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Acting as Administrator of the Interim Trust Fund

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Report No. P 7221-GUB

MEMORANDUM AND RECOMMENDATION  
OF THE  
MANAGING DIRECTOR  
TO THE  
PRESIDENT OF THE  
INTERNATIONAL DEVELOPMENT ASSOCIATION  
ON A  
PROPOSED INTERIM FUND CREDIT  
IN AN AMOUNT OF SDR 15 MILLION  
TO  
THE REPUBLIC OF GUINEA-BISSAU  
FOR A  
WATER AND ENERGY PROJECT

May 18, 1998

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## CURRENCY EQUIVALENTS

Currency Unit	=	CFA Franc
US\$1.00	=	580 CFAF (As of May 1998)

FISCAL YEAR January 1 to December 31

## WEIGHTS AND MEASURES

1 meter	=	3.28 feet
1 hectare	=	2.47 acres
1 kilometer	=	0.625 miles
1 liter	=	0.220 Imperial gallons
1 Imperial gallon	=	4.545 liters
1 cubic meter	=	220 Imperial gallons

## ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
AFD	<i>Agence Française de Développement</i>
AGEOPPE	<i>Agência Guineense de Execução de Obras de Interesse Público e Promoção de Emprego</i> (Public Works Executing Agency)
BOAD	West African Development Bank ( <i>Banco Oeste-Africano de Desenvolvimento</i> )
EAGB	<i>Electricidade e Águas de Guiné-Bissau</i> (Electricity and Water Utility of Guinea-Bissau)
EDI	Economic Development Institute
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environment Monitoring Plan
GDP	Gross Domestic Product
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDA	International Development Association
KfW	<i>Kreditanstalt für Wiederaufbau</i>
NCB	National Competitive Bidding
MDRRNA	<i>Ministério do Desenvolvimento Rural, Recursos Naturais e do Ambiente</i> (Ministry of Rural Development, Natural Resources and Environment)
MEIRN	(Former) <i>Ministério da Energia, Indústria e Recursos Naturais</i> (Former Ministry of Energy, Industry and Natural Resources)
MESTC	<i>Ministério do Equipamento Social, Transportes e Comunicação</i> (Ministry of Social Infrastructure, Transport and Communication)
NGO	Non-Governmental Organization
PPF	Project Preparation Facility
PROMAS	<i>Programa de Melhoramento de Água e Saneamento</i> (Project Preparation Unit: Water and Sanitation Program)
SEE	<i>Secretariado do Estado da Energia</i> (Secretary of State for Energy)
SNEAS	<i>Sociedade Nacional de Energia, Água e Saneamento</i> (National Company for Energy, Water and Sanitation)

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**REPUBLIC OF GUINEA-BISSAU  
WATER AND ENERGY PROJECT**

**INTERIM FUND CREDIT AND PROJECT SUMMARY**

<b>Borrower</b>	Republic of Guinea-Bissau
<b>Beneficiaries</b>	Asset-holding management company (SNEAS), Water and Electricity Utility, Ministry of Rural Development, Natural Resources and Environment (MDRRNA), Secretary of State for Energy (SEE)
<b>Poverty category</b>	Program of Targeted Intervention
<b>Amount</b>	SDR 15 million (US\$20.25 million equivalent)
<b>Commitment Fee</b>	0.5% on undisbursed credit balance, beginning 60 days after signing.
<b>Terms</b>	Standard IDA with forty years maturity.
<b>Financing Plan</b>	See Schedule A
<b>On-Lending:</b>	US\$20.25 million equivalent of the Interim Fund Credit would be provided by the Government to SNEAS, of which 50% (US\$10.125) would be on-lent at IBRD terms (20 years including 5 years of grace at an annual interest of 7 %), 50% would be provided to SNEAS in the form of equity.
<b>Economic Rate of Return:</b>	The ERR of the Water component is 52%, while the ERR for the Energy component is 92%.
<b>Staff Appraisal Report:</b>	17325-GUB
<b>Map:</b>	IBRD No. 22943
<b>Project I.D.:</b>	GW-PE-1012

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**MEMORANDUM AND RECOMMENDATION OF THE MANAGING DIRECTOR  
TO THE PRESIDENT OF THE INTERNATIONAL DEVELOPMENT ASSOCIATION  
(THE ASSOCIATION ACTING AS ADMINISTRATOR OF  
THE INTERIM TRUST FUND)  
ON A PROPOSED INTERIM FUND CREDIT  
TO THE REPUBLIC OF GUINEA-BISSAU  
FOR A WATER AND ENERGY PROJECT**

1. I submit for your approval the following memorandum and recommendation on a proposed development credit to the Republic of Guinea-Bissau for SDR 15 million, the equivalent of US\$20.25 million, on standard IDA terms with a maturity of 40 years, to help finance a Water and Energy Project. Of this amount, 50% (US\$10.125) would be on-lent by the Government to an Asset Holding Management Company (SNEAS) at IBRD terms (20 years including 5 years of grace at an annual interest of 7%), and 50% would be provided to SNEAS in the form of equity. The water and electricity sector would contribute with US\$1.5 million equivalent; cofinanciers (BOAD and AFD) would contribute with US\$8.5 million equivalent towards the energy component, and the Dutch cooperation would finance a US\$2.5 million traditional energy component.

2. **Sector Background.** A public enterprise, the Electricity and Water Company of Guinea-Bissau (EAGB) is in charge of both water and electricity supply and distribution in the city of Bissau. EAGB's Board of Directors is composed of representatives of the Ministry of Finance, the Ministry of Rural Development, Natural Resources and Environment (MDRRNA), and representatives of employees of EAGB, the Chamber of Commerce, the Municipality of Bissau, and the Director General of EAGB. Policy directives are set by MDRRNA for the water sector, and the Secretary of State for Energy (SEE) for the energy sector. The Board approves policies, major investment plans, and borrowing, as well as water and electricity tariffs. This approval process has not worked well in the past and there have been many delays that have had a negative impact on the functioning of the utility.

3. EAGB was created in 1983 to be in charge of water and electricity production and distribution for the country. In practice EAGB only serves the capital, Bissau, with MDRRNA being responsible for electricity and water in the secondary cities. In 1991, EAGB entered into a profit-sharing arrangement with a consortium consisting of Electricité de France (EDF) and Lyonnaise des Eaux (LYSA) to run electricity and water supply operations in Bissau under a performance-based management contract, which was in effect until July 30, 1997. In spite of recent improvements in the company's administration, maintenance and distribution, the performance of EAGB under the contractual arrangement with EDF/LYSA has, on the whole, been less than satisfactory. There has been very little investment in the sectors in the past five years. Production and distribution of both water and electricity remain far below demand and are of deteriorating quality. There are enormous losses in both sectors due to fraud and technical problems. The tariff schedule is not coherent with inflation or the cost of gasoil. The Government is in arrears in paying its bills to the utility. Weak commercial management (lack of computerization of clients, lack of street names and addresses, lack of meters for water and difficulties in cutting service to clients who do not pay their bills) combined with poor personnel management (relatively unskilled and under-motivated staff) have only added to the problems of the utility. Poor quality services have exacerbated poor revenue collection systems, with the result that EAGB is currently undergoing a severe cash flow crisis, thereby putting in question its

short-term viability. The performance and management problems of the utility have also resulted in the withdrawal of other donors from both sectors.

4. Currently EAGB has about 5,000 customers for water (4,000 legal and 1,000 illegal connections) and about 12,000 customers for electricity. In 1994, the price for water was US\$0.19/m<sup>3</sup>, barely covering half of production costs, and revenues from water contributed less than 11% to EAGB's turnover of US\$10 million. The Government, however, instituted a tariff increase and, in December 1996, prices stood at US\$0.29/m<sup>3</sup>. The price for electricity currently is US\$0.31/kWh.

5. **Water Sector.** The capital city of Bissau currently has a basic water supply infrastructure inherited from the colonial period which covers the center of Bissau and some limited extensions in the urban fringes. However, this distribution network was built more than 30 years ago and has not been significantly rehabilitated. In 1992, of the over 200,000 people who lived in Bissau, less than 20,000 inhabitants had direct access to drinking water through unmetered private connections, while another 25,000 residents obtained safe water from 50 public standpipes. For the remainder of the population, water supply is either unreliable, unsafe or distant. In areas without pumped water supply, the population draws highly contaminated water from shallow wells. In the absence of meters, daily water production in Bissau is estimated to be around 17,000 m<sup>3</sup> with a total storage capacity of 1,180 m<sup>3</sup> which is insufficient to satisfy daily peak demand. Approximately 70% of the total quantity pumped from groundwater sources is lost through leakage and illegal connections. Although pumped water is of good chemical and bacteriological quality, it is distributed without any treatment and thus does not protect consumers against accidental water contamination. The irregularity of water supply in Bissau is in large part due to frequent power cuts which disrupt pumping of water. The problems in the water sector translate directly into low productivity among the population, including frequent absenteeism due to sickness, and high medical expenses.

6. **Energy Sector.** Peak demand for electricity is estimated to be about 15MW but the available units in EAGB have the capacity to produce 11.8MW, i.e. about 2/3 of total demand. Unable to properly maintain the facilities due to cash flow difficulties, EAGB was able to produce a mere 6.85MW in May 1996. This low rate of production (compounded with high inefficiency of the system with 40% losses) is insufficient to meet daily average demand for electricity, let alone demand during peak times. The consequences are frequent black-outs or load shedding, which can last from several hours to many days. Customer dissatisfaction with the service only serves to exacerbate already existing problems of revenue collection, with the result that EAGB has been living under a constant cash flow crisis.

7. The problems of the electricity sector in the country have negatively impacted industrial and commercial activities. An unreliable supply of electricity damages equipment, disrupts economic activity, and deters investments. In many cases, employers have had to resort to buying their own generators in order to continue economic activity, at high economic cost--an entrepreneur using a generator pays US\$0.43/kWh, higher than the average tariff of US\$0.31/kWh charged by EAGB for industrial and commercial consumers. As for the environment, poor maintenance of the plant has led to serious consequences. Oil coming from the diesel engines and from the reservoirs has been leaking into the soil and damaging the environment around the plant. As a consequence, water, fish and agricultural land producing vegetables have been contaminated. It is estimated that 10% of the fuel and grease oil used by the engines leaks into the soil. In addition, the waste water and oil waste are discharged without

treatment in two open sewers going into the adjacent rice growing fields. Noise and vibrations from the machines and gas pollution from the two generators also negatively affect surrounding neighborhoods. Finally, there are fire hazards in the plant and no safety measures to deal with them.

8. Traditional fuels (fuelwood and charcoal) represent an estimated 95% of the total national energy consumption. The household sector is responsible for more than 85% of the total consumption of both fuelwood and charcoal. Rural consumption of fuelwood has been estimated at some 480,000 tons per year, and urban consumption of fuelwood and charcoal at 70,000 and 20,000 tons respectively. Total consumption of traditional fuels is estimated to represent the harvesting of some 740,000 tons per year. While rural consumption of traditional fuels represents the lion's share of consumption, the supply of the urban markets represents an environmental threat to Guinea-Bissau's environment and forest as it entails the intensive harvesting of forest in geographically concentrated areas.

9. **Pluvial Drainage.** There are five underground collectors for storm water drainage under the main streets in the center of Bissau. Due to the lack of regular maintenance, however, they are clogged with garbage and sand. The negative effects of this can be clearly illustrated by the case of Bandim market, the largest market in Bissau. The drainage canals around the market are choked with garbage, human waste and waste water from the surrounding neighborhoods, yet the merchants use water from these same drainage canals to wash their vegetables and fruits. Although newly paved urban roads are usually designed with lateral open concrete channels, during rainy seasons, flooding is frequent since the capacity of the drainage network is neither sufficient nor adequately maintained. Bissau suburbs are substantially under-equipped with drainage infrastructure. In areas with steep slopes, erosion is a problem due to the high intensity of storms and the absence of protective vegetation.

10. **Project Objectives.** The overall *development objectives* of the project are: (i) to alleviate the effects of poverty and improve health by increasing access to safe and affordable water and sanitation; (ii) to ensure reliable and affordable supply of water and electricity for economic growth; (iii) to ensure sustainability by improving water pricing and electricity tariffs for cost recovery and developing the Government's regulatory and planning capacity in these sectors. *Specific project objectives* are: (i) to carry out institutional reform in the water and electricity sectors; (ii) to build institutional capacity by strengthening the Ministry of Rural Development, Natural Resources and Environment (MDRRNA) and the Secretary of State for Energy (SEE); (iii) to provide reliable and potable water supply in Bissau and secondary centers on a sustainable basis through cost recovery, and improve the pluvial drainage system in Bissau; and (iv) to enable the energy sector to supply an economic and reliable supply of electricity to the largest number of people, and thus support the conditions for sustainable economic growth.

11. **Project Description.** The proposed operation has four components:

(a) **Institutional Reform and Capacity Building** (base cost US\$5.62 million). This component comprises: (i) technical support to the Government in hiring a new private operating company for the utility through international competitive bidding; (ii) financial and technical assistance to the Government to operate and manage the utility during the transition period, August 1997 to June 1998, including assistance to carry out the liquidation of EAGB; (iii) technical, legal and financial support for the creation of the asset-holding management company, SNEAS, and for its operation during the first two and a half years of project life; (iv) training,

studies and technical assistance; (v) equipment (vehicles, computers, etc.) necessary to carry out the execution of project components; (vi) community participation, including community mobilization, assistance to laid-off workers for their reinsertion through micro-enterprise creation, and energy-saving campaigns; (vii) financing of a social and reserve fund to pay for government arrears for water and electricity bills; and (viii) a program to improve general government procurement and financial management.

(b) Urban Water Supply (base cost US\$6.57 million). This component comprises (i) rehabilitation and extension of the primary and secondary water supply network in Bissau and in selected secondary cities (Bafata, Gabu and Bolama) with the replacement of about 7 kms of old asbestos pipelines and installation of 13 kms of new PVC pipelines; (ii) rehabilitation and extension of the tertiary water supply network in Bissau and in selected secondary cities with the replacement of about 14.5 kms of old asbestos pipelines and installation of 10 kms of new PVC pipelines; (iii) rehabilitation of 1,000 existing connections in Bissau and installation of about 1,000 new connections, all old and new connections equipped with meters; (iv) rehabilitation of 76 public standpipes and installation of 20 new ones; (v) construction of two reservoirs for Bissau; and (vi) construction of two boreholes. The project envisages a specific component aimed at ensuring that low-income users are adequately serviced under the new institutional arrangements by providing for low-income house connections (branchements sociaux) at lower rates and the provision of public standpipes. The public standpipes will be privatized.

(c) Energy (base cost US\$12.42 million). In the energy sector, the project addresses electricity generating capacity and distribution, environmental issues, and support for the development of the traditional energy sector. The sub-components are the following:

(i) *Electricity generating capacity and distribution* which includes investments for rehabilitation and expansion of the central power plant and the distribution network in Bissau; autonomous power generation and distribution in the secondary cities of Bafata, Gabu, Canchungo and Farim; and the installation of meters, storage tanks, and safety equipment. Co-financiers (BOAD and AFD) have expressed a strong interest in financing this component. The detailed works to be carried out under the rehabilitation and expansion of the electricity generating capacity (in accordance with a least-cost expansion program) will be decided after the technical studies are completed.

(ii) *Environmental clean-up* consists of the cleaning up of the oil spill behind the EAGB plant which has had a disastrous environmental and health impact on the surrounding area.

(iii) *Environment Monitoring Plan* aims to monitor the quality of the environment in Bissau and the three secondary cities as a result of the project.

(iv) *Traditional energy* involves the development of the traditional energy sector through institutional strengthening, implementation of a wood-fuels supply pilot project and promotion of private sector inter-fuel substitution.

(d) Pluvial Drainage (base cost US\$2.85 million). This component would provide for the restoration of the storm water drainage collector network in Bissau through the rehabilitation of 8,340 meters of covered canals and the construction of 3,060 meters of new collectors, and special works in the areas of Luanda, Plaque and the Bairro Militar to control erosion and flooding.

12. **Project Implementation.** The Government is carrying out institutional reform in the water and energy sectors in order to make the production and delivery of water and electricity more efficient and competitive. This institutional reform involves establishing two companies: (i) a state owned national utility authority which would be an asset holding management company called *Sociedade Nacional de Energia, Água e Saneamento* (SNEAS); and (ii) a water and electricity utility company, leased to a private operating company, the foreign investor/manager. SNEAS will be the owner of the facilities of EAGB and will be fully responsible for sector development including identification, preparation, financing and implementation of new projects. SNEAS will *not* be an executing agency and will contract out the management of all systems (in Bissau and outside) and the execution of all works to qualified firms and enterprises, either national or international. SNEAS will sign a lease/concession contract with a private operating company to operate and maintain the facilities of the utility in Bissau, bill customers and collect charges, for a period that will be determined in the contract.

13. SNEAS will have primary responsibility for coordination and management of the project. SNEAS will be in charge of management of the investment program, management of debt service, production of consolidated accounts for the two sectors, and will be in charge of supervising the activities of the operating company. SNEAS will delegate the pluvial drainage and environment components to AGEOPPE who will contract private sector entities through national competitive bidding (NCB). The implementation of the traditional energy component will be the joint responsibility of the MDRRNA and the Secretariat of Energy. SNEAS will be responsible for monitoring the project, writing up progress reports and managing the special account.

14. The operating company will operate and maintain the systems at its own risk and its only revenues would be the lease contractor rate (LCR). Therefore, the OC would have real incentives to improve the collection ratio, cut operating costs, and reduce the unaccounted-for-water and electricity losses. SNEAS' only revenues would be the rental fee paid back by the OC for each cubic meter of water and kilowatt hour of electricity produced, that is, the difference between the "consumer rate" (which initially would be substantially lower than the full rate) and the LCR. Therefore, SNEAS would have real incentives to obtain from the Government consumer rates always sufficient to at least maintain a positive cash flow.

15. **Project Sustainability.** The proposed project would address the current weak institutional set-up of EAGB as it stands by moving from a performance-based management contract to a lease/concession contract and by establishing an asset holding management company to manage the assets and planning aspects of the sector. The institutional reform is based on the following principles:

- *Incentives for the operating company:* The rental fee for the private operating company for the utility is based on the amounts of water and energy produced rather than distributed, meaning that the company has every incentive to increase profits by increasing distribution, cutting losses, and improving collection.
- *Private operator targets:* As an additional incentive for the operating company to renew investments and limit losses, non-revenue water performance targets are specified in the contractual agreement. These include specific targets in the water sector for installation of public standpipes and low-income house connections to ensure greater access for the poor.

- *Sector financial equilibrium:* To ensure long-term sustainability and free up fiscal resources for other sectors, a specific timeframe is stipulated for reaching cash-flow equilibrium in the two sectors.

16. It is expected that this will provide the grounds for improving management and give the private sector the flexibility needed to first, make the utility company more profitable and sustainable, and second, make the water and energy sector more efficient and effective. On the water side, the focus on involving communities to set up the tariff structure and for the maintenance and use of the facilities is expected to help ensure the sustainability of the provision of safe and affordable water to a larger proportion of the population in urban and peri-urban areas. Operation and maintenance of the water system would be independent from government subsidies. Other benefits from the institutional reform include : (a) efficiency gains, which will be shared by consumers through adequate tariff regulation; (b) greater sustainability of electricity supply through investment in the sector; and (c) savings in public resources, which the Government can reallocate to social programs. In addition, the energy efficiency improvement program that will be carried out to promote energy conservation will provide more benefits to the population.

17. ***Lessons Learned from Previous IDA Involvement.*** IDA has been involved in the water and energy sectors mainly through two projects: the ongoing Transport and Urban Infrastructure Project (Cr.2748-GUB) which became effective in January 1996 and included a specific water component; and an energy project (Cr. 2237-GUB) approved in 1991, which aimed to address the medium term supply of electricity and petroleum products. The key problems that have been highlighted in the implementation of relevant Bank projects in Guinea-Bissau are the following: (i) the need for the Project Coordination Unit to have full authority and responsibility to carry out its tasks, and the importance of having high-level representation from the other ministries and institutions involved in the project in order to resolve conflicts; (ii) the need to have Government commitment to policy changes up front before the project becomes effective; (iii) counterpart funding cannot be assumed--the availability of counterpart funds has been a recurrent and persistent problem; (iv) only guaranteed donors' support, based on firm commitment, should be counted in the financing plan; (v) financing of operations and maintenance of any infrastructure built or rehabilitated, and financing for continuity of any services initiated under the project needs to be discussed with the Government and firm assurances sought of their continued financing through concrete mechanisms, such as special funds (e.g. the Road Fund); and (vi) the selection of works and their cost evaluation needs to be done carefully during appraisal and later substitution should be avoided.

18. In light of these lessons, the following steps have been taken for the proposed project:

- *Government commitment:* The Government has signed two Sector Policy Letters on water and energy supporting the institutional reform, has created a Comité de Pilotage to oversee the reform, and has taken all the necessary steps to hire a private operator for the utility.
- *Autonomy and authority of project coordinating units:* The proposed project will be implemented by an asset holding management company, SNEAS, which will have both autonomy and authority to make major decisions regarding investments and debt repayments in the water and energy sectors.
- *Sector contribution:* The water and energy sectors will contribute under SNEAS a total of US\$1.5 million towards the project from the sales of water and electricity.

- *Cofinancing:* A cofinancing amount of US\$8.5 million is not yet assured, but BOAD and AFD have expressed a strong interest in financing the electricity generation and distribution component. Confirmation of this cofinancing amount is a condition of project effectiveness. As for the traditional energy component (US\$2.5 million), the Dutch cooperation has expressed a strong interest in financing this component starting next calendar year. This component will be scaled back unless firm commitments are obtained in early 1999.

19. ***Rationale for IDA Involvement.*** One of the main objectives of the Country Assistance Strategy (CAS) discussed by the Board on June 10, 1997 is to promote private sector development. This project will support this objective by: (i) helping to create an enabling environment for private sector growth through well-targeted and action-oriented legal and regulatory reforms; (ii) improving basic infrastructure for a more efficient private sector and encouraging job creation; and (iii) nurturing grassroots enterprise development and an increasingly stronger government-business community partnership. The institutional reform proposed under the project will pave the way for more active participation of the private sector in the production and distribution of water and electricity. IDA also aims to foster the conditions for the long-term development of the economy by remedying financial imbalances through limiting new investments to the most urgent needs. Lack of maintenance and absence of new investments in the water sector have led to a severe deterioration in the water supply, with households and conventional enterprises experiencing daily breaks in supply. Ensuring supply of safe and affordable water involves improvement of the energy sector as well. Investment in the energy sector is justified on its own ground, however, as any vision of development of the economy and of the productive sectors, such as industry, fishing and tourism, will require reliable and affordable supplies of electricity, a sector that is currently facing severe financial as well as capacity constraints.

20. ***Agreed Actions.*** During negotiations Government agreed to the following:

- (a) the program of works to be executed for the power plant and water reservoirs will be submitted to IDA for no objection prior to calling for tenders;
- (b) creation of a special account in a foreign commercial bank acceptable to IDA to be managed by SNEAS, which would initially cover four months of eligible expenditures;
- (c) conditions for financing SNEAS;
- (d) project implementation schedule;
- (e) SNEAS would not be an executing agency and would contract out the management of all systems (in Bissau and outside) and the execution of all works to qualified firms and enterprises, either national or international. SNEAS staff will be limited to a maximum of 20 persons with annual expenditures on personnel not to exceed 95 million CFAF in 1998, 114 million in 1999 and 105 million in 2000;
- (f) SNEAS will submit to the Bank, not later than two months before the end of each fiscal year, a detailed training program for the coming year for SNEAS and higher level staff of SEE;
- (g) SNEAS will be responsible for the preparation of consolidated sectoral accounts. It will also issue separate financial statements, including balance sheets, income statements and sources, sources and uses of funds statements for the energy activity and water activity separately. In addition, SNEAS will have its financial statements

audited annually and would submit to the Bank the audited financial statements with the corresponding audits for review no later than six months following the close of the fiscal/financial year;

- (h) SNEAS will commission an audit of the operating company every six months using an independent auditor acceptable to IDA, which would include the monitoring of compliance with financial covenants;
- (i) SNEAS will transmit to the Bank for review, not later than two months before the end of each fiscal year, together with its annual operating and capital expenditure budgets for the following year, financial forecasts for at least the following three years;
- (j) all accrued debts of EAGB prior to July 1998 will be serviced by the Government.
- (k) SNEAS' assets would be annually revalued (on a pro forma basis) and along consistent procedures acceptable to IDA;
- (l) SNEAS would open a fiduciary account in a private commercial bank to manage the funds received from the operating company;
- (m) the Bank's Standard Bidding Documents for goods or works under ICB and the Standard Letter of Invitation Package for Consultant's Services would be used. Draft standard bidding to be used were also reviewed and agreed upon;
- (n) the project would be carried out in accordance with the Manual of Procedures, which may not be amended without Bank approval;
- (o) a detailed procurement plan for works, goods and services to be procured under the two first project years which will be updated and reviewed on a regular basis during annual reviews. The Government will take the necessary measures to ensure that procurement phases do not exceed the target time periods;
- (p) SNEAS will have the project accounts, special accounts, and statement of expenditures audited annually by qualified independent auditors acceptable to IDA, which will include a separate opinion on the use of SOEs and the operation of the special account. SNEAS will also ensure that the audited accounts, together with the auditors' reports, are submitted to IDA not later than six months following the close of their fiscal/financial year;
- (q) the supervision program, the performance indicators and reporting requirements, including the submission of all consultants reports and studies financed under the project were agree upon;
- (r) IDA, the cofinanciers, and the Government would carry out a detailed review of the entire project one year from the date of credit effectiveness, that is, around July 1999 and every year thereafter;
- (s) SNEAS will not enter into new borrowing arrangements unless a reasonable forecast of its revenues and expenditures, which is acceptable to IDA, indicates that projected internal cash generation for each year during the term of the debt to be incurred will be at least equal to SNEAS' projected debt service for that year;

- (t) SNEAS will not make any new investment until the end of the project unless such investment is, in the opinion of IDA, technically, financially and economically viable based on detailed financing plans and forecasts;
  - (u) no later than three months before the beginning of each fiscal year, commencing with fiscal year 1999, SNEAS shall, on the basis of a ten-year financial projections satisfactory to IDA, review whether it would meet the requirements of financial equilibrium in any year covered by such projections and shall furnish to IDA the results of such review upon its completion. If any such review shows that the requirement of financial equilibrium for any year covered by such projections cannot be met, SNEAS, in conjunction with the Government, shall promptly take all necessary measures (including, without limitation, adjustments of the structure or levels of the electricity and water rates) in order to meet such requirements in due time.
21. The agreed conditions of Board Presentation were the creation of SNEAS, the presentation of its statutes to IDA and the finalization of the Manual of Procedures, incorporating the changes agreed upon during negotiations.
22. The agreed conditions of effectiveness are:
- (a) passing and publication of a new Electricity Law;
  - (b) confirmation of agreements between all cofinancing parties;
  - (c) signing of two contracts, between the Operating Company and SNEAS, and between the Operating Company and the Government. These would specify the roles and responsibilities of the three parties, including performance contracts, and the expected outcomes. Agreed upon targets would be reviewed at the end of the first two years of project life, and every three years thereafter, to take into account results obtained and any changes in circumstances;
  - (d) signing of the convention between SNEAS and the Government covering the period 1998-2001, which would include a subsidiary agreement for the amount of the credit being provided to SNEAS (on-lent and as equity);
  - (e) issuance by SNEAS of the letter of instruction to a commercial bank, following review by IDA, giving irrevocable permanent guidelines to the bank on the utilization of funds from the lease/concession contract with the operating company;
  - (f) setting up of a financial management system (including project account) and appointment of auditors acceptable to IDA.
23. **Poverty Category.** The project is a poverty-targeted intervention. It will improve access to affordable safe drinking water and energy in targeted areas of Bissau and secondary cities. Employment will be generated through works to be carried out by local contractors. The proposed project will offer a solution to deal with the problems of institutional reform leading to management efficiency. It will give autonomy and incentive to the private operator to carry out investments and to deliver services of water and electricity in poor neighborhoods.
24. **Environmental Aspects.** The project has been placed in Category A and required an Environmental Impact Assessment (EIA) study. The EIA was carried out in June-July 1996 and was cleared by IDA in November 1996. The Government made the EIA available to affected

groups and to local NGOs in Bissau prior to negotiations, and it will be available at the Bank's Public Information Center. According to the EIA, the physical works envisaged would not generate involuntary resettlement or cause any major environmental problems, and, in addition, detailed mitigation plans were formulated to correct any negative impact that may result from works implemented under the project. An *Environment Monitoring Plan* has also been developed to ensure adherence to environmental management standards and compliance with mitigating measures for each component of the project. In conjunction with the monitoring plan, the lease contract with the operating company will clearly specify the environmental regulations containing minimum environmental standards and indicators for environmental monitoring to be executed by the operating company under supervision of SNEAS. In addition to the environmental aspects of the civil works, the project will address the issue of cleaning up of the environmentally hazardous oil spill behind EAGB's power plant. Increased water supply and electricity would help improve personal hygiene and reduce health hazards.

25. ***Program Objective Categories.*** The proposed project would help to: (a) reduce poverty by improving public health through safe and reliable water and energy supply for the poor in Bissau and secondary cities and by creating employment; (b) encourage private sector participation in managing water and power; and (c) protect the environment by strengthening the financial viability of the water and energy utility company.

26. ***Participatory Approach.*** A planning-by-objectives workshop (ZOPP) was organized in March 1996 with major stakeholders, in which participants identified the main constraints in the water and electricity sectors, reviewed main issues and priorities, and determined the objectives, short and long term, to assign to the project, as well as the main results to be expected. In February 1997, a second ZOPP workshop was organized to discuss with stakeholders the new institutional arrangements for the water and energy sectors. The workshop addressed the specific institutional set-up for the asset holding management company to be created and discussed the significance and consequences of transferring the commercial operations of EAGB to a private operating company through a lease/concession contract. The workshop helped to build consensus among stakeholders on key issues, such as the extent of the lease vs. concession, management efficiency and its relationship with labor cost reduction, tariff adjustments in relation to ability to pay, and responsibilities of the operating company for maintenance, among others.

27. In addition to the workshops, the project provides for a US\$1 million sub-component which seeks to promote community participation in the project by (i) strengthening community-based organizations with a view to involving beneficiaries in assessing their needs in water and sanitation and working with the parties involved (SNEAS, the operating company, municipalities, AGEOPPE) to implement, operate and maintain the systems built; (ii) implementing an information, training and communication program to create awareness of the communities' and Government's roles and responsibilities in water and sanitation; and (iii) providing training for technical service staff of MDRRNA and SEE in community participation in delivering urban services and on environmental issues.

26. ***Project Benefits.*** The key benefits of the proposed project would be the following: (a) on the *poverty and health side*, the project would improve the quality and the access to safe water of urban and peri-urban dwellers, especially the poor; (b) on the *economic side*, it would provide for the demands of electricity and water of commercial and industrial users, allowing for better development of urban areas as centers of economic growth, as well as increase time savings for

women and children, particularly among the poor, which would translate into greater opportunities for education and employment; (c) on the *financial side*, the project would improve the viability of private provision of water and electricity; (d) on the *environment side*, it would provide for the implementation of mitigating measures for water and electricity works and the cleaning up of the environmentally hazardous oil spill behind EAGB's power plant. Overall the project will make the water and electricity utility a viable entity and decrease the pressure of the utility on public resources.

27. **Project Risks.** The main risks are on the institutional side, namely, the possibility of political and social opposition to the restructuring of the utility company. However, various measures have been taken to mitigate this risk. Two ZOPP workshops were held in the course of project preparation to discuss institutional reform, all attended by the major stakeholders from Government, the private sector and civil society. While the Government had been slow in implementing reforms under the Energy Project, extensive dialogue and discussions of constraining factors have taken place and some of the bottlenecks ironed out. As a result of these discussions, the Government has made significant progress on reforms under the Energy Project (e.g. tariff reforms, liquidation of DICOL and Guinée Gas) and has prepared both a Water Sector Policy Letter and an Energy Sector Policy Letter which were reviewed by IDA and signed by the relevant ministers. The draft policy letters incorporate the main elements of the institutional reform proposed under this project.

28. As further evidence of Government commitment to institutional reform, a PPF was signed under this project, under which the Government hired consultants to proceed with preparation of bidding documents for hiring a new operating company. The prequalification process was successful and a prebidding conference organized by the Minister of Economy and Finance, the Minister of Social Infrastructure and the Secretary of State for Energy took place in Lisbon with the two pre-qualified firms. The bidding documents for hiring the new operating company were launched in January 1998. There is full ownership by the Government of the institutional reform process. A solution for the management of the utility during the transition period (August 1997 to June 1998) has been negotiated with the Government, using resources from a second PPF (a team consisting of external technical assistants and consultants has been managing the utility). A Comité de Pilotage has been formed with high level representatives from relevant ministries, which is overseeing the reform process, and which is also responsible for the creation of SNEAS.

29. Social problems could occur as a result of the institutional reform. Staff reduction could create dissatisfaction leading to work stoppage and difficulties for the new operating company. In order to mitigate these problems, all former workers of EAGB will automatically be recruited by the operating company while EAGB is liquidated. The new operator will have a six-month period to make staff adjustments and the project will finance, through a social fund, the payment for overstaffing for that period.

30. On the water side, the main risks are: (a) slow implementation of the policy to discontinue the practice of providing free water at the standpipes; and (b) the pace at which communities would be mobilized and sensitized to participate in the process, and their willingness to pay for water and sanitation services. The first risk would be mitigated by a time-bound action plan based on a willingness-to-pay study to introduce cost-recovery through water vendors at the metered standpipes. The second risk would be mitigated by a systematic use of beneficiary assessments and

an extensive community participation program involving the mayors, NGOs and community leaders.

31. On the energy side, the main risk is associated with the institutional location of the Secretariat of Energy which has recently been moved from MEIRN to the office of the Prime Minister. This raises the risk of political interference and lack of compliance with the autonomy of SNEAS to oversee the functioning of the sector. This risk will be mitigated by making sure that the convention between SNEAS and the Government is transparent and that the new Secretary of Energy is fully on board with the institutional reforms under way.

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

Sven Sandstrom  
Managing Director

**Attachments**

Washington D.C.  
May 18, 1998

**REPUBLIC OF GUINEA-BISSAU**  
**WATER AND ENERGY PROJECT**  
**Project Cost and Financing Plan**

**Estimated Project Cost**  
US\$ million equivalent

	Local <sup>a</sup>	Foreign	Total	Total as % of base cost
<b>Project Components</b>				
<b>1. Institutional Reform and Capacity Building</b>				
Technical assistance, studies, training, equipment, community participation, project supervision (SNEAS), liquidation of EAGB, social and reserve fund	1.27	4.35	5.62	19%
<b>2. Water Supply</b>				
Rehabilitation & expansion of production capacity and distribution network, connections, installation of standpipes and low-income connections, metering	1.48	5.08	6.57	22%
<b>3. Energy</b>				
Rehabilitation & expansion of generating capacity; environmental clean up; Environment Monitoring Plan; traditional energy component	3.19	9.22	12.42	42%
<b>4. Pluvial Drainage</b>				
Rehabilitation of network, extension of primary network, special networks	1.15	1.70	2.85	10%
<b>5. PPF Refinancing</b>	0.39	1.60	1.99	7%
<b>Base Cost Estimate<sup>b</sup></b>	<b>7.48</b>	<b>21.95</b>	<b>29.45</b>	<b>100%</b>
<b>Physical Contingencies<sup>c</sup></b>	<b>0.41</b>	<b>1.36</b>	<b>1.77</b>	<b>6%</b>
<b>Price Contingencies</b>	<b>0.63</b>	<b>0.91</b>	<b>1.54</b>	<b>5%</b>
<b>TOTAL PROJECT COST<sup>a</sup></b>	<b>8.53</b>	<b>24.22</b>	<b>32.75</b>	<b>111%</b>

NOTE: FIGURES MAY NOT ADD UP DUE TO ROUNDING. COST ESTIMATES ARE BASED ON CONSULTANT EVALUATIONS AND PROJECT DESIGNS. <sup>A</sup> LOCAL COSTS ARE NET OF DUTIES ON IMPORTED EQUIPMENT AND MATERIALS. <sup>B</sup> IN JUNE 1996 PRICES. <sup>C</sup> PHYSICAL CONTINGENCIES HAVE BEEN CALCULATED ON CIVIL WORKS ONLY

**Financing Plan**  
US\$ million equivalent

<b>Potential Funding Sources</b>	<b>SNEAS</b>	<b>IDA</b>	<b>Cofinanciers</b>	<b>Total</b>
1. Institutional Reform & Capacity Building	0	5.95	0	<b>5.95</b>
2. Water Supply	0.58	7.01	0	<b>7.59</b>
3. Energy	0.92	1.97	11	<b>13.89</b>
4. Pluvial Drainage	0	3.33	0	<b>3.33</b>
5. PPF Refinancing	0	1.99	0	<b>1.99</b>
<b>TOTAL</b>	<b>1.5</b>	<b>20.25</b>	<b>11</b>	<b>32.75</b>

Note: Figures may not add-up due to rounding. <sup>a</sup> Co-financing commitments to be confirmed prior to effectiveness

**REPUBLIC OF GUINEA-BISSAU  
WATER AND ENERGY PROJECT****Economic Analysis**

1. The overall *development objectives* of the proposed project are: (a) to alleviate the effects of poverty and improve health by increasing access to safe and affordable water and sanitation; (b) to ensure reliable and affordable supply of water and electricity for economic growth; and (c) to ensure sustainability by improving water pricing and electricity tariffs for cost recovery and developing the Government's regulatory and planning capacity in these sectors.
2. The economic analysis of the water supply component of the proposed project (ANNEX 5-5, SAR) demonstrates that it will provide approximately 50% of the population of Bissau with potable water, with about 115,000 new customers including the secondary cities. Additional economic benefits will be (a) *increased efficiency of production and lower costs* due to improved management, increased employee productivity, and the consequent extension of the lifetime of the network; (b) a *decrease in unaccounted-for water* due to improved management and the immediate rehabilitation of the water system; (c) *increased personal savings by people who formerly bought water at high rates from vendors* due to greater access to a more reliable primary water supply from the utility at lower prices; and (d) a *consumers' surplus* as a result of the increase in water consumption per capita. Other effects, including health benefits from reductions in water-borne diseases and infant mortality, the reduction of the burden now placed on women and children to fetch water, and improvements in the urban environment as well as urban environment management, while acknowledged, have not been quantified for this analysis.
3. The internal economic rate of return (IERR) of the water component of the project is 52%. The exchange rate is assumed to be in equilibrium as a result of the CFA devaluation in 1994. Incremental revenues from the sale of water were taken as a proxy for direct use benefits. In addition to the quantified benefits included in the economic analysis, there are a number of non-quantified benefits which, if they could be included in the analysis, would further increase the IERR. Savings in time and/or investment and maintenance costs associated with other alternative sources of water to meet bathing and cleaning needs will also contribute to the income effect. Finally, although some of the direct health benefits to household members are probably taken into account in the price paid for water services, the indirect benefits accruing to other members of the community are not, and thus represent additional benefits.
4. The cost benefit analysis of the energy component (ANNEX 5-6, SAR), carried out to determine the true merit of the investment program for this component, including the adequacy of tariffs, gives an internal economic rate of return (IERR) of 92%. This analysis takes into account the capital cost of the investment program together with the associated incremental operation and maintenance costs. As for the benefits of this component, the analysis considers the incremental demand served through simulation of the operations of the utility with and without the investment program.

### Financial Analysis

The financial equilibrium of the water and electricity sector is affected by five main factors: (a) level of water tariffs; (b) efficiency of water distribution of the sector linked to a reform of the sector; (c) level of electricity tariffs; (d) efficiency of electricity distribution of the sector linked to a reform of the sector; and (e) the proposed project.

#### *Overview of Financial Scenarios for the Electricity Sector*

Scenario	Project WB/ BOAD	Institutional Reform	Tariff Change	Maximum Cash Flow Required	Year of Equilibrium	Comments
1	no	no <sup>1</sup>	178 FCFA/kWh	Accumulated 4,443 m FCFA (2012)	1998	Equilibrium reached in 1998
2	no	no <sup>1</sup>	178 FCFA/kWh	Accumulated 4,443 m FCFA (2012)	1998	Equilibrium reached in 1998
3	yes	no <sup>1</sup>	178 FCFA/kWh	Accumulated 30,139 m FCFA (2012)	1998	Possible reduction in tariff
4	yes	no <sup>1</sup>	178 FCFA/kWh	Accumulated 30,139 m FCFA (2012)	1998	Possible reduction in tariff
5	yes	yes	178 FCFA/kWh	Accumulated 45,287 m FCFA (2012)	1998	Possible reduction in tariff
6	yes	yes	178 FCFA/kWh	Accumulated 45,287 m FCFA (2012)	1998	Possible reduction in tariff

<sup>1</sup> The number of employees remains the same (346), and the paid rate for receivables stays at 82%. Energy sales remain stagnant.

#### *Overview of Financial Scenarios for the Water Sector*

Scenario	Project WB/BOAD	Institutional Reform	Tariff Change	Maximum Cash Flow Required	Year of Equilibrium	Comments
1	no	no <sup>1</sup>	no	5,789 m FCFA (2012)	2012+	No equilibrium during the 15 years
2	no	no <sup>1</sup>	157 to 590 FCFA/m <sup>3</sup> in 2005	628 m FCFA (2001)	2005	Tariff increase of 18% per year
3	yes	no <sup>1</sup>	no	2,212 m FCFA (2001)	2012+	No equilibrium during the 15 years
4	yes	no <sup>1</sup>	157 to 337 FCFA/m <sup>3</sup> in 2005	1,263 m FCFA (2003)	2005	Tariff increase of 10% per year
5	yes	yes	no	1,299 m FCFA (2003)	2012	Equilibrium reached in 2012
6	yes	yes	157 to 232 FCFA/m <sup>3</sup> in 2005	1,166 m FCFA (2000)	2005	Tariff increase of 5% per year

<sup>1</sup> The number of employees remains the same (346), and the paid rate for receivables stays at 82%. Energy sales remain stagnant.

## Key Performance Indicators

## A) Institutional Reform and Capacity Building

	1998	1999	2000	2001	2002	2003
1. Trimestrial and semi-annual reports	yes	yes	yes	yes	yes	yes
2. Number of meetings of the Board	6	12	12	12	12	12
3. Number of meetings with donors	3	6	6	6	6	6
4. Number of external audits		1	1	2	2	2
5. Number of project coordination meetings (SNEAS)	10	15	20	20	20	15
6. Number of prepared projects	2	5	5	10	10	10
7. Follow-up and evaluations (frequency and number)	1	1	2	2	2	2
8. Existence of an adapted operational plan	yes	yes	yes	yes	yes	yes
9. Existence of training program (number of people trained per year)	3	5	5	10	10	10
10. Periodicity of actualization of the Directing Scheme	no	no	yes	no	yes	no
11. Response time for Ministry of Finance to sign withdrawal applications (in days)	15	15	15	15	15	15

## B) Water

		Schedule						
1. Hydraulic indicator plan	SNEAS	1/99						
2. Triennial slipping investment plan	SNEAS	9/99; 9/00; 9/01; 9/02; 9/03						
3. Tariff preposition	SNEAS	1999; 2000; 2001; 2002; 2003						
4. Report to be submitted every 6 months	SNEAS	3/99; 9/99; 3/00; 9/00; 3/01; 9/01, 3/02; 9/02						
5. Efficiency (average loss of water)	SNEAS	1998	1999	2000	2001	2002	2003	
		35%	50%	70%	70%	75%	80%	
6. Measure of bore hole capacity	SDE	8/99						
7. Response time to network problems	SDE	3 hours						
8. Response time to do repairs	SDE	24 hours						
9. Time for connection of new users	SDE	15 days						
10. Detailed plan for maintenance works	SDE	9/99; 9/00; 9/01; 9/02; 9/03						
11. Renewal and extension of works to be done by SDE		1998	1999	2000	2001-2012			
	Number of connections	SDE	300	600	600	-----		
	Number of drains	SDE	1000	2500	2500	2000/year		
	Number of standpipes	SDE	---	---	---	5/year		
12. Coverage ratio (%)	SDE	1998	1999	2000	2001	2002	2003-2012	
		80	85	87	90	95	95	
13. Monthly consumption, billing and payment day to SNEAS	SDE	30 days after end of the month						
14. Registry of complaints	SDE	Ongoing						

## C) Energy

		Schedule						
1. Electricity indicator plan	SNEAS	1999						
2. Triennial slipping investment plan	SNEAS	9/99; 9/00; 9/01; 9/02; 9/03;						
3. Tariff preposition	SNEAS	1999; 2000; 2001; 2002; 2003						
4. Report to be submitted every 6 months	SNEAS	3/99; 9/99; 3/00; 9/00; 3/01; 9/01; 3/02; 9/02						
5. Efficiency (average of loss of electricity)	SNEAS	1998	1999	2000	2001	2002	2003	2004-2012
		55%	60%	70%	75%	80%	85%	85%
6. Response time to problems in connection and low-tension network	SDE	3 hours						
7. Response time to repair low-tension cables	SDE	12 hours						
8. Response time to repair of middle-tension cables	SDE	2 hours						
9. Response time to reconnect medium-tension cables	SDE	18 hours						
10. Renewal and extension work to be done by SDE	SDE	1998	1999		2000		2001-2012	
		1350	2700		2700		---	
Low-tension (in km)	SDE	5		20		20		3 by year
11. Coverage ratio (%)	SDE	1998	1999	2000	2001	2002	2003-2012	
		80	85	87	90	95	95	
12. Response time to SDE inquiry	SNEAS	15 days						
13. Monthly consumption, billing and payment day to SNEAS	SDE	30 days after end of the month						
14. Registry of complaints	SDE	Ongoing						

## D) Community Participation

	1998	1999	2000	2001	2002	2003
1. Number of publicity campaigns disseminated through mass communication means	30	60	60	50	50	40
2. Frequency of workshops	30	50	70	70	70	70
3. Number of informative and educational brochures produced	100	300	600	1000	1000	1000
4. Number of management committees formed for public standpipes	20	30	30	40	45	50
5. Number of directors recruited for the management committees	20	30	30	40	45	50
6. Number of standpipe management systems implemented	20	30	30	40	45	50
7. Percentage of population aware (sensitized) of the management and utilization of water and electricity	60	70	80	90	90	95
8. Percentage of consumers that pays for water and electricity	90	90	90	90	95	95
9. Percentage of annual reduction in the number of water and electricity connections that were cut	2	3	4	5	6	7
10. Percentage increase in the number of requested connections	5	10	10	10	10	10
11. Reduction in the number of client complaints per year (%)	5	5	10	10	20	30

**REPUBLIC OF GUINEA-BISSAU  
WATER AND ENERGY PROJECT**

**Summary of Proposed Procurement Arrangements**  
*(US\$ million equivalent, net of duties and taxes)*

<b>Item</b>	<b>International Competitive Bidding (ICB)</b>	<b>National Competitive Bidding (NCB)</b>	<b>Other</b>	<b>Non-Bank Financed (NBF)</b>	<b>TOTAL (including contingencies)</b>
1. Civil Works	8.81 <sup>a</sup> (8.81)	0.97 (0.97)		8.99 (0)	18.77 (9.78)
2. Goods and Equipment	0.24 (0.24)	0.70 (0.70)		0.2 (0)	1.15 (0.95)
3. Consulting Services	1.23	0.17	5.20 (5.20)	3.31 (0)	9.92 (5.20)
4. Training			0.725 (0.725)		0.725 (0.725)
5. Operating Costs			0.205 (0.205)		0.205 (0.205)
6. PPF Refinancing		0	1.99 (1.99)	0	1.99 (1.99)
<b>TOTAL</b>	<b>10.29</b>	<b>1.84</b>	<b>8.12</b>	<b>12.50</b>	<b>32.75</b>

Note: Figures may not add up due to rounding. Figures in parentheses are US\$ million equivalent, to be financed by IDA. Local costs are net of duties on imported equipment and material. Contingencies have been calculated for works financed by IDA and donors only.

<sup>a</sup> out of which US\$3 million are for drainage procured by AGEOPPE

## Disbursements

## Allocation and Disbursement of IDA Credit

Category	IDA amount (US\$ million)	Percentage to be disbursed from IDA credit
A. Civil works	9.02	100% of foreign expenses, 95% of local expenses
B. Goods and equipment	0.95	100% of foreign expenses, 95% of local expenses
C. Consulting Services	6.09	100%
D. Training	0.72	100%
E. Operating Costs	0.15	100% until December 31, 2001
F. PPF Refinancing	1.99	as in the PPF agreements
G. Unallocated	1.33	
<b>TOTAL IDA CREDIT</b>	<b>US\$20.25</b>	

Estimated IDA Disbursement  
by semester

	1998	1999		2000		2001		2002		2003	
	Sem 2	Sem 1	Sem 2								
Annual	4.00	4.10	3.75	3.75	2.00	2.00	0.18	0.17	0.10	0.10	0.10
Cumulative	4.00	8.10	11.85	15.60	17.60	19.60	19.78	19.95	20.05	20.15	20.25

**REPUBLIC OF GUINEA-BISSAU  
WATER AND ENERGY PROJECT**

**Key Processing Events**

(a) Time taken to prepare the project:	44 months
(b) Project prepared by:	Government with IDA assistance <sup>1</sup>
(c) First IDA mission:	April 6, 1994
(d) Appraisal mission:	June 24, 1997
(e) Date of negotiations:	March 24, 1998
(f) Board Presentation:	June 9, 1998
(g) Planned date of effectiveness:	September 9, 1998
(i) Relevant PCRs/ICRs/PPARs:	ICR 16592 - Republic of Guinea-Bissau Infrastructure Rehabilitation Project (Cr. 2074-GUB), closed on December 31, 1996, rated satisfactory.

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<sup>1</sup> This report is based on the findings of the Bank appraisal mission which visited Guinea-Bissau in June 1997 and the post appraisal missions carried out in September and December 1997. The appraisal mission comprised of Mr. Leslie Pean (Senior Project Officer and Mission Leader), Mr. Matar Fall (Sanitary Engineer), Mr. Claude Sorel (Private Sector Development Specialist), Mr. Mark Makanda (Financial Analyst), Mr. Agilson Perazza (Environmental Specialist). Mr. B. Abeille (Procurement Specialist), Mr. Marcos Sugar (Disbursement Officer), Mr. Kishor Uprety (Counsel), Ms. Rumana Huque (Urban Planner), Mr. Greg Fazzary (Energy Specialist), Mr. Jan Janssens (Senior Sanitary Engineer), Ms. Lizmara Kirchner (Language Staff Assistant) and Ms. Fanny Barrett (Program Assistant) participated in the preparation of the project. Mr. Mahmood A. Ayub is the Country Director for Guinea-Bissau and Ms. Letitia A. Obeng is the Sector Manager for this operation.

**REPUBLIC OF GUINEA-BISSAU**  
**WATER AND ENERGY PROJECT**

**Status of Bank Group Operations in Guinea-Bissau**  
**IBRD Loans and IDA Credits in the Operations Portfolio**

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original Amount in US\$ Millions				Difference Between expected and actual disbursements a/																													
					IBRD	IDA	Cancellations	Undisbursed	Orig	Frm Rev'd																												
Number of Closed Loans/credits: 20																																						
<u>Active Loans</u>																																						
GW-PE-35688	IDA30100	1998	REPUBLIC OF GUINEA-BISSAU	NAT.HEALTH DEV.PROGR	0.00	11.70	0.00	11.59	.74	0.00																												
GW-PE-1015	IDA29600	1997	REPUBLIC OF GUINEA-BISSAU	BASIC EDUCATION	0.00	14.30	0.00	13.72	.98	0.00																												
GW-PE-35915	IDA27480	1995	REPUBLIC OF GUINEA-BISSAU	TRANSP.& URBAN INFRA	0.00	22.00	0.00	4.82	.13	0.00																												
GW-PE-1002	IDA24650	1993	REPUBLIC OF GUINEA-BISSAU	SOCIAL	0.00	8.80	0.00	.66	.39	0.00																												
GW-PE-1011	IDA23420	1992	REPUBLIC OF GUINEA-BISSAU	TECHNICAL ASSISTANCE	0.00	7.20	0.00	1.20	1.08	.22																												
<b>Total</b>					<b>0.00</b>	<b>64.00</b>	<b>0.00</b>	<b>31.99</b>	<b>3.32</b>	<b>.22</b>																												
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Active Loans</u></th> <th style="text-align: center;"><u>Closed Loans</u></th> <th style="text-align: center;"><u>Total</u></th> </tr> </thead> <tbody> <tr> <td>Total Disbursed (IBRD and IDA):</td> <td style="text-align: right;">29.58</td> <td style="text-align: right;">187.51</td> <td style="text-align: right;">217.09</td> </tr> <tr> <td>  of which has been repaid:</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">4.69</td> <td style="text-align: right;">4.69</td> </tr> <tr> <td>Total now held by IBRD and IDA:</td> <td style="text-align: right;">64.00</td> <td style="text-align: right;">175.65</td> <td style="text-align: right;">239.65</td> </tr> <tr> <td>Amount sold :</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td>  Of which repaid :</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.00</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td>Total Undisbursed :</td> <td style="text-align: right;">31.99</td> <td style="text-align: right;">2.75</td> <td style="text-align: right;">34.74</td> </tr> </tbody> </table>												<u>Active Loans</u>	<u>Closed Loans</u>	<u>Total</u>	Total Disbursed (IBRD and IDA):	29.58	187.51	217.09	of which has been repaid:	0.00	4.69	4.69	Total now held by IBRD and IDA:	64.00	175.65	239.65	Amount sold :	0.00	0.00	0.00	Of which repaid :	0.00	0.00	0.00	Total Undisbursed :	31.99	2.75	34.74
	<u>Active Loans</u>	<u>Closed Loans</u>	<u>Total</u>																																			
Total Disbursed (IBRD and IDA):	29.58	187.51	217.09																																			
of which has been repaid:	0.00	4.69	4.69																																			
Total now held by IBRD and IDA:	64.00	175.65	239.65																																			
Amount sold :	0.00	0.00	0.00																																			
Of which repaid :	0.00	0.00	0.00																																			
Total Undisbursed :	31.99	2.75	34.74																																			

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

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

**Note:**

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

**Guinea-Bissau**  
**STATEMENT OF IFC's**  
**Committed and Disbursed Portfolio**  
 As of 31-Mar-98  
 (In US Dollar Millions)

FY Approval	Company	Committed				Disbursed			
		IFC				IFC			
		Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1994	AEF Agribissau	.69	.09	0.00	0.00	.69	.09	0.00	0.00
	Total Portfolio:	.69	.09	0.00	0.00	.69	.09	0.00	0.00
Approvals Pending Commitment									
		<u>Loan</u>	<u>Equity</u>	<u>Quasi</u>	<u>Partic</u>				
1998	BAO	0.00	.35	0.00	0.00				
1998	GUINEA BIS	0.00	.14	0.00	0.00				
	Total Pending Commitment:	0.00	.49	0.00	0.00				

**NOTE ON PORTFOLIO IMPLEMENTATION ISSUES**

As of March 31, 1997, the Board has approved 23 IDA credits for Guinea-Bissau totaling US\$214.80 million, of which roughly US\$24.14 million remains undisbursed. Approximately 76 percent of IDA commitments were for investment operations, while the remaining 24 percent were for adjustment operations (approved in 1987 and 1989). Of the investment operations, roughly 73 percent of the commitments were for infrastructure (including energy); 13 percent for agriculture, health, and education; and 14 percent for technical assistance.

The size of the Bank's portfolio in Guinea-Bissau has gradually reduced from 9 projects in FY94 to 4 projects at present. There has also been a deterioration in the quality of the portfolio. Of the current 4 projects in the portfolio, two are rated unsatisfactory (Energy Project and the Transport and Urban Infrastructure Project). The disbursement lag deteriorated between FY94 and FY96 from 8.8 percent to about 12 percent. Several generic and specific factors account for this deterioration. Lack of a clear consensus within the Government on certain key policy reforms or management decisions (such as privatization or liquidation of public enterprises and timely action on the Road Fund) resulted in delays. The heavy burden of servicing the external debt severely affected the availability of counterpart funds for IDA-assisted projects, and also led to delays in payments of salaries of health workers which negatively affected the ongoing Social Sector Project. On the positive side, disbursements during FY97 are expected to be significantly higher than in the past. Audit reports are submitted in compliance with Bank procedures. The quality of the audits is good; in FY96, almost all audits were unqualified. Likewise, no major problems have been encountered with the use of the Bank's guidelines for procurement of goods, works, and consultants.

A Country Portfolio Performance Review (CPPR) was carried out in March 1997 to address the issues related to IDA's portfolio. The review was timed just prior to the CAS consultations to ensure that the lessons from experience with the ongoing portfolio would be appropriately incorporated in the new country strategy. It was made clear to the authorities that non-compliance with agreed upon actions would jeopardize future Bank cooperation, and that future lending scenarios would contain monitorable benchmarks for implementation performance. Based on detailed discussions with the authorities, it was decided to suspend the Transport and Urban Infrastructure Project in view of insufficient commitment to resolving the obstacles to the implementation of the project. On the other hand, significant progress has been made in the implementation of the Energy Sector Project (the other problem project). It was agreed that the operation would be monitored very closely over the next few months to ensure that the recent actions undertaken by the authorities can be followed up by the completion of the privatization or liquidation of the public companies in the energy sector. It now appears very likely that this project will be reclassified as satisfactory in the next few months.

In FY95, the Resident Mission in Bissau was closed on cost-effectiveness grounds. Since then, the Bank's Resident Mission in Dakar is serving Guinea-Bissau. In view of administrative budget constraints and other competing priorities, it is difficult to make a case for reopening the field office at this time.

## Guinea-Bissau at a glance

3/10/98

POVERTY and SOCIAL	Guinea-Bissau	Sub-Saharan Africa	Low-income	Development diamond*	
Population mid-1996 (millions)	1.1	600	3,229		
GNP per capita 1996 (US\$)	250	490	500		
GNP 1996 (billions US\$)	0.3	294	1,601		
<b>Average annual growth, 1990-96</b>					
Population (%)	2.0	2.7	1.7		
Labor force (%)	1.8	2.6	1.7		
<b>Most recent estimate (latest year available since 1989)</b>					
Poverty: headcount index (% of population)	49	..	..		
Urban population (% of total population)	22	31	29		
Life expectancy at birth (years)	38	52	63		
Infant mortality (per 1,000 live births)	136	92	69		
Child malnutrition (% of children under 5)	..	..	..		
Access to safe water (% of population)	57	47	53		
Illiteracy (% of population age 15+)	45	43	34		
Gross primary enrollment (% of school-age population)	..	72	105		
Male	..	78	112		
Female	..	65	98		
<b>KEY ECONOMIC RATIOS and LONG-TERM TRENDS</b>					
	1975	1985	1995	1996	
GDP (billions US\$)	0.2	0.1	0.3	0.3	
Gross domestic investment/GDP	15.4	35.1	22.3	23.0	
Exports of goods and services/GDP	5.2	9.8	11.7	10.5	
Gross domestic savings/GDP	-5.4	-2.9	-1.2	1.8	
Gross national savings/GDP	-3.1	-4.3	6.2	8.3	
Current account balance/GDP	..	-45.6	-16.1	-14.7	
Interest payments/GDP	0.0	1.5	1.8	1.3	
Total debt/GDP	4.5	215.3	367.2	339.7	
Total debt service/exports	..	46.3	32.1	21.6	
Present value of debt/GDP	..	..	269.7	214.9	
Present value of debt/exports	..	..	1559.0	1281.2	
	1975-85	1986-96	1995	1996	
(average annual growth)					
GDP	2.2	4.0	4.4	4.6	5.0
GNP per capita	-0.8	1.8	0.9	3.2	2.9
Exports of goods and services	-5.7	9.6	-22.0	-5.8	3.4
<b>STRUCTURE of the ECONOMY</b>					
(% of GDP)					
Agriculture	47.8	42.4	51.8	54.2	
Industry	25.4	14.3	11.5	10.9	
Manufacturing	..	0.0	..	..	
Services	26.9	43.3	36.7	34.9	
Private consumption	82.5	94.9	94.8	91.7	
General government consumption	22.9	17.9	6.4	6.6	
Imports of goods and services	25.9	57.7	35.1	31.8	
	1975-85	1986-96	1995	1996	
(average annual growth)					
Agriculture	-2.0	4.0	6.6	6.9	
Industry	3.9	5.1	3.8	2.6	
Manufacturing	..	5.9	3.8	2.3	
Services	8.6	3.5	2.2	2.8	
Private consumption	2.6	3.2	9.0	8.2	
General government consumption	4.3	3.2	-1.3	10.4	
Gross domestic investment	4.0	0.8	2.6	-8.9	
Imports of goods and services	3.0	-3.0	-7.0	-6.0	
Gross national product	2.6	3.9	3.0	5.3	

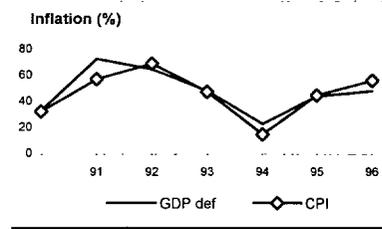
Note: 1996 data are preliminary estimates.

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

## Guinea-Bissau

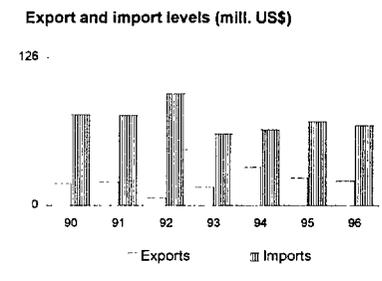
## PRICES and GOVERNMENT FINANCE

	1975	1985	1995	1996
<b>Domestic prices</b>				
(% change)				
Consumer prices	..	..	45.4	56.6
Implicit GDP deflator	7.2	32.3	44.7	48.6
<b>Government finance</b>				
(% of GDP)				
Current revenue	..	30.2	28.9	21.4
Current budget balance	..	4.7	13.6	5.6
Overall surplus/deficit	..	-39.8	-1.5	-12.2



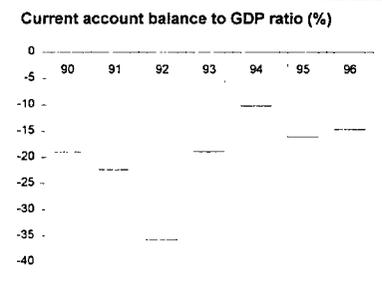
## TRADE

	1975	1985	1995	1996
(millions US\$)				
Total exports (fob)	..	..	24	22
Groundnuts	..	5	21	19
Other food	..	3	0	1
Manufactures	..	..	..	..
Total imports (cif)	..	69	72	69
Food	..	17	26	22
Fuel and energy	..	9	8	9
Capital goods	..	13	15	13
Export price index (1987=100)	..	..	82	85
Import price index (1987=100)	..	..	130	138
Terms of trade (1987=100)	..	..	63	61



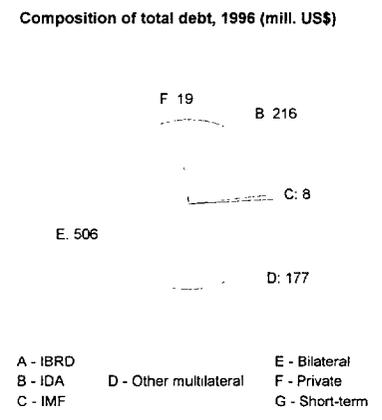
## BALANCE of PAYMENTS

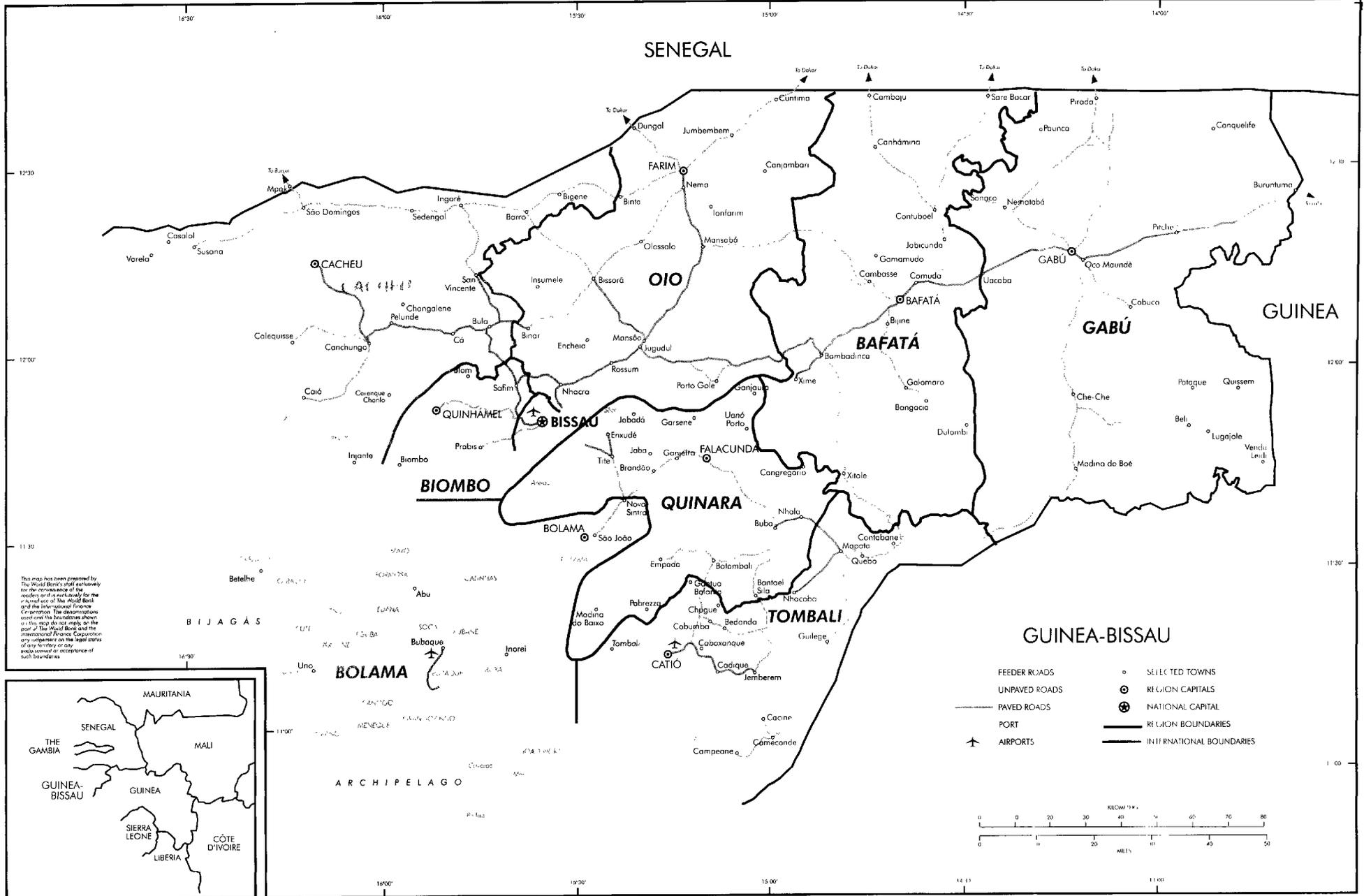
	1975	1985	1995	1996
(millions US\$)				
Exports of goods and services	..	20	30	28
Imports of goods and services	..	82	89	86
Resource balance	..	-62	-60	-58
Net income	..	-5	-7	-5
Net current transfers	..	1	25	23
Current account balance, before official capital transfers	..	-66	-41	-40
Financing items (net)	..	83	41	51
Changes in net reserves	..	-17	0	-11
<b>Memo:</b>				
Reserves including gold (mill. US\$)	..	..	24	29
Conversion rate (local/US\$)	0.4	2.5	278.0	405.7



## EXTERNAL DEBT and RESOURCE FLOWS

	1975	1985	1995	1996
(millions US\$)				
Total debt outstanding and disbursed	8	311	933	919
IBRD	0	0	0	0
IDA	0	44	212	216
Total debt service	0	9	14	10
IBRD	0	0	0	0
IDA	0	0	2	2
Composition of net resource flows				
Official grants	0	0	0	0
Official creditors	8	38	13	29
Private creditors	0	20	0	0
Foreign direct investment	0	0	0	0
Portfolio equity	0	0	0	0
World Bank program				
Commitments	0	0	0	0
Disbursements	0	15	9	14
Principal repayments	0	0	1	1
Net flows	0	15	8	13
Interest payments	0	0	2	1
Net transfers	0	14	7	12





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- FEEDER ROADS
- UNPAVED ROADS
- PAVED ROADS
- PORT
- ✈ AIRPORTS
- SELECTED TOWNS
- ⊙ REGION CAPITALS
- ⊕ NATIONAL CAPITAL
- REGION BOUNDARIES
- INTERNATIONAL BOUNDARIES