Electra so that it can undertake the large projects envisaged for the power and water sectors. Since its establishment, Electra's accumulation of losses has eroded its share capital, but since most of its expansion was financed through Government contributions (originating from foreign grants), Electra's ratio of debt to equity remains very comfortable at 18/82. The high level of accounts receivable, which at the end of 1987 accounted for about 6 months of electricity and water sales, is partly because of delays in payment by Government agencies and partly because of a weak commercial department. Electra is in need of a corporate development plan and a strategy with regard to its finances. Electra is currently operating at an overall loss and is being subsidized by the Government. Although Electra does not keep separate accounts for its water and power operations, because of the high cost of water

production, it is believed that power operations are subsidizing water operations. With Italian technical assistance, Electra has reviewed its accounting, inventory management, and control systems and has designed new systems which will separate the accounting of power and water operations. Electra now needs technical assistance in implementing the new systems, and in reducing its very high technical and non-technical power losses. Indeed the most economical way to increase electricity supply to the major centers and, at the same time, to reduce its cost is by improving the efficiency of power generation and reducing the losses between generation and sales from their current level of 38% to more normal levels of 12-15%. A water supply project is currently under preparation that would also aim at reducing the high water losses and promote efficient allocation and utilization of the country's water resource through rational pricing of services. Similarly, loss reduction and tariff studies both for the power and water sectors will be undertaken. During negotiations, agreement was reached that the results and recommendations of the power studies will be discussed with IDA prior to their being implemented. Agreement was also reached that the Government and Electra will reduce receivables of Electra to an average level of five months of sales of electric power not later than December 31, 1989, and provide a plan by that date to reduce them to a level of three months by December 31, 1992.

III. PROJECT OBJECTIVES

The Transport Sector

18. The project aims at removing some of the obstacles to greater efficiency of land transport through: (i) a modification of the institutional framework to eliminate the restrictive regulations that go against efficiency and to permit private sector participation; (ii) rescinding Transcor's exclusive right to operate in some of the islands and, at the same time, strengthen Transcor's management to make it more efficient and capable of competing with the new private transporters; and (iii) helping strengthen the road maintenance organization.

The Power Sector

19. The objectives of the power component are to: (i) improve the efficiency of the energy sector; (ii)reduce costs of electricity ; (iii) promote indigenous sources of energy; and (iv) strengthen local institutions within the energy sector.

IV. PROJECT DESCRIPTION

Transport.

20. The following will be provided for in the transport sector:

(i) purchase of new vehicles, including buses, minibuses and pickups, spare parts, tires and workshop equipment for both Transcor and the private sector;

(ii) technical assistance and spare parts for the Ministry of Public Works for road maintenance;

(iii) construction of a new workshop for Transcor; and

(iv) technical assistance to strengthen Transcor's management.

Power

21. The following would be provided for in the power sector:

(i) purchase of transformers, conductors, meters, vehicles, and other materials and equipment needed to reduce losses;

(ii) purchase of a generating unit, spare parts and materials that would permit the rehabilitation and maintenance of existing units; and

(iii) technical assistance, power master plan, tariff studies and training to strengthen Electra.

B. PROJECT ADMINISTRATION

(a) Project Execution and Credit Administration

22. Project implementation will be the responsibility of the Ministry of Public Works and Transcor for the transport component and Electra, for the power component. Part of the proceeds of the proposed credit in foreign exchange to be used by private operators in the transport sector in exchange for Escudos would be made available as a grant to the Banco de Cape Verde (BCV) under a subsidiary agreement between the Borrower and BCV with BCV having overall responsibility for administration of those funds. Only goods for the transport sector would be eligible. Local currency counterpart funds generated by the sale of foreign exchange provided by the Credit would be deposited into a counterpart fund account in the BCV. Agreement was reached that those funds would be utilized to finance part of the recurrent or capital costs of priority projects in the transport sector. A small project unit will be established in the Bank of Cape Verde for purposes of project coordination. The completion date for the project is expected to be June 30, 1991.

(b) Procurement

23. The procurement arrangements for each of the components are shown in Schedule B. Procurement of vehicles, spare parts, materials and workshop equipment with respect to each contract estimated to cost the equivalent of US$100,000 or more will follow procedures set forth in Sections I and II of the Guidelines for Procurement under IBRD loans and IDA credits (May 1985 edition). Miscellaneous equipment, tools and vehicles, estimated to cost less than the equivalent of US $100,000 for a total of US$1.0 million will be packaged and

procured by international and local shopping after receipt of quotations from at least three or more suppliers from a minimum of two different geographical locations. Procurement by the private sector will be in accordance with procedures followed by the Bank of Cape Verde (BCV). Contracts for amounts over US$100.000 equivalent would be subject to prior review. Consultants and technical assistance personnel to be financed by IDA would be appointed in accordance with Bank group guidelines and would be employed on terms and conditions satisfactory to IDA.

(c) Disbursement

24. Because the project covers two sectors and will essentially finance imports of vehicles, materials and equipment, existing disbursement profiles cannot be used. The proposed credit is expected to be disbursed by December 31, 1991. Special accounts will be opened at the BCV where funds would be deposited. The initial deposits by the Association would be for a total equivalent to $550,000. Agreement was reached at negotiations with Government on the respective allocation of the credit proceeds to buses, vehicles and spare part purchases. The construction cost of the workshop will be financed retroactively ($200,000). The contract was awarded after the visit of the appraisal mission and the procedures followed are acceptable to IDA.

(d) Accounts and Audit

25. During negotiations, agreement was reached that BCV will maintain records and separate accounts in respect of the project and have these accounts and Statements of Expenditures (SOE) audited each fiscal year by auditors acceptable to the Association. To that effect, BCV will maintain accounting records and supporting documents that will, in particular,include the import licenses and proofs of purchase submitted to BCV by the credit beneficiaries. In addition, under Cape Verdean law, Transcor and Electra's accounts are certified by the Ministry of Finance. The scope of this audit, however, does not meet the IDA's auditing standards. Therefore, agreement was reached with the Government that Transcor and Electra would be required to have all audits be conducted according to auditing standards satisfactory to and by a qualified independent auditors acceptable to IDA. The audited accounts and the auditors report would be submitted to IDA within six months following the end of the fiscal year.

(e) Reporting

26. The BCV will be required to submit quarterly reports on the progress of project implementation, including the implementation of Transcor's performance contract. The BCV will prepare the project completion report.

Annex 2

Republic of Cape Verde

Infrastructure Rehabilitation and Technical Assistance Project

Documents Available in the Project File

Reference Nos

1. Empresa Publica de Electricade e Agua, E.P., Relatorio Exercicio, 1985, 1986 and 1987.

2. Empresa Publica de Electricidada e Agua, Orcamento, 1987 and 1988.

3. Electra - Financial Situation - Memo of July 23, 1987.

4. Cape Verde - Issues and Options in the Energy Sector (Energy Assessment), August 1984.

5. Cape Verde - Second Five Year Economic Development Plan (1986-1990).

6. Assessment of Wind Energy Potential for Electrification in Cape Verde - Phase I, RISO National Labortory, and UNDP.

7. Bilateral Project between Cape Verde and the Netherlands "Renewable Energies" Final Report Phase II, 1981-1984.

8. A note on the power production and fuel savings from the wind turbines at Praia, Cape Verde Islands, 1985, Riso National Labortory.

9. Reinforcement of Capacity of Palmeira Power Station (Phase II) - Bidding Documents.

10. Detailed financial and economic evaluation of the transport component - Memo of November 10, 1987.

11. Estatutos de Electra - April 17, 1982.

12. Decreto - Lei no.11 78 of February 18, 1978 on Public Enterprises.

13. Boletim Ofical - N. 52 - (12-26-1966) - Diploma Legislativo - N. 1633 - Regulamento de transportes en automoveis.

14. Boletim Ofical - N. 10 (9-10-1975) - Decrete lei 7D/75 (amendment to diploma legislativo N. 1633).

15. Boletim N. 52 - (12-31-1979) Decreto lei 156/79 Creating Transcor.

16. Boletim N. 20 (5-17-1980) Partaria 38/80 with Transcor's Statutes.

17. Transcor - Documents de gestao previsional de exercicio, 1987.

18. Transcor - Summary Financial Statements - 1986.

19. Transcor - Projecto de Renonacao ampliada do parque.

20. Transcor - Plano para 1987 - 1990.

21. Cape Verde Transport Sector Review, 1987.

CAPE VERDE
INFRASTRUCTURE REHABILITATION AND TECHNICAL ASSISTANCE
Road Transport and Electric Power