REPORT NO. 23997-ER

REVITALIZING ERITREA'S DEVELOPMENT STRATEGY

June 26, 2002

Poverty Reduction and Economic Management 2
Country Department for Eritrea
Africa Region

Document of the World Bank

GOVERNMENT FISCAL YEAR
July 7 – July 6

CURRENCY EQUIVALENTS

Currency Unit: Eritrean Nakfa (ERN)
Official Rate: US$1 = ERN (as of June 27, 2002

ABBREVIATIONS AND ACRONYMS

AGOA	Africa Growth and Opportunity Act
BOE	Bank of Eritrea
BOP	Balance of Payments
CBE	Commercial Bank of Eritrea
CEM	Country Economic Memorandum
CEO	Chief Executive Officer
ECDF	Eritrean Community Development Fund
EDF	Eritrean Defense Force
EIDB	Eritrean Investment and Development Bank
EPLF	Eritrean Peoples Liberation Front
ERP	Eritrea Rehabilitation Project
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GAD	Government Accounts Division
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GoE	Government of Eritrea
HCBE	Housing and Commercial Bank of Eritrea
IDP	Internally Displaced Persons
IFAD	International Fund for Agricultural Development
IFS	Integrated Farming System
IMF	International Monetary Fund
KFW	German Development Corporation
MoA	Ministry of Agriculture
MoE	Ministry of Education
MoF	Ministry of Finance
MoH	Ministry of Health
MoL	Ministry of Labor
MOLG	Ministry of Local Government
MOLHW	Ministry of Labor and Human Welfare
MoLWE	Ministry of Land, Water and Environment
MOTI	Ministry of Trade and Industry
NEPFP	National Economic Policy Framework and Program
NSEO	National Statistics and Evaluation Office
OECD	Organization for Economic Cooperation and Development
PDID	Public Debt and Investment Division
PFDJ	Popular Front for Democracy and Justice
SME	Small and Medium Enterprise
TD	Treasury Department
TSE	Telecommunication Services of Eritrean
WHO	World Health Organization

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ACKNOWLEDGEMENTS

This CEM was initiated at the request of Dr. Woldai Futur, Economic Advisor in the Office of the President. It has benefited from his guidance and support as well as that of Dr. Abraham Kidane in his office. In the course of preparation, intensive discussions were held with several ministries including Finance, Transport and Communications, Public Works, Local Government, Agriculture, Health, Education, Industry and Trade, Bank of Eritrea, Chamber of Commerce and National Statistics and Evaluation Office. Their assistance is gratefully acknowledged.

The core team that prepared this report included Emmanuel Ablo, Peter Miovic, Viju Ipe, Andrew Singer, Paul Murgatroyd, Randeep Sudan and Mehret Ghebreyesus, and was led by Mathew Verghis. Useful contributions were received from Sibel Kulaksiz, Steve Knack, Doug Addison, and Ray Purcell. Chit Tharnthong helped conceptualize the "learning strategy" discussed in Chapter 3. This draft benefited from discussions and comments from Jacob Bregman, Andrew Dabalen and Gwan-Jo Kim (education); Eva Jarawan and Christine Pena (health); Berhane Manna and Talib Esmail (agriculture); and from Fred Kilby on the entire document. Tanisha McGill handled the administrative matters and the processing of the document, with assistance from Roboid Covington.

The Country Director when this work was launched was Oey Astra Meesook and is currently Makhtar Diop. The Sector Manager is Fred Kilby. The peer reviewers are Paul Collier and Frank Lysy. An earlier draft of the report was discussed at a review meeting on April 30, 2002. The team gratefully acknowledges the very useful comments particularly from the peer reviewers.

Financial support for the CEM preparation from the Dutch PRSP trust fund is gratefully acknowledged. The implementation of the strategy described in this CEM is being supported by the Africa Region Knowledge Economy fund, the Integrated Framework for Trade fund, UNDP and USAID.

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EXECUTIVE SUMMARY

INTRODUCTION

1. It is no exaggeration to say that Eritrea is at a cross-roads today. The war with Ethiopia meant that the development plans and programs gradually put into place since independence were disrupted. The signing of the peace agreement in December 2000 and the ruling of the boundary commission on April 13, 2002 are all-important, but it is clear that the conditions facing Eritrea are significantly more difficult than prior to the war. Not only are the direct costs of the war very high, but the break in economic relations with Ethiopia and the loss of investor confidence will continue to exact a price for some years to come.

2. It is in this context that the Government has decided to review its development strategy and has asked for World Bank input into this process. In response, the Bank has prepared this Country Economic Memorandum. It follows the first CEM on Eritrea (World Bank 1994) that provided a Bank and donor input as independent Eritrea refined its development strategy.

3. Unlike the last CEM, this one has the advantage of building on a relatively substantial body of World Bank analytical work on Eritrea including the Export Development Report (World Bank, 2000), Financial Sector Review (World Bank 2001), Agricultural Sector Review (World Bank 2001) and sector reviews under preparation in health and education. This CEM has also benefited from the IMF reports over the last few years. Also very useful was the articulation of development strategy over the last few years in the Government of Eritrea's Macro Policy Paper (1994), National Economic Policy Framework and Program (1998) and Transitional Economic Growth and Poverty Reduction Strategy Paper (2001).

4. The CEM is divided into three chapters. The first is a review of Eritrea's development experience since independence organized along the lines of the recommendations of the previous CEM. These recommendations covered nine major areas ranging from achieving macroeconomic stability to improving the environment.

5. The second chapter is a review of government expenditure in Eritrea. A notable feature of this first Bank effort to review the public expenditures of Eritrea is an attempt to assess the composition of expenditures in Eritrea by reassigning from original budget heading to a programmatic classification. If Treasury data were used as they are currently reported, expenditure in key sectors like education, health, agriculture, water and rural roads would be underestimated.

6. The third chapter outlines a "learning strategy" for Eritrea. This is not meant to replace Eritrea's existing strategy. The learning strategy is meant to supplement the existing strategy based on the experience of actual implementation over the last ten years, but also on Eritrea's post-war reality. The strategy has begun implementation even as the CEM was being written, and progress on implementation will be reported on below.

The road traveled since independence

7. **Much progress was made immediately after independence on macroeconomic stabilization.** By early 1998, inflation had been reduced to under 8 percent, the newly created currency, the Nakfa, was stable and backed by 5 months reserves, and the budget deficit had been significantly reduced to 6 percent of GDP, after large payments for the reintegration of soldiers, assistance to families of fighters who were killed or disabled, and also an upward revision in civil

service salaries had been made. The current account deficit including official transfers was more or less in balance, domestic and foreign debt remained low and GDP growth averaged 7.4 percent for the four years through 1997.

8. **And on building the institutions for macroeconomic management.** In March 1997 two proclamations established the guidelines for the operations of Eritrea's new central bank, the Bank of Eritrea, and for the financial institutions, along with legal measures that facilitated the introduction of the new Eritrean currency, the Nakfa. The two tiered exchange rate had been unified in April 1997 and there was virtually no parallel market premium. In November, independent Eritrea's national currency, the Nakfa was launched. Fifteen foreign exchange bureaus were in operation by the spring of 1998. A debt management unit was set up in the Ministry of Finance.

9. **The war with Ethiopia that began in 1998 reversed many of the macroeconomic gains.** As military expenditures shot up, the trade relationship with Ethiopia was severed and port revenues from Ethiopian traffic dried up, macroeconomic stress was severe. By 2000, the budget deficit had ballooned to 48 percent of GDP, domestic debt reached 128 percent of GDP, the external balance deteriorated sharply and Eritrea had resources to barely cover a month's worth of imports. GDP growth was 0.3 percent in 1999 and negative 11.9 percent in 2000.

10. **By 2001 the economy had begun to stabilize**. The budget deficit and inflation had started to come down and growth resumed, led by a recovery in agriculture as farmers went back into the fields. The demobilization program is now underway, and this should facilitate stabilization by allowing a reduction in military expenditure and releasing soldiers into the labor force.

11. **However, the longer term macroeconomic consequences of the war are such that rapid and sustained development will be much harder to achieve.**. First, the state has become far and away the dominant actor in the economy. Eritrea's always high public expenditures averaged an astonishing 90 percent of GDP between 1998 and 2001. Second, Eritrea has become increasingly dependent on support from abroad for sources of investment funds and even for the government's recurrent expenditures. Dependence on support from the diaspora is shifting to dependence on aid to make the high levels of government expenditures possible. Eritrea averaged private transfers of 45 percent of GDP and net donor support of 16 percent between 1993 and 1997. Rising donor support meant the ratios were reversed by 2001 with donor support rising to 34 percent and transfers declining to 27 percent. By contrast, Uganda, which also benefits from large donor and diaspora flows receives about 12 percent of GDP as aid and 9 percent of GDP in private transfers.

12. Third, Eritrea has become a highly indebted country. A preliminary debt-sustainability analysis shows Eritrea's debt in net present value terms as a percentage of exports peaking in 2002 at 311 percent, well above the HIPC eligibility cut-off of 150 percent. Because the debt is largely concessional, the debt service to exports ratio is more manageable, peaking at 23 percent in 2002 but then falling to 20 percent in 2003 and falling further afterwards. It is also worth noting that these standard measures of indebtedness do not take into account Eritrea's very large diaspora flows.

13. Finally, the war has seriously affected Eritrea's financial sector. As of December 2000, 42 percent of the combined portfolio of the three banks was non-performing. At the time banking system capital was only 1.7 percent of total assets and 4.9 percent of risk capital. However, under the terms of the donor-funded Emergency Reconstruction Program (ERP), the three banks can fully or partially write-off loans affected by the war. Once this future infusion of capital is accounted for, along with a transaction whereby Government has taken over responsibility for

about Nakfa 1186 million in liabilities due from CBE to Commercial Bank of Ethiopia, and receives Nakfa 986 million in cash, in return for Nakfa 200 million in capital to be paid-in over time, only the Housing and Commercial Bank of Eritrea (HCBE) will remain in a precarious state. However, the banking sector as a whole is unprofitable, and unless remedial steps are taken the other two banks may also run into trouble.

14. The cumulative impact is that Eritrea is now much more vulnerable to new shocks. Events such as reduction of aid or diaspora flows, further conflict, terms of trade shocks, or covering contingent liabilities of public and quasi-public entities (such as banks or enterprises employing many people) that will not be allowed to fail, could lead to unbearable pressures on the public purse. Eritrea's room for maneuver has been sharply curtailed.

15. **Exports collapsed as a result of the war, but had slowed even earlier.** The previous CEM had highlighted the importance of exports and a number of measures were taken including unifying the exchange rate, lowering and rationalizing tariffs, simplifying customs procedures, and investing in infrastructure. There was an initial surge in exports, but by 1996 and 1997 exports of goods had started to fall. Nor was there diversification away from Ethiopia, its traditional export market, or in the composition of exports. As a result, exports have collapsed with the break of economic relations with Ethiopia. The slowdown in exports even before the border war is probably linked to the slow development of the private sector.

16. **The slow development of the private sector may be the biggest disappointment of Eritrea's post-independence economic performance.** A number of useful measures were taken immediately after independence. Many enterprises were privatized, and those few (mostly large ones) still awaiting sale are run on a commercial basis. The existing investment code was reformulated and the Eritrean Investment Center was established; a "one-stop" Business Licensing Office was set up; land was allocated for industrial estates near Asmara and in Dekamhare and Dubarwa and a couple of housing estates were built to relieve the housing problem that was particularly acute for foreign investors and returnees that were trying to set up new businesses.

17. The Eritrean Investment Center reported that in response, some 500 new private sector ventures had been approved during the period 1992-97 which, expected to generate some 14,000 new jobs. It is not known how many of these approvals became functioning enterprises, but there is persuasive evidence that all is not well with Eritrea's private sector. This evidence includes lack of progress on exports even before the war, the number of foreign companies that had signed joint ventures, especially in fisheries and agri-business and then failed, the stagnation in foreign direct investments despite a promising start in 1996, the slow growth in the SME sector, and the continued overwhelming dominance of the public sector.

18. Eritrea has generally favorable policies for private sector participation and investment. However, entrepreneurs report that these policies are not implemented as intended and the business climate is often not friendly to the private sector. The CEM team interviewed a number of private investors and relevant government officials to get a sense of the regulatory climate as perceived by investors. They report that procedures are still cumbersome, and implementation of procedures can be arbitrary. Some of these problems stem from having a bureaucracy that is not used to dealing with the private sector. Others from continued implementation of laws enacted by the Dergue. But not all the problems can be ascribed to culture or old habits.

19. There are many complaints about the role of the PFDJ in private business, and not just by investors. Party-owned businesses are believed by investors to have an unfair advantage in getting licenses, land, telephones, foreign exchange and in taking care of other needs. Further, it

is reported that firms that compete with party owned businesses will have difficulty winning contracts and will run into difficulty with officials. Finally, although outright corruption appears to be still rare in Eritrea, there are increasing reports of contracts and consultancies having been steered to the right groups or individuals to get permits or win contracts.

20. The team compiled a list of 22 companies wholly owned by the party in banking, foreign exchange dealing, trading, transport, construction, banking and so on. There are another 11 companies in which the party owns over 60 percent of the shares. And the party is reported to be managing some state owned companies, including trading enterprises that are typically in private hands, such as automobile dealerships. Indeed, the party's presence in the formal economy appears to be increasing rather than decreasing.

21. **Agriculture was seen as a high priority, because some 80 percent of the population were dependent on agriculture, and Eritrea has historically been drought prone.** The previous CEM recommended as high-impact actions: improved use of pest control systems; dissemination of drought resistant, faster maturing seed varieties; increased use of fertilizer on irrigated land; rehabilitation of existing irrigation schemes; and construction of microdams.

22. As will be seen later where progress in the agriculture section is discussed in the context of the government expenditure on agriculture, efforts were made in most of these areas. Although there has been progress, in some cases quite encouraging, the sustainability of the programs is open to question and the strategy may need revision.

23. **There has been real progress in improving the functioning of the labor market.** At independence, the private sector was very restricted in hiring labor, wages paid did not reflect market realities, there were fears that the authorities would not be able to retrench labor where it was redundant, and there was the enormous challenge of building an efficient civil service.

24. Labor laws are now less restrictive. Retrenchment of labor in enterprises that have been privatized proceeded smoothly. Wage scales have been decompressed, although they may not yet fully reflect shortages of skilled labor which would give the right signals as to where the resources for education and training should be directed. Eritrea has also made significant progress in laying the foundations for an efficient and effective civil service.

25. **There has been a significant increase in funding for health and education since independence, along with increase in provision of health and education services**. However, there are real concerns about quality, particularly of education, and much needs to be done. Health and education are discussed in more detail in the context of public expenditures.

26. **Roads, power, water supply and telecommunications were identified as critical infrastructure in the 1994 CEM.** Good progress has been made, particularly on roads and power. There has been some improvement in water supply and until recently very little progress in telecommunication. Roads are discussed in more detail in the context of public expenditures, and telecommunication as a strategic sector over the long term.

27. **At independence Eritrea found itself with serious environmental problems.** These included land and pasture degradation, deforestation, low quality of water for drinking and inadequate knowledge of the potential of irrigated agriculture, and increasing deterioration of the urban environment. Partly because of the loss of forest cover but mainly because of the pressure of the growing population on the land resources, the loss and degradation of soils, particularly in the highlands, was putting downward pressure on yields.

28. The government established a Ministry of Land, Water and Environment, potentially providing for a more integrated approach to Eritrea's environmental problems. A comprehensive national environmental management plan has been adopted and is being implemented. National environmental assessment procedures and guidelines are in place. There exists a national biodiversity strategy and there is a program to protect marine biodiversity, supported by the Global Environmental Facility. Taken together this suggests a promising start, but the pressure on land and fresh water resources is intense, and will need continued attention by the authorities.

29. **An important area not covered by the 1994 CEM was monitoring and evaluation.** Although the National Statistics and Evaluation Office has been strengthened, the data-base on Eritrea remains extremely poor. There has never been a census, nationally representative household income and expenditure survey or proper national accounts. While there are plans for all of these, developing capacity in this area should be a priority. With the increased pressure on public finances, evidence-based prioritization of programs supported by public funds has become critical.

Government Expenditure Review

30. This section represents a first attempt at functional and economic analysis of government expenditure in Eritrea. The Ministry of Finance collects expenditure data by budget heading. However, as will be discussed below these data undercount expenditure in key sectors like health, education, rural roads and water supply.

31. **The data presented a challenge.** The biggest was program fragmentation which arises when two or more ministries are involved in a program. For example, the Ministry of Education, Local Government and Labor and Human Welfare are all involved in education. To get a complete picture of expenditure on education all spending needs to be accounted for. Existing government reports do not do this, and had to be done manually for this report. This was done for four program areas: education, health, water supply and feeder roads. In addition there is inadequate budget classification, lack of integration of government data and inconsistencies between line ministries and the Treasury Department. Nor was it yet possible to compile data on local government expenditures, or on transactions between government and state-owned enterprises. An even more important gap is the lack of data on transactions between government and the business owned by the PFDJ. The coverage of Eritrea's budget in this report is thus still far from being comprehensive.

32. **Right from independence Eritrea achieved high levels of revenue mobilization**. Between 1993 and 2001 the total revenue to GDP ratio ranged from a low of 26 percent in 2001 to a high of 43.3 percent in 1997; the annual average ratio was 33.2. This is well above the averages for Ethiopia (18.3 percent), Uganda (9.9 percent), and Rwanda (8.9 percent). Port fees mainly from Ethiopian traffic at Assab amounted to 9.5 percent of GDP in 1997 have dried up, but the tax-based revenue effort remains reasonably good, still running at 18-20% of GDP even in the very difficult situation of the last few years

33. **Aggregate Government expenditure has always been very high, and extraordinarily so during the war.** Total expenditure to GDP averaged 64 percent through 1997 and 90 percent from 1998 to 2001. Countries like Uganda, Rwanda and Ethiopia ranged between 16-25 percent in peace time, and Ethiopia peaked at 33 percent during the war. These totals do not include the activities of the PFDJ-owned businesses, which inhabit a grey space between the public and the private sector.

34. An analysis of the economic composition of shows that defense expenditure was large even prior to war, and was larger than capital expenditure every year except 1997. During the war,

defense expenditure peaked at 39 percent of GDP in 1999 and is projected at 15 percent of GDP in 2002. This is still very high. Capital expenditure has been steadily increasing since 1994 with wide swings as lumpy donor financed projects come on-line. Wages and salaries as a percentage of GDP doubled between 1993 and 1996, from 9.3 percent to 18.8 percent, reflecting substantial increases in civil service pay, accompanied by a 30 percent reduction in the workforce. Interest payments went up from 1.9 percent of GDP in 1997 to 5.0 percent in 2000. With net domestic claims on government jumping from Nfa 1.7 billion to Nfa 7.6 billion during the period, domestic interest payments would have risen more sharply had the government not kept interest rates repressed.

35. The analysis of the functional composition of expenditure only covers 1997-2002 because of the difficulties of compiling the data. Over this period non-defense government expenditure rose substantially from 42 percent of GDP in 1997 to 66 percent in 2000, driven by the huge rise in demands for emergency humanitarian assistance for internally displaced persons (IDPs) and people affected by drought, and by GOE's very commendable effort to maintain the momentum of development activities.

36. An analysis of expenditure in constant Nakfa shows that the general upward trend in expenditure across all categories shows a distinct break in 2000. In that year there was a sharp increase in expenditure on education and humanitarian services while spending on health, infrastructure services and economic services declined precipitously. The third round of fighting in the border war which seriously disrupted normal public and private sector activities in Debub and Gash Barka regions provides much of the explanation for the spending pattern seen in 2000.

37. **The major deficiency in public expenditure management in Eritrea is arguably the absence of stronger mechanisms for strategic prioritization of resources.** A cash budget system allows the Ministry of Finance and Office of the President to control aggregate expenditure. Budget monitoring and control systems are reasonably effective, although mechanisms for monitoring and controlling commitments should be gradually introduced. Similarly, the gradual introduction of performance indicators, coupled with enhanced autonomy managers of line agencies, can be expected to lead to eventual further improvements in operational efficiency.

38. While any government can make mistakes in public expenditure choices, experience elsewhere suggests that a more formal budget process will lead to a more rigorous evaluation of new policy proposals. With such a process a number of projects that appear questionable might not have been undertaken: the InterContinental Hotel in Asmara, the Airport in Massawa that can handle jumbo jets, the Massawa-Assab road and others. Consider, for example, the Massawa airport. With the Asmara airport seriously underutilized and being able to handle any conceivable increase in traffic and cargo in the medium term, what was the hurry of using scarce public resources to increase airport capacity? Resources have alternate uses.. This airport and the Inter-Continental hotel each cost more than the education ministry's budget for 2000. A more formal process of examining the allocation of public monies might have also led to a questioning of the expansion of the PFDJ-owned businesses.

39. The discussion and approval of the budget by the National Assembly for the first time in 2002 is a very welcome and long overdue step. However, it is best seen as an initial step. It was not accompanied by a budget speech which is the usual mechanism for the Government to outline and justify its programs. The expenditures planned in the budget are significantly in excess of current projections of revenue. As a result, the real budget constraints are not confronted. Further, it does not give line ministries a realistic view of the resources availableto them. This

will undermine their ability to make realistic plans which can lead to difficulties in implementation due to mid-course cut-backs in availability of resources.

40. **There has been a significant increase in public education expenditure in Eritrea.** As a share of GDP and in dollars per capita, government expenditure is higher than in Uganda or Ethiopia. The strategy has focused on system expansion and this has led to the rising enrollment rates. However the high rates of drop-out and wastage will reduce the impact of rising enrollments. The Government has targeted primary education, but in an anomaly, unit costs per student are lower in middle and secondary education than in primary education which raises concerns about quality of education at those levels. The World Bank's Education Sector Review also raises concerns about the quality of education at other levels.

41. **Developing a sector-wide strategy for education that takes into account all external and internal partners is critical.** Education is a priority sector, and there may well be a case for continuing to increase funding for the sector. But given the fiscal stress that Eritrea will face over the next few years, it is important that further increases are based on a clear sector strategy that is tied to results, and eliminates the fragmented approach that has been used so far.

42. **Although health too has seen increases in expenditure, public health expenditure to GDP and public health expenditure in dollars per capita are below comparators like Uganda and Rwanda and roughly equal to Ethiopia.** Indicators such as life expectancy, immunization rates, and infant and child mortality have all improved significantly since independence, while maternal mortality, puzzlingly, deteriorated. Low caloric intake and malnutrition among women and children continues to be the main cause of high mortality in Eritrea.

43. The policies followed in this sector concentrated on rehabilitation and expansion of health services infrastructure, increasing the number of health personnel, and strengthening the disease control programs. As a result there has been progress in the physical infrastructure, number of health professionals and immunization coverage. The overall health status has shown improvement. Two important multisectoral projects have begun implementation. HAMSET deals with HIV/AIDS, Malaria, Sexually Transmitted Diseases and Tuberculosis. The other project covers early childhood development. These innovative projects are responding to pressing health needs. The next step to consolidate the gains in health would appear to be the development of a health sector strategy. Like education, this should include internal and external parties. As this is done there is a good case for increasing expenditure on health.

44. **Expenditure on agriculture, measured in constant Nakfa, peaked in 1998 and has been fallen significantly since.** However, the 2002 budget calls for more than a doubling of expenditure on agriculture. Government strategy initially focused on building microdams but has increasingly focused on the Integrated Farming System (IFS) which provides tractors, fertilizer, seeds and irrigation to farmers. While the microdams have by and large not been successful, the IFS has raised yields. However, the Bank's Agricultural Sector Review suggests that this is not a sustainable strategy. In developing any strategy for agriculture, careful attention also needs to be paid to the overall resource costs in raising yields as well as to the fragility of the land as l additional tracts of land are subjected to mechanical cultivation and the use of other modern inputs.. This suggests the need to make strategic choices so as to not expand the area under cultivation in a manner that increases the risks in agriculture.

45. The two most important factors for improving productivity in agriculture are probably moisture control and developing a sustainable strategy for the intensification of agriculture. In dry land farming, the use of appropriate technology, including the use of modern inputs will

depend on moisture availability. Water harvesting, better moisture conservation measures, and introduction of more appropriate farm implements are all necessary. The next priority would be to speed up irrigation development for the production of high value crops.

46. A sustainable intensification of agriculture will imply less subsidy of fertilizer and tractors, and more emphasis on research and extension and a private sector led distribution system for inputs. Increasing the coverage of farms under IFP will imply ever increasing subsidies for fertilizer, seeds and tractors. Further, this highly centralized form of decision making on the use of these inputs is likely to lead to their increasingly inefficient use. The environmental consequences are likely to be negative. A better strategy would be a more decentralized one where farmers themselves are left to take decisions on the use of the inputs. Rather than spend public funds on subsidizing use of fertilizer and tractors, Government should focus on research and extension so that farmers can make improved choices and maximize the benefits from modern inputs. Rather than attempting to control the distribution of inputs, no matter how well-intentioned, the strategy should be to encourage the development of a private distribution system.

47. **Roads have been a priority for Government and significant progress has been made in upgrading and building roads.** Because of the war, real government expenditure on infrastructure fell sharply in 2000. Sector policy has been progressing well, with due attention to maintenance, and strengthening of the institutional capacity. A sector strategy that includes feeder roads is under preparation .

Creating a learning society

48. This section builds on the review of the previous chapters and suggests how Eritrea's development strategy might be strengthened in response to the experience of implementation since 1993 and the war.

49. The first point to note is that the existing strategy is not to be discarded but, rather, to be strengthened, by taking into account the experience of implementation over the last ten years. The strategy suggested here consists of three prongs: a short-term response to the crisis in the form of a Crash Program for Exports; a medium term program to improve the use of public expenditures and strengthen the private sector by pro-actively encouraging two relatively neglected groups – the domestic private sector and the diaspora; and a long-term strategy designed to prepare Eritrea to compete in the global economy.

50. **A noteworthy feature is that the discussions during the preparation of the CEM led to agreement on the broad strategy, and implementation of the strategy has already begun on all three prongs.** While there are still differences of views on some aspects of the diagnosis and relative importance of the factors important for Eritrea's development, the strategy laid out in this CEM is largely a joint one.

51. **For the short-term, the strategy suggests a Crash Program for Exports.** Eritrea can get preferential access to the EU under the Lome Convention and to the US under the African Growth and Opportunities Act (AGOA). This provides a brief window of opportunity to increase exports to these markets. Eritrea also has a comparative advantage and skills in production of garments, sweaters and shoes. The Crash Program uses a strategy of assisting companies overcome their supply constraints, combined with proactively inviting potential investors and enterprises willing to subcontract business to Eritrea who want to take advantage of the quota access. The Crash Program has been running since September 2001.

52. **For the medium term, the strategy suggests first measures to improve the comprehensives, allocation, transparency and use of public expenditures.** Implementing the

IMF TA program already agreed with government should help improve the timeliness and accuracy of internal and external reporting, and facilitate tracking of spending.. These can be very usefully supplemented by implementing the reforms in the National Statistics and Evaluation Office so that independent data are collected on development outcomes.

53. A second level of improvement will come from making better use of available information. If Government wishes, the World Bank can assist in this process. A multi-sectoral public expenditure process can be launched with the goal of assisting in the preparation of the 2003 budget. Sector specialists in the key sectors would work with line ministries in assisting them with their budget submissions while a team works with the ministry of finance in putting the numbers together.

54. The third and highest level of improvement will come from strengthening the process that began with the National Assembly discussion of the 2002 budget. No expenditures should be approved outside the budget process. If decisions on new spending are needed during the course of the year, supplementary budgets should be discussed by the cabinet and National Assembly. Realistic revenue projections will lead to discussions of the trade-offs required and preparation of a budget speech will make Government's strategy clear and help frame the discussion.

55. **Measures to improve the private sector are grouped around four areas**: making rapid development of the private sector a priority and providing space for its growth; lowering the costs of doing business in Eritrea; attracting foreign investors with an emphasis on the diaspora so as to gradually converting the remittances and donations into investments; and improving the functioning of the financial sector.

56. **To prioritize the private sector** critical actions include gradually moving the party (PFDJ) out of business; recognizing that expensive government projects eat into the space available to the private sector; and implementing policies already in place that move the private sector into roles currently played by the state.

57. **There are clear indications that the cost of doing business, in cash or in time needed to achieve results, is high in Eritrea.** These include cost of services such as transport (especially shipping and air-freight), communication (including telephone and internet access) and the costs of dealing with regulations. Indeed, uncertainty and delay can be as expensive as direct costs. There is no market in land, and this remains a problem as the President himself noted in an interview last year. The World Bank and Government launched a study in March 2002 to try and quantify these costs and suggest means to reduce them.

58. **Attracting foreign investors both for learning and for funds is a priority.** The diaspora provides a starting point. Creating a climate that attracts diaspora investment will create a climate that attracts other investors. This is easier said then done. The post-independence experience offers a cautionary tale. Government has been keen on attracting diaspora investors since independence. Although there has been some success, it has been limited.

59. Following the recommendations from the initial CEM mission, a survey of foreign investors with particular focus on the diaspora will be launched shortly. It is planned to include Asian and other investors being targeted in the Crash Program for Exports. The survey is expected to be carried out in the summer of 2002, and it is expected to identify the constraints to investment as perceived by the diaspora and other foreign investors.

60. **A well functioning financial sector is critical for private sector development.** Following the war Eritrea's financial sector has been unprofitable. Financial sector policies can create a

better environment for the banks. To achieve this goal the following recommendations are made: (i) The Bank of Eritrea should not hold treasury bills beyond what is needed for transactions or monetary policy purposes when banks are holding excess cash reserves. (ii) Interest rates on treasury bills should be raised to levels approximately equal to what might be considered a desirable rate to be paid by banks on savings deposits; (iii) Bad debt provisions by banks should be made tax deductible; (iv) Banks should be encouraged to take a more differentiated interest rate policy on risky loans and removing the reference to an interest rate limit of 12 percent with respect to legal recourse will be necessary; and (v) Up to half the reserve requirement of 20 percent should be allowed to be met through treasury bills. Holding cash for the entire amount seems unduly onerous and ultimately raises the costs of money to borrowers

61. Beyond these measures greatest improvement will come from new competition in the banking system. Finally a private bank is being established. Given CBE's dominant position Government can move purposefully to reduce CBE's large market share and cost of funds advantage. One such measure is to cause public sector institutions to move significant demand (low cost deposits) to other banks. In addition, the central bank should strictly enforce prudent maximum loan concentration limits on CBE relative to its net worth (e.g., no more than 20% of its net worth to one credit risk), in order to force the bank to syndicate lending to a few of its largest best customers, thus allowing other banks access to this important market.

62. **In the long term Eritrea will have to be a globally competitive economy.** The actions discussed in the previous two sections, along with the other elements of the development strategy in health, education, agriculture and other sectors, are designed to help achieve this vision. But Eritrea's development vision should include actions now that will make Eritrea competitive in the global economy ten or fifteen years from now.

63. Rapidly expanding global networks and the spread of information technology is opening new possibilities that were not available in the past. One such opportunity is in IT-enabled services. Examples include call centers; back office data processing for airlines, banks, insurance and so on. The potential size of this market alone is enormous: Dun and Bradstreet report that about $200 billion of "business process outsourcing" is farmed out annually by companies worldwide. Even if these numbers were greatly overestimated, capturing a small piece of this market would make a tremendous difference for Eritrea. Some market segments require advanced skills and infrastructure but some services which do not require advanced infrastructure, can be easily standardized and out located.

64. **Telecommunication be considered a strategic sector.** Government can start to use the technology to achieve its development goals – in health, education, agriculture and other sectors. This will then create a generation of Eritreans, the enabling environment and the necessary infrastructure that would hopefully lead to firms that export IT-enabled services, but in any case should lead to the economy becoming competitive in the global marketplace.

65. **The delay in liberalizing the telecommunication sector now provides an opportunity to leapfrog, both in terms of technology and in terms of strategy.** The technological opportunity to leapfrog comes from the possibility of installing an all Internet Protocol (IP) network in the country. Internationally, data has already overtaken voice on telecommunication networks. An IP network or a packet switched network is far more efficient than traditional circuit switched networks. An IP network will make it possible for Eritrea to provide wide spread telephony services for a flat and affordable rate across the country as well as reduce the cost of international services.

66. **In terms of strategy, a pragmatic business-driven approach can make leapfrogging a reality.** Low-cost wireless services, widely available broadband communications and IP networks can emerge from making the right choices at the right time as in Scandinavia, China, Singapore and Chile. One such scenario would have Internet Service Providers (ISPs) and other providers competitively bidding for at least two national licenses for local network and service provision (internet, wireless paging, etc) while TSE focus becomes "whole-saler" of transmission backbone capacity and international access under clear rules of inter-connection. Such a scenario would encourage an IP-centric network to emerge, multiplying access to voice and other services in a modular, demand-driven manner.

67. **As the telecommunication infrastructure spreads, it provides an opportunity for Government.** The Ministry of Health has signed deals with Johns Hopkins and the University of Bologna to provide specialist telemedicine services in Asmara and the zoba offices. A South African group is to provide training to nurses. However, the connectivity does not currently exist to implement these arrangements. Distance education and agricultural extension also provide examples of how Eritrea can overcome its shortage of teachers or trained extension workers and still deliver services. The role of government is essentially to serve as a content provider. Government's objective is to use technology to achieve it's development objectives – in health, education, agriculture and other sectors. What is proposed here is not that government install computers in every village – quite the contrary – rather than providing hardware, government should focus on the software, the content. By creating useful content, government will create incentives that will lead to the spread of the hardware, for example through telecenters. Where the government does need to install computers in their offices, to the extent possible, contracts for installing and maintaining these should be given to the private sector.

68. **The private sector needs to play a critical role in making services widely accessible**. This is particularly problematic in rural areas where incomes are too low to afford telephone or internet services. One way for the private sector to provide these services widely is through telecenters. The extent to which the private sector is willing to develop telecenters will depend on profit opportunities from establishing them. Allowing telecenter operators to charge small fees for providing access to government forms or services through the internet can go a long way to establishing their profitability. As will allowing telecenter operators to charge for providing distance education and other government services.

69. Clearly, an educated population will be a key part of the learning strategy and the education sector strategy will be important. However, for the learning strategy to take-off a core mass of technical people will have to be quickly developed. In countries that have developed such a capacity, the private sector has played a critical role. Indeed, driving around Asmara today one is struck by the number of computer schools and training institutes that are springing up. This effort needs to be taken to a higher level. A clear legal framework and process for the establishment of private technical training institutes and colleges should be immediately set up. Uganda has seen the establishment of 10 private universities in a very short period of time, and the next paragraph suggests that Eritrea may have a special advantage in this regard.

70. The diaspora can play a special role in the education-communication nexus, in that these will be two areas where Eritreans abroad can be expected to have particular interest. For example, Eritreans abroad are quite likely to be willing to support family members attendance at fee paying institutions that will generate good jobs. Another possibility is for people to sponsor internet connections for the schools in the area that they originally come from. Telecommunications too are likely to be of interest: if wireless connections were available , mobile phones are probably the first present people would send to their families.

71. **Following the presentation of these ideas during the initial CEM mission, it was decided to proceed towards implementation.** Accordingly, in August 2001, a study tour was organized to Andhra Pradesh, India, which is seen as a world-leader in low-income countries in using technology for achieving development objectives. Eritrean participants included representatives from the Ministries of Health, Education, Transport and Communication, Chamber of Commerce and Telecommunication Services of Eritrea.

72. Following the study tour, Government asked the Bank to assist with the reformulation of its strategy for telecommunication liberalization, including revisiting issues such as provision of monopoly in landlines, and the strategy for developing IP-centric networks.

73. A telecommunication mission visited Eritrea in February of 2002 and work on developing the strategy, building on the work that had already been done is moving ahead quickly. Since the videoconferences have been held almost every week between Bank staff in Washington and staff from the Ministry of Telecommunications and TSE in Asmara. A study tour to China focusing on the implications of developing an IP network is planned for May 2002.

74. Work on the "demand" side, the delivery of content is proceeding somewhat slower. The purpose of including Ministries of Health and Education in the study tour was to begin the process of sensitization. An informal team has been formed within the Bank country team to work on these issues. Plans in the near future call for including ICT experts in the missions that are working towards developing health and education strategies.

1. THE ROAD TRAVELED SINCE INDEPENDENCE

A. INTRODUCTION

1.1 In May of 1991, under the leadership of EPLF, Eritrea was fully liberated from Ethiopia, following 30 years of struggle. Eritrean victory, combined with the simultaneous and coordinated victory of the EPRDF-led rebel forces on the Ethiopian side, toppled Mengistu's brutal Derg regime. Following a two year period, and in agreement with the new government of Ethiopia, Eritrea held a referendum in which the Eritreans voted overwhelmingly for independence. Based on this, Eritrea declared independence on May 24, 1993.

1.2 Soon after independence the Eritrean government asked the World Bank to lead the preparation of a Country Economic Memorandum. The CEM was to cover, in as comprehensive a way as possible, the economic and social situation in Eritrea and give some pointers for the way forward. A large multi-donor mission visited Eritrea in October of 1993. With excellent collaboration among the donors and superb assistance from many Eritreans, the report was prepared and discussed with the government in the summer of 1994 and published in its final form on November 10, 1994[1].

B. RECOMMENDATIONS OF THE FIRST CEM AND PROGRESS THROUGH 2001

1.3 The 1994 CEM presented recommendations covering nine different areas:

- achieving macro-economic stability;
- promoting exports;
- facilitating private sector development;
- realizing the potential of agriculture;
- improving labor markets;
- strengthening the role of communities in poverty reduction;
- investing in people (including education, health and nutrition);
- prioritizing infrastructure investments; and
- improving the environment.

1.4 It was hoped that these recommendations, if successfully implemented, would lead to rapid, sustainable, widely shared growth.

Achieving macroeconomic stability

1.5 Achieving macroeconomic stability meant pursuing fiscal discipline. Yet the Eritrean authorities had to balance several competing needs against one another; i.e. the needs for reconstruction, demobilization and reintegration of 55,000 former combatants into civilian life, resettlement of about 190,000 returning refugees, helping to take care of the families of the tens

[1] World Bank, Country Economic Memorandum (CEM), Eritrea: Options and Strategies for Growth (in Two Volumes), November 10, 1994

of thousands of fighters who had died or been maimed during the war of independence[2], and an upward adjustment in salaries of the severely underpaid civil servants. This had to be done with the scant public resources that they could squeeze out of a rundown economy or muster from the Eritrean diaspora and the donor agencies.

1.6 This looked like an impossible task back in 1993. But by 1997 this is precisely what the Eritreans had achieved. They had put the large "one-off" expenditures on reintegration of soldiers and refugees and assistance to the families of killed and disabled fighters largely behind them. On the revenue side they reduced corporate income taxes, eliminated export taxes, and lowered and reduced the dispersion of import tariffs, while tightening up on tax collection in general. They also achieved a startling rise in non-tax revenues to a level of nearly 23 percent of GDP in 1997, almost a half of which were charges for port services paid by Ethiopia for the use of the ports of Assab and Massawa (Table 2.1).

1.7 The two-tiered exchange rate was unified in April 1997 at birr 7.2 to the US dollar and by the spring of 1998 15 forex bureaus were in operation. In March 1997 two proclamations established the guidelines for the operations of Eritrea's new central bank, the Bank of Eritrea, and for the financial institutions, along with legal measures that later, in November of that year, facilitated the introduction of the new Eritrean currency, the Nakfa. The Nakfa started out at par with the Ethiopian birr. A Debt Management Unit was set up in the Ministry of Finance to promote prudent debt management. Several university graduates had been recruited to the Ministry of Finance to help improve the administration of Eritrea's fiscal policies. By early 1998 Eritrea's decision makers felt that significant progress had been made towards achieving macroeconomic stability and that it was time to turn to medium term issues. A draft National Economic Policy Framework and Program for the period 1998-2000 was prepared in March 1998, summarizing Eritrea's achievements and sketching out the way forward.

1.8 The results of these actions seemed encouraging in early 1998. As table 1.1 shows, annual average inflation had been brought down to 7.7 percent; the newly created currency, the Nakfa, was stable and backed up by gross reserves that covered about 5 months' worth of imports of goods and services; the budget deficit, including official grants, which had averaged about 20 percent of GDP during 1994-96, was brought down to 6 percent of GDP; the current account deficit, including official transfers, was essentially in balance despite record imports, financed mostly by large private transfers of the Eritrean diaspora; public debt, which was non-existent at the time of independence, remained insignificant; and growth of GDP averaged about 7.4 percent over the four-year period through 1997.

1.9 Unfortunately the good news did not last long. Difficulties with Ethiopia which had started with trade and high port charge issues when the Nakfa was introduced in 1997, escalated rapidly after the first military clash between the two countries in May 1998. Exports to Ethiopia, representing about 63 percent of Eritrea's total exports of goods, collapsed; port revenues dried up; dividends from public enterprises dwindled; military expenditures ballooned; an income surtax had to be introduced to reduce Eritrea's reliance on bank financing of a burgeoning budget deficit; economic activity slowed down and eventually went into a sharp decline in 2000.

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[2] Government of Eritrea, National Economic Policy Framework and Program (NEPFP) for 1998-2000, Discussion Paper, Asmara, March 1998, p.6; also in Government of Eritrea's, Transitional Economic Growth and Poverty Reduction Strategy 2001-2002, Asmara, August 2001, p.6.

Table 1.1: Key Economic Indicators, 1993-2001

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Real GDP growth (%)	-2.5	9.8	2.8	9.2	7.7	3.9	0.3	-11.9	9.7
Inflation (%) change, end of year	9.6	6.8	11	3.4	7.7	9	10.6	26.8	7.7
Fiscal balance (incl. official grants) as % of GDP	-7.0	-13.3	-25.1	-20.6	-6.0	-39.9	-56.3	-47.8	-32.3
Exports of goods & services (US$ Million)	93.3	143.3	171.4	200.2	203.3	110.4	65.7	97.5	147.3
Imports of goods & services (US$ Million)	283.7	409.3	545.5	571.5	589	596.1	597.4	498.6	522.8
Current account balance (excl. transfers) as % of GDP	7.6	3.8	-10.2	-21.2	-5.7	-33.0	-40.1	-33.0	-29.7
Current account balance (incl. transfers) as % of GDP	26.4	20.8	3.5	-8.2	2.2	-24.8	-29.1	-16.7	-12.6
Reserves in months of imports of goods & services (end-year)	3.9	5.6	4.6	4.1	4.9	1.4	1.1	0.9	1.2
Gross national savings/GDP (%)	81.9	29.2	11.6	14.9	40.7	12.1	13.3	19.2	22.9

* GDP growth rates for 1993 and 1994 used in this table have been reported in various documents over the past few years. The rest of this report uses national accounts data as estimated by the authorities in order to preserve internal consistency of the accounts and comparisons based on these accounts. These figures, still unofficial, report GDP growth to have been 9.9% in 1993 and 25% in 1994. Resolution of the difference awaits the authorities' publication of the official estimates of GDP since independence. The current account balance estimates (excluding and including transfers) for the period 1993-96 are taken from the IMF staff report for the 1998 Article IV consultation.

1.10 The budget deficit increased from 6 percent of GDP in 1997 to 48 percent in 2000, and domestic debt reached 128 percent of GDP in 2000 (see Table 1.2). The external balance also deteriorated sharply, with external debt reaching over 50 percent of GDP (from zero at independence) and gross international reserves covered barely a month of imports. Foreign exchange had to be rationed with the result that the black market rate for the Nakfa was at times as much as twice the official rate. Gross national saving, much of it driven by the transfers and transactions of the Eritrean diaspora, nose-dived from over 40 percent of GDP in 1997 to about 20 of GDP in 2000-2001. While the external debt still looks manageable since it was contracted on highly concessional terms, the prospects for a rapid increase in exports to replace the lost exports to the Ethiopian market are grim. Without a crash program for exports Eritrea runs the danger of moving from a debt-free to a highly indebted poor country in record time.

1.11 By 2001 the economy had begun to stabilize. Budget deficit and bank financing of this deficit started to come down, helping to bring the inflation rate back into the single digit range in 2001. Growth resumed, led by a recovery in agriculture as farmers went back into the fields. This helped reduce the domestic debt to GDP ratio to 106 percent, although external debt to GDP ratio continued to rise. The demobilization program is now underway. This should facilitate stabilization by allowing a reduction in military expenditure and release soldiers into the labor force, thus making further expansion of economic activity more sustainable.

Table 1.2: Macroeconomic Consequences of the War

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Income per capita	NA	NA	180	200	220	210	190	170	180
Government expenditure/GDP (%)	68.2	65.2	77.5	65.9	55.5	81.9	97.7	101.4	77.2
Government domestic debt(net)/GDP (%)	NA	NA	NA	NA	34.3	63.4	98.8	127.5	105.9
External public debt/GDP (%)	0.5	4.8	5.7	6.2	11.7	19.8	39.8	51.7	60.9
Bank financing/GDP (%)	-0.5	5.7	17.4	19.7	3.8	30.5	39.8	41.8	19.1
Private transfer/GDP (%)	40.5	56.7	37.6	38.9	54.6	34.7	36.9	32.2	26.5
Net donor support/GDP (%)	17.6	21.4	13.8	13.8	12.4	17.3	27.1	24.3	33.7

1.12 However, as can be inferred from the indicators presented in by Table 1.2 on the macroeconomic consequences of the war, rapid and sustained development will be much harder to achieve. First, the state has become far and away the dominant actor in the economy. Eritrea's persistently high public expenditures averaged an astonishing 90 percent of GDP between 1998 and 2001. This is not purely a war-time phenomenon. Levels of public expenditure have been much higher than in comparator countries such as Uganda, Rwanda or Ethiopia. In these countries, public expenditure has fluctuated around 15-30 percent of GDP. Even before the recent war, public expenditures in Eritrea averaged 67 percent of GDP during the period 1993-1997.

1.13 Second, Eritrea has become increasingly dependent on support from abroad for sources of investment funds and even for the government's recurrent expenditures. Dependence on support from the diaspora is shifting to dependence on aid to underpin the high levels of government expenditures. Private transfers averaged 45 percent of GDP and net donor support 16 percent between 1993 and 1997 (Table 1.2). Rising donor support meant the ratios were reversed by 2001 with donor support rising to 34 percent and transfers decling to 27 percent of GDP. By contrast, Uganda, which also benefits from large donor and diaspora flows receives about 12 percent of GDP as aid and 9 percent of GDP in private transfers.

1.14 Third, Eritrea has become a highly indebted country (Table 1.3). A preliminary debt-sustainability analysis shows Eritrea's debt in net present value terms as a percentage of exports of goods and services reaching 311 percent in 2002, well above the HIPC eligibility cut-off of 150 percent. Because the debt is largely concessional, the debt service to exports ratio is more manageable, rising to 23.5 percent in 2002 but then falling to 19.5 percent in 2003 and falling further afterwards, based on an assumption of a 14 percent per annum growth in exports between 2002 and 2006. It is also worth noting that these standard measures of indebtedness do not take into account Eritrea's very large diaspora flows.

Table 1.3: Eritrea - External Debt Indicators 2001-2006

	2001	2002	2003	2004	2005	2006
Debt (NPV)/Exports* (%)	328.5	310.8	287.5	287.8	254.8	221.3
Debt service/Exports* (%)	4.6	23.5	19.5	15.1	15.0	12.4

*Exports of goods and services
Source: IMF

1.15 The overall dependence on aid and diaspora flows is very clear. The current levels of aid are unlikely to be sustained. The very large disbursements of the last three years were driven primarily by IDA emergency lending and emergency humanitarian assistance from bilateral donors and UN agencies. After the Demobilization and Rehabilitation Program which is expected to disburse mostly in 2002 and 2003, IDA flows are going to decrease significantly. Humanitarian assistance too is expected to fall off sharply following the return of most of the war-displaced persons to their villages. Until the ongoing dispute with the EU over governance and human rights issues is resolved, total aid flows will be much smaller than Eritrea has been receiving. Over the long term, the current levels of diaspora transfers may or may not be sustained. Current levels are partially driven by the patriotism of Eritreans as the country finally achieved independence, and by the threat to Eritrean independence posed by the border war which has now ended. As time passes, and the next generation is born and raised abroad, these flows are likely to decrease unless there continues to be significant outmigration.

1.16 Aid and diaspora remittances are providing Eritrea macroeconomic breathing room. What is needed now is a renewed push to quickly grow the private sector which in turn will increase exports and so reduce the dependence on aid. As for the diaspora, a more sustainable use of the flows from this source should be found. This is most likely to come from increasingly

converting these remittances into investments. As the conditions are created that encourage the diaspora to invest, the conditions will also be created for other domestic and foreign investors to put money into Eritrea.

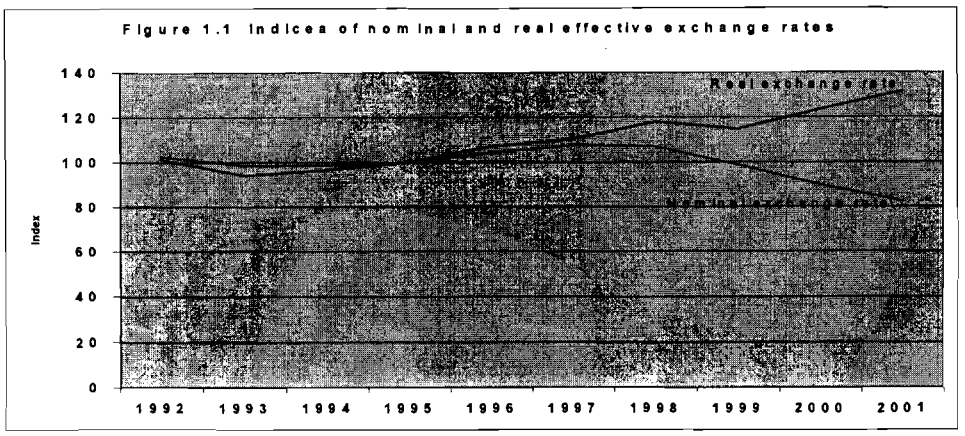
1.17 Finally, the war has seriously affected Eritrea's financial sector. As of December 2000, 42 percent of the combined portfolio of Eritrea's three banks were bad or doubtful debts. At the time banking system capital was only 1.7 percent of total assets and 4.9 percent of risk capital. However, under the terms of the donor-funded Emergency Reconstruction Program (ERP), the three banks can, under certain eligibility rules, fully or partially write off loans affected by the war. Once this future infusion of capital is accounted for, along with a transaction whereby Government has taken over responsibility for about Nakfa 1186 million in liabilities due from CBE to Commercial Bank of Ethiopia, and receives Nakfa 986 million in cash, in return for Nakfa 200 million in capital to be paid in over time, only the Housing and Commerce Bank of Eritrea (HCBE) will remain in a precarious state. However, the banking sector as a whole is unprofitable, and unless remedial steps are taken the other two banks may also run into trouble.

1.18 The cumulative impact of the recent war is that Eritrea is now much more vulnerable to new shocks. Events such as reduction of aid or diaspora flows, further conflict, terms of trade shocks, or covering contingent liabilities of public and quasi-public entities (such as banks or entereprises employing many people) that will not be allowed to fail, could lead to unbearable pressures on the public purse. Eritrea's room for maneuver has been sharply curtailed.

Promoting exports

1.19 Expansion of exports was already considered important in the last CEM for a number of reasons: Eritrea has a small domestic market and needed exports as the main engine of growth; acquisition of new technology and skills could best be done through openness to the world markets; and, the need for foreign exchange was going to increase as the economy took off. Prior to the wholesale nationalization of businesses by the Mengistu regime in the mid 1970s, Eritrea had a tradition of exports that could be revived and built on.

1.20 Exports that were thought to have the greatest potential for expansion were in manufacturing, mining, agriculture, livestock, fisheries, and tourism. A number of policy measures that pertained to the incentive framework were implemented. Right after independence there was a dual exchange rate, with the two rates rarely diverging by more than 20 percent, and with exports receiving the more favorable rate. The exchange rate was unified in April of 1997 by bringing the rate determined at the auctions for the birr in Ethiopia to the preferential level offered for foreign exchange by Eritrea for most private imports, all exports and for inward remittances. The initial rate was set at Birr 7.2 per $US. Through 1997, Eritrea's exchange rate policy gave a strong incentive to exports. As inflation picked up in 1998 due to the border war, and the nominal rate was not allowed to depreciate in line with inflation, the real effective exchange rate appreciated (Figure 1.1). The growing gap between the real and nominal rates was reinforced by large inflows of foreign exchange from the diaspora and, after a few years, with growing inflows of aid. This "Dutch disease" effect is likely to make it more difficult for Eritrea to engineer a recovery in its exports, especially since the relatively "easy" Ethiopian export market is gone for the foreseeable future.



1.21 Import tariffs were lowered and made more uniform. In 1994 [legal notice 18/1994] the number of import tariffs was reduced to 12 with capital goods, raw materials and semi-processed goods having a tariff of 2 percent; duties on basic goods are now in the range of 3-20 percent; non-basic goods have tariffs in the range of 25-40 percent; and luxury items have tariffs of up to 200 percent. Importers report that customs clearance procedures are relatively expeditious and free of corruption.

1.22 A number of other actions supportive of export expansion were also taken. For example, mining and hydrocarbons laws and regulations were promulgated that provided incentives to domestic and foreign enterprises to prospect for, explore and develop Eritrea's mineral deposits. Steps were initiated to develop a framework for a sustainable expansion of fishing and exports of fish. At the same time the government embarked upon major investments in roads, electric power generation, dams and ports, all of which would support both the expansion of exports and production for the domestic market.

1.23 The total impact of these measures was not impressive. There was an initial surge, but by 1995 exports of goods had peaked, although earnings from exports of services continued to grow until the start of the border war in 1998 (Table 1.4 and Table 1.5). This happened despite the extremely low level of per capita exports (one of the lowest in the world) and despite Eritrea's traditional role as a major provider of manufactured goods to Ethiopia. By 1998, Eritrea had not been able to diversify either geographically or in terms of the types of goods it produced. Ethiopia continued to take roughly two thirds of Eritrea's exports, including most of its exports of manufactures and crude materials. The remaining third of exports went to Sudan and the Middle East and were largely composed of live animals and (Table 1.5). With the collapse of the Ethiopian market, starting in 1997 due to Ethiopia's negative reaction to the introduction of the Nakfa, exports of manufactures virtually disappeared. By 1999 Eritrea's exports of goods amounted to only $20 million. Such a low level of exports poses one of the biggest challenges for policymakers in Eritrea.

Table 1.4: Eritrea – Direction of Exports of Goods (millions of US$)

	1993	1994	1995	1996	1997	1998	1999	2000
Ethiopia	24.9	33.7	56.1	53.8	33.1	7.0	0.0	0.0
Africa	8.9	10.6	16.6	8.4	9.1	7.3	10.8	10.3
Middle East	0.7	8.2	2.7	3.3	1.1	2.2	2.5	1.9
Europe	1.5	3.3	3.8	4.6	3.3	2.9	2.4	2.3
United States	0.0	0.2	0.1	6.3	0.4	0.5	0.6	0.0
Rest of the World*	4.0	8.4	4.5	5.3	5.1	6.4	3.9	5.1
Total	**40.0**	**64.4**	**83.8**	**81.7**	**52.2**	**26.3**	**20.2**	**19.6**
Total (excluding Ethiopia)	**15.1**	**30.7**	**27.7**	**27.9**	**19.1**	**19.3**	**20.2**	**19.6**

Source: Customs Office.
*Most importantly Japan and Republic of Korea

Table 1.5: Composition of Exports, 1992-2000 (millions of US$)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Food and live animals	0.9	5.3	19.1	22.4	14.5	11.3	7.8	8.4	11.4
Beverages and tobacco	1.4	1.7	1.5	3.1	4.1	1.2	0.0	0.0	0.1
Crude materials	12.5	14.6	21.4	24.7	19.3	18.0	12.0	3.0	3.9
Animal and vegetable oils, fats, and waxes	0.0	0.0	0.0	0.3	0.4	0.2	0.0	0.4	0.0
Chemicals and related products	0.1	1.2	1.2	1.9	2.1	1.1	0.5	0.6	0.7
Manufactured goods	0.9	10.1	11.0	15.9	13.9	8.9	3.5	2.9	2.7
Machinery and transport equipment	0.4	0.7	1.9	3.2	4.3	1.5	0.6	3.7	0.4
Miscellaneous manufactured articles	0.4	6.4	8.3	12.2	23.0	9.9	1.8	1.2	0.5
Exports of goods, f.o.b.	**16.6**	**40.0**	**64.4**	**83.7**	**81.6**	**52.2**	**26.3**	**20.2**	**19.7**
of which: Ethiopia	**14.4**	**24.9**	**33.7**	**56.2**	**52.7**	**33.1**	**7.0**	**0.0**	**0.0**
non-Ethiopia	**2.2**	**15.1**	**30.7**	**27.6**	**29.0**	**19.1**	**19.3**	**20.2**	**19.6**
Memo Items:									
Share of exports to Ethiopia (%)	86.7	62.2	52.3	67.1	64.5	63.4	26.6	0.0	0.0
Exports of services	72.8	57.2	79.8	90.8	104.9	149.8	82.2	45.6	60.7

Source : IMF

Facilitating private sector development

1.24 The Government's development strategy described in the Macropolicy document in 1994 and in subsequent documents, sees the the private sector as the engine of economic growth. The EPLF Government inherited a host of enterprises nationalized by the Mengistu Government. The industrial sector consisted of about 40 large industrial enterprises employing around 11,000 workers, and 700-800 small enterprises (more in the nature of workshops) employing on average 5-7 people each[3]. The government's intention from the beginning was to privatize as many of the enterprises as possible, but have them run on a commercial basis while the process of privatization was underway. There was also the awareness that the atmosphere for the private sector in general had to improve so as to encourage new entrants.

1.25 The small workshops were sold off quickly or repossessed by the former owners, so that by 1994 only the larger enterprises were still in government hands. There was then a pause of a couple of years while the mechanism to oversee the privatization of the larger enterprises was set up. The process was not badly disrupted by the border war. As a result 35 of the 41 large public enterprises up for sale had been sold by the end of 2001.

1.26 A number of other measures undertaken during the period 1993-97 were also important to enterprise development. The existing investment code was reformulated and the Eritrean Investment Center was established; a "one-stop" Business Licensing Office was set up; opinions as to the needs of the private sector were sought through various channels, including through the Chamber of Commerce; land was allocated for industrial estates near Asmara and in Dekamhare and Dubarwa but with practically no infrastructure; and a couple of housing estates were built to relieve the housing problem that was particularly acute for foreign investors and returnees that were trying to set up new businesses.

1.27 The response to these measures was mixed. The Eritrean Investment Center reported that some 500 new private sector ventures were approved during the period 1992-97. These were expected to generate 14,000 new jobs, roughly a half of them in manufacturing[4]. Hotel and

[3] CEM, op.cit., Tables 4.1 and 4.2, pp. 47-48, and IMF, Eritrea – Selected Issues, SM/98/161, pp. 19-27
[4] NEPFP 1998-2000, Annex 1, Table 1.1

restaurant businesses which accounted for 30 percent of all approvals (by value of capital to be invested) had visibly picked up. Manufacturing which had accounted for about 40 percent of all approvals had expanded by about 50 percent between 1993 and 1997 (see table 1.6) How much of this expansion was due to new private sector activity is not known. Construction, on the other hand, which experienced a veritable boom, was driven largely by government infrastructure investments (only 10 percent of all approvals). And fisheries and agriculture investments (7 percent and 4 percent , respectively, of approvals during 1992-97) did not seem to have had much of an impact in their respective areas. The strong expansion in agriculture in 1998-99 was probably due to a major increase in cultivated area under the government's heavily subsidized Integrated Farming Program and exceptionally good weather conditions, rather than to new investments by the private sector. Note however, that the data presented in table 1.6 are very rough estimates, and may not be a reliable indicator of the true growth rates in the various sectors, as a proper system of compiling national accounts has not yet been instituted in Eritrea.

Table 1.6: GDP by Industrial Origin, 1993-2001 (in millions of constant Nakfa, 1992=100)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Agriculture	481.8	658.5	581.5	548.0	550.8	866.7	800.3	454.4	616.8
Crops and livestock	385.7	554.8	472.3	437.4	443.7	755.5	683.8	331.3	488.2
Staple crops	109.0	217.0	160.1	134.6	135.3	335.5	279.2	97.0	195.6
Cash crops	54.2	107.9	79.6	66.9	67.3	166.8	138.8	48.2	97.2
Livestock	222.5	229.9	232.6	235.9	241.1	253.2	265.8	186.1	195.4
Forestry and fishing	96.1	103.7	109.2	110.6	107.1	111.2	116.5	123.1	128.6
Forestry	92.6	95.3	98.0	100.8	103.7	106.7	109.8	113.0	116.3
Fishing	3.5	8.4	11.2	9.8	3.4	4.5	6.7	10.1	12.3
Industry	337.5	384.6	466.2	638.4	764.5	715.1	735.2	688.4	732.2
Mining and quarrying	4.0	4.0	4.0	4.1	8.8	6.8	6.1	3.0	3.0
Manufacturing	166.1	176.6	213.0	240.9	256.6	233.5	234.6	242.9	256.2
Handicrafts and small industry	28.1	32.7	38.1	50.2	93.0	85.0	88.4	91.5	96.5
Electricity and water	24.0	26.2	27.8	29.5	32.2	32.9	35.0	35.5	35.8
Building and construction	115.3	145.1	183.3	313.7	373.9	356.9	371.1	315.5	340.7
Services	1331.1	1659.3	1729.3	1845.7	1951.5	1813.1	1868.3	1856.1	1941.3
Distribution services	828.4	970.2	1074.4	1148.8	1222.7	1019.2	1029.4	967.6	1025.6
Trade, wholesale, and retail	567.8	641.4	717.8	763.9	808.9	648.9	655.4	589.8	625.2
Transport and communi	260.6	328.8	356.6	384.9	413.8	370.3	374.0	377.8	400.4
Other services	502.7	689.1	654.9	696.9	728.8	793.9	838.9	888.5	915.7
GDP at factor costs	2150.4	2702.4	2777.0	3032.1	3266.8	3394.9	3403.8	2998.9	3290.3
Indirect taxes less subsidies	144.2	130.0	125.2	137.4	155.8	133.0	146.7	123.6	135.6
GDP at Market prices	2294.6	2832.4	2902.2	3169.5	3422.6	3527.9	3550.5	3122.5	3425.8

Source: IMF

1.28 The overall picture is that all is not well with the private sector environment in Eritrea. The slow progress on exports, the continued dominance of the public sector in the economy, and the number of proposed investments from the diaspora, foreigners and Eritreans that have failed to materialize, all suggest that immediate attention needs to be paid to the environment for the private sector. The CEM team interviewed a number of private investors and relevant government officials to get a sense of the regulatory climate as perceived by investors. The emerging picture is that despite Eritrea's generally favorable policies for private sector participation and investment, the implementation of these policies is not friendly to the private sector. Delays can come from the procedures themselves and their application.

1.29 Consider the procedures. The Eritrean Investment Center provides a short form that guides the preparation of a simple feasibility study and project summary document that are meant

to be the basis for applying for a business license. The Business Licensing Office is meant to be a speedy "one-stop" center for the issuance and renewal of business licenses suggesting that getting a license to invest in Eritrea is a simple process. However, actual experience is that applications for business licenses are still turned down for nebulous reasons and getting all the permits to start a business can take months.

1.30 For instance, foreign investors require business visas which are given only for 3-5 months (requiring, among other things, a supporting letter from the concerned minister); a work permit (again requiring a supporting letter); clearances from the tax and immigration offices; and supporting letters from the concerned ministry and immigration office to the Bank of Eritrea to open bank accounts. A partial list of offices that need to be personally visited, each often several times, includes the investment office, the business license office, the Bank of Eritrea, high court, municipality, income tax office, land office and the concerned ministry. Many of these offices require supporting documents from each other and typically none of the supporting letters can be used twice – the concerned ministry, for example, has to address the supporting letter separately to each office that requires it.

1.31 Once the investor has the necessary permits, which reportedly not all investors are able to do, he/she is still a long way from being able to begin operations. Investors complain of considerable arbitrariness in implementing rules. For example, an investor went to the land office and was told that his application would not be considered without a business license. But the business license office would not issue the license without an office address being established. Another investor complained that the income tax office would not allow him to amortize investment, which some other investors were allowed to do. Labor law in Eritrea requires that six months compensation be provided to any laborer dismissed after one year in service, regardless of cause. A couple of investors claim that workers who want to leave after a year start behaving badly so that they have to be fired. One investor reported having to pay a worker's salary while the worker was in jail for stealing from the firm, and had to pay the six month compensation as well. There are also several complaints about disputes and complaints being allowed to bring business to a halt rather than having an orderly and transparent system of dispute resolution.

1.32 Some of these problems stem from having a bureaucracy that is not used to dealing with the private sector; others from continued implementation of deliberately anti-private sector laws enacted by the Dergue. But not all the problems can be ascribed to culture or old habits .

1.33 There are many complaints about the role of PFDJ in private business, and not just by investors. Party-owned businesses are believed by investors to have an unfair advantage in getting licenses, land, telephones, foreign exchange, water, electricity, etc. Further, the party and the government being closely linked, it is in the nature of things that party owned businesses will have certain advantages when competing for public sector contracts.

1.34 The team compiled a list of 22 companies wholly owned by PFDJ in banking, foreign exchange dealing, trading, transport, and construction. There are another 11 companies in which the PFDJ owns over 60 percent of the shares. The PFDJ took over some of the Dergue-nationalized enterprises such as garages, the Elaberet farm, and the automobile dealership. Indeed, PFDJ's presence in the formal economy appears to be increasing rather than decreasing.

1.35 The record suggests that the complaints cannot be dismissed as the grumbling of disgruntled investors. The private sector has not taken off despite the apparently supportive policy framework that has been in place since the early 1990s. Eritrea's exports of goods in 2000 were a tiny $20 million and projections for 2001 were for $25 million. Not all of this can be attributed to the war.

1.36 Foreign direct investment provides an indicator. In 1994, a survey of East African investors asked potential foreign investors about their perceptions of East African countries. Eritrea had the highest overall score (table 1.7). On just about every question, Eritrea was perceived at the time as having a favorable climate for investors. This was true even of the size of the market, which obviously took into account the free trade that existed between Ethiopia and Eritrea.

Table 1.7: Perceived Strengths and Weaknesses of East African Countries 1994

	Average score*				
Factors	Kenya	Tanzania	Uganda	Ethiopia	Eritrea
Costs of labour	4.0	3.4	3.8	3.8	4.5
Overall growth prospects	3.2	3.7	3.8	3.8	4.2
Geographical location	3.5	3.6	3.4	3.9	4.2
Size of the market	3.0	3.4	3.2	3.6	4.0
Availability of specific resources	3.1	2.9	3.5	3.0	3.7
Overall political climate	2.7	3.5	3.3	2.7	3.0
Level of taxation and related regulations	2.8	3.3	3.3	2.4	3.0
Overall business environment	3.2	2.5	3.2	2.7	3.0
Treatment of remittances	2.7	2.9	3.4	2.2	3.2
Availability of skilled labor force	2.9	1.9	2.7	2.6	2.7
Quality of physical infrastructure	3.1	1.6	2.6	2.0	2.2
Presence of a developed financial system	2.8	1.6	2.2	1.9	2.5
Average	3.1	2.9	3.2	2.9	3.4

*Interviewees were asked to rank each item on a 1 to 5 scale with 1 meaning very unfavorable and 5 very favorable

Source: Eastern Africa: Survey of Foreign Investors, Economisti Associati for the World Bank, Vol. 3. Page 14.

1.37 Given these perceptions, one would have expected foreign direct investment in Eritrea to take off. It has not. Table 1.8 shows the outcome with respect to foreign direct investments since that survey was carried out. The investments in Eritrea are, with Kenya, the lowest in the region and well below the amounts realized by Uganda and Tanzania, although in per capita terms Eritrea does pretty well. The forthcoming liberalization of the telecommunication sector may improve the situation., but the opportunities provided by the early favorable opinion of Eritrea have not been realized.

Table 1.8: Foreign Direct Investment, Net Inflows (current US$ millions)

	1995	1996	1997	1998	1999	2000	Total
Kenya	33	13	20	11	14	111	202
Tanzania	120	150	158	172	183	193	976
Uganda	121	121	175	210	222	220	1069
Ethiopia	14	22	288	261	90	50	725
Eritrea	0	37	39	32	36	35	179

Source: World Bank

1.38 This overall picture is confirmed from anecdotal evidence. It is known that a number of foreign companies had signed agreements in fisheries, agriculture and agro-business that have not succeeded for various reasons. It is reported that some investors from the diaspora have left Eritrea frustrated and unable to proceed. In fact the mission could not identify a single significant successful exporter with foreign investment, and this is not for lack of interest. Seawater Farms may in time prove to be the exception, and hopefully will later not be exceptional any more. The absence of foreign investors in any significant numbers means not just loss of their funds, and the jobs and exports that they would have created,but perhaps more critically, loss of their knowledge and skills.

1.39 This despite the fact that for some high-profile foreign investors, senior officials in government have taken a personal interest in assisting them. But, over time, the difficulties with the investment climate are such that many of them have not been able to survive. If this is the case for major investors who often have access to senior officials, the difficulties for smaller investors must be greater.

1.40 Not all the news is bad. Some investors report that when their projects had the support of key individuals in government, they were able to overcome all obstacles. However this is dependent on retaining the support of the individual official, and the individual official retaining his or her job. An investor discovered this the hard way - as soon as the concerned minister was replaced , the project which had been highly successful began to run into all kinds of difficulty.

1.41 In view of the foregoing, improving the environment for the private sector must be a high priority, and Eritrea's future development strategy should pay close attention to this.

Realizing the potential of agriculture

1.42 With Eritrea suffering chronic food deficits for decades, the immediate goal in agriculture was to increase the production of various crops either by raising yields or increasing the area under cultivation, particularly in the western lowlands. Recommendations that were thought to be likely to have the largest impact were to improve pest control (pesticides, herbicides, fungicides, community-based surveillance of crops); develop and disseminate more drought resistant, faster maturing seed varieties; increase fertilizer use in selected areas, particularly on irrigated lands, and rehabilitate the existing irrigation schemes and construct additional micro-dams in selected areas. It was also thought that improvements in some of the farming implements and in the methods of plowing could bring modest but quick results, and that carrying out a thorough assessment of the existing water resources was essential. The importance of water to Eritrea's agriculture comes out clearly in the wide fluctuation of staple and cash crop production and productivity which reflect the extreme variability and unpredictability of rainfall (table 1.9).

1.43 Measures that would also have to start being taken soon concerned training of extension agents and providing them with transport; encouraging land markets; and building the infrastructure that would make access to markets, particularly in the lowlands, easier and cheaper.

1.44 The goal of increasing yields and the area under cultivation was tackled through two major initiatives. The main one was a government program called Integrated Farming Program which quickly became the most important activity of the Ministry of Agriculture and was recently reported to have covered over 20 percent of the cultivated area, adding about 90,000 hectares of land to the production of crops, mainly in the western lowlands. In addition to improved seeds, fertilizer and advice (e.g. the Sasakawa Global 2000 package) the program used mechanization in a major way[5]. However, the increase in yields, which more than doubled for a number of crops under cultivation, may not have been sufficient to cover the extra costs and may in part be due to unusally good rains. It would be important in future trials to do a careful experimental design, controlling for soils, moisture, inputs (and in various quantities) and, particularly, accounting for the full cost of mechanization and labor.

1.45 Although the extension service improved in the last 5-6 years, its reach did not go much beyond the initiatives such as the IFP and Sasakawa Global 2000. As a result traditional agriculture had to continue to do things in the old way which meant low-input rain fed agriculture with very little use of fertilizers, improved seeds, or better pest management techniques.

[5] World Bank, Agriculture Sector Review, 2001.

1.46 The other major initiative was the construction of microdams, much of it with voluntary labor. These seem not to have made a major contribution partly because there was inadequate analysis before implementation. As a result there was little expansion of areas actually irrigated. Steps towards better implementation of irrigation programs have since been identified, the most important of which are to complete the long-expected survey of water resources and revise the public irrigation design and implementation procedures. There also needs to be more work done on how to allocate water resources among competing needs.

Table 1.9: Production (metric tons), Productivity (metric tons) and area Cultivated (hectares) by Main Crops, 1992-99

	Cereals	Pulses	Oilseeds	Total
1992				
Production	251,300	6,000	5,100	262,400
Area sown	263,100	8,800	12,700	284,600
Productivity	0.95	0.68	0.40	0.92
1993				
Production	86,850	1,530	9,670	98,050
Area sown	338,500	15,000	42,100	395,600
Productivity	0.26	0.10	0.23	0.25
1994				
Production	253,400	4,370	8,800	266,570
Area sown	330,310	7,950	24,700	362,960
Productivity	0.76	0.55	0.36	0.73
1995				
Production	122,460	6,122	11,696	140,278
Area sown	298,432	21,935	29,073	349,440
Productivity	0.41	0.28	0.40	0.40
1996				
Production	85,358	6,369	5,187	96,914
Area sown	322,179	14,127	35,050	371,356
Productivity	0.26	0.45	0.15	0.26
1997				
Production	99,080	1,209	2,624	102,913
Area sown	374,255	5,798	13,350	393,403
Productivity	0.26	0.21	0.20	0.26
1998				
Production	457,810	3,275	6,792	467,877
Area sown	477,043	6,942	13,436	497,420
Productivity	0.96	0.47	0.51	0.94
1999				
Production	427,060	15,009	30,258	472,427
Area sown	318,829	7,700	14,316	340,805
Productivity	1.34	1.95	2.11	1.39
2000				
Production	110,631	6,899	507	118,038
Area sown	315,411	22,887	3,212	341,510
Productivity	0.35	0.30	0.16	0.34
2001				
Production	219,051	16,412	2,527	237,991
Area sown	343,832	33,999	8,865	386,696
Productivity	0.64	0.48	0.29	0.62
Average 1992-01				
Production	211,300	6,720	8,316	226,346
Area sown	338,189	14,514	19,680	372,379
Productivity	0.62	0.46	0.42	0.61

1.47 Progress was made in expanding access to markets through the construction and improvement of roads and a major increase in vehicles plying the roads. Finally, all land was vested in the government under the new constitution but, would be de facto under the control of those cultivating it. The users would be able to recover the investments they made during their

tenure by passing on these costs to the next user. Whether this approach will be an effective substitute for a market based on private ownership of land is yet to be seen.

Improving labor markets

1.48 At independence, the private sector was very restricted in hiring labor, wages paid did not reflect market realities, there were fears that the authorities would not be able to retrench labor where it was redundant, and there was the enormous challenge of building an efficient civil service.

1.49 Considerable progress has taken place in all these areas. Labor laws are now less restrictive. Retrenchment of labor in enterprises that have been privatized proceeded smoothly. There is no minimum wage in the private sector and wage scales have been decompressed, although they may not yet fully reflect shortages of skilled labor which would give the right signals as to where the resources for education and training should be directed.

1.50 Eritrea has made significant progress in laying the foundations for an efficient and effective civil service. In principle, the central ministries will focus only on policy design, regulation (standards, monitoring and evaluation, contestability of markets), research and human resource development. To the extent that there is direct service delivery by the government, as in health, education and agriculture, it is to be delivered by the regional governments. The civil service reform program has assessed how many people and with what skills will be needed to efficiently carry out the business of government and many of the people that are to fill the existing vacancies are being trained either at home or abroad. Vacancies for skilled positions can in principle be filled by foreign experts. While the program was seriously set back by the war and other factors, the conditions for getting it back on track now exist, raising hopes that the implementation gaps seen in so many sectors could be significantly reduced over the medium term.

Strengthening the role of communities in poverty reduction

1.51 Strong community and family solidarity are one of the most striking aspects of the Eritrean society. The 1994 CEM recommended that these qualities continue to be relied on to help in poverty reduction. Traditional support systems have helped Eritreans face extrememly hard condiitons due to wars and droughts and have been very important in the success that the Eritreans have shown over decades in dealing with famines, refugees, internally displaced people, families of martyrs, and demobilized soldiers.

1.52 One of the important programs that took these strengths of Eritrea explicitly into account was the Eritrean Community Development Fund. Over the years it proved successful in helping communities gain access to basic infrastructure (roads, schools, health clinics, clean water, markets, and micro credit). However, because it operated from a Ministry, it relied on the capacities of the central government to make it work. As Eritrea moves forward with its ambitious decentralization program , it will face the challenge of replicating the competencies of the center at the zoba level, so that the communities can eventually take on greater planning and implementation responsibility. Given the strong egalitarian bent that one sees among Eritreans, the decentralization of many activities to the zoba level should, in and of itself, have a positive impact on poverty and well-being of the population .

Investing in people

1.53 Education. Eritrea faced a particularly daunting task in this area at independence. Education at all levels was in a very poor state. Progress in some areas and lack of progress in others have to be seen in this light. With a roughly 15 percent annual growth of expenditures on

primary and secondary education between 1993 and 1997 (in real terms) and maintenance of these levels between 1997 and 2000, enrolment rates at elementary and secondary levels increased by 14 and 7 percentage points, respectively There was also strong growth in enrolments at the teachers' college, the university and technical/vocational schools. However, this expansion was not strong enough to prevent the pupil/teacher ratios from rising substantially between 1993 and 2000 (see Table 2.8)

1.54 In spite of the increased investment in education, in 2000 the gross enrolment rate was still only 57 percent at the elementary level, 21 percent at the secondary level and 2 percent at the tertiary level. Net enrolment rates must be lower since repetition rates at all levels are at least 20 percent per grade. Quality of teaching, availability of learning materials and school environments (sanitation, the state of physical facilities) all fall far short of desired standards. If past performance is any guide, it seems that the required improvements would take not just additional resources but, perhaps more importantly, more effective use of resources.

1.55 Health and Nutrition. Progress has been made in improving the health system since independence. Many clinics and health stations/centers have been built, substantially reducing the average distance an Eritrean has to travel to the nearest health facility. The number of health care professionals has sixtupled since independence with the overwhelming portion of the increase contributed by newly trained nurses and health assistants (Appendix table 2.11). A number of programs aimed at early childhood development and control of HIV/AIDS, malaria, sexually-transmitted diseases, tuberculosis and other diseases are being implemented.

1.56 Nevertheless, the challenges in the sector remain very serious as shown by the health status of the population. As estimated in year 2000 (see Table 2.10) life expectancy is still only about 50 years (and not because of the impact of AIDS which is not a major problem in Eritrea). Infant and child mortality rates are of the order of 60 and 94, respectively. Maternal mortality , at 417 deaths per 100 000 live births, is very high. Under-1 children's inocculation rate is still only 56 percent. Some 44 percent of children are undernourished. The burden of disease is high, with about 70 percent of it due to avoidable communicable diseases.

1.57 To face these challenges Eritrea will need to further increase its expenditures on health while making them more cost-effective. Data must be generated in order to be able to analyze the pattern of expenditures by health program, by health facility and by geographic zone. These data will allow the decision makers to evaluate the performance and cost-effectiveness of specific health programs and use the information to more effectively address health care needs of various segments of the population.

Infrastructure

1.58 The 1994 CEM looked at what sorts of infrastructure were needed for a rapid take-off of the economy. The areas identified were roads, power, water supply and telecommunications. Since then Eritrea has made major strides in all these areas. A number of key roads in the highlands were rehabilitated. The heavily used Asmara-Massawa road has been reconstructed. The Asmara-Keren-Barentu road to the west has been tarmacked. An all-weather gravel road from Masawa to Assab is nearing completion. The new 84 megawatt power plant in Massawa , damaged during the border war, has been repaired. Transmission lines to bring this power to Asmara, Dekemhare, Mendefera and Keren have been completed. The Toker dam, a new dam to supply water to Asmara, has been completed. Major projects in Massawa and Asmara were undertaken to relieve the shortage of housing in these towns. In the telecommunications sector, however, progress has been slow: internet connectivity was only introduced in December 2000; the demand for fixed-line telephones far outstrips the supply; and mobile telephones have yet to be introduced.

Environment

1.59 At independence Eritrea found itself with serious problems of land and pasture degradation, deforestation, low quality of water for drinking, inadequate knowledge of the potential of irrigated agriculture, and increasing deterioration of its urban environment. Marine and coastal pollution was not a problem but there was awareness that it could soon be so in the absence of a framework in which to address the potential problems.

1.60 Partly because of the loss of forest cover but mainly because of the pressure of the growing population on the land resources, the loss and degradation of soils, particularly in the highlands, was putting downward pressure on yields. For decades there had been schemes, often under the food-for-work programs, to stem this degradation through terracing, reforestation, bunding, and building of water catchments. Studies of Eritrea's water resources and a strategy for the use of these resources remain to be developed.

1.61 The government established a Ministry of Land, Water and Environment, potentially providing for a more integrated approach to Eritrea's environmental problems. A comprehensive national environmental management plan has been adopted and is being implemented. National environmental assessment procedures and guidelines are in place. There exists a national biodiversity strategy and there is a program to protect marine biodiversity, supported by the Global Environmental Facility. Taken together, this suggests a promising start, but the pressure on land and fresh water resources is intense, and will need continued attention by the authorities.

Monitoring and evaluation

1.62 One of the important issues that the 1994 CEM did not cover was monitoring and evaluation. The argument then was that data to do that did not exist, that much of what needed to be done was obvious, and that when the time came to do assessments of more refined trade-offs, the requisite data and the capacity to analyze them would be available.

1.63 As a result there do not exist systems and procedures for examining the rates of return or cost-effectiveness of public investments or programs. In the initial stages when broken bridges had to be repaired, electricity had to be restored, urban water supplies had to be rehabilitated, or food aid had to be distributed in a country with a strong egalitarian bent, resistance to a focus on evaluation and monitoring on the grounds that it was unnecessary and took trained resources away from more important tasks, was understandable and perhaps justifiable. Over time, some capacity for adaptive planning that took into account previous experience and potential trade-offs, did get built up as the development of sector plans in education and health attest. Despite the efforts that the National Statistics and Evaluation Office (NSEO) is making to improve matters, the data base on virtually all aspects of socio-economic life in Eritrea remains extremely poor. There has never been a census, a nationally representative household income and expenditure survey, or proper national accounts. While there are plans for all of these, developing the capacities in these areas and in the use of the data thus generated to carry out monitoring and evaluation activities, should be a priority.

C. CONCLUSION

1.64 This chapter has summarized Eritrea's key achievements in the economic and social sphere since independence. It has shown that much has been achieved and, despite the setbacks due to the border war with Ethiopia and a string of droughts, there is a foundation on which Eritrea can build in the coming years. At the same time Eritrea faces enormous challenges brought about by the border war. Its room for maneuver has thus shrunk. Eritrea's domestic plus foreign debts are now well over 150 percent of its annual GDP, restricting its ability to borrow in

the future. Ethiopia, its largest export market and a major source of government revenues has been lost for some time to come. Eritrea is in the midst of a huge task of reconstruction, demobilization and reintegration of soldiers, and the return of over a million internally displaced people to their homes. It is also facing a set of internal political and social strains.

1.65 How can Eritrea break out of this box? This report presents an analysis of the situation in the key sectors of the economy as well as options for action. Choosing and implementing some of the options successfully will surely help. But how things are done may be even more important than what is done. The last part of this chapter touched on some of the behaviors that will need to be looked at and modified. One of the main suggestions of this report (developed in chapter 3) is that Eritrea remake itself as a "learning society", using knowledge and information technology to transform itself. Achieving that will mean changes in behavior at all levels of society. This chapter offered suggestions on a few areas where these changes might usefully begin, but the ultimate goal is one of continuous change based on knowledge acquired by living in an inclusive, open society that is well-connected to and integrated into the rest of the world.

2. GOVERNMENT EXPENDITURE REVIEW

A. THE CONTEXT

2.1 For the first time since independence, the Government's budget for 2002 was reviewed and approved by the National Assembly. This is a welcome step in the evolution of Eritrea's public expenditure management system. Although the IMF has regularly reported on aggregate fiscal operations, without a published budget there has been no publicly available analysis of expenditures. This chapter represents a first attempt at functional and economic analysis of government expenditure in Eritrea. The analysis is particularly timely because, with the ending of the war, Eritrea faces the challenge of making a major fiscal adjustment.

2.2 The rest of the chapter is divided into six sections. Section B discusses the sources of government expenditure data used here and the difficulties encountered in compiling the data. Section C presents an overview of government fiscal operations. In section D we present a comparative analysis of aggregate government expenditure, using Ethiopia, Uganda and Rwanda as comparator countries. Section E looks at the economic composition of government expenditure. In section F we examine the functional composition of government expenditure. In section G we sketch out a framework for government expenditure management reform and identify key reform issues. Sections H, I, J and K cover, respectively, the government's expenditures and policies in education, health, agriculture and roads.

B. THE DATA

2.3 We encountered a number of difficulties in compiling the data for the analysis of government expenditure. This is not surprising, given the fact that this is the first time an analysis of the functional and economic composition of Government expenditure has been attempted. The bulk of the data used in this chapter was obtained from the Ministry of Finance (MOF). The key units in MOF that provided data are the Government Accounts Division (GAD) and the Public Debt and Investment Division (PDID) in the Treasury Department (TD) as well as the Budget Office. The Government Accounts Division produces both a Recurrent Expenditure Report and a Capital Expenditure Report. The MOF data were supplemented with data from sector ministries, especially the ministries of education, health and local government. In the rest of this section we discuss some of the difficulties encountered in compiling the data. We touch on the following issues: program fragmentation, inadequate budget classification, inadequate item description, lack of integration of locally-financed and externally-funded expenditure, data inconsistencies, and incomplete data.

Program fragmentation

2.4 Program fragmentation arises when two or more ministries are responsible for a given program. In Eritrea there are a number of cases of program fragmentation. One example is the involvement of the Ministry of Education (MOE), the Ministry of Local Government (MOLG) and the Ministry of Labor and Human Welfare (MOLHW) in one or more stages of basic education; i.e. kindergarten, primary education and secondary education. In view of this, it is difficult to get a unified view of public expenditure on basic education. Information had to be pieced together from MOF, MOE and the Eritrea Community Development Fund (ECDF) Secretariat in MOLG. The GAD reports do not consolidate the expenditure data on the programs

managed by the different ministries. The situation is similar for public expenditure on health care, water supply and feeder roads.

Inadequate budget classification

2.5 The Government Accounts Division produces reports showing the economic composition of government expenditure. These reports, however, do not yet conform to the coding system of the IMF's Government Finance Statistics (GFS) Manual, even though in November 2000, with the assistance of the IMF's Statistics Department, the TD prepared a bridge table which links the Eritrean coding system with that of GFS. Another weakness is that the functional composition of government expenditure does not go beyond the three broad categories of administrative and general services, economic services and social services. To aid government expenditure analysis the reports produced by the Government Accounts Division need to disaggregate the data further into the standard GFS functional categories and into sub-functions, programs, activities and projects. In this chapter we have attempted to extend the functional composition of government expenditure to eight categories (see table 2.5).

Inadequate item description

2.6 The description of a number of expenditure items appears inadequate. A prime example of this deficiency is the lack of a clear identification of recurrent expenditure on roads as opposed to capital expenditure on roads. Another example is the failure to identify the ultimate beneficiaries of certain grants such as under MOLG. Furthermore, the reports do not always distinguish between different types of investments in state-owned enterprises; that is whether the investment is a grant, loan or equity.

Lack of integrated government expenditure data

2.7 The Public Debt and Investment Division produces expenditure reports on projects financed by donors, broken down by grants and loans while Government Accounts Division produces reports on recurrent and capital expenditure financed by the Government of Eritrea (GOE). These two reports are not integrated to provide a broader picture of government expenditure. This compounds the problem of program fragmentation.

Inconsistencies between TD and sector data

2.8 We attempted to carry out an in-depth analysis of government expenditure in selected sector ministries, particularly MOLG and MOE. This attempt proved unsuccessful because we could not reconcile data provided by the TD with data provided by sector ministries. As TD expenditure data are based on monthly returns from the sector ministries we found the inconsistencies puzzling.

Incomplete data

2.9 This chapter does not present a comprehensive view of public expenditure in Eritrea for we were not able to compile data on local government expenditure or on transactions between government and state-owned enterprises. An even more important omission is the lack of data on transactions between government and the businesses owned by the Popular Front for Democracy and Justice (PFDJ).

C. Overview Of Government Fiscal Operations

2.10 To the extent the data permit, the analysis in this chapter covers the period 1993-2002. The period is further sub-divided into three sub-periods, where necessary. The first sub-period covers 1993-1997 when a spiraling overall annual budget deficit was suddenly brought down

sharply in 1997, raising expectations that this heralded an era of prudent fiscal management. The second sub-period covers the border war years, 1998-2000. During this sub-period the government resorted to excessive deficit financing to meet the exigencies of the war. The third sub-period, 2001-2002, is the period of post-war fiscal adjustment effort. The figures for 2001 are preliminary estimates while those for 2002 are projections.

2.11 A summary of government fiscal operations is presented in table 2.1 below. We look first at revenue performance. Right from independence in 1993 Eritrea achieved very high levels of revenue mobilization. Between 1993 and 2001 the total revenue to GDP ratio ranged from a low of 25.7 percent in 2001 to a high of 43.3 percent in 1997; the annual average ratio was 34.5. This is well above the average of Ethiopia (18.3 percent), Uganda (9.9 percent), and Rwanda (8.9 percent).

2.12 Prior to the border war with Ethiopia non-tax revenue accounted for a significant share of total revenue, reaching a peak of 22.7 percent of GDP in 1997. The two most important sources of non-tax revenue have been port fees and public contributions. The latter is mainly donations from Eritreans in the diaspora, although it also includes items such as proceeds from sales of government property and dividends from public enterprises. Port fees and charges surged to 9.5 percent of GDP in 1997, after having been 5-6 percent of GDP for the previous 3 years, but then declined rapidly and dried up when Ethiopia stopped using the Eritrean ports of Assab and Massawa following the outbreak of the border war in 1998. During the border war there existed an income surtax which brought in revenues equivalent to almost 5 percent of GDP in 1999 and 2000. The surtax was eliminated in April 2001.

2.13 As shown in table 2.1, the government not only achieved high levels of revenue mobilization but also pushed aggregate expenditure to extraordinarily high levels throughout the period under review. Even before the outbreak of the border war the ratio of total government expenditure to GDP ranged from 55.5 percent to 77.5 percent. With the outbreak of the war the expenditure to GDP ratio rose to levels rarely seen in any other country. At the height of the war (1999 and 2000) the ratio approached or exceeded 100 percent, although part of that is due to the staguation and decline in GDP during 1999-2000. The upshot of such high levels of Government expenditure was that the overall budget deficit, including grants, reached staggering proportions, particularly during the war years. During the war period the deficit ranged between 39.9 percent and 56.3 percent of GDP.

2.14 Eritrea's reliance on resource flows from its development partners increased markedly during the period under review. In the first full year of independence external grants amounted to 20.1 percent of GDP but tapered of gradually to 6.2 percent in 1997. External loans remained at modest levels (1.3-5.0 percent of GDP) between 1994 and 1997. During the war years external grants and loans came to play a bigger role in the government's fiscal operations; in 2000 they amounted to 38.7 percent of GDP. In spite of the high levels of donor flows to Eritrea between 1998 and 2000 domestic borrowing by the Government exploded, averaging 35.6 percent of GDP per annum during the war years.

Table 2.1: Summary of Government Fiscal Operations,1993-2002 (% of GDP)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[1]
Total revenue	39.1	31.8	38.4	33.0	43.3	32.1	33.1	33.8	25.7	23.2
Tax revenue	22.7	21.1	20.4	19.9	20.5	18.6	17.8	16.3	17.0	16.5
Direct taxes	7.8	10.1	9.7	9.1	9.6	9.7	9.0	7.9	7.6	7.4
Indirect domestic taxes	6.3	4.6	4.3	4.3	4.6	3.8	4.1	4.0	4.0	4.0
Import duties & taxes	7.9	6.0	6.4	6.5	6.4	5.1	4.6	4.5	5.5	5.1
Export tax	0.6	0.4	0	0	0	0	0	0	0	0
Non-tax revenue	16.4	10.7	18.0	13.3	22.7	11.4	10.5	12.6	6.3	6.6
Port fees & charges	10.7	4.9	6.7	6.8	9.5	1.9	1.9	0.2	0.2	0.3
Contributions & other 2	5.7	5.8	11.3	6.5	13.2	9.5	8.6	12.4	6.0	6.4
Extraordinary revenue 3	0	0	0	0	0	2.2	4.8	4.8	2.3	0
Total expenditure	68.2	65.2	77.5	66.0	55.5	81.9	97.7	101.4	77.2	85.9
Overall balance (excl. grants)	-29.1	-33.4	-38.1	-32.1	-12.1	-49.8	-64.8	-67.0	-51.5	-63.4
External grants	22.2	20.1	13.1	11.5	6.2	9.9	8.5	19.2	19.2	8.1
Overall balance (incl. grants)	-7.0	-13.3	-25.1	-20.6	-6.0	-39.9	-56.3	-47.8	-32.3	-55.2
External borrowing	0.1	5.0	1.3	1.3	4.4	9.2	15.2	19.5	14.0	20.6
Domestic borrowing	-0.5	7.3	19.2	17.9	4.2	33.4	40.8	32.6	19.6	12.0
Err & Omissions/ financing gap	6.7	0.2	3.5	-1.7	-2.6	-2.7	0.2	-4.3	0	23.4

Source: Ministry of Finance and IMF staff estimates

[1] Data for 2002 are based on IMF projections

2 This category includes voluntary contributions, sales of government property, dividends from public enterprises and property ownership fees

3 This was a border war-related income surtax

2.15 A key question that arises from table 2.1 is the extent to which the severe fiscal imbalances triggered by the war are being brought under control. The early indications were encouraging in that the overall fiscal deficit (including grants) went down from 47.8 percent of GDP in 2000 to 32.3 percent in the following year. However, the 2002 budget estimates show that the deficit is set to rise sharply to 55.2 percent of GDP, despite a projected strong growth in GDP in 2002. Two forces are driving up the deficit, namely a declining revenue to GDP ratio and a rising expenditure to GDP ratio. Spending pressure is not expected from the defense side, as defense expenditure is projected to fall to about 15 percent of GDP, which is close to its pre-war level. However, in view of delays in getting large-scale demobilization and reintegration of soldiers underway, some of the assumptions underlying the defense budget may not hold. Furthermore, the prospects of the large volume of donor resources programmed for 2002 are uncertain given the rift between the government and the European Union and member states. Taking these factors into accounts, there is a real danger that if the 2002 budget is actually implemented, the fiscal adjustment that began in 2001 will seriously falter.

D. AGGREGATE GOVERNMENT EXPENDITURE

2.16 In table 2.2 we make a comparative analysis of aggregate government expenditure in Eritrea for the period 1993-2001, using Ethiopia, Uganda and Rwanda as comparator countries. The choice of comparator countries is based on the following considerations: all four countries are at a similar stage of development as measured by GDP per capita; all the countries have experienced protracted wars; and the clouds of war have not completely dissipated from these countries.

Table 2.2: Comparative Aggregate Government Expenditure, in Percent of GDP 1993-2001

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Eritrea[1]	68.2	65.2	77.5	66.0	55.5	81.9	97.7	101.4	77.2
Ethiopia[2]	19.6	25.0	24.7	26.9	25.4	30.6	33.0	31.2	29.1
Uganda[3]	18.6	18.6	16.7	16.2	19.5	19.0	20.5	21.1	19.6
Rwanda[4]	23.9	16.0	20.5	22.5	19.6	18.9	19.7	18.9	21.4

1 Data are based on the Eritrea public expenditure review files and IMF reports
2 Data are from the draft report "Ethiopia: Focusing Public Expenditures on Poverty Reduction and the country files, all in fiscal years
3 Data are from the Uganda Public Expenditure Review 2001 and country files
4 Data are from Rwanda country reports

2.17 Eritrea stands out among the four countries shown in table 2.2 in terms of the ratio of government expenditure to GDP. Right from the time of independence,as already noted, government expenditure as a percentage of GDP has been exceptionally high in Eritrea. It averaged 66.5 percent during the pre-war period and 93.7 percent during the war years. None of the comparator countries comes anywhere close to these ratios. The peak ratio was 33 percent (in 1999) for Ethiopia, Eritrea's much larger neighbor with which it fought the border war.

2.18 The expenditure to GDP ratios seen in Eritrea during the period under review mean that the government's command over resources is unusually big. The border war clearly played a role in pushing government expenditure to very high levels. However, the pre-war ratios show that the war offers only a partial explanation.

2.19 In fact, the figures in table 2.2 tell only part of the story. The other part of the story has to do with the extensive business interests of the Popular Front for Democracy and Justice, the sole legal political party in the country. For all practical purposes, the PFDJ is a quasi-government organization. It has close business links with the government. The PFDJ publishes neither individual company accounts nor consolidated group accounts. However, the PFDJ is involved in many sectors of the economy: agriculture, manufacturing, construction, hotels, banking, import and export trade, transport, shipping, etc.

E. ECONOMIC COMPOSITION OF GOVERNMENT EXPENDITURE

2.20 The economic composition of government expenditure is shown in table 2.3. Defense expenditure looms very large in the table. As a percentage of GDP it exceeded capital expenditure in most years since independence, despite some large investments. The squeeze on non-defense recurrent expenditure is very noticeable in 1998 and 1999. Wages and salaries as a percentage of GDP doubled between 1993 and 1996, from 10.2 percent to 19.2 percent, reflecting substantial increases in civil service pay, accompanied by a 30 percent reduction in the workforce. Owing to the exigencies of the border war, civil service pay has been frozen since 1997. However, government employment expanded enormously as mobilization for the war was stepped up. It is estimated that at the height of the war defense personnel numbered about 300,000. Despite the massive increase in the number of the men and women in the Eritrean Defense Force (EDF) wages and salaries as a percentage of GDP rose only marginally during the war years. The main explanation for this is that those serving in the EDF as part of their National Service obligation and ex-combatants who were recalled for military service receive only a stipend for themselves and their families; the average stipend is about Nfa 500 per month.

2.21 Interest payments went up from 1.1 percent of GDP in 1997 to 2.9 percent in 2000. With net domestic claims on government jumping from Nfa 1.6 billion to Nfa 7.6 billion during the period, domestic interest payments would have risen more sharply had the government not kept

interest rates repressed; the Treasury Bill rate remained at 2.5 percent even when inflation was in double digits.

Table 2.3: Economic Composition of Government Expenditure, in Percent of GDP at Constant Prices (1992 = 100), 1993-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[1]
Total recurrent expenditure	37.7	31.0	54.8	40.2	30.2	52.8	56.1	54.7	41.8	33.2
Defense expenditure	21.4	13.0	19.9	22.5	13.6	36.8	38.8	35.8	25.1	14.9
Of which wages & salaries				11.6	8.3	9.3	10.8	14.2	10.9	5.2
Non-defense expenditure	16.3	18.0	34.9	17.7	16.7	16.1	17.3	18.9	16.7	18.4
Of which										
Interest payments	0	0.1	0.5	0.9	1.1	1.3	2.0	2.9	3.4	3.3
Wages & salaries				7.6	6.8	7.0	6.4	6.1	4.7	5.4
Capital expenditure	19.9	14.6	16.6	20.9	24.5	27.3	39.2	28.3	18.2	18.9
Special programs	10.6	19.6	6.1	5.0	0.7	1.7	2.5	18.3	17.1	30.2
Contingency	-	-	-	-	-	-	-	-	-	3.4
Total expenditure	68.2	65.2	77.5	66.0	55.5	81.9	97.7	101.4	77.2	85.9

Source: Ministry of Finance and IMF staff estimates
[1] Data for 2002 are based on projections

2.22 Capital expenditure as a ratio to GDP fluctuated widely during the period. Changes in the ratio of capital expenditure to GDP were influenced mainly by disbursements by external financiers for lumpy projects such as the Toker Water Dam, the Hirgigo Power Plant and the Port of Massawa. Loan or equity injections into state-owned enterprises also played a part. For example, in 2000 the government took over from the PFDJ a commercial bank loan of Nfa 466.5 million made towards the construction of the Intercontinental Hotel in Asmara.

2.23 Table 2.3a presents the economic composition of government expenditure in constant 1992 prices. The table shows that total expenditure doubled in real terms between 1993 and 2000. All categories of expenditure showed increases of a similar magnitude, with defense expenditures nearly quadrupling over the period..

Table 2.3a: Economic Composition of Government Expenditure at Constant Prices (1992=100), million Nakfa 1993-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[1]
Total recurrent expenditure	866.2	878.9	1590.7	1273.8	1034.0	1863.9	1990.9	1709.3	1432.5	1243.9
Defense expenditure	298.3	563.6	661.7	713.4	464.2	1297.5	1378.0	1118.0	860.6	557.2
Of which										
Wages & salaries				367.8	283.3	327.3	382.8	444.1	373.5	195.2
Non-defense expenditure	567.9	315.3	929.1	560.4	569.9	566.4	612.9	591.2	571.9	686.8
Of which										
Interest payments	0.9	3.1	14.0	27.5	36.1	45.1	69.5	90.8	115.6	124.6
Wages & salaries				239.4	234	247.8	225.6	190.7	159.8	203.3
Capital expenditure	457.3	413.1	482.4	661.0	840.1	963.2	1391.2	883.9	625.2	708.4
Special programs	242.5	555.0	176.1	158.7	23.9	60.8	88.0	570.0	585.3	1130.8
Contingency	-	-	-	-	-	-	-	-	-	129.1
Total expenditure	1566.0	1847.0	2249.2	2093.7	1898.1	2887.8	3470.0	3163.1	2643.0	3212.2

Source: Ministry of Finance and IMF staff estimates
Current expenditures were deflated by the GDP deflator (1992=100)
[1] Data for 2002 are based on projections

2.24 In table 2.4 we draw attention to the balance between recurrent and capital expenditure and expenditure on special programs for 1997-2002. The table shows that recurrent expenditure

and expenditure on special programs together was on average 75 percent of total government expenditure between 1993 and 1996. Thereafter, as a number of very large projects were being completed, the share of capital expenditures in GDP doubled between 1996 and 1999. Since then the share has dropped back to its pre-1997 levels.

Table 2.4: Eritrea - Percentage Shares of Recurrent and Capital Expenditure in Total Government Expenditure, 1993-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[1]
Recurrent	55.3	47.6	70.7	60.8	54.5	64.5	57.4	54.0	54.2	40.3
Capital	29.2	22.4	21.4	31.6	44.3	33.4	40.1	27.9	23.7	23.0
Special programs	15.5	30.1	7.8	7.6	1.3	2.1	2.5	18.0	22.1	36.7
Total	100	100	100	100	100	100	100	100	100	100

Source: Ministry of Finance and World Bank files
[1] Data for 2002 are based on projections

F. FUNCTIONAL COMPOSITION OF GOVERNMENT EXPENDITURE

2.25 Table 2.5 presents the functional composition of government expenditure. Owing to the difficulty of compiling these data, the table covers 1997-2001 only. The functional categories used in table 2.5 are defined in Appendix 2.1. As can be seen from the table, defense took the lion's share of government expenditure from 1998 to 2000, amounting, on average, 37.1 percent of GDP per annum. This was a three-fold increase over the level of 1997. The sharp increase in defense expenditure has to be seen in the light of the major border war that Eritrea fought with its much bigger neighbor, Ethiopia, during the period 1998-2000.

Table 2.5: Functional Composition of Government Expenditure, in Percent of GDP at Constant Prices (1999 = 100) 1997-2001

	1997	1998	1999	2000	2001p
Administrative and General Services[1]	10.5	8.5	18.1	21.9	11.1
Defense	13.6	36.8	38.8	35.8	25.1
Social Services	9.7	9.6	10.0	11.8	9.2
of which					
Education	4.9	5.1	5.2	7.7	5.0
Health	3.2	3.4	4.6	3.1	3.3
Infrastructure Services	7.4	7.7	10.0	4.9	7.9
of which					
Roads	4.2	3.6	3.8	2.7	4.9
Environmental Services	0.9	2.9	1.0	1.0	0.5
Economic Services	9.8	11.7	14.7	7.3	7.7
of which					
Agriculture	4.7	7.6	6.3	5.5	4.1
Humanitarian Services	1.7	2.0	2.6	13.6	11.8
Financial Obligations 2	1.9	2.8	2.5	5.0	3.8
Total government expenditure	55.5	81.9	97.7	101.4	77.2
Of which					
Non-defense	41.9	45.1	58.9	65.6	52.1

Source: Ministry of Finance and World Bank Public Expenditure files
[P] Data for 2001 are preliminary
1 The figures for 1999 and 2000 include extraordinary items (e.g. MOF take-over of loan for Hotel Intercontinental)
2 Includes pension payments and interest payments on external and domestic debt

2.26 Over the period non-defense government expenditure too rose substantially from 41.9 percent of GDP in 1997 to 65.6 percent in 2000, although in absolute terms (constant Nakfa), the increase was more moderate. Between 1997 and 1999 the two factors driving these expenditures were (a) increased assistance to agriculture and other economic services, and (b) some extraordinary items such as MOF's take-over of the loan for Hotel Intercontinental. In 2000 the extraordinary expenditure continued, but assistance to economic services other than agriculture was cut sharply as Eritrea attended to the huge post-war rise in humanitarian assistance. Since 2000 pre-war ratios of various categories of government expenditures to GDP are being re-established, although defense expenditures and large needs for humanitarian assistance, demobilization and reintegration continue to put strong upward pressure on overall expenditures. Despite these pressures,, the Eritreans continued their efforts to maintain the momentum of development activities throughout this period.

2.27 As an indication of the government's attempt to press ahead with its development programs during the war, government expenditure on the social services as a percent of GDP increased marginally during the period under review; from 9.7 percent in 1997 to 11.8 percent in 2000. In the case of education the ratio actually increased from 4.9 percent in 1997 and 1998 to 7.7 percent in 2000. With health, the ratio trended upwards between 1997 and 1999 before falling back to the 1997 level in 2000. The overall conclusion to be drawn from this is that, despite the massive increase in defense spending, government expenditure on the social sectors did not suffer severe cuts. However, this was only possible because aggregate government expenditure was allowed to rise to unprecedented levels.

2.28 Table 2.5a shows the functional composition of government expenditure in constant 1992 prices. The general upward trend in expenditure across all categories shows a distinct break in 2000. In that year there was a sharp increase in expenditure on education and humanitarian services while spending on health, infrastructure services and economic services declined precipitously. The third round of fighting in the border war which seriously disrupted normal public and private sector activities in Debub and Gash Barka regions provides much of the explanation for the spending pattern seen in 2000.

Table 2.5a: Functional Composition of Government Expenditure at Constant Prices (1992=100), in million Nakfa, 1997-2001

	1997	1998	1999	2000	2001[P]
Administrative and General Services1	358.0	299.7	643.8	684.80	380.2
Defense	464.2	1297.5	1378.0	1118.0	860.6
Social Services	333.4	337.9	353.8	367.9	313.8
of which					-
Education	166.5	179.4	184.3	241.2	172.5
Health	108.2	120.9	163.6	97.8	113.5
Infrastructure Services	252.0	272.4	355.9	152.4	270.0
of which					
Roads	144.2	127.1	136.7	84.2	169.4
Environmental Services	30.4	100.9	35.0	29.9	18.5
Economic Services	335.6	411.5	521.4	229.2	263.5
of which					
Agriculture	160.4	268.8	225.1	173.2	139.7
Humanitarian Services	58.8	70.6	93.5	424.2	405.4
Financial Obligations	65.7	97.3	88.7	156.5	131.1
Total government expenditure	1898.1	2887.8	3470.0	3163.1	2643.0
Of which					
Non-defense expenditure	1433.9	1590.3	2092.0	2045.1	1782.4

Source: Ministry of Finance and World Bank Files
[P]Data for 2001 are preliminary
1 The figures for 1999 and 2000 include extraordinary items (e.g. MOF take-over of loan for Hotel Intercontinental)

2.29 In table 2.6 we compare the functional composition of selected expenditure categories (in percent of GDP) in Eritrea with that in our comparator countries. The thing that distinguishes Eritrea most from the other countries in the table is the percentage of GDP spent on defense. Even prior to the outbreak of the border war with Ethiopia, Eritrea was already spending 13.6 percent of GDP on defense. During the war years (1998-2000) defense spending averaged 37 percent of GDP per annum.

2.30 With regard to administrative and general services a straight-forward comparison with the other countries would suggest that Eritrea is at the top end of spenders. However, this comparison is misleading because the data for Eritrea are distorted by large, one-time payments made by the MoF for non-administrative services in 1999 and 2000. As a ratio to GDP, expenditure on education was higher in Eritrea than in the comparator countries which may suggest a degree of ineffectiveness in these expenditures, given the comparatively poor indicators of education status in Eritrea. Expenditure on health as a ratio to GDP in Eritrea is lower than in the comparator countries.

Table 2.6: Comparative Functional Composition of Selected Government Expenditure Categories, 1997-2000, in Percent of GDP

	1997				1998				1999				2000			
	Eri	Eth	Rwa	Uga	Eri	Eth	Rwa	Uga	Eri	Eth	Rwa	Uga	Eri	Eth	Rwa	Uga
Administrative & General services	10.5	8.0	8.9	10.4	8.5	11.5	8.7	9.6	18.1	16.0	9.7	9.9	21.9	11.1	8.9	10.5
Defense	13.6	5.3	NA	3.9	36.8	8.7	NA	2.9	38.8	13.1	NA	5.1	35.8	7.9	NA	4.6
Education	4.9	3.7	1.9	2.6	5.1	3.5	1.9	2.7	5.2	3.2	2.0	3.1	7.7	4.5	3.5	3.4
Health	3.2	3.8	4.3	4.7	3.4	4.1	4.1	5.9	4.6	NA	NA	NA	3.1	NA	NA	NA
Agriculture	4.7	2.9	NA	NA	7.6	3.2	NA	NA	6.3	2.5	NA	NA	5.5	3.5	NA	NA

Eri: Eritrea
Eth: Ethiopia
Rwa: Rwanda
Uga: Uganda
Source: Country Economic reports, and IMF staff reports

2.31 In this section we also look at the breakdown of expenditure into that which was domestically financed and that which was financed by Eritrea's development partners (see table 2.7). The externally-financed expenditure share did not increase much between 1997 and 1999 but it jumped from 22 percent in 1999 to 40 percent the next year. The big increase in the externally-financed share came from expenditure in response to the humanitarian crisis caused by the third round of fighting between Eritrea and Ethiopia in May and June 2000. The advent of durable peace with Ethiopia would see the humanitarian assistance requirement diminish but development assistance would be expected to increase, assuming improved relations between Eritrea and its development partners. Nevertheless, it is questionable whether donors are likely to finance in the future the high shares of government expenditures seen in 2000 and 2001.

Table 2.7: Percentage Shares of Domestically and Externally-Financed Expenditure in Total Government Expenditure, 1997-2002

	1997	1998	1999	2000	2001	2002[1]
Domestically financed expenditure	81.0	78.0	77.9	60.4	63.6	54.1
Donor financed expenditure	19.0	22.0	22.1	39.6	36.4	45.9
Total expenditure	100.0	100.0	100.0	100.0	100.0	100.0

[1] Data for 2002 are based on projections

G. A FRAMEWORK FOR GOVERNMENT EXPENDITURE MANAGEMENT REFORM

2.32 A public expenditure management system that functions well should achieve three broad objectives (see for example Campos and Pradhan [1996] or World Bank [1998]): aggregate fiscal discipline, allocation of resources in accordance with strategic priorities, and efficient use of resources in implementing these priorities. Achieving these objectives depends crucially on various budget and financial management practices, most of which can be grouped broadly under the headings of policy and planning, budget preparation, budget execution, and budget reporting.

Box 2.1: Three Broad Objectives in Public Expenditure Management

Level 1	Aggregate Fiscal Discipline	Budget totals should be sustainable over the medium term and beyond, and should result from explicit decisions rather than merely accommodating spending demands
Level 2	Allocative efficiency	Spending should be allocated based on policy priorities and on effectiveness of programs
Level 3	Operational efficiency	Spending should produce intended results at least cost

2.33 **Aggregate fiscal discipline** has eluded Eritrea for almost the entire period under review. As noted earlier, during the border war with Ethiopia the government, perforce, allowed aggregate expenditure as a percentage of GDP to soar to exceptionally high levels. Nevertheless, Government has demonstrated a desire for macroeconomic discipline, successfully cutting back on expenditures after the two shocks, in 1996-97 following the first demobilization and restructuring of the civil service, and also in 2001 after the war. That Government is able to adjust fiscal policy in this way is a positive indicator of the public expenditure management system.

2.34 Expenditure control in Eritrea relies largely on a cash-based system in which monthly allotments allow tight control over actual expenditures. Ministry of Finance and the Office of the President enforce expenditure ceilings and monitor actual spending. There are no controls on expenditure commitments, however; nor is there verification of delivery of goods and services. Introduction of controls over expenditure commitments is needed to avoid possible problems of expenditure arrears – particularly if revenues are less than anticipated -- with the resulting unexpected cutbacks adversely affecting allocative and operational efficiency. Verification of delivery of goods and services, perhaps through tracking surveys, would help improve transparency.

2.35 The budget system is quite comprehensive in that there are few off-budget items and donor aid is reasonably well covered. The one, major exception to this is the transparency or lack of transparency of transactions between PFDJ enterprises and the government. These enterprises have yet to publish individual company accounts or group accounts. Under these circumstances, claims that these companies pay or do not pay taxes cannot be verified. Similarly, whether or not cross debts between government and the PFDJ exist remains a matter of conjecture.

2.36 Regarding military expenditure, Government have been sharing with the IMF information on military expenditures at a level of detail at least comparable to other countries, and sometimes providing much greater detail. However, there have been press reports of off-budget purchases of military expenditure which we have not been able to verify.

2.37 The public expenditure management system does poorly on the test of **allocative efficiency**. This requires integration of policy, planning and budgeting through a process by

which budget allocations are driven by policy priorities. Budgeting in Eritrea is largely incremental, and the formal process that allows fundamental questioning of existing policies or a well-defined process for encouraging or evaluating new policy proposals is still being built.

2.38 A better functioning budget process may have led to the questioning of a number of prestige projects that have been undertaken, even during the war: the Intercontinental Hotel in Asmara, the jumbo jet capacity airport in Massawa, the Massawa-Assab road. Expenditure on the Intercontinental Hotel and the Massawa airport were both greater than total spending on education in 2000, including donor expenditure on education. It may have also led to the questioning of the business activities of the PFDJ.

2.39 The 2002 budget has been adopted by the National Assembly for the first time. This is a very welcome and long overdue step. However, it is best seen as an initial step. It was not accompanied by a budget speech which is the usual mechanism for the Government to outline and justify its programs. This becomes the basis for a fruitful discussion. The expenditures planned in the budget are significantly in excess of reasonable projections of revenue. This leads to likely trade-offs and strategic decisions not being discussed, because the real budget constraints are not confronted. Further, it does not give line ministries a realistic view of the resources available to them.

2.40 Ideally, budget preparation is based on a Medium Term Expenditure Framework (MTEF). Indicative budget ceilings for each Ministry, reflecting policy priorities, should be specified in future Budget Circulars issued by the Ministry of Finance to improve credibility of the budget process, which can affect outcomes at both levels 1 and 2. Guidelines for costing activities should be specified as well in the Budget Circular. The budget classification system is adequate for many purposes, but further disaggregation by function and sub-functions would permit more detailed analysis of the match between policy priorities and spending allocations.

2.41 An IMF technical assistance program is expected to be put in place to improve the public expenditure management system. This includes assistance in drafting a Budget Preparation Manual for guiding staff in the techniques of budget preparation. Effective budget reporting systems are particularly important for the goal of allocative efficiency. The IMF's TA program focuses on actions to improve government banking and accounting arrangements, including cash management, and strengthened monthly fiscal reporting, with the longer-term objective of an integrated financial management information system based on double-entry accounting principles. These reforms can improve the timeliness and accuracy of internal and external reporting, facilitating tracking of spending and remedial action.

2.42 Eritrea's public expenditure management system has the institutional checks in place to minimize leakages. An IMF Fiscal Affairs Department report in December 2000 found that verifications are made to ensure the expenditures are within the approved amounts, monthly fiscal reports are prepared by spending Ministries in a timely way with cash books being reconciled with spending Ministries' bank accounts, accounts are closed at the end of the year, and no carryover is permitted. A system of internal audit, Treasury inspection, and external audit is in place, which helps to ensure that the PEM system remains relatively free of corruption.

2.43 Strengthening the external audit function would enhance transparency and accountability of public expenditure management. The Constitution requires annual reports by the Auditor General to the National Assembly, but this requirement is yet to be implemented. The Auditor General's office also suffers from staffing constraints, and hence focuses on ensuring accuracy in the annual reports of budget units. As capacity improves, a more comprehensive performance-

auditing approach should assess efficiency and effectiveness of resource use, enabling a more informed allocation process.

2.44 **Operational efficiency** as well as allocative efficiency are enhanced when budgets reflect explicit policy priorities and are adequate to carry out the agreed tasks. This means that resources available to line agencies are more predictable, allowing them to plan and manage more effectively. In Eritrea, there has been a focus on inputs rather than on objective and outputs, with little or no use of performance indicators (e.g. based on client surveys or other sources) for assessing the effectiveness of spending. An IMF mission has recommended a gradualist approach to introducing performance-oriented budgeting.

2.45 Other improvements in operational efficiency can result from reforms in budget preparation. Improved timeliness of budget formulation is needed for staff in spending ministries to take the budget preparation exercise seriously.

2.46 Where control systems are weak, actual spending may differ substantially from budgeted amounts, increasing resource unpredictability for line agencies. Deviations between actual and budgeted expenditures in Eritrea are, however, generally small, implying relatively effective monitoring and control systems as far as agreed expenditures are concerned.

2.47 Operational efficiency in many nations is impaired by an overly high civil service wage bill, which crowds out non-wage recurrent spending needed for providing essential public services. The balance of wage and non-wage spending in Eritrea is appropriate, however. Despite low pay, the quality of public administration is relatively high.

2.48 In summary, the major deficiency in public expenditure management in Eritrea is arguably the absence of stronger mechanisms for strategic prioritization of resources. Budget monitoring and control systems are reasonably effective, although mechanisms for monitoring and controlling commitments should be gradually introduced. Similarly, the gradual introduction of performance indicators, coupled with enhanced autonomy managers of line agencies, can be expected to lead to eventual further improvements in operational efficiency.

H. EDUCATION

Current status and progress since 1993

2.49 Eritrea has made some progress since independence in developing its education sector. While the indicators for literacy are probably not the most reliable, available data suggest that overall illiteracy fell from 54 percent in 1993 to 46 percent in 2000 (table 2.8). Illiteracy among males, females and youth also declined during the above period. The rate of literacy is still below rates observed in low income countries, including sub-Saharan Africa (Appendix 2.3). There are significant disparities in illiteracy rates among men and women

Table 2.8: Performance of the Education Sector in Eritrea and Sub-Saharan Africa

	1993	1995	1998	2000			
	Eritrea	Eritrea	Eritrea	Eritrea	Ethiopia	Uganda	SSA
Gross elementary enrollment rate[1]	43	50	51	57	43*	74**	78*
Gross secondary enrollment rate	14	15	16	21	17*	12**	26***
Gross tertiary enrollment rate	1	1	1	2	1*	2**	NA
Illiteracy (Overall)	54	52	48	46	62	33	38
Illiteracy (Males)	39	37	34	33	56	22	30
Illiteracy (Females)	68	66	62	59	67	43	46
Student: Teacher ratio	37	40	43	49	43*	35*	40*
Education expenditure in % of GDP	2.2	3.0	5.1	7.7	4.5	3.4	4.7
Education expenditure as % of total govt. expenditure	3.9	4.5	6.2	7.7	13.2	NA	NA
Expenditure per capita ($/person)	3.4	5.4	9.3	11.2	4.5	9.6	NA

*Data are for the year 1998. ** Data are for the year 1995 *** Data are for the year 1994
SSA- Sub-saharan Africa
Source: Education Sector Review (2002); World Bank database.
1 In the case of Ethiopia,Uganda and Sub-saharan Africa the enrolment rate is for the primary level (grades 1-8). For Eritrea the enrolment rate is for grades 1-5

2.50 There has been an increase in gross basic and secondary enrollement between 1993 and 2000. Gross basic enrollment rate increased from 43 percent in 1993 to 57 percent in 2000 and gross enrollment at the secondary level from 14 percent in 1993 to 21 percent in 2000 (table 2.8). However, almost half of the elemenary school children do not enter secondary school and hence quickly regress to functional illiteracy. Net enrollment rates at all levels are expected to be significantly lower, because of the high overall repetition rates throughout the system (around 20 percent) and the significant dropout rates. Enrollment rates in Eritrea are significantly below the averages for the low income countries, sub-Saharan Africa in particular and in the different regions in the developing world (Appendix 2.4).

2.51 Another pressing concern is the quality of education, with high pupil teacher ratios at the national level and significant regional disparities in these ratios. The student teacher ratios at the primary level increased from 37 in 1993 to 49 in 2000. In 2001, the number of students per teacher ranged from 36.6 in sparsely populated DK Bahri to 60.8 in Debub with an average of 51.4 for the whole country (Appendix 2.5). The pupil-teacher ratio in the country is higher than the averages for sub-Saharan Africa and on par with averages for the low income countries (Appendix 2.6). It is also higher than pupil-teacher ratios in comparator countries like Ethiopia and Uganda. Such high student ratios will affect the overall quality of learning.

2.52 The Education Sector Review found that the present curriculum is very narrow with little emphasis on creative, aesthetic and technological subjects or on health education. The curriculum emphasizes mathematics and language, but is less focussed on applied knowledge and skills. Teaching in primary schools is in mother tongue. English is introduced as a second language in the primary level. However, many teachers at the primary level have limited skills in teaching english. This leaves many children with very basic english on entry to the middle and secondary schools. Currently the curriculum is under review. However the institutional capacity to conduct such a review is limited in terms of (a) available skilled human resources, and (b) access to international comparative quality norms for the process of curriculum development.

2.53 The approaches set out in the text books largely set the tune for pedagogy at all levels with too much emphasis on rote learning and insufficient focus on the development of

understanding, evaluation and critical skills. Monitoring and evaluation occurs throughout the system, but the results appear not to be translated in a systematic approach to quality improvement of teaching and learning. A more coherent system for monitoring and evaluation of the whole school system needs to be in place, taking international comparative best practices into account.

Expenditure on education

2.54 Spending on education increased from US $ 11.6 million in 1993 to US $ 48.4 million in 2000 (table 2.9). While the recurrent budget doubled during this period, the capital expenditure in 2000 was little more than four times that in 1993. Total spending has increased every year since 1993 except in 1999. There was clearly an emphasis on expanding primary and secondary education, although tertiary and vocational education have not been neglected,. with donor agencies providing most of the funds for their development.

Table 2.9: Trend in Total Government Expenditures and Expenditure on Education in Eritrea (million, US$), 1993-2000

Year	Expenditure on education												As % of GDP
	Recurrent (1)	*In Percent	Capital (2)	*In Percent	Total MOE (3)	*In Percent	UA (4)	*In Percent	Others (5)	*In Percent	TOTAL (6)	*In Percent	
1993	8.2	2.8	2.5	0.8	10.8	3.6	0.9	0.3	0.0	0	11.6	3.9	3.1
1994	9.9	3.8	3.8	1.5	13.6	5.3	1.0	0.4	0.0	0	14.6	5.7	3.1
1995	13.0	3.1	5.1	1.2	18.1	4.3	1.1	0.3	0.0	0	19.2	3.7	3.7
1996	10.1	2.4	5.0	1.2	15.0	3.5	2.5	0.6	0.9	0	18.4	4.3	2.9
1997	16.6	4.6	8.1	2.2	24.7	6.9	6.1	1.7	0.8	0.2	31.6	8.8	4.9
1998	20.1	3.4	9.3	1.6	29.4	5.0	2.3	0.4	4.5	0.8	36.3	6.2	5.1
1999	19.7	2.9	13.4	2.0	33.1	4.8	1.6	0.2	1.8	0.3	36.5	4.3	5.1
2000	17.0	2.7	8.3	1.3	25.3	4.0	21.6	3.4	1.8	0.3	48.4	7.7	7.7

Note: *Percentage of total government spending. Others category includes other line ministries which spend on education activities, but whose expenditures are not recorded in the Ministry of Education (MOE). These include Ministry of Labor (MOL), Ministry of Local Government (MOLG), Eritrean Community Development Fund (ECDF), Ministry of Health (MOH) and Ministry of Tourism (MOT). In addition, The German Development Cooperation (KFW) funds school construction but pays contractors directly and so its contribution is not included in the MOE budget. This table does not yet include spending by MOL. UA denotes University of Asmara. The 2000 expenditure for UA includes all government-wide spending on scholarship programs and in- kind contributions from rapidly expanding exchange programs between foreign institutions and the UA, which explain the large temporary increase in 2000.

2.55 Total expenditures on education as a proportion of GDP increased from 3.1 percent in 1993 to 7.7 percent in 2000, although the number for year 2000 is probably an anomaly because of a sudden increase in Eritreans being sent to study at universities abroad. Preliminary estimates of the share of expenditures on education as a percent of GDP for 2001 put it back in the range of 5 percent (Table 2.5)

2.56 Although the overall educational spending increased, there has been some imbalance in the spending across the different levels (Appendix 2.7). Over three-quarters (78 percent) of the education budget goes to basic education, which includes grades 1 to 7. But there is some disparity in the allocation of total resources between the two cycles of basic education. Of the 78 percent share spent for basic education, 67 percent goes to primary level (grades 1 to 5) while only 11 percent goes to the middle level (grades 6 to 7), even though 17 percent of all students are enrolled in this level. The allocation of recurrent spending also shows similar patterns. Similarly although recurrent spending claimed by basic education is a commendable 78 percent of the total recurrent budget of the MOE, only 7 percent of the 78 percent went to the middle level. The proportion of recurrent education budget to the middle level was also lower than the share

awarded to the tertiary level. The share of education budget earmarked for the tertiary education is about 6 percent, while it is 16 percent for the secondary level (grades 8 to 11). Comparison of these allocations relative to the number of students enrolled at each level shows that secondary education is relatively under-funded.

2.57 The structure of per student expenditures across different levels of education in Eritrea also supports the view outlined above. In 1999/2000, per unit spending in the general secondary education was on average 10 percent lower than per unit spending in primary education. Similarly the unit costs in the middle level were about 40 percent lower than spending in primary education. These lower expenditures in middle and secondary education are likely to have a negative impact on quality. Secondary schools lack basic learning materials: laboratories, libraries, sufficient textbooks, or enough qualified teachers. In addition, they have larger class sizes. Beyond the secondary level, the share of spending rises with the level of education. Appendix 2.7 indicates that recurrent unit costs for technical and tertiary education were 5 and 8 times higher than those at the primary education level.

2.58 There are disparities in educational spending per student across the different regions (Appendix 2.8) but these are due to the higher cost of reaching remote regions. Expenditures per pupil tended to be higher in the two Red Sea zobas. The three Zobas with the largest number of out-of-school primary school age children (North and South Red Sea and Gash Barka), also have the highest unit costs. There are also disparities between the central administration and the regions and among the regions in the total allocation of educational spending, number of staff, and their average salaries

2.59 Comparison of expenditures on education as percentage of GDP shows that expenditures in Eritrea are close to the average for sub-Saharan Africa but higher than those in comparator countries like Ethiopia, Uganda, and Rwanda. Education expenditure per capita at $11.2 is significantly higher than Ethiopia and Uganda. While education expenditure as a share of total government expenditure is much lower than the comparator countries, this is a reflection of the very high levels of government expenditure in Eritrea. Most developing countries spend about 15 percent of their total public expenditures on education.

Government policy on education

2.60 Policy in the education sector has focussed on the expansion of the education system. The doubling of educational spending between 1993 and 2000 (recurrent costs in US$ by MOE) shows the government's commitment to education. Consequently, the slow progress in increasing the enrollment rate and the quality of education are real concerns. The key issues are outlined below.

2.61 One factor that certainly complicated the compilation of table 2.9 on expenditure in the sector, but may also complicate implementation is the many actors in the sector. In addition to the Ministry of Education, other line ministries like Ministry of Health, Ministry of Local Government and Ministry of Tourism and agencies like German Development Corporation are involved in educational activities. This may be one of the factors that not only affects proper accounting of expenditures, but, more importantly, may be affecting the coordination of educational activities.

2.62 The high student-teacher ratios is an issue that needs attention. Provision of learning materials and equipment, student textbooks, extra curricular teaching materials, school libraries, administrative support, electricity and small-maintenance, and better buildings in rural areas are also items that need to be looked at.

2.63 The imbalances in education funding across levels –(relative under-funding of the middle and secondary levels), across different regions, and between salary and non-salary expenditures, need to be addressed to increase overall efficiency.

2.64 Reforms in curriculum with emphasis for creative and aesthetic education, technological subjects, and health education, improvement in pedagogy and better monitoring and evaluation are other items that need attention.

2.65 Teacher salaries are about 8 times GDP per capita, which is fiscally unsustainable in the long run. At the momement this is not causing a macroeconomic problem, because the high cost teachers are balanced out by teachers still in national service who receive much lower salaries. But as the national service teachers are converted to regular service this may become an issue.

2.66 As will be noted in the next chapter, higher education in technical fields will be critical for Eritrea's suggested development strategy. Here private provision of education should be strongly encouraged.

2.67 It would appear that given the considerable Government expenditure on education, and income levels, Eritrea's education sector should be doing better. It is not immediately obvioius where the ineffeciencies lie. The way forward should be based on a sector wide strategy that takes into account all external and internal partners active in education. Developing a sectoral strategy will help assure that any funding increase will show results. Education is a priority sector, and there may well be a case for continuing to increase funding for the sector. But given the fiscal stress that Eritrea will face over the next few years, and the apparent lack of results in terms of quality and coverage from the earlier increases in spending, it is important that further increases are based on a clear sector strategy that is tied to results.

I. HEALTH

Current status and progress since 1993

2.68 The general health status of Eritreans at independence was very poor. In 1993 the infant mortality rate was as low as 135 per 1000 live births, life expectancy was 46 years and fertility was 6.8 births per woman (table 2.10). Since then, life expectancy has improved somewhat, and infant, child and maternal mortality have improved significantly. Still, the health status of the population continues to be poor.

2.69 Although Eritrea has increased its public expenditure on health sector since 1993, health expenditure as a percent of GDP and total government expenditure and the per capita health expenditure are still well below the averages for sub-Saharan Africa and for countries like Ethiopia, Uganda and Rwanda.

Table 2.10: Performance of the Health Sector in Eritrea Compared to Sub-Saharan Africa

	1993 Eritrea	1995 Eritrea	1998 Eritrea	2000 Eritrea	Ethiopia	Uganda	Rwanda	SSA
Immunization (DPT < 12 years)	28	35	60	56	64	51	85	58.6
Life expectancy at birth	46	50.3	50.8	50.4	42.3	42.1	40.0	46.8
Infant Mortality Rate	135	65.9	62.0	60.4	103.7	83	123.2	92.4
Child Mortality Rate	203	NA	110.3	94	166	161	203	159.2
Maternal Mortality	754	NA	403	417	NA	NA	NA	NA
Fertility Rate	6.8	6.0	5.8	5.6	6.3	6.4	6.0	5.3
Population/physician (Thousand)	28			39	> 20	> 20	>20	10*
Population/Nurse (Thousand)	8.4	NA		5.4	NA	NA	NA	NA
Hospital beds (per thousand population)	1.08	NA	NA	0.75	0.3	0.9*	1.7*	1.1*
Health expenditure as % of GDP	NA	2.3	3.4	3.1	4.1	5.9	4.1	4.2
Health expenditure as % of total expenditure	NA	3.6	4.2	3.1	6.9	NA	NA	NA
Expenditure per capita ($/person)	NA	3.8	6.3	4.7	4.2	17.8	10.3	36.9

*Data are for the year 1998

Source: World Bank: World Development Indicators 2001, Health Sector Review, SIMA data base

2.70 Though there has been significant progress in availability of health services much needs to be done. According to the Health Sector Review, access to immunization is low: only 55 percent of the under-1 children were fully immunized (received up to two doses of measles vaccine) by 1999. In 1999, only 28 percent of women of child bearing age received immunization against tetanus. Although this is a significant improvement from 2.6 percent in the early years of independence, it is still far below international standards. Poor family planning services (contraceptive prevalence rate of four percent) and high fertility rates (5.6 children per woman in 2000) are also items of concern in Eritrea.

2.71 The government has been keen on improving the health infrastructure. It established a 3-tier system consisting of primary health stations and community health services, secondary health centers and zonal hospitals, and specialized hospitals at the tertiary level. There were 16 hospitals, 4 health centers, and 106 health stations in 1993 which increased to 18, 52 and 170 respectively by 2000. In addition there were five mini-hospitals and 55 clinics by the year 2000 (Appendix 2.9). The average population covered by one health facility in 1999 was about 26,000 against the government's target of 10,000. Although the number of hospital beds increased marginally by 10.8 percent from 2822 in 1993 to 3126 in 2000, the number of beds per 1,000 population declined from 1.08 in 1993 to 0.76 in 2000. This is less than the regional average of 1.37 for sub-Saharan Africa. (Appendix 2.10), but higher than the corresponding numbers for Ethiopia and Uganda. The population per nurse decreased from 8.4 thousand in 1993 to 5.4 thousand in 1999. The ratio of population to the number of physicians however increased from 28 thousand to 39 thousand in 1999 (Appendix 2.11).

2.72 Low caloric intake and malnutrition among children and women continues to be the main cause of high mortality in Eritrea. Based on the results of the Demographic and Health Survey of Eritrea (1995), 38 percent of children under-5 years of age were stunted (low height for age), 15 percent were wasted (low weight for height) and 44 percent were underweight (low weight for age) in 1995. WHO (2000) found that 50 percent of children under 5 in Eritrea suffer from anemia compared to 32 percent average for Africa as a whole

Government Expenditure on Health

2.73 In real terms, total spending on health more than doubled between 1995 and 1999 (Table 2.11). The share of capital expenditures in total has been increasing until 1999. Early on the focus was on primary care facilities. After 1997, as the emphasis in capital spending shifted to the development of tertiary heath care facilities, the share of primary care facilities in the total capital expenditure declined drastically. Total recurrent expenditures in real terms fell by almost 10 percent between 1995 and 2000. Almost 98 percent of the recurrent expenditure was spent on primary care facilities. It may be noted that the significant increase in capital expenditures in tertiary health care facilities in recent years is not supplemented by a proportionate increase in recurrent expenditures. This may result in creation of capacity in the tertiary sector which then cannot be properly utilized due to insufficient resources to cover the recurrent expenditures.

Table 2.11: Eritrea-Public Expenditure on Health Care, 1995-2000
(millions of constant Nakfa, 1992=100)

Category	1995	1996	1997	1998	1999	2000
Capital Expenditure	5.3 (6.9)	14.5 (30.6)	48.8 (45.1)	54.3 (44.9)	99.8 (61.0)	47.1 (48.2)
Primary			48.8 (45.1)	19.4 (16.0)	17.9 (10.9)	0.8 (0.8)
Tertiary & other				34.9 (28.9)	81.9 (50.0)	46.4 (47.4)
Recurrent Expenditure	70.9 (93.1)	32.9 (69.4)	59.4 (54.9)	66.6 (55.1)	63.9 (39.0)	51.6 (52.7)
Primary				65.7 (54.3)	62.9 (38.5)	50.8 (51.9)
Tertiary & other				0.9 (.8)	0.9 (0.6)	0.7 (0.7)
Total	76.1 (100)	47.5 (100)	108.2 (100)	120.9 (100)	163.7 (100)	97.9 (100)
Total (Million $)	13.61	9.26	20.53	24.44	31.23	19.23
Per capita expenditure ($)	3.8	2.5	5.4	6.3	7.8	4.7

(figures in parentheses are percentages to the total expenditure on health)
The ERP, ECDF and other project contributions to health sector spending and spending by other line ministries in the health sector are included to compute the expenditure on health care.

2.74 Per capita total spending on health services increased from US$3.8 in 1995 to US$7.8 in 1999 but then fell to US$4.7 in 2000. Measured in terms of recurrent costs, per capita expenditures on health dropped by about 10 percent between 1995 and 1999. Even at the peak total per capita spending was less than the averages for sub-Saharan Africa, the low income countries and comparator countries like Rwanda and Uganda (Appendix 2.10 and Table 2.10). Total health expenditure in Eritrea as a percent of GDP is also less than the regional average and those in Ethiopia, Uganda and Rwanda.

Government policy

2.75 The policies followed in this sector concentrated on rehabilitation and expansion of health services infrastructure, the provision of health services, increasing the number of health personnel, and strengthening the disease control programs. As a result there has been progress in the physical infrastructure, number of health professionals and immunization coverage. The

overall health status has shown improvement. Government policies resulted in an increasing role of the public sector. Forty six percent of the health facilities were owned by the Ministry of Health in 1993 which increased to 76 percent by 2000 (Health Sector Review).

2.76 Despite the progress made so far, overall health status of the population remains poor. Indicators of general health call for sustained additional funding for the health sector Comparing Eritrea's health spending and outcomes to neighboring countries and international standards also suggests that this sector should get additional resources.

2.77 Poor access to health services for rural and nomadic population, low number of physicians and beds, growth of hospitals without proper attention to capacity and availability of human resources, poor access to sanitation and improved water are other issues that need attention.

2.78 Two important multisectoral projects have begun implementation. The first is HAMSET which deals with HIV, Maleria, Sexually Transmitted Diseases and Tubercolosis. The other is the Early Childhood Development project. These innovative projects are responding to presssing health needs.

2.79 The next step to consolidate the gains in health would appear to be the development of a health sector strategy. Like in education, this should include internal and external parties involved in health. The MoH fully supports the development of a health sector strategy and has already engaged the World Bank and other partners in this effort. There is also a need to improve coordination and communication among all stakeholders, MoH needs to take the lead in ensuring that this happens. As this is done there is a good case for increasing expenditure on health. Since resources are severly limited, it would be important to assess the inefficiencies in the sector. Further, development of a national health account with better information on unit costs and private sector provision would be useful for policy analysis.

J. AGRICULTURE

Current status and progress since independence

2.80 About 80 percent of the population are dependent on agriculture for their livelihood. Yet the sector contributed only 16 percent of the gross national production in 2000[6]. Clearly, productivity in the sector is very low.

2.81 Domestic food production regularly falls below demand, resulting in dependence on commercial imports or food aid. During 1996-99 domestic production covered only 38 percent of demand. Imports accounted for 51 percent (table 2.12). Although average production increased between 1992-95 and 1996-99, the share of imports in total food demand also increased from 33 to 51 percent due to the increase in total demand. The projected national food balance from 2000 to 2010 (World Bank, Agriculture Sector Report) shows that the country will continue to depend heavily on commercial imports and food aid to meet growing demand.

[6] Source: World Bank, Agricultural Sector Review.

Table 2.12: National Food Balance (000 tonnes)

Component of balance	Average 1992-1995	*In percentage 1992-1995	Average 1996-1999	*In percentage 1996-1999
Opening stock	92	21.9	71	10.5
Production	190	45.2	259	38.3
Imports	138	32.8	347	51.2
Supply	420		677	
Consumption	384	91.4	587	86.7
Seed and losses	36	8.6	42	6.2
Closing stock	NA		64	9.5
Export	NA		0	
Demand	420	100	677	100

(*Percentages of the total demand)
Source: Ministry of Agriculture and the World Bank Agricultural Sector Memo

2.82 The area, production and productivity in respect of major crops since 1992 (see table 1.9) show wide variations. Annual production ranged from 98 thousand tonnes in 1993 to 472 thousand tonnes in 1999 with an average of 226 thousand tonnes. Total cropped area and productivity also varied widely around averages of 372 thousand hectares and 0.61 tonnes per hectare, respectively. Cereals account for about 93 percent of total production and 91 percent of the area sown, followed by oil seeds and pulses. Agricultural productivity is close to the average for the region but lags behind the average for low-income countries and the world average (Appendix 2.12). Low and uncertain rainfall, low levels of modern input use and the subsistence nature of farming result in low productivity. Although fertilizer consumption in Eritrea is close to the average for the region, it is below the average for low-income countries and the world. Eritrea also lags behind the averages for sub-Saharan Africa and low-income countries in the degree of mechanization of agriculture (number of tractors per unit area).

2.83 The Integrated Farming System (IFS), a program spearheaded by the Ministry of Agriculture, showed that fertilizers, quality seeds and better land preparation could raise cereal yields in Eritrea. The IFS involves a coordinated use of a package of inputs; i.e. mechanization, fertilizers, modern seeds and insecticides. Data on yields from traditional farming systems and the IFS (Appendix 2.13) suggest that the latter could increase average yields of cereal crops by 85 percent, with the highest yield increase having been achieved for pearl millet (127 percent) and the lowest for barley (32 percent). These results show that there is potential for raising yields by using modern inputs and practices. However, the costs of the inputs have to be set against the gains in yields. So far, this has not been done.

2.84 Up-to-date estimates of current and potential land use categories are not available. As of 1994 only 3.6 percent of the total land area was under cultivation (Appendix 2.14) representing roughly 20 percent of potentially cultivable land; 57 percent was browsing and grazing lands and 33 percent was barren land. The cultivated land area per rural person is very low ranging from 0.07 ha in the North Red Sea Zoba to 0.32 ha in Gash-Barka with a national average of 0.15 hectare (Appendix 2.15). The crop production system is predominantly rainfed subsistence farming (which accounts for 90 percent of production); , the rest is semi-commercial rainfed farming and irrigated agriculture. High population pressure, deforestation and subsistence farming practices over the years have resulted in land degradation and loss of up to 10 to 20 metric tonnes of top soil per hectare of cropped land (Bojo, 1996).

2.85 Poor investments in infrastructure, especially roads and communications, private services and industries and in human capital are limiting the development of agriculture. The Agriculture

Sector Review found that private sector investment in agriculture has been very low; less than five percent of the total investment over the period 1994-97. The border war with Ethiopia resulted in substantial losses for such investments.

Government expenditure on agriculture

2.86 In an attempt to achieve rapid advances in agricultural production, the government increased spending on agriculture from 160 million Nakfa in 1997 to 269 million Nakfa in 1998 in constant terms. Since then there has been a decline as total spending fell to 173 million Nakfa in 2000 (table 2.13). Total spending as a percentage of GDP peaked at 7.6 percent in 1998 and then declined to 5.5 percent in 2000. With the ending of the border war, spending on agriculture has been targeted towards emergency work and rehabilitation, which included distribution of drought animals, tools and basic inputs. The government has been giving importance to capital construction, as evidenced by the increase in the share of capital expenditure in total expenditure from 67 percent in 1997 to 82 percent in 2000. A big portion of capital spending has been on machinery and equipment, consistent with the government's objective of mechanized farming. About two-thirds of the capital spending is financed by external donors. The sustainability of capital spending will therefore depend to a large extent on the availability of external funding. The grain board accounted for a major share of the recurrent expenditure and reached the level of 1-7 percent of expenditure on agriculture, fisheries, and the grain board during 1997-99. Capital expenditure on fisheries was of similar magnitude.

Table 2.13: Government Spending on Agriculture, Fisheries and the Grain Board (millions of constant Nakfa, 1992=100)

	1997	*In Percent	1998	*In Percent	1999	*In Percent	2000	*In Percent
Recurrent	53.4	33.3	61.1	22.7	57.2	25.4	31.6	18.3
Of which Agriculture	17.3	10.8	17.2	6.4	14.9	6.6	13.1	7.6
Fisheries	4.5	2.8	4.4	1.6	4.6	2.0	3.9	2.3
Subsidy to Grain Board	31.5	19.7	39.5	14.7	37.8	16.8	14.5	8.4
Capital	106.9	66.7	207.7	77.3	167.9	74.6	140.9	81.7
Of which Agriculture	74.9	46.7	61.7	23.0	107.4	47.7	118.2	68.5
Fisheries	32.1	20.0	95.9	35.7	60.5	26.9	22.7	13.2
Subsidy to Grain Board	0		50.1	18.6	0		0	
Total Expenditure	160.4	100	268.8	100	225.1	100	172.5	100
Of which Agriculture	92.2	57.8	78.9	29.3	122.3	54.3	131.2	76.1
Fisheries	36.6	22.8	100.2	37.3	65.0	28.9	26.7	15.5
Subsidy to Grain Board	31.5	19.7	89.7	33.3	37.8	16.8	14.5	8.4
Total expenditure* as % of total government expenditure	8.2		9.1		6.2		5.5	
Total expenditure* as % of GDP	4.7		7.6		6.3		5.5	

(*Total expenditure on agriculture, fisheries and the grain board

Note: The ERP, ECDF and other project contributions to agricultural sector spending and spending by other line ministries in agriculture sector are included to compute the sectoral expenditure.

2.87 One of the findings of the Agriculture Sector Review is that recurrent spending on agriculture is too low in relation to its sectoral share of GDP and given the dependence of 80 percent of the population on agriculture.

Government policy on agriculture

2.88 During 1998-99 government spending was focused on the Integrated Farming Program (IFP). The IFS covered 42,500 hectares in 1998. In 1999 the coverage reached 90,000 hectares. Although the IFP showed significant yield improvements, its cost-effectiveness has yet to be evaluated. Modern seeds and fertilizers require adequate irrigation during critical stages of plant growth. Hence areas for IFP need to be carefully selected. Costs of mechanization and the long-term impact of mechanized farming on the shallow soils of the highlands also need to be assessed.

2.89 Future growth in the agricultural sector requires addressing the major constraints limiting production and productivity- the low and uncertain rainfall and poor irrigation facilities, poor investment in rural infrastructure and weak/undeveloped rural private institutions, low per-capita land availability and land degradation. The country is drought prone with average annual rainfall between 200 mm and 700 mm. Production, especially of high-value crops, could be increased by expansion of the area under irrigation. FAO (1994) estimated that areas under rainfed and irrigated farming could be increased to about 12 percent and 5 percent of the total land area, respectively. However, recent estimates from the Ministry of Agriculture show that as of 1999 total cultivated land accounted for only 3.6 percent of the total area, which indicates that the country still has room to increase the cultivated area. Productivity of rainfed agrculture may be increased through better soil moisture conservation, water harvesting, plant protection and greater use of drought - resistant crop varieties.

2.90 Currently only 5-6 percent of the cropped area is irrigated. Much of the current irrigated area is under spate irrigation, which often involves poor water management (IFAD, 1998). Although the government started aggressively to construct micro-dams, the absence of a long-run irrigation development strategy and the shortage of trained staff adversely affected the program. A sound institutional framework for program formulation, implementation, monitoring and evaluation based on a survey of water resources in the country is needed. This is a prerequisite for tapping the potential for private investment in the irrigation sub-sector.

2.91 Modern farming practices offer opportunities for substantial improvement in productivity. Inputs like fertilizers, pesticides, modern seeds and mechanized farming may be promoted where the benefits justify the costs. However, according to the Agricultural Sector Review there are substantial subsidies on fertilizer and on credit provided to farmers to purchase fertilizer. Given the tight fiscal situation, the sustainability of such subsidies is doubtful.

2.92 Private institutions in the form of input supply and marketing agencies and financial institutions have not yet emerged. Supply of modern inputs like fertilizer and pesticides at present is the responsibility of the Ministry of Agriculture. Some farmers groups and cooperatives are being organized. These could eventually take over the responsibility for input procurement and distribution..

2.93 Poor soil fertility and degradation of lands have affected productivity. Specific actions are needed to promote soil conservation, land management practices, agroforestry and animal production, and tenure systems in pastoral lands.

2.94 High value horticultural crops like banana, onion, papaya, tomato, peppers, eggplant, okra, citrus and mango offer opportunities for commercial farming where irrigation facilities are available. Progress in production of these high value crops offer opportunities for higher farm incomes and export earnings.

2.95 Agricultural research is very weak in Eritrea. New technologies developed elsewhere with similar agro-climatic conditions may be imported to the extent possible. Research needs for the peculiar nature of subsistence agriculture in the country should however be pursued. As the research and development capacity is built up, extension services may also be developed to transfer the technologies to the farmers.

2.96 In sum, agricultural policy should proceed on two prongs. The first prong would focus on managing Eritrea's water resources. Efficient use of Eritrea's scarce water resources is probably the key to development of the sector. Strategic choices need to be made here that take into account Eritrea's fragile soil. In particular, expansion of area under cultivation and irrigation should be carefully done, and the strategy may well focus more appropriately on intensification of agriculture as discussed below.

2.97 The second prong would involve development of a sustainable plan for the modernization of agriculture. The results of IFP show that the use of modern inputs can increase productivity in agriculture. However, an examination of the total opportunity cost of achieving these results may show that the current strategy is not sustainable.

2.98 Increasing the coverage of the IFP under current arrangements would imply ever increasing subsidies for fertilizer, seeds and tractors. Further, the highly centralized form of decision making on the use of inputs is likely to lead to inefficiency. The enviromental consequencies are likely to be negative.

2.99 A better strategy would be a more decentralized one where farmers themselves are left to take decisions on the use of inputs. Rather than spending public funds on subsidizing fertilizer and tractor services, Government should focus on research and extension so that farmers can make improved choices and maximize the benefits from modern inputs. Rather than attmpting to control the distribution of inputs, the strategy should be to encourage the development of private distribution systems.

K. ROADS

Current status and progress since 1993

2.100 At independence Eritrea inherited a road network that had been devastated by the 30-year liberation war. There had been little investment in construction and maintenance of the road network during the war. This resulted in a road network that is limited in coverage, and where it exists, is in poor condition for motorized transport. This is a major constraint to economic development in general and agricultural and rural development in particular. Although road transport is the primary mode of transport in the country, parts of the old 0.9 meter gauge railway line between Massawa and Asmara have been recently restored.

2.101 We do not have data to analyze the physical progress in road development in Eritrea since independence; such an assessment is therefore not attempted here. Data on the available road network is presented in (Appendix 2.16). The total length of all roads is 6990 kilometers which represent a road density of 0.06 kilometer per square kilometer and 1.7 kilometer per thousand population. Most of the roads were constructed between 1934 and 1938. The lack of maintenance resulted in poor road conditions throughout the country. As a result, only about 10-25 percent of the roads may be classified as in good or fair condition.

2.102 A comparison for the road network in Eritrea with relevant regions/countries gives an indication of the depth of the problem (Appendix 2.17). The road density in Eritrea is below the average for low income countries and for sub-Saharan Africa. It is also below the average for

Ethiopia and Rwanda. Among sub-Saharan African countries, only Mali, Mauritiana, Niger, and Sudan have lower road densities than Eritrea. However, it may be noted that for some countries the data may not be comparable.

Government expenditure on roads

2.103 Government expenditure on infrastructure facilities over the period 1997-2000 (table 2.14) shows that since 1997 there has been a declining trend in government spending. The total investment in roads declined from 197.1 million Nakfa (7.6 percent of total government expenditure) in 1997 to 162 million Nakfa (2.7 percent of total government expenditure) in 2000. However, expenditure on feeder roads, which was funded under the Eritrea Community Development Fund showed an increasing trend. Expenditure on trunk roads has been declining; it fell from 190.5 million Nakfa in 1997 to 137 million Nakfa in 2000. Of the total expenditure on trunk roads almost 70 percent was spent on maintenance and the rest for construction. Although at independence the government placed high priority on the development of roads, recent trends in government spending do not bear out the stated the government objective. The declining government spending will result in further deterioration of the already fragile road network in the country.

Table 2.14: Government Expenditure on Infrastructure Facilities, 1997-2000 (millions of constant Nakfa, 1992=100)

	1997	1998	1999	2000
Ports, rail and communications	136.6	90.7	172.0	69.5
Roads	197.1	189.7	220.6	162.3
Feeder roads	6.6	5.4	14.4	25.1
Trunk roads	190.5	184.3	206.2	137.2
Construction	57.2	55.3	61.9	41.2
Maintenance	133.4	129.0	144.4	96.0
Total expenditure on infrastructure	333.7	280.4	392.6	231.8
Total expenditure on infrastructure as % of GDP	7.1	5.3	6.8	3.9

Government policies

2.104 Since independence the government has made strenuous efforts to improve the road network. In some areas donor support has played a critical role; for example, the improvement works on the Asmara - Massawa road under the Recovery and Rehabilitation Project. The government is keen on improving the road network in potential agricultural areas, especially in the western parts of the country. In this regard, work is ongoing on the Keren-Agordat-Barentu road, Barentu-Tessenei road, and Barentu-Mendefera road.

2.105 In the light of the low road density and the poor condition of the existing roads there is an urgent need for sustained investment in the sector. The immediate priorities include improvements in road safety, upgrading of the condition and capacity of selected main roads between major urban areas, commercial and agricultural centers and markets. For the medium to long term a comprehensive strategy for the development of roads is being prepared.

2.106 Institutional capacity for managing the road network is limited. There is a need for better coordination between the Infrastructure Department and the Road Transport Construction Department and for the recruitment of qualified professionals to manage both the ongoing and proposed projects.

2.107 Although the government's policy on road construction favors private sector participation. RTDC with its sizable capacity for road construction and maintenace, may still have a role in road maintenance for some time to come. What needs strenghtening is the public sector capacity at the regional level for the maintenance of feeder roads in a cost-effective way.

2.108 Policies in the road sector are addressing the environmental and social impact of roads, links to other modes of transport, poverty reduction and other social objectives, and the impact of transport on the incidence of HIV/AIDS. Generation of a database covering vehicle overloading and associated road damage, estimates of costs or resources that will be required for planned new construction and maintenance may help policy makers. A study is underway on road user charges that would generate resources for road maintenance and a portion of long-term road development costs.

2.109 There has been good progress towards the development of a sector strategy in the context of the IDA Roads TA project.

3. CREATING A LEARNING SOCIETY

A. INTRODUCTION

3.1 This chapter builds on the previous chapters and suggests how Eritrea's development strategy might be strengthened in response to the experience of implementation since 1993 and the border war. The review in the previous chapter found that there has been progress in building the institutions necessary for a modern economy and state. There had also been some progress on the macroeconomic front and infrastructure provision, at least until the border war. Agriculture, health, education and roads, the four sectors reviewed, all showed progress.

3.2 However, progress in building a vibrant private sector has been slow and disappointing. The development of the private sector has, no doubt, been set back by the war, which resulted in labor shortages, rationing of foreign exchange and loss of the Ethiopian market. But the war provides only a partial explanation for the slow growth of the private sector. As noted in the report, there are other constraints relating to access to land, infrastructure, etc. The private sector is crucial for creating jobs and raising incomes. Accordingly, the suggestions made here focus on the private sector. There is an urgency to this task because aid and diaspora flows have provided Eritrea with macroeconomic breathing room. However, the macroeconomic dynamics that are in place with the high levels of government expenditure, value of imports far exceeding exports and growing foreign debt will become unsustainable unless there is sustained growth in the economy, including a rapid focus on exports.

3.3 The strategy suggested has three prongs: a short-term response to the foreign exchange crisis in the form of a Crash Program for Exports; a medium-term program to improve the use of public exenditures and improve the climate for investment for the domestic private sector and the diaspora; and a long-term strategy designed to prepare Eritrea to compete in the global economy. Note that this does not imply that the actions in the long term strategy are any less urgent than those in the short term strategy.

3.4 A noteworthy feature of the discussions under this CEM is that there has been broad agreement on all three prongs of the strategy, and as shall be reported below, work is underway to flesh out and actually begin implementation on all three prongs. While there are still differences of views on aspects of the diagnosis and the relative importance of the factors important for Eritrea's development, the strategy laid out in this CEM is largely a joint one.

3.5 It is also worth noting that the strategy that is being laid out in this chapter might not have been very different had it been prepared just before the war and the loss of economic relations with Ethiopia – with the possible exception of the Crash Program for Exports. What is different now is that achieving results is much more urgent than it might otherwise have been; and the room for maneuver or mistakes is much reduced.

B. THE SHORT TERM: THE CRASH PROGRAM FOR EXPORTS

3.6 It has been clear to Eritrea's policy makers since independence that given Eritrea's small size, relative lack of natural resources and need for technological development that exports would have to grow dramatically if Eritrea was to develop. In addition to putting in a number of export-friendly measures described in chapter 1, Government commissioned a World Bank study on Export Development, which outlined a strategy. Much of the substantive work for this study was done in 1997 and 1998. However, as will be seen below, deteriorating trade relations with Ethiopia in 1996 and 1997 and the border war led to a collapse in exports and heightened the urgency of increasing exports. Accordingly, a Crash Program for Exports is proposed with a goal

of raising exports from the current level of $20 million to $200 million in 5 years. The Crash Program is developed based on the analysis of the Export Development Report that was discussed with Government in January 2000.

The Export Development Strategy report

3.7 Given the relatively slow growth of exports in the first few years after independence, the Government requested the Bank to develop a strategy to increase exports. In response, the Bank produced the Export Development Strategy Report (World Bank 2000). Although the analysis was largely done in 1997 and 1998, the recommended strategy still remains valid. The report recommended a two-pronged strategy. One prong builds on Eritrea's natural resources. The other prong relies on developing those areas of the economy that can quickly absorb Eritrea's stock of unemployed or underemployed people.

3.8 The first prong of the strategy will be to take advantage of the country's modest population density and its varied climate and natural resources to develop exports based on livestock, agriculture, horticulture, fisheries, forestry, and tourism. These are the activities producing most of Eritrea's exports today, which consist chiefly of semi-processed hides and skins, live sheep and goats, cotton, sesame, and fishery products.

3.9 The second prong suggests that Eritrea develop labor-intensive manufactured exports based on the country's abundant supply of low-paid labor. Expansion of low-skilled manufactured exports would begin in industries with especially low skill and capital requirements, such as labor-intensive sewing and assembly of garments made of textiles and leather, production of knitwear made from textile yarn, and sewing of shoe uppers for export.

3.10 While this strategy remains valid, the collapse in exports following the border war meant that urgent measures needed to be taken to jumpstart exports. Accordingly, a Crash Program for Exports is proposed. This program, which is described below, was accepted by the Government following the CEM mission in February 2001, and implementation began a few months later.

The original design of the Crash Program for exports

3.11 The Export Development Strategy Report made the point that experience with export take-off in other countries has been that it is the second prong, labor-resource based exports, that can achieve dramatic early growth, rather than natural resource-based exports. Countries such as Korea, Thailand, Mauritius, Bangladesh and Tunisia have all achieved dramatic export take-offs based on light manufacturing. The start has nearly always come in the "sewing based industries", such as textile garments, shoes and leather garments.

3.12 Eritrea is almost unique in Africa in that it has a tradition and a skill base in key sewing-based industries, namely shoes, woven-cloth garments plus sweaters and hosiery. These industries were set up by the Italians years ago, and were primarily oriented to serve the then virtually captive Ethiopian market. Although these industries were woefully neglected during the long period of Ethiopian rule, nevertheless, some of the skill base and the know-how still exists, and can be built on. Indeed, the rebuilding process was already starting, when it was interrupted by the hostilities, and the loss of the key Ethiopian market.

3.13 Under the Lome Convention, African countries have preferential access to the lucrative European Union market. So far, however, apart from Mauritius and Tunisia, no other African country has been able to utilize this valuable preference to achieve a significant export take-off. Similarly, Eritrea is a listed beneficiary country under the USA's Africa Growth & Opportunity Act, 2000 (AGOA), which enables it to export garments to the USA free of duty, but more

significantly, free of any quota restrictions for the next eight years. As a "lesser developed" beneficiary country, Eritrea is not restricted to the use of USA-made cloth, so the potential is even better. This Act is probably the most significant development for African exports since the first Lome Convention, and could well transform the pattern of trade from the continent.

3.14 A growing number of countries including Mauritius, Kenya, South Africa, Lesotho, Madagascar have begun to take advantage of this opportunity. Those countries that move fast will reap the benefits. Further, AGOA requires that after September 2004 either US or African made yarn be used. The window of opportunity is thus limited. Eritrea should quickly expand and re-direct its garment industry from the local and sub-regional market, to become a world-class supplier to the USA.

3.15 To sum up, in these key industries, Eritrea has the skills and the basic know-how. In addition, it has preferential market access only available to African and Lome countries. The time is right to build on these strengths, and spearhead the export growth that the country so badly needs. The hope is that, once the Crash Program has created the beginnings of a take-off in these three industries, it could then move on, and utilize the same approach to extend take-off into other products and industries. One promising candidate would be IT-enabled services, sometimes called remote back-office services.

3.16 The goal of the Program is to take Eritrea's export earnings of goods from the current negligible level of around $20 million, up to a total of $200 million within five years. The initial focus will be on the shoe industry, the sweater and hosiery industry, and the garment industry.

3.17 The objective of tight initial targeting is to achieve real results as quickly as possible. It is not to second-guess the market. It is more than likely that, over time, other products and other markets will take over from the initial targets. The objective is to make a start, and to demonstrate that export success can be achieved.

3.18 Some may argue that Eritrea should start with nearby African markets for these products. However, African markets tend to be interested in the cheaper, simpler shoes and sweaters, which often come as second-hand imports. The advantage of low-cost sewing labor is of much less interest to such markets than to the high-income economies of western Europe and North America.

3.19 For shoes and sweaters, the focus of the Crash Program will be on the EU. However, for garments, because of the unique immediate opportunity presented by AGOA, the focus will be on the United States market.

3.20 What Eritrea has is labor, plus some skills, know-how, and an industrial culture. What it does not have is good contacts with potential buyers in the EU, and the skills to create the designs that will sell. Nor does it have the up-to-date production and management know-how needed to convert those designs into actual production for Europe and North America. Thus, foreign partners will be needed, to contribute these vital missing elements into the supply chain.

3.21 In most developing countries, the focus of official efforts is almost exclusively on attracting foreign investment. The argument goes that not only does this bring in the missing know-how, but it also brings in new capital, and a long-term commitment by the foreign partner to the country. Admittedly, FDI might be viewed as the ideal, from the recipient country's point of view. But, in export industries such as shoes and sweaters, FDI is typically not the ideal from the viewpoint of those foreign firms that have the vital missing elements. Since they can choose

from many countries in which to source their requirements, there is little attraction in investing their own capital in one of these countries, particularly if perceived as risky.

3.22 Rather than FDI, the much more typical arrangement in these industries is cross-border sub-contracting. The actual sourcing is usually done by an intermediary. He obtains the order from a substantial EU-based or US-based customer, typically either a big retail chain or the owner of an independent brand. Normally, this end-customer specifies the design he wants made. The intermediary may be in the EU or US, or he may be in another producing center, and yet on the lookout for new places to source production. The latter pattern is more typical in the garment industry.

3.23 The foreign intermediary may then purchase the basic materials on his own account, or he may direct the manufacturing partner as to where these should be sourced. Typically, when dealing with an early-stage supplier, the foreign intermediary will send one of his trusted staff to oversee the initial stages of actual production. This is likely to include some hands-on training of key operatives, such as cutters and quality controllers.

3.24 Once a start has been made, the producing country can gradually move up the market, steadily obtaining better and better returns on its labor. This is how Hong Kong started, at the very bottom of the market. It is now so wealthy that few garments or shoes are actually still made there. This, then, is the route the Crash Program will aim for. It will not aim to attract foreign investors. Instead, it will aim to attract foreign intermediaries into cross-border sub-contracting business for the three target industries.

3.25 Even though Eritrea produces leather and also cotton, it is most unlikely that the current local supply of either leather or cotton cloth will initially be able to meet the highly specific and exacting requirements set by EU and US customers. Thus, take-off will inevitably have to begin mainly on the basis of imported inputs.

3.26 As experience builds, local suppliers of leather and cloth will develop the required capabilities to match EU and US requirements. This will happen first in the simpler inputs, such as lining leather and lining cloths, moving later into more sophisticated inputs. As the Export Development Strategy Report argues strongly, any attempt to restrict exporters to the use of local inputs would be counter-productive, and merely delay take-off. Sub-contracting will only be attracted to Eritrea if buyers are totally free to specify exactly the inputs they require, to produce the specific design and quality level they need.

3.27 The intention is that the Crash Program will assist 3-10 local firms in the shoes industry; 3-10 local firms in sweaters and hosiery industry; and possibly 2-5 firms in the woven garments industry.

How the Crash Program will work

3.28 The Crash Program will be implemented by the Crash Program Committee (CPC), a small committee of leading entrepreneurs in the three initial target industries. The CPC will operate as a special committee under the Eritrean National Chamber of Commerce. The intention is that, over the initial eight-month period of the Crash Program, the CPC will meet at least once every two months. The detailed implementation of the Program will be carried out by consultants, contracted to the Committee.

3.29 To achieve the intended export take-off, parallel actions will be required on several fronts. Success will require actions so that firms can have access to physical infrastructure; meet

funding requirements; regulatory requirements; and also meet the need to locate and attract the right foreign partners.

3.30 The sewing industries are not demanding of physical infrastructure. Much is already in place. The key problem is access to industrial plots for expansion. Many of the existing producers of shoes and sweaters operate in cramped, small workshops, rather than factories. If they are to be taken seriously by visiting foreign intermediaries, they must be in a position to expand quickly into larger premises.

3.31 The problem arises because there is no market in industrial plots. They are only available on the basis of administrative allocation by the authorities, usually free of charge. However, the basis of allocation is by no means clear. One shoe producer visited applied for a plot of 2000-3000 square meters three years ago, and still has not been allocated a plot. Yet he could probably quadruple his capacity, even using existing machines, if only he had more space.

3.32 Actions will be needed to ensure that all suppliers providing Profiles to the Program are provisionally allocated expansion plots on demand, subject to their obtaining a firm initial order. The arrangements must convince the foreign intermediaries that lack of space will not get in the way of completing the initial contract on time.

3.33 One reality that needs to be faced is that many of the local entrepreneurs with the desired experience and know-how in shoes and sweaters are now financially very weak. The loss of the Ethiopian market has hit them hard. Many have either built up stocks of un-sellable product or have built up unserviceable debts. However, banking practice in Eritrea usually requires that loans be backed by 100 percent collateral, a requirement that these firms are not likely to be able to meet.

3.34 During the January, 2002 mission, assurances were given by senior representatives of both the Commercial Bank of Eritrea and the Housing & Commerce Bank of Eritrea that, in principle, they would be willing to finance the working capital needs of the type of cross-border sub-contract business being sought within the Crash Program. Most importantly, they would be willing to do so without reference to physical collateral or general overdraft limits.

3.35 Nevertheless, actual experience by the initial manufacturing partners in obtaining such finance will need to be monitored. The Program will need to monitor progress on this issue, will assist firms where needed to prepare strong applications and also will aim to reassure bankers as to the actual risks involved in financing such business.

3.36 Obtaining access to foreign exchange has recently been very difficult. One exporter visited has been unable to obtain a single dollar of foreign currency from his commercial bank for the past two years, in spite of repeated requests. He reports that the official Foreign Currency Bureaux have been told to surrender to the central bank all forex they take in from customers, so that this source is also now blocked to him. Thus, his only resort is the black market. However, this is illegal. He could be arrested by the plain-clothes Financial Police, and face severe penalties.

3.37 In this situation, exporters are forced to resort to either barter or a CMT-type contract, where the foreign buyer supplies all inputs, and the local supplier obtains a fee for their conversion. Unless it is remedied, the current situation will seriously hamper the efforts of the Crash Program to attract foreign partners.

3.38 The main regulatory problem still requiring satisfactory resolution concerns access to imported inputs. Others may well emerge during the course of the Crash Program. Cross-border sub-contracting will not take off unless local entrepreneurs are able to import whatever inputs they need for their export production, free on any loading of duties or taxes. This principle appears to have been accepted by the Government at the policy level. However, making it work in practice for each and every export producer will take more work. Making such systems work smoothly in practice will need more than just directives from the top. It will need detailed training and advice for the operating level, primarily within the Customs service, and not only in Asmara, but also at the port of Massawa.

3.39 A positive recent step has been the passing of the export free zone proclamation, which essentially allows the Finance Minister to declare any part of Eritrea a free zone with the usual benefits including access to duty free imports. It takes the unusual step, however, of providing a tax holiday for life. Even if there is a belief that a tax holiday is needed to compete with other countries that have provided such holidays, most of these allow a tax holiday of no more than ten years.

3.40 Both of the initial target industries within the Crash Program face the problem of loss of key employees to military service. There are key skills that are vital to the whole process. Most males under 40 were drafted during the conflict. Except for a few thousand, they are still serving in the military. Without essential key employees, it will be impossible for firms within the Crash Program to take on new export obligations. For the Crash Program to succeed, some means will need to be found of enabling these key employees to return to their factories.

3.41 Locating and attracting foreign partners is the front on which the most pro-active work will be needed. It will not be enough to get the conditions right, and then stand back and wait for partners to arrive. These competitive markets do not work like that. Someone has to go out and locate potential partners first, and then persuade them to come to Asmara, to take a closer look at what local entrepreneurs can offer them.

3.42 This will require the services of an outside expert, with understanding of the two target industries, and with experience in developing exports in low-cost locations. The work will be carried out in stages.

3.43 Desk research will be used to locate current importers of shoe uppers in two or three key EU markets, known to have a substantial import demand for such products. Desk research will also be used to locate countries currently facing quota problems for garment exports into the US market. The search initially will be for countries close by, in the Middle East, which have established trading connections with Eritrea.

3.44 In parallel, in Asmara, local entrepreneurs with technical experience in shoe production and in sweater production will be contacted. Those that are interested in participating actively in the Crash Program will be asked to provide as much information as possible about their experience and expertise, in the form of a Capability Profile. They will be asked for samples, and for photographs and plans of current production facilities, no matter how rudimentary.

3.45 The second stage will be field research. For sweaters, the initial targeting will be on Mauritius. This is because sweater exporters from Mauritius target the EU very specifically, and also it is known that some exporters there are already offloading some of their simpler lines to other, cheaper production locations. Mauritian sweater exporters are already sourcing simpler lines in Madagascar. The objective will be to persuade at least a small "first wave" of Mauritian

exporters to consider moving simpler production to Asmara. They will be invited to visit the city, and meet potential partners.

3.46 For woven garments, the initial targeting will be on one or two Asian countries known to have quota problems. For shoes and shoe uppers, the approach will be slightly different. The initial targeting will be on two or three key countries within the EU, known to have substantial imports of uppers or of full shoes. The selection is likely to include Italy, the UK, and perhaps Germany. The final selection will depend on the results of Stage One.

3.47 The third stage is to attract foreign partners to visit Asmara. For both sweaters and shoes, the ideal will be to persuade, say, five to fifteen intermediaries to visit Asmara. However, there is no guarantee that willing candidates will be found.

3.48 The idea is to give each potential partner the maximum possible assistance: before, during, and after his visit to Asmara. Each partner will be met at the airport; briefed and then introduced to those local entrepreneurs most likely to meet his requirements. Briefings will cover all the main concerns expressed during Stage Two by potential partners.

3.49 Each visitor will be free to conduct confidential business discussions as and when he wishes, but must also know that help and assistance is available at the end of a phone at any time of the day. The aim will be that every visitor has the most positive experience possible of what it will be like doing business with Eritrea.

3.50 The final stage will be the follow-through needed for take-off. The objective is to achieve initial trial orders, which then develop into regular ongoing business. The Crash Program will pro-actively offer assistance with any problem the foreign partner or the local entrepreneur encounters. Regular contacts with the initial group of local entrepreneurs selected by the first wave of foreign partners will be helpful in this context.

3.51 Only when both the foreign buyer and the local supplier are happy to be left alone to get on with their business will the task end. Once that happens for the first wave, consideration could be given to starting the whole cycle once more for a second wave, either in the same industries, or spreading the approach to cover other industries.

Progress on the Crash Program

3.52 The Crash Program was launched in September 2001. Visits have been made to Kenya (which has made the most progress towards taking advantage of AGOA) and Mauritius. Research has begun on the UK market. One shoe factory has already received through these efforts an opportunity to quote for and make a counter sample for a wholesaler.

3.53 The focus at the moment is on assisting the firms overcome their supply constraints. A list of skilled workers has been provided to the demobilization commission in the hope that they will be candidates for early demobilization. Firms are receiving assistance in preparing viable business plans for preparing bankable loan applications. Still unresolved are access to land and buildings.

3.54 The strategy itself is also being refined based on these first experiences. One important change, after seeing the experience in Kenya, is that for clothing, in addition to subcontracting, the Crash Program will try to attract FDI, primarily from Asian clothing firms seeking to take advantage of AGOA. Other changes include a shift in focus from shoe uppers to shoes, and including sweaters as a target for exports to the US.

C. THE MEDIUM TERM: IMPROVING THE USE OF PUBLIC EXPENDITURES AND REINVIGORATING THE PRIVATE SECTOR

Improving the use of public expenditures

3.55 The previous chapter suggested that much improvement is needed in the prioritization of public expenditures. Clear benefits will be seen when the IMF TA program that has been agreed with Government is implemented. As noted in the previous chapter, these reforms can improve the timeliness and accuracy of internal and external reporting, facilitating tracking of spending and remedial action. These can be very usefully supplemented by implementing the reforms in the National Office of Statistics and Evaluation so that independent data are collected on development outcomes.

3.56 A second level of improvements will come from sectors making strategic use of this information in putting together sector strategies, on the basis of which line ministries make their budget submissions to the Ministry of Finance. If Government wishes, the World Bank can assist in this process. A multi-sectoral public expenditure process can be launched with the goal of assisting in the preparation of the 2003 budget. Sector specialists in the key sectors will work with line ministries in assisting them with their budget submissions while a team works with the ministry of finance in putting the numbers together.

3.57 The third and highest level of improvement will come from strengthening the process that began with the National Assembly discussion of the 2002 budget. No expenditures should be approved outside the budget process. If decisions on new spending are needed during the course year, supplementary budgets should be discussed by the cabinet and National Assembly. Realistic revenue projections will lead to discussions of the trade-offs required and preparation of a budget speech will make Government's strategy clear and help frame the discussion.

3.58 Eritrea's development strategy as articulated in the Government's Macro-policy and Poverty and Growth Reduction papers recognizes that the private sector will be the engine of growth in the long term. A number of private sector-friendly policy measures were also instituted. Yet the development of the private sector has lagged. Interviews conducted by the World Bank over a number of years with the private sector while preparing the Export Development Strategy Report, the Financial Sector Report, Crash Program for Exports and CEM have pointed to a number of constraints faced by the private sector.

3.59 The World Bank's experience in Eritrea while preparing the reports described above, suggests several critical elements towards improving the business environment over the medium term: giving priority to the private sector and providing space for its growth; lowering the costs of doing business in Eritrea; targeting the diaspora with a view to gradually converting the flows of remittances and donations into investments; and improving the functioning of the financial sector.

Giving priority to the private sector

3.60 Policy makers need to give priority to the private sector if it is to develop. This is the starting point without which all other efforts to grow the private sector may be doomed to failure. There is a lack of attention to the constraints facing the private sector and this may go a long way towards explaining the slow development of the private sector between 1993 and 1998. Three sets of actions are suggested here to expand the space available to the private sector: getting the party (PFDJ) out of business; recognizing that expensive government projects eat into the foreign exchange and other resources available to the private sector; and implementing policies already in place that move the private sector into roles currently played by the state.

3.61 A high priority is to get the party out of business. Whatever the original motivation for setting up the party owned businesses after independence, there is a wide-spread belief in the private sector that these businesses, which now constitute the single biggest conglomerate in the economy, enjoy unfair advantages whether it be getting needed permits, access to land, foreign exchange or telephone lines. Party-owned businesses are widely believed to not pay taxes. This at a time, when Government is becoming increasingly dependent on donors for revenue. It is not surprising then that perception becomes reality and firms will not try to compete against party-owned businesses.

3.62 Getting the party out of business can be treated as any privatization program. Many lessons have been learnt over the years about such programs and the World Bank is prepared to offer any needed technical assistance. Privatization in this instance can be a two-stage process. The first stage is to stop the creation of new party businesses, commercialize the activities of existing ones and make their operations fully transparent by, among other things, subjecting them to external audits. Simultaneously the necessary preparations for privatization can be undertaken, and the actual privatization will be the second stage.

3.63 The second set of actions to increase the scope for private sector activity has to do with Government avoiding actions that crowd out the private sector. A good illustration comes from the decision to build the Inter-Continental Hotel. The Inter-Continental Hotel is reported to have cost about $50 million (more than double the exports of goods in year 2000). Since its opening almost two years ago it has mainly housed Italian soldiers paying rates below the levels needed to recoup the original investment. Meanwhile, the private sector finds it difficult to access foreign exchange except through the black market. If this $50 million had been made available to the private sector, several exporters facing severe foreign echange constraints might now be prospering.

3.64 Indeed, while Government has a reputation for financial probity, it has undertaken a number of projects that could be considered prestige projects: the Inter-Continental Hotel, the new airport in Massawa (which can reportedly handle jumbo jets), the large middle-class housing estates, the Massawa-Assab road, all have used large resources at a time when resources available for the private sector were negligible. Government's own priority areas have been starved of resources as well – the cost of the Inter-Continental alone is almost double the total expenditure on education in 2000 (Appendix 2.7), including expenditures financed by donors. While the World Bank has not carried out a formal cost-benefit analysis of these projects, it does not seem likely that they will be economic under current conditions. For example, Asmara airport is greatly underused, and there is no indication that there will be significant traffic at Massawa airport. There may indeed come a day when an airport is needed at Massawa. At the moment, however, there are likely to be higher priorities.

3.65 Entrepreneurs may well make bad decisions but unless they are given the opportunity to make business decisions based on their assessment of risks and potential returns, they will not be able to build their enterprises. As long as Government pre-empts these decisions, by using the available foreign exchange, or constantly second guesses the private sector through stringent administrative review before issuing necessary permits and licenses, the private sector will be constrained.

3.66 The third area where Government can be proactive in enlarging the scope for private sector activity is by implementing sector policies that already assign a central role to the private sector. In several sectors including roads and agriculture, sectoral policy is to let the private sector play the dominant role while the ministry is increasingly to become a policy-making and

monitoring body. The faster this transition happens the greater the encouragement to the private sector.

Reducing the costs of doing business

3.67 There are clear indications that the cost of doing business, in cash or in time needed to achieve results, is high in Eritrea. These include the cost of services such as transport (especially shipping and air-freight), telecommunications (including telephone and internet access), and the costs of dealing with regulations. Indeed, uncertainity and delay can be as expensive as direct costs. There is no market in land, and this remains a problem as the President himself noted in an interview last year.

3.68 Consider the costs of sea transport. Given Eritrea's two ports and long coastline, one would expect that costs of sea transport would be relatively low. Indeed, a growing body of cross-country research suggests that being landlocked is a competitive disadvantage. However, there are indications that in fact sea freight rates for Eritrean firms are quite high (table 3.1).

Table 3.1: P&O Shipping Rates from Northern Europe, January 2002 (20 ft)

Dubai	$700
Jeddah	$850
Salalah	$1000
Djibouti	$1125
Massawa	**$2300 + war risk premium**

3.69 The cost of shipping to Massawa is more than double the cost of shipping to Djibouti, itself the most expensive port in the region. And this would be true even if the war risk premium were zero. These high costs are really being driven by trans-shipment costs. There is not enough traffic to Massawa for the shipping lines to call there directly. Accordingly, they ship to nearby ports. The goods are then shipped to Massawa on smaller liners a substantially increases costs.

3.70 Over time, if Eritrea can increase the volume of traffic then the shipping lines can start calling directly at the Eritrean ports. This process will be accelerated when relations with Ethiopia are normalized and Massawa again becomes the port of choice for Northern Ethiopia.

3.71 Government (as well as the private sector) is very cognizant of the high costs of doing business in Eritrea. Accordingly, the World Bank and Government have launched an exercise to quantify the costs of doing business in Eritrea. The relevant costs might include the cost of transportation, banking, telecommunications or power. They also include the costs of dealing with the bureaucracy, and the costs of delays waiting for permits or land allocation. The purpose of this study is quantifying the costs so as to develop a prioritized action plan to address the most important issues.

3.72 Two instruments will be used. The first is a customized survey of (mostly) manufacturing enterprises that will have elements similar enough to surveys of firms undertaken in a number of neighboring countries that will allow benchmarking of Eritrea. The second instrument is a survey of services (telecommunications, transport and financial services), which looks at the policies and performance of these sectors. Both surveys will be completed by June 2002. An Eritrean counterpart team has been set up with the assistance of the Ministry of Trade and Industry (MoTI), and the Chamber of Commerce. Analysis based on the two surveys and on a survey of industries being carried out separately by MoTI is expected in the Fall of 2002 and will serve as the basis for developing an action plan.

Targeting the diaspora

3.73 A potentially very important asset in developing the private sector is the diaspora. Eritrea famously considers the diaspora as part of the country. The diaspora served as the financial backbone of the liberation struggle. Members of the diaspora provided important ideas around the time of independence as the newly established government was trying to develop its policy direction. Arrangements were made for the diaspora to vote in the referendum on independence, and the diaspora is represented in the National Assembly. Following independence, the role of the diaspora was well recognized.

3.74 The financial contributions from the diaspora have continued, now formalized as a two percent tax. Table 3.2 shows how significant these flows have been. At times of crisis such as during the border war these contributions have greatly increased. When one remembers that total exports of goods in 2000 had fallen to $20 million, the critical importance of the diaspora flows becomes clear.

3.75 Although the diaspora continued its financial support after independence, early hopes of large numbers of people returning to Eritrea, bringing their capital, skills and talents have not materialized. Perhaps not surprisingly, people found that they had made lives with their families in other countries and it was not easy to relocate. What this means however, is that financial support from the diaspora has a limited life span. While the first generation of Eritreans have proven very steadfast in their support, the next generation who are born abroad will have less loyalty. By the third generation, it is more than likely that this support will have more or less dried up, unless there continues to be significant out-migration. In this case, the "new" first generation migrants are likely to send remitances.

Table 3.2: Eritrea's Private Transfers from Abroad

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001
US$ millions	166	289	216	245	354	248	255	200	180
As % of exports of goods and services	119	211	169	167	174	228	388	205	122
As % of exports of goods	460	448	268	257	662	880	1267	544	909

Source: Government of Eritrea, IMF

3.76 It is important then that these flows are increasingly transformed into investments. This is easier said then done. The post-independence experience offers a cautionary tale. The fact of the matter is that Government has been keen on attracting diaspora investors since independence. Although there has been some success, it has been limited.

3.77 As investors, the diaspora may not behave very differently from any other investors. Their primary concern will be return on investments, and actions that maximize their returns (such as by reducing the costs of doing business) will induce them to invest. The key difference is that as a group they will be more open to investing in Eritrea. Experience in other countries shows that diaspora investors have the advantage of familiarity with their country and contacts that make them more likely to invest.

3.78 Government very much sees the need to begin the transformation of diaspora flows into investment. Following the recommendations from the initial CEM mission, a survey of foreign investors with particular focus on the diaspora has been launched. It is planned to include the Asian and other investors being targeted in the Crash Program. This is being carried out by the Foreign Investment Advisory Service (FIAS) with the cooperation of the Ministry of Foreign Affairs and Office of Macro Policy and International Cooperation. The survey is expected to be carried out in the summer of 2002, and it is expected to identify the constraints to investment as perceived by the diaspora and other foreign investors.

3.79 As will be described in the section on the long-run strategy, the diaspora might play an important role in the spread of telecommunications infrastructure and also in financing higher education.

Improving the functioning of the financial sector

3.80 A well-functioning financial sector is critical for the development of the private sector. Eritrea has an unusual financial sector for a country of its size and stage of economic development. The World Bank completed a Financial Sector Review in 2000, and the discussion here is based on a follow-up exercise to update the information following the end of the war.

3.81 By one widely used measure, M2/GDP, Eritrea has one of the deepest financial sectors in Africa. M2/GDP is about 154 percent in Eritrea compared to 55 percent in South Africa, 42 percent in Kenya and 15 percent in Uganda. The high ratio in Eritrea is driven by the very large deposits of the banking system from the diaspora relative to the level of economic activity.

3.82 A measure of how well the financial system is performing its intermediation role is the level of lending. Gross loans, due largely to a significant decline in CBE's lending, actually dropped by Nakfa 176 million in 2000 to a level of less than Nakfa 2.6 billion. The system-wide loan deposit ratio has been steadily dropping from 42 percent in 1998, to 33 percent in 1999, and to 30 percent as of December 2000. As a consequence, total banking system credit dropped to 50 percent of GDP and the private sector portion of that credit to 35 percent. This, however, is still high compared to levels in other African countries (e.g., it is 6 percent in Uganda). Eritrea's banks are doing considerable lending relative to the size of the economy even after the border war.

3.83 As noted in the first chapter, the financial position of the banks has deteriorated sharply. While the profitability problems stem from financial market policies and the banks' relatively noncommercial pricing decisions, the banking sector does not lend efficiently thus limiting the prospects for the private sector.

3.84 First, consider the financial market issues. Five are discussed here:

(a) As of June 2001 the central bank, the Bank of Eritrea (BoE), held Nakfa 3.6 billion of Treasury Bills or almost 50 percent of all T-bills outstanding, even though banks hold excess reserves and a bank and insurance company complain that they are unable to buy all the T-bills they would like to hold. Meanwhile, as per their most recent statements, the banks were holding Nakfa 1.4 billion in cash and Nakfa 706 million in bank deposits in addition to their reserve requirements at BOE, far in excess of their day-to-day requirements. There is no risk of crowding out in Eritrea given the huge liquidity in the banking system. The banks, after adjusting for the effect of reserve requirements, are paying 6 percent to 7.5 percent at the margin for savings and term deposits .

If BOE were to have sold an additional Nakfa 1 billion in existing T-bills earning 2.5 percent to the banking system, it would have increased banks' profit before tax by almost Nakfa 35 million per annum and somewhat reduced the disincentives to collecting fixed and term deposits. The Bank of Eritrea, subject to holding a limited inventory of T-bills that may be necessary for transactions and monetary policy purposes, should hold only that level of treasury bills that can not be sold to the banks and insurance companies.

(b) The banking system, while paying savings and term deposit clients interest rates that during year 2000 amounted to about negative 14 percent in real terms, is largely using this money to invest in T-bills at 2.5 percent, i.e., 3.75 to 5.00 percent less than the banks are paying for this money. If the banks are commercially rational, they will curtail the large losses this is imposing on them by either reducing interest rates paid on deposits to levels equal to or less than what can be earned on T-bills (and thus creating a huge disincentive to savers) and/or substantially reduce the amount of these deposits they are willing to collect. Neither of these responses is in the long-term interest of Eritrea.

Market forces will not remove this anomaly in the interest rate structure because of the large existing excess liquidity and the relatively noncommercial behavior of the primary market players.

It is, therefore, suggested that the interest rate on any new T-bill issues be raised to levels approximately equal to what they consider to be a desirable rate to be paid by banks on savings deposits. While the added interest expense would represent budgetary expenditure, it would increase financial institutions' profit before tax by that same amount. Budget revenues would increase to offset the increased expenditure to the extent that institutions would pay tax on these profits and, in the case of government owned institutions such as CBE (far and away the largest holder of T-bills), declare dividends as well.

(c) BOE has recently imposed appropriate loan provisioning requirements relating to anticipated bad debt. These provisions represent a very real expense for banks, just like interest or salaries, as banks are in the business of taking risk. however, unlike Eritrea, most OECD countries allow this expense to be deducted from taxable income. Eritrean banks are thus in the anomalous position that they may have to pay income tax even though they report a loss before taxes. Indeed, pro forma Eritrea banking system 2000 financial statements suggest that the banks may be required to pay almost Nakfa 60 million in taxes, even though they could have a loss before taxes of about Nakfa 142 million. The authorities should amend tax laws so that those specific bad debt provisions that are required by BOE regulations are tax-deductible expenses.

Obviously, if loans against which provisions are made later become performing loans and/or are repaid (which tends to happen occasionally but not often), the provisions will need to be reversed and will become taxable income at that time. Other measures which lead to actual reduction in the levels of bad debt, such as improved credit information systems and reviewing and strengthening laws related to collateral, security and foreclosure to enhance banks' ability to use the legal system to collect on defaulted debt are even more important.

(d) CBE, EIDB and HCBE are not setting commercially rational interest rates on loans. These banks have been very slow to raise rates although inflation as well as some costs had increased substantially, bad debt risk has increased sharply, lending was unprofitable at negative real interest rates prevailing during 2000, and profits are not satisfactory. They also do not, for the most part, price for risk. As a consequence, there has been a transfer of a significant subsidy from owners (the taxpayers in the

case of the publicly owned banks) to borrowers with the highest risk borrowers, i.e., the uses of capital for which the economic benefits are most in doubt, receiving the highest subsidies

The banks will intermediate loans more efficiently by pricing for risk. They are theoretically free to set their own interest rates and have been considering such actions for some time. However, CBE and EIDB do have to please their Board and Supervising Agency, and may feel that significant increases in lending rates would be frowned on, if not viewed as "politically incorrect". While there is some evidence that HCBE may view lending interest rate decisions in much the same way as the government owned banks do, this bank's freedom to determine its own rates is also commercially constrained by the dominating presence of CBE's interest rate structure with which it has to compete. The Boards of Directors of CBE and EIDB should consider a more differentiated policy of raising interest rates on riskier loans. In this regard, the Civil Code needs to be amended to remove the reference to an interest rate limit of 12 percent with respect to legal recourse, especially given that it seems to act as a psychological impediment to bank willingness to charge interest rates in excess of that level.

(e) Reserve requirements of 20 percent, which can not be met even in part with interest bearing instruments, such as T-bills, are onerous and should be changed by allowing up to half to be met with qualified interest bearing instruments such as T-bills. Over the longer term, this would significantly reduce the de facto tax that reserve requirements impose on the banking system. This result could also be accomplished by reducing the reserve requirement significantly, e.g., to 10 percent. However, while such an action may have little monetary or incremental inflation impact so long as additional excess reserves remain in the system, it would serve to increase excess reserves even further, further deferring the time when monetary policy might be more effectively utilized.

3.85 Beyond these short-term issues however, the structure of the financial sector needs to be improved. Currently, the three banks are short of needed skills (a problem that has been aggravated by the war), rely on collateral as a basis for lending, do not have good coverage in rural areas and have not introduced modern methods of banking. The entire sector is state or quasi-state run, with the Government having 100 percent ownership of the CBE and EIDB; and the party owning the HCBE.

3.86 Limited efforts are underway to improve the functioning of the three banks through the provision of technical assistance through the Emergency Reconstruction Program. Assistance is also being provided to the Bank of Eritrea to strengthen it's supervision capacity.

3.87 More fundamental improvement will come with bringing in modern methods in banking and introducing competition in the market. With regard to competition, Eritrea's laws are liberal, and domestic and foreign banks are eligible to begin operations. Despite having these laws on the books for a number of years, no new banks have enetered the market.

3.88 The competitive environment may improve somewhat within the next year as a private Eritrean group which had planned to apply for a banking license in mid-2000, but deferred its plans for some time, has now applied for a license. This group includes several project sponsors with some banking experience. Moreover, they are planning to start with a reasonably strong

capital base (a minimum capital in excess of US $5 million equivalent) and are discussing the possibility of bringing in a foreign partner and a strong CEO from abroad.

3.89 Given CBE's dominant position, it will be useful to take measures to ensure that meaningful competition develops. For example, if a strong private bank (or banks) is established and/or if HCBE can be strengthened to the point where it becomes a meaningful competitor, Government can move purposefully to reduce CBE's large market share and cost of funds advantage by causing public sector institutions to move significant demand (low cost deposits) to other banks. In addition, the central bank should strictly enforce prudent maximum loan concentration limits on CBE relative to its net worth (e.g., no more than 20 percent of its net worth to one credit risk), in order to force the bank to syndicate lending to a few of its largest best customers, thus allowing other banks access to this important market.

3.90 Even if a reasonably strong new private bank does enter the market, high priority should continue to be placed on trying to attract a reputable foreign bank, as such a bank, while difficult to attract, would be likely to take significant market share of business community clientele and would create a spirit of competition, dynamism and innovation that is badly needed in the sector.

3.91 It is unclear at this juncture as to what market share a proposed new private bank is likely to take or as to whether it will be feasible to attract a foreign bank entrant. However, experience elsewhere shows that Non-Bank Financial Institutions (NBFIs), which collect deposits and make loans with different market niche targets and approaches can often create more competition than would an additional bank. It is, therefore, recommended that CBE aggressively explore opportunities to catalyze the creation of such an NBFI by utilizing excess liquidity to offer an investment of 20 to 49 percent in the capital of an NBFI such as a leasing company, finance company, and/or venture capital firm if qualified international investors can be found to take a majority position and operating control.

D. THE LONG TERM: BECOMING A GLOBALLY COMPETITIVE ECONOMY

3.92 Development strategy is ultimately about transforming society. Eritrea's vision for the future is of a modern, private sector led economy. The actions discussed in the previous two sections, along with the other elements of the development strategy in health, education, agriculture and other sectors, are designed to help achieve this vision. But Eritrea's development vision should include actions that will make Eritrea competitive in the global economy ten or fifteen years from now.

3.93 Rapidly expanding global networks and the spread of information technology is opening new possibilities that were not available in the past. One such opportunity is in IT-enabled services. Examples include call centers; back office data processing for airlines, banks, insurance and so on. The Economist (May 3, 2001) reported an estimate that a typical western bank could outsource 17-24 percent of its cost base, reducing cost-to-income ratio by 6-9 percentage points and in many cases doubling profits. The potential size of this market alone is enormous: Dun and Bradstreet report that about $200 billion of "business process outsourcing" is farmed out annually by companies worldwide. A McKinsey study on the market for IT enabled services for the National Association of Software and Service Companies in India estimated that by 2008 the opportunities would be in human resource services ($44 billion), customer interaction services ($33 billion), finance and accounting ($25 billion), data research, integration and analysis ($18 billion) and remote education ($15 billion).

3.94 Even if these numbers were greatly overestimated, capturing a small piece of this market would make a tremendous difference for Eritrea. Some market segments require advanced skills

and infrastructure but some services do not and could be easily standardized and out-located. See box 1 for an example from Ghana.

Box 3.1: It Takes a Satellite

By Thomas Friedman, New York Times, May 8, 2001

ACCRA, Ghana — If you're wondering why I came to Ghana, I can now reveal the truth: I came to check my health insurance.

No, really. You see, I'm enrolled with Aetna health insurance. And Aetna, as well as Keystone Mercy health care, has moved a large chunk of its data processing to a modern high-rise in downtown Accra. There 400 young Ghanaian techies — working in three eight-hour shifts and connected to the U.S. by satellite — punch the raw claims data sent to them by the U.S. health-care giants onto computerized forms and then zip it back by satellite to the U.S. for final processing. Since I had recently filed a claim with Aetna, I kept looking over the shoulder of the Ghanaian techies to see if, by chance, they were processing my forms!

The Ghana office of the U.S.-based ACS Inc., where this data processing is going on, is a good answer to a question one hears often these days: Is Africa hopeless? To be sure, one tele-computing office does not an economy, or a future, make. The evening before I visited the ACS operation, I was at a dinner where a debate broke out between a leader of Ghana's Trades Union Congress and the country's deputy minister of finance over how much to raise the minimum wage. They were arguing over an increase of 10 cents a day. It was sad. Ghana's minimum wage is about 80 cents a day — a rich country made poor by decades of misrule.

But hopeless? Well, a country or continent can be hopeless only if the best and the brightest, particularly the young have given up all hope. And I did not find that in Ghana, and certainly not at the ACS office. You have to imagine this scene: You step off the steamy streets of Accra, go up three floors, and all you see in every direction is a sea of young Ghanaians doing data processing on computers, in air-conditioned rooms with a radio playing "Don't Worry, Be Happy."

"Ghana is the first country in Africa to get into this sort of tele-computing," said Bossman Dowuona- Hammond, the Ghana manager for ACS. "We now have 400 people on this floor, but we plan to expand to 1,000 later this year. We're expecting UPS and American Express to move some of their data processing here too. [The way it works is] claim forms are sent from the US by photo image, through a satellite, they come up on the screen of each data processor, and they key in the data on computerized forms and then send it back to the States.

"It helps to have computer skills," he added, "but basically you just have to know English and be able to type 60 words per minute at 95 percent accuracy. We train you for the rest. . . . These young people have to adapt to U.S. standards, so imagine the skills and work ethic they take when they go to other jobs [in Ghana]."

In a country where the average income is about $380 a year, the best ACS data processors make $300 a month. They also get free transport to work (there are no public buses here), plus meals and free health care. In February 14 other data processing firms came over to scout Ghana for their back-office computing work. India, the Philippines, Hong Kong all started with this sort of simple data processing and then moved up to more complex code- writing and software design.

"In Africa, government is the biggest employer," says Mr. Dowuona- Hammond. "If all these people were to be employed by government their incomes would be so low it would have no impact on their lives. In Africa, if you give decent employment to one person, you are feeding 15 in the urban areas and 30 to 35 in rural areas. Also, 90 percent of my employees are female, and this sort of job makes them self-dependent." One reason AIDS has spread so quickly in Africa is that young girls without work have to sell their bodies for food.

"I studied computers at the polytechnic," said Ruth Anane-Darko, 24, a top processor. "If this weren't here I would have been a secretary for a lot less pay. Most of my friends are trying to get a job here."

Calling Africa hopeless today is morally offensive, because it condemns millions of people to no future, and analytically wrong. There are multiple trends here, and not all bad. Yes, Ghana has fallen way behind. But the information revolution offers young Ghanaians a real chance to leap forward in ways they never could have dreamt of just a decade ago. As long as they have hope — and they do — we should too.

3.95 Eritrea may seem like an unlikely candidate for such a strategy. There are only about 30,000 telephone lines in Eritrea implying a teledensity of less than 1 percent, one of the lowest in the world. 80 percent of these lines are in Asmara. Computers are even less prevalent. Literacy rates are very low and technically skilled people are in very short supply. Other countries are moving rapidly ahead – Eritrea remains one of the few countries yet to liberalize the telecommunication sector. By the time some of these issues are addressed the market may have changed dramatically, and IT-enabled services may no longer be an important or viable market for Eritrea.

3.96 What is suggested however is that telecommunications be considered a strategic sector. That Eritrea has been slow to liberalize can be turned into an advantage by leapfrogging technologically. Government can start to use the technology to achieve its development goals – in health, education, agriculture and other sectors. This will then create a generation of Eritreans, the enabling environment and the necessary infrastructure that might lead to firms that export IT-enabled services, but in any case should lead to the economy becoming competitive in the global marketplace.

3.97 The elements of what is needed are outlined in terms of telecommunications reform, the role of government and the role of the private sector. Finally, progress since the initial CEM mission on these issues is outlined.

Telecommunication reform

3.98 Eritrea decided to partially privatize the state-owned Telecommunication Services of Eritrea (TSE) as far back as 1994. Since then commendable progress has been made in preparing regulations and directives towards the sale of TSE, KPMG has been engaged to prepare a strategic plan and valuation study and discussions have taken place with several potential buyers. Agreement was almost reached with Daewoo Corporation when the combination of the East Asian crisis followed by the war, and the deflation of the worldwide telecommunication sector ended all prospects for a deal.

3.99 Given the difficulties in attracting a buyer and based on advice from various sources, efforts had been directed towards maximizing the value of TSE for potential buyers. Such measures included reserving the monopoly over international gateways particularly for voice telephony and reserving a monopoly for TSE for fixed lines.

3.100 However, if telecommunication is to play a role as a strategic sector for development then the strategy should be refined. Maximizing the revenue from the partial sale of TSE becomes secondary to ensuring widespread access to ICT services. Indeed, the delay in selling TSE now provides an opportunity to leapfrog, both in terms of technology and in terms of strategy.

3.101 The technological opportunity to leapfrog comes from the possibility of installing an all Internet Protocol (IP) network in the country. Internationally, data has already overtaken voice on telecommunication networks. An IP network or a packet switched network is far more efficient than traditional circuit switched networks. An IP network will make it possible for Eritrea to provide wide spread telephony services for a flat and affordable rate across the country as well as reduce the cost of international services.

3.102 China has been witnessing one of the fastest expansions in its telecommunication network and is the world leader in introducing a nationwide IP network. Why are other countries, including in the west, further behind in introducing IP networks? The reason is that for countries where traditional circuit switched networks are widespread, the costs of conversion are very high. For Eritrea, with almost no legacy systems, the cost of introducing an IP network are relatively low.

3.103 On telecommunication strategy, many lessons have been learnt from the experience of the last decade. An important one is that privatization is not a panacea, but if done properly, it can boost ICT development. In Chad a private operator had only provided 6,000 lines after 20 years of full monopoly. After 8 months of competition, lines multiplied ten-fold. In Armenia, 3 years after a full private monopoly had been granted, the only change had been higher tariffs with no improvement in quality or coverage, and internet penetration significantly lower than neighboring countries. But privatization of the incumbent combined with private competition has

dramatically boosted investment quality and service in countries like Chile, Mauritania, Jordan, Malaysia, Guinea and Peru.

3.104 Further, a pragmatic business-driven approach can make leapfrogging a reality. Low-cost wireless services, widely available broadband communications and IP networks can emerge from making the right choices at the right time as in Scandinavia, China, Singapore and Chile. One such scenario would have Internet Service Providers (ISPs) and other providers competitively bidding for at least two national licenses for local network and service provision (internet, wireless paging, etc) while TSE focus becomes "whole-seller" of transmission backbone capacity and international access under clear rules of inter-connection. Such a scenario would encourage an IP-centric network to emerge, multiplying access to voice and other services in a modular, demand-driven manner. Unfortunately, leapfrogging remains at the level of rhetoric in many countries, and indeed, can lead to poorly timed policy choices which are difficult or costly to reverse as happened in Armenia.

Role of Government

3.105 As described above, Government will play a critical role in making the right policy choices in liberalizing the telecommunication sector. Beyond the telecommunication sector, Government has to be a facilitator if the telecommunication infrastructure is to be really used. As the infrastructure is built up, it is more than likely that private users will start using it. For example, despite the large excess demand for phone and internet access, private schools offering classes in computers continue to spring up in Asmara.

3.106 But the infrastructure also provides an opportunity for Government. Consider health. The Ministry of Health has signed deals with Johns Hopkins and the University of Bologna to provide specialist telemedicine services in Asmara and the zoba offices. A South African group is to provide training to nurses. However, the connectivity does not currently exist to implement these arrangements. Distance education and agricultural extension also provide examples of how Eritrea can overcome its shortage of teachers or trained extension workers and still deliver services.

3.107 A growing trend worldwide is for governments to use the internet to provide citizens with a one-stop portal that provides many government services and requirements on-line. The Indian state of Andhra Pradesh has just launched a portal which serves as a single-window and one-stop facility for several services, including giving information about 100 departments of the Government, accepting payments such as electricity/water bills, and downloading about 350 varieties of applications covering caste/income certificates and tenders - all online (www.aponline.gov.in). An earlier initiative, CARDS, was handling 12,000 transactions a day. If people have access to these services in the villages themselves, then government services become much more accessible, and the savings in time and effort for citizens can be considerable.

3.108 Note that in all the examples provided above, the role of government is essentially to serve as a content provider. This is not accidental. What is proposed here is not that government install computers in every village – quite the contrary – rather than providing hardware, government should focus on the software, the content. By creating useful content, government will create incentives that will lead to the spread of the hardware, for example through telecenters. Where the government does need to install computers in their offices, to the extent possible contracts for installing and maintaining these should be given to the private sector.

3.109 If the strategy is to succeed, technical education will play a special role. Here, it is urgent that Government set the framework that will allow the private sector to provide the needed education. A visitor to Asmara today can see a number of private institutes that offer various

types of computer courses. This suggests that the demand is there and that a clear policy framework that encourages private participation in education could lead to the growing numbers of technically trained people that was crucial in countries like India. As will be suggested below, the diaspora can play an important role.

Box 3.2: Will the Poor Benefit from the Strategy?

The discussion in this chapter has focused on growth. A natural question is to ask whether the poor will benefit. As might be expected, there is not much poverty-related information available in Eritrea. The first ever census was postponed after the war broke out, as was the first ever nationally representative household survey. Perhaps the most comprehensive snapshot of poverty at independence comes from a World Bank Poverty Assessment (World Bank (1996)) that included the results from a Rapid Appraisal Survey in 1993-94 covering 92 communities in all provinces except Denkalia.

The Rapid Appraisal estimated that about 50 percent of the population was poor. The Rapid Appraisal was carried out in a drought year 1993-94, and 70 percent of the households would not have been able to consume the minimum basket of food and other essential commodities without food aid. The food-balance table (Table 2.12) indicates that over 1996-1999, food imports averaged 51 percent of consumption, up from 33 percent during 1992-95 which included the drought year of 1993/94. About 60 percent of the poor lived in the rural areas of the highlands, 25 percent in the lowlands and the remaining 15 percent lived in urban areas.

In 1993-94 Eritrean communities had a higher than usual share of households headed by women – about 45 percent – as a result of the war during which many able bodied men lost their lives. This percentage is likely to be higher now. The proportion of female headed households that was poor was not different from that of male headed households. Women in Eritrea have had relatively secure access to land and other productive assets and it was a policy of the independence movement to actively involve women in public and community affairs and to secure their rights.

Crop cultivation and animal husbandry accounted for 60 percent of rural incomes, although in the lowlands livestock cultivation was more important. The biggest difference between the poor and non-poor in source of income came from trade and services, with non-poor rural households receiving 8 times as much income from these activities than the poor. Additionally, the non-poor averaged 7 livestock units per household relative to 2 for the poor, and the non-poor tended to have 3-4 times higher incomes from crops and livestock. Social indicators are commensurately poor as described in the previous chapter. Eritrea has been a labor short economy, with significant numbers of northern Ethiopians seasonally migrating to Eritrea to work, often in the lowest paying jobs.

The poverty profile is likely to have changed significantly in May 2000. Until then the impact of the war with Ethiopia had been relatively contained with some 270,000 people displaced by the war. Between May 2000 and June 18 when the Cessation of Hostilities was signed, 1.1 million people, a third of the population, were displaced. A major humanitarian crisis was averted through quick action from the Government with strong donor support to provide the refugees with food, medical care and even education to the extent possible. By the end of 2001, only about 45,000 people remained in the camps, unable to return because of landmines.

Over the next two years 200,000 people, mostly men of prime working age, will be demobilized from the army. While the economy has been desperately labor constrained and jobs should be available particularly in agriculture, demobilized soldiers may crowd into the cities. The demand for urban private sector jobs can be expected to increase suddenly. As mentioned above, in rural areas prior to the war opportunities for and ability to participate in trading and service activities made a critical difference in the probability of being poor and these may well continue to be important.

The benefit to the poor of the strategy recommended here should be seen in the context of the overall development strategy being pursued in Eritrea. We suggest a short term, medium term and long term strategy with measures that focus on private sector development. The success of these measures, in growth and poverty reduction depends on the successful implementation of the other elements of Eritrea's development strategy. The macroeconomic aggregates should be brought under control. Discussions on development of sectoral programs are underway in education, health, roads and agriculture and should be pursued aggressively. A demobilization program to assist in the demobilization and reintegration of 200,000 soldiers has been launched. These elements of the development program should help generate a rapid and sustained growth rate which, given the Eritreans' egalitarian bent and a labor-short economy, should lead to a significant reduction in poverty.

Role of the private sector

3.110 The private sector needs to play a critical role in making services widely accessible. This is particularly problematic in rural areas where incomes are too low to afford telephone or internet services. One way for the private sector to provide these services widely is through telecenters. The extent to which the private sector is willing to develop telecenters will depend on profit opportunities from establishing them. Allowing telecenter operators to charge small fees for providing access to government forms or services through the internet can go a long way to establishing their profitability. As will allowing telecenter operators to charge for providing distance education and other government services.

3.111 Rural communities are willing to spend on telecommunications. Villages in Botswana generated telephone revenues of 1.3 percent of GDP in 1996 as compared to 1.6 percent countrywide. The corresponding figures for Peru were 1.5 percent and 1.2 percent, with the rural areas spending a larger share of GDP as compared to the country as a whole. Typically the spending on telecommunication services across a wide range of developing and industrial countries ranges from 1 to 3 percent of GDP, with the world average being 2.2 percent.

3.112 Table 3.3 below indicates the population needed to support one rural public phone for different countries:

Table 3.3: Population Needed to Support One Rural Public Telephone

Country	Rural GDP Per capita, US$	Investment per Line, US$	Population
Kenya	130	4,000	650
Peru	790	10,000	339
India	180	2,000	277
Botswana	1,300	4,000	200
Bangladesh	150	1,000	169
Hungary	2,200	1,200	14
United Kingdom	9,800	2,000	5

Source: A, Dymond, *Universal Telecommunications Service: Social Obligation or Business Opportunity,* 19th February 1998, cited in Sudan and Ghebreyesus (March 2001)

3.113 Indeed, there has been a mushrooming of small tele-shops, tele-kiosks or telecenters in many developing countries. In Senegal close to 10,000 (1999) small telecenters operated by private franchisees offer phone and fax services and approximately 1000 are equipped with computers. An increasing number have modems allowing clients access to email and the Internet. Though the distribution of the telecenters favors the urban areas with Dakar alone accounting for 7,200 centers, they are also spreading in rural areas.

3.114 There might be a special potential in the diaspora-education-telecommunication nexus. Two areas where the diaspora might reasonably be expected to have a special interest are education and telecommunication. One can imagine multiple possibilities:

- For the diaspora to stay engaged, migrants need to be able to talk with their parents. If it were available, a mobile phone is probably the first present to be sent.
- The tertiary sector could be expanded on a fee basis – many young people would be able to finance tertiary education by borrowing from diaspora relatives for a few years, paying back with their own earnings.
- Schools need to have internet links, and the diaspora could be encouraged to sponsor the costs for schools from their home villages.
- Members of the diaspora might return to set up technical training institutes and other IT-related businesses.

Progress in Telecommunications since the initial CEM mission

3.115 Following the presentation of these ideas during the initial CEM mission, it was decided to proceed towards implementation. Accordingly, in August 2001, a study tour was organized to Andhra Pradesh, India, which is seen as a world-leader in low-income countries in using technology for achieving development objectives. Participants included representatives from the Ministries of Health, Education, Transport and Communication, Chamber of Commerce and Telecommunication Services of Eritrea.

3.116 Following the study tour, Government asked the Bank to assist with the reformulation of its strategy for telecommunication liberalization, including revisiting issues such as provision of monopoly in landlines, and the strategy for developing IP-centric networks.

3.117 A World Bank telecommunication mission visited Eritrea in February 2002 and work on developing the strategy, building on the work that had already been done, is moving ahead quickly. Videoconferences have been held almost every week between Bank staff in Washington and staff from the Ministry of Telecommunications and TSE in Asmara. A study tour to China focusing on the implications of developing an IP network is planned for May 2002.

3.118 Work on the "demand" side, the delivery of content is proceeding somewhat slower. The purpose of including Ministries of Health and Education in the study tour was to begin the process of sensitization about the possibility of developing IT applications in their respective sectors. An informal team has been formed within the Bank country team to work on these issues. Plans in the near future call for including ICT experts in the missions that are working towards developing health and education strategies.

APPENDIX TO CHAPTER 2

Appendix 2.1 Definition of Functional Categories

Administrative and General Services: This is the sum of expenditures on administration of the office of the President, Ministry of Local Government less ECDF projects, Central Personal Agency, Office of the Auditor General, Ministry of Justice, National Security Agency, Ministry of Foreign Affairs, Ministry of Information, Ministry of Finance, ERP Balance of Payments, ERP program management, and ERP Contingencies.

Social Services: This is the sum of expenditures on Education, Health, Labor and Human Welfare and expenditure on National Organizations. Educational expenditures include spending by the Ministry of Education on Elementary and Junior Secondary education, Senior Secondary, Technical and Vocational, Asmara Teacher's Training Institute, and the University of Asmara. The elementary education expenditures also include expenditures on ECDF and ERP education projects.
Health expenditures include expenditures by the Ministry of Health on primary care, tertiary care, and other health care expenditures.

Infrastructure services: This is the sum of the expenditures on ports authority, rail and communications, roads and water supply and other expenditures. Expenditure on roads includes expenditure on feeder roads from the Ministry of Local Government, ECDF and ERP and expenditure on construction and maintenance of Trunk Roads by the Ministry of Public Works. Expenditure on water supply includes spending by Ministry of Public Works, Ministry of Local Government, ECDF, and ERP components.

Environmental Services: This is the sum of expenditures by the Ministry of Land, Water and Environment, and the Housing Commission which includes ECDF Natural Resource Management and ERP housing components.

Economic Services: This is the sum of expenditures on Agriculture, Trade and Industry, Tourism, Energy and Mines, ECDF spending on market places and ERP spending on Micro-credits and private sector reconstruction.

Humanitarian services: Total expenditures include support to families of reserve army, Commission for UN coordination, ERRA and ERRC, ERP safety nets, and demobilization and reintegration expenditures.

Financial Obligations: Financial obligations include pension payments, bank charges and interest on external and internal debt.

Appendix 2.2. Functional Composition of Government Expenditure, 1997-2001 (millions of Nakfa)

	1997	1998	1999	2000	2001[P]
Administrative and General Services [1]	489.1	447.3	1039.2	1319.2	832.7
Defense [2]	634.2	1936.3	2224.5	2153.7	1885.0
Social Services[3]	455.6	504.3	571.1	708.6	687.3
of which					
Education[4]	227.5	267.8	297.6	464.6	377.9
Health [5]	147.8	180.4	264.2	188.5	248.9
Infrastructure Services	344.3	406.6	574.5	293.6	591.4
of which					
Roads	197.1	189.7	220.7	162.3	371.1
Environmental Services	41.5	150.6	56.4	57.6	40.6
Economic Services	458.5	614.1	841.7	441.5	577.1
of which					
Agriculture	219.1	401.1	363.4	333.7	306.0
Humanitarian Services	80.4	105.4	150.9	817.2	887.9
Financial Obligations	89.7	145.2	143.2	301.4	287.2
Total government expenditure [6]	2593.3	4309.5	5601.5	6093.0	5789.2

Source: Ministry of Finance and IMF staff estimates

[1] General and administrative services plus administrative portions of ECDF and ERP. Also includes MOLG spending on roads and water supplies, Early Childhood Development Project and ERP BOP Suppor

[2] Data are based on the expenditures agreed upon with IMF.

[3] Includes contributions from ERP, ECDF and other projects

[4] Total education spending is the total for the Ministry plus ECDF and ERP. Assumes all ECDF and ERP spending is for primary education. Spending within levels are adjusted to match the treasury totals.

[5] Includes expenditure for the Ministry of Fisheries, Grain Board, and ERP spending on agriculture

[6] Functional expenditures for 2001 are provisional since ministry wide composition of expenditures were not available when this report was prepared. Expenditure under the Human Resource Development Project are proportionately allocated under the Administrative & General Services, Agriculture, Education, Energy, Finance, Health, Labor & Welfare, Public Works, Tourism, Trade & Industry and University of Asmara. See Appendix 2.I for the definitions of the different functional categories used.

P The data fro 2001 are preliminary and hence may not add up.

Appendix 2.3: Illiteracy in Eritrea and in the Developing World

Region/country	Illiteracy overall		Illiteracy among adult males		Illiteracy among adult Females		Illiteracy among youth	
	1993	2000	1993	2000	2000	2000	2000	2000
Sub-Saharan Africa	46.4	38.3	36.8	30.2	55.7	46.1	28.8	22
Middle east and North Africa	42.5	34.8	30.4	24.4	55	45.5	24	17.5
East Asia & Pacific	18.7	14.3	11.1	7.96	26.6	20.8	4.5	2.8
South Asia	50.7	45.3	38.5	33.8	63.7	57.3	36.8	31
Latin America & Caribbean	14	11.6	12.7	10.7	15.3	12.5	7.3	5.9
Low income countries	43.3	37.8	33.1	28.5	53.6	47.2	29.5	22
World	27.7	23.8	20.2	17.1	35.3	30.6	16.6	14.3
Eritrea	53.8	46.2	38.8	32.6	68.4	59.3	37	28.8

Source: World Bank: SIMA database and World Development Indicators

Appendix 2.4: Educational Enrollment in Eritrea and in the Developing World

Region/country	Gross primary enrollment		Gross secondary enrollment		Gross tertiary enrollment	
	1993	1997	1993	1997	1993	1997
Sub-Saharan Africa	76.0	78	25.8	27	NA	NA
Middle east and North Africa	96.8	95	59.9	64	14.0	16
East Asia & Pacific	114.8	119	54.8	69	7.1	8
South Asia	97.04	100	48.5	49	5.8	7
Latin America & Caribbean	108.7	113	49.5	60	14.2	17
Low income countries	93.2	97	42.2	46	7.8	8
World	102.6	106	61.6	64	21.3	14
Eritrea	50.9	52 (98)	16.6	17 (98)	1.1 (94)	1

Source: World Bank: SIMA database and World Development Indicators

Appendix 2.5: Administrative Staff, Schools, Enrollments and Teachers by Zoba (as of June, 2001)

Zoba	Administrative Staff At Zoba Office (A)	Enrollments (B)	Teachers (C)	Schools (D)	B / A	B/C
Anseba	24	48,575	954	117	2,024	50.9
Debub	155	128,093	2,107	247	826	60.8
Debubawi Keih Bahri	15	5,088	139	24	339	36.6
Gash-Barka	46	48,904	955	145	1,063	51.2
Maekel	180	135,577	2,872	200	752	47.1
Semienawi Keih Bahri	50	25,995	593	99	520	43.8
Total	470	392,012	7,620	832	834	51.4

Source: IT Office, Ministry of Education

Appendix 2.6: Pupil-Teacher ratios and Public Expenditures in Education in Eritrea, Comparator Countries, and in Sub-Saharan Africa

Country Name	Pupil- teacher ratio (1997)	Education Expenditure % of GDP (1998)	Public Expenditure Per student, % of GNI per capita (1998)	Public Expenditure, % of GNI (1998)
Eritrea	51	4.6	35.6	3.8
Ethiopia	43	3.1	63.1	4.0
Rwanda	NA	2.0	NA	NA
Uganda	35	3.1	NA	2.6
Sub-Saharan Africa	40	4.7	26.2	4.0
Low-income countries	50	2.9	16.3	3.2

Source: World Bank: SIMA database and World Development Indicators

Appendix 2.7: Education spending by level, 1999-2000 (US$)

	Students enrolment		Spending on Education (million US$)				Spending per student (US$)			
			Total spending		Recurrent spending		Total spending		Recurrent Spending	
Level of Education	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
Basic			23	19.8	16.1	14.5	70	54	49	39
Primary	261,960	295,940	19.7	17.5	14.6	13.2	75	59	55	44
Middle	67,020	74,320	3.3	2.3	1.5	1.3	49	31	22	17
Secondary			4.7	3.7	2.5	2.2				
General	47,530	59,630	3.9	3.1	2.2	2	82	52	46	33
Technical	910	1,020	0.8	0.6	0.3	0.2	879	588	329	196
Tertiary			4.4	3.7	4.3	3.6				
University of Asmara	4,090	4,140	4.2	3.5	4.1	3.4	1,027	845	1,002	821
ATTI	470	480	0.2	0.2	0.2	0.2	425	408	425	408
Total	381,980	435,540	32.1	27.2	22.9	20.3				

Note: Total spending includes recurrent and capital expenditures by MOE and other line ministries and agencies (MOLG and KFW). Spending on non-formal education; summer programs and scholarships abroad awarded by MOE are not included. It is not clear which level these expenditures should be assigned. The total number of students does not include the number of students in the School of Nursing and Health Technology and Students in the School of Catering managed by the MOT. The total of students left out are less than a thousand, and would have minimal impact.

Appendix 2.8: Public Spending Per Student by Region, Eritrea (1999)

Zoba	Unit Spending	Relative Spending Ratio	Ages 7-11 population

	Nakfa	US$	National=1	% out of school
Anseba	240.8	26.8	0.9	48
Debub	210.2	23.4	0.8	30
DK-Bahri	704.5	78.3	2.6	89
Gash Barka	287.9	32.0	1.0	63
Maekel	310.9	34.5	1.1	22
SK-Bahri	374.2	41.6	1.4	71
National	274.3	30.5	1.0	47

Source: Ministry of Education

Notes: For calculating the out of school age proportions, the 1998 population and enrollment ratios were used. The estimates of unit costs use the 1999 spending and enrollment rates. In general, there was not a substantial improvement in enrollment rates to change the out of school ratio estimates

Appendix 2.9: Eritrea: Growth in Health Infrastructure, 1990-1999

Facility Type	1990	1995	1999	2000	Total growth (1990-1999)	
					Number	Percent
Hospital	16	16	18	18	2	13%
Mini-Hospital	0	4	5	5	5	
Health Center	4	40	49	52	45	1125%
Health Station	106	130	154	170	48	45%
Clinics	0	31	37	55	37	
Total	126	221	263	300	137	109%

Source: Ministry of Health Eritrea, Annual Health Service Activity Report (January-December 1999), June 2000.

Appendix 2.10: Health Sexctor in Eritrea, the Comparator Countries and Sub-Saharan Africa.

	No. of Physicians per 1000 population (1999)	No. of beds per 1000 population (1998)	Per capita GDP ($, 1998)	Per capita health Expenditure ($, 1998)	Health expenditure % of GDP (1998)
Eritrea	**0.3**	**0.75**	**173**	**6.3**	**3.6**
Ethiopia	0.03	0.24	107	4.2	4.1
Rwanda	0.04	1.65	250	10.3	4.1
Uganda	0.04	NA	324	17.8	5.5
Sub-Saharan Africa	0.17	1.37	NA	42.0	4.3

Source: World Bank, *World Development Indicators 2001*, Washington, D.C., 2001

Appendix 2.11: Eritrea - Growth of Human Resources in the MOH, 1991- 1999

Category	1991	1995	1999		Total Increase (1991-99)	
			Number	Population Per Staff	Number	Percent
Physicians-GPs	58	108	100	39,900	42	72%
Physicians-Specialist	0	0	45	88,700	45	
Nurses	288	391	735	5,400	447	119%
Health Assistants	0	539	1292	3,100	1292	
Pharmacists, Tech, Druggists	8	17	84	47,500	76	950%
Sanitarians	0	15	21	190,000	21	
Lab Technicians	15	35	132	30,200	117	780%
X-Ray Technicians	18	18	40	99,700	22	122%
Administrative Staff	0	1425	1790	2,200	1790	
Total	387	2548	4239		3852	995%

Source: Ministry of Health Eritrea, Annual Health Service Activity Report (January-December 1999), June 2000

Appendix 2.12: Agricultural Productivity and Input Use in Eritrea, the Comparator Countries and Sub-Saharan Africa

Country/group/region	Cereal yield (Kilograms/ha) 1998-2000	Fertilizer consumption (100 grams per ha) 1996-98	No. of tractors per 100 ha of arable land, 1996-98
Eritrea	1150[1]	140	11
Ethiopia	1141	159	3
Rwanda	930	4	1
Uganda	1371	2	9
Sub-Saharan Africa	1120	135	17
Low income countries	1301	632	69
World	2067	988	187

Source: Word Bank 2001: World Development Indicators

[1] Based on the estimates of the Ministry of Agriculture, Government of Eritrea

Appendix 2.13: Crop Yields Under Traditional and Integrated Farming Systems, 1998

Crop	Traditional Practices			Integrated Farming Systems			
	Area (000 ha)	Production (000 mt)	Yield (mt/ha)	Area (000 ha)	Production. (000 mt)	Yield (mt/ha)	Increase (percent)
Taff	22.8	14.1	0.62	4.5	4.6	1.02	64.3
Wheat	21.9	17.5	0.80	3.3	5.5	1.66	107.9
Barley	41.3	49.7	1.21	4.2	6.8	1.59	32.0
Maize	36.8	26.3	0.71	1.7	2.7	1.59	122.8
Sorghum	209.8	221.4	1.06	26.3	48.1	1.83	73.3
F. Millet	12.4	6.9	0.56	0.6	0.7	1.05	86.5
P. Millet	80.1	40.8	0.51	2.9	3.4	1.16	127.1
Total	425.1	376.8	0.89	43.6	71.6	1.64	85.4

Source: Ministry of Agriculture.

Appendix 2.14: Current and Potential Land Use Categories, 1994

	Potential		Current	
Land Use	000 hectares	Percentage of total	000 hectares	Percentage of total
Rainfed cultivated land	1,500	12.3	417	3.4
Irrigated land	600	4.9	22	0.2
Disturbed forest	53	0.4	53	0.4
Forest plantations	10	0.1	10	0.1
Woodland and scrubland	5,979	49.1	673	5.5
Browsing and grazing land			6,967	57.2
Barren land	4,047	33.2	4,047	33.2
Total	12,189	100.0	12,189	100.0

Source: FAO 1994: vol. II, Annex 2, p. 21 for current data; potential is estimated.

Note: Owing to different sources, the statistics cited here may not correspond to those in other tables

Appendix 2.15: Distribution of Cultivated Land and Population, 1999

Zoba	No. of Sub *Zobas*	Population (000s)	Rural Population (000s)	Cultivated land (000s ha)	Cultivated land per rural Person (ha)
Anseba	10	570.2	562.7	58.1	0.10
Debub	11	1014.8	976.3	128.1	0.13
Gash-Barka	14	754.8	790.8	27.8	0.32
Maekel	4	726.6	188.5	217.6	0.14
N. Red Sea	9	558.5	567.2	40.8	0.07
S. Red Sea	4	273.9	223.9	0	0.00
Total	52	3,900	3,198	471.9	0.15

Source: Ministry of Agriculture; mission estimates.

Appendix 2.16: Eritrea- Length of Classified Roads by Surface Type (Km)

Road class	Paved	Gravel	Earth	Track	Total
Primary	660	680	1230	220	2790
Secondary	NA	120	410	210	840
Feeder	NA	NA	510	2950	3460
Total	660	800	2150	3380	6990

Source: Eritrea- Road Sector Development Program, Phase 1

Appendix 2.17: Road Network in Eritrea, Sub-Saharan Africa and Low Income Countries (Kilometers per 1000 square Kilometers)

Country/region/group	1998/1999
Eritrea (paved and gravel roads)	14.4
Paved, gravel and earth roads	35.7
Paved, gravel, earth and tracks	69.2
World	63.2
Low income countries	19.5
Subsaharan Africa	30.1
Angola	41.3
Benin	61.4
Botswana	18.0
Burkina Faso	44.2
Cameroon	73.7
Central African Republic	39.0
Ethiopia	28.7
Gabon	29.8
Gambia, The	270
Ghana	166
Guinea	124
Guinea-Bissau	156
Kenya	112
Lesotho	196
Mali	12.4
Mauritania	7.5
Mauritius	941
Mozambique	38.8
Níger	7.97
Nigeria	213
Rwanda	604
Senegal	75.7
Sudan	5.0
Tanzania	99.8
Togo	138
Zimbabwe	47.4

Source: World Bank: Live Data Base 2001

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Table 1.1 Gross Domestic Product by Sector at Current Prices, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
Agriculture	598.1	479.7	723.5	701.5	720.5	752.6	1293.4	1291.9	875.3	1350.9	1719.8
Crops and livestock	505.4	384.0	609.6	569.7	575.1	606.2	1127.5	1103.8	638.2	1069.2	1406.8
Staple crops	188.0	108.5	238.5	193.2	177.0	184.9	500.7	450.7	186.8	428.3	621.2
Cash crops	93.5	53.9	118.5	96.0	88.0	91.9	248.9	224.0	92.9	212.9	308.7
Livestock	223.9	221.5	252.6	280.6	310.2	329.4	377.9	429.1	358.5	428.0	476.9
Forestry and fishing	92.7	95.7	113.9	131.7	145.4	146.3	165.9	188.1	237.1	281.7	313.0
Forestry	90.1	92.2	104.7	118.2	132.5	141.7	159.2	177.2	217.7	254.7	278.2
Fishing	2.6	3.5	9.2	13.5	12.9	4.6	6.7	10.8	19.5	26.9	34.9
Industry	235.3	336.0	422.6	562.4	839.3	1044.5	1067.2	1186.8	1326.0	1603.8	1820.2
Mining and quarrying	2.0	4.0	4.4	4.8	5.4	12.0	10.1	9.8	5.8	6.6	10.7
Manufacturing	137.2	165.4	194.0	256.9	316.7	350.6	348.5	378.7	467.9	561.2	651.5
Handicrafts and small industry	24.2	28.0	35.9	46.0	66.0	127.1	126.8	142.7	176.3	211.4	226.4
Electricity and water	23.2	23.9	28.8	33.5	38.8	44.0	49.1	56.5	68.4	78.4	93.0
Building and construction	48.7	114.8	159.4	221.1	412.4	510.9	532.6	599.1	607.7	746.3	838.6
Services	1123.8	1325.2	1823.2	2086.0	2426.7	2666.3	2705.8	3016.0	3575.4	4252.1	4809.9
Distribution services	722.1	824.7	1066.0	1296.0	1510.4	1670.6	1521.0	1661.7	1863.9	2246.4	2550.7
Trade, wholesale, and retail	484.6	565.3	704.7	865.9	1004.3	1105.2	968.4	1058.0	1136.1	1369.4	1554.9
Transport and communications	237.5	259.4	361.3	430.2	506.1	565.4	552.6	603.7	727.7	877.0	995.8
Other services	401.7	500.5	757.2	790.0	916.3	995.8	1184.8	1354.2	1711.5	2005.7	2259.2
Financial services	23.6	34.0	57.4	78.3	113.7	125.3	144.5	161.8	189.2	228.0	265.9
Dwellings and domestic services	51.0	51.5	57.7	64.9	72.8	78.7	89.1	99.1	121.9	143.5	162.0
Public administration and services	225.1	293.2	491.7	478.3	538.0	573.0	698.7	805.2	1037.7	1197.7	1326.9
Domestic and other	102.0	121.8	150.4	168.5	191.7	218.7	252.5	288.1	362.7	436.5	504.5
GDP at factor costs	1957.2	2140.8	2969.3	3349.9	3986.5	4463.4	5066.4	5494.7	5776.7	7206.8	8349.9
Indirect taxes less subsidies	109.2	143.6	142.8	151.0	180.7	212.8	198.5	236.8	238.1	297.0	345.8
GDP at Market prices	2066.4	2284.4	3112.1	3500.9	4167.2	4676.2	5264.9	5731.4	6014.8	7503.8	8695.7
Memo items											
Agriculture	598.1	479.7	723.5	701.5	720.5	752.6	1293.4	1291.9	875.3	1350.9	1719.8
Industry	235.3	336.0	422.6	562.4	839.3	1044.5	1067.2	1186.8	1326.0	1603.8	1820.2
Services	1123.8	1325.2	1823.2	2086.0	2426.7	2666.3	2705.8	3016.0	3575.4	4252.1	4809.9

p Data for 2002 are based on projections
Source: IMF

Table 1.1a. Gross Domestic Product by Sector at Current Prices, 1992-2002
(Percentage share of GDP at factor costs)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
Agriculture	30.6	22.4	24.4	20.9	18.1	16.9	25.5	23.5	15.2	18.7	20.6
Crops and livestock	25.8	17.9	20.5	17.0	14.4	13.6	22.3	20.1	11.0	14.8	16.8
Staple crops	9.6	5.1	8.0	5.8	4.4	4.1	9.9	8.2	3.2	5.9	7.4
Cash crops	4.8	2.5	4.0	2.9	2.2	2.1	4.9	4.1	1.6	3.0	3.7
Livestock	11.4	10.3	8.5	8.4	7.8	7.4	7.5	7.8	6.2	5.9	5.7
Forestry and fishing	4.7	4.5	3.8	3.9	3.6	3.3	3.3	3.4	4.1	3.9	3.7
Forestry	4.6	4.3	3.5	3.5	3.3	3.2	3.1	3.2	3.8	3.5	3.3
Fishing	0.1	0.2	0.3	0.4	0.3	0.1	0.1	0.2	0.3	0.4	0.4
Industry	12.0	15.7	14.2	16.8	21.1	23.4	21.1	21.6	23.0	22.3	21.8
Mining and quarrying	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.1
Manufacturing	7.0	7.7	6.5	7.7	7.9	7.9	6.9	6.9	8.1	7.8	7.8
Handicrafts and sma	1.2	1.3	1.2	1.4	1.7	2.8	2.5	2.6	3.1	2.9	2.7
Electricity and water	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.1	1.1
Building and constru	2.5	5.4	5.4	6.6	10.3	11.4	10.5	10.9	10.5	10.4	10.0
Services	57.4	61.9	61.4	62.3	60.9	59.7	53.4	54.9	61.9	59.0	57.6
Distribution services	36.9	38.5	35.9	38.7	37.9	37.4	30.0	30.2	32.3	31.2	30.5
Trade, wholesale, an	24.8	26.4	23.7	25.8	25.2	24.8	19.1	19.3	19.7	19.0	18.6
Transport and comm	12.1	12.1	12.2	12.8	12.7	12.7	10.9	11.0	12.6	12.2	11.9
Other services	20.5	23.4	25.5	23.6	23.0	22.3	23.4	24.6	29.6	27.8	27.1
Financial services	1.2	1.6	1.9	2.3	2.9	2.8	2.9	2.9	3.3	3.2	3.2
Dwellings and dome	2.6	2.4	1.9	1.9	1.8	1.8	1.8	1.8	2.1	2.0	1.9
Public administratio	11.5	13.7	16.6	14.3	13.5	12.8	13.8	14.7	18.0	16.6	15.9
Domestic and other	5.2	5.7	5.1	5.0	4.8	4.9	5.0	5.2	6.3	6.1	6.0
GDP at factor costs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Indirect taxes less sub	5.6	6.7	4.8	4.5	4.5	4.8	3.9	4.3	4.1	4.1	4.1
GDP at Market prices	105.6	106.7	104.8	104.5	104.5	104.8	103.9	104.3	104.1	104.1	104.1
Memo items											
Agriculture	30.6	22.4	24.4	20.9	18.1	16.9	25.5	23.5	15.2	18.7	20.6
Industry	12.0	15.7	14.2	16.8	21.1	23.4	21.1	21.6	23.0	22.3	21.8
Services	57.4	61.9	61.4	62.3	60.9	59.7	53.4	54.9	61.9	59.0	57.6

p Data for 2002 are based on projections
Source: Table 1

Table 1.2. Gross Domestic Product by Sector at Constant (1992) Prices, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
Agriculture	598.1	481.8	658.5	581.5	548.0	550.8	866.7	800.3	454.4	616.8	739.9
Crops and livestock	505.4	385.7	554.8	472.3	437.4	443.7	755.5	683.8	331.3	488.2	605.3
Staple crops	188.0	109.0	217.0	160.1	134.6	135.3	335.5	279.2	97.0	195.6	267.3
Cash crops	93.5	54.2	107.9	79.6	66.9	67.3	166.8	138.8	48.2	97.2	132.8
Livestock	223.9	222.5	229.9	232.6	235.9	241.1	253.2	265.8	186.1	195.4	205.2
Forestry and fishing	92.7	96.1	103.7	109.2	110.6	107.1	111.2	116.5	123.1	128.6	134.7
Forestry	90.1	92.6	95.3	98.0	100.8	103.7	106.7	109.8	113.0	116.3	119.7
Fishing	2.6	3.5	8.4	11.2	9.8	3.4	4.5	6.7	10.1	12.3	15.0
Industry	235.3	337.5	384.6	466.2	638.4	764.5	715.1	735.2	688.4	732.2	783.1
Mining and quarrying	2.0	4.0	4.0	4.0	4.1	8.8	6.8	6.1	3.0	3.0	4.6
Manufacturing	137.2	166.1	176.6	213.0	240.9	256.6	233.5	234.6	242.9	256.2	280.3
Handicrafts and small	24.2	28.1	32.7	38.1	50.2	93.0	85.0	88.4	91.5	96.5	97.4
Electricity and water	23.2	24.0	26.2	27.8	29.5	32.2	32.9	35.0	35.5	35.8	40.0
Building and construct	48.7	115.3	145.1	183.3	313.7	373.9	356.9	371.1	315.5	340.7	360.8
Services	1123.8	1331.1	1659.3	1729.3	1845.7	1951.5	1813.1	1868.3	1856.1	1941.3	2069.4
Distribution services	722.1	828.4	970.2	1074.4	1148.8	1222.7	1019.2	1029.4	967.6	1025.6	1097.4
Trade, wholesale, and	484.6	567.8	641.4	717.8	763.9	808.9	648.9	655.4	589.8	625.2	669.0
Transport and commu	237.5	260.6	328.8	356.6	384.9	413.8	370.3	374.0	377.8	400.4	428.4
Other services	401.7	502.7	689.1	654.9	696.9	728.8	793.9	838.9	888.5	915.7	972.0
Financial services	23.6	34.2	52.2	64.9	86.5	91.7	96.8	100.2	98.2	104.1	114.4
Dwellings and domest	51.0	51.7	52.5	53.8	55.4	57.6	59.7	61.4	63.3	65.5	69.7
Public administration	225.1	294.5	447.5	396.5	409.2	419.4	468.2	498.8	538.7	546.8	570.9
Domestic and other	102.0	122.3	136.9	139.7	145.8	160.1	169.2	178.5	188.3	199.3	217.0
GDP at factor costs	1957.2	2150.4	2702.4	2777.0	3032.1	3266.8	3394.9	3403.8	2998.9	3290.3	3592.4
Indirect taxes less subs	109.2	144.2	130.0	125.2	137.4	155.8	133.0	146.7	123.6	135.6	148.8
GDP at Market prices	2066.4	2294.6	2832.4	2902.2	3169.5	3422.6	3527.9	3550.5	3122.5	3425.8	3741.2
Memo items											
Agriculture	598.1	481.8	658.5	581.5	548.0	550.8	866.7	800.3	454.4	616.8	739.9
Industry	235.3	337.5	384.6	466.2	638.4	764.5	715.1	735.2	688.4	732.2	783.1
Services	1123.8	1331.1	1659.3	1729.3	1845.7	1951.5	1813.1	1868.3	1856.1	1941.3	2069.4

p Data for 2002 are based on projections
Source: IMF

Table 1.2.a Annual growth of gross domestic product at 1992 prices, 1992-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
Agriculture	-19.4	36.7	-11.7	-5.8	0.5	57.4	-7.7	-43.2	35.7	20.0
Crops and livestock	-23.7	43.8	-14.9	-7.4	1.4	70.3	-9.5	-51.6	47.3	24.0
Staple crops	-42.0	99.1	-26.2	-15.9	0.5	147.9	-16.8	-65.3	101.6	36.7
Cash crops	-42.0	99.1	-26.2	-15.9	0.5	147.9	-16.8	-65.3	101.6	36.7
Livestock	-0.6	3.3	1.2	1.4	2.2	5.0	5.0	-30.0	5.0	5.0
Forestry and fishing	3.7	7.9	5.3	1.3	-3.2	3.8	4.8	5.7	4.5	4.7
Forestry	2.8	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Fishing	34.6	140.0	33.3	-12.5	-65.3	32.4	48.9	50.7	21.8	21.9
Industry	43.4	14.0	21.2	36.9	19.8	-6.5	2.8	-6.4	6.4	7.0
Mining and quarrying	100.0	0.0	0.0	2.5	114.6	-22.7	-10.3	-50.8	0.0	52.9
Manufacturing	21.1	6.3	20.6	13.1	6.5	-9.0	0.5	3.5	5.5	9.4
Handicrafts and small	16.1	16.4	16.5	31.8	85.3	-8.6	4.0	3.5	5.5	0.9
Electricity and water	3.4	9.2	6.1	6.1	9.2	2.2	6.4	1.4	0.8	11.8
Building and construct	136.8	25.8	26.3	71.1	19.2	-4.5	4.0	-15.0	8.0	5.9
Services	18.4	24.7	4.2	6.7	5.7	-7.1	3.0	-0.7	4.6	6.6
Distribution services	14.7	17.1	10.7	6.9	6.4	-16.6	1.0	-6.0	6.0	7.0
Trade, wholesale, and	17.2	13.0	11.9	6.4	5.9	-19.8	1.0	-10.0	6.0	7.0
Transport and commu	9.7	26.2	8.5	7.9	7.5	-10.5	1.0	1.0	6.0	7.0
Other services	25.1	37.1	-5.0	6.4	4.6	8.9	5.7	5.9	3.1	6.1
Financial services	44.9	52.6	24.3	33.3	6.0	5.6	3.5	-2.0	6.0	9.9
Dwellings and domes	1.4	1.5	2.5	3.0	4.0	3.6	2.8	3.1	3.5	6.4
Public administration	30.8	52.0	-11.4	3.2	2.5	11.6	6.5	8.0	1.5	4.4
Domestic and other	19.9	11.9	2.0	4.4	9.8	5.7	5.5	5.5	5.8	8.9
GDP at factor costs	9.9	25.7	2.8	9.2	7.7	3.9	0.3	-11.9	9.7	9.2
Indirect taxes less subs	32.1	-9.9	-3.7	9.8	13.3	-14.6	10.2	-15.7	9.7	9.7
GDP at Market prices	11.0	23.4	2.5	9.2	8.0	3.1	0.6	-12.1	9.7	9.2
Memo items										
Agriculture	-19.4	36.7	-11.7	-5.8	0.5	57.4	-7.7	-43.2	35.7	20.0
Industry	43.4	14.0	21.2	36.9	19.8	-6.5	2.8	-6.4	6.4	7.0
Services	18.4	24.7	4.2	6.7	5.7	-7.1	3.0	-0.7	4.6	6.6

Source: Table 2

p Data for 2002 are based on projections

Table 1.3. GDP deflators by sector, 1992-2002 (1992=100)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
Agriculture	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Crops and livestock	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Staple crops	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Cash crops	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Livestock	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Forestry and fishing	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Forestry	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Fishing	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Industry	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Mining and quarrying	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Manufacturing	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Handicrafts and small industry	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Electricity and water	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Building and construction	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Services	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Distribution services	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Trade, wholesale, and retail	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Transport and communications	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Other services	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Financial services	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Dwellings and domestic services	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Public administration and services	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Domestic and other	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
GDP at factor costs	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
Indirect taxes less subsidies	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4
GDP at Market prices	100.0	99.6	109.9	120.6	131.5	136.6	149.2	161.4	192.6	219.0	232.4

p Data for 2002 are based on projections
Source: IMF

Table 1.4 Gross national income by expenditure at current prices, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
GDP at market prices	2066.4	2284.4	3112.1	3500.9	4167.2	4676.2	5264.9	5731.4	6014.8	7503.8	8695.7
Resource gap	-733.2	-1001.8	-1796.3	-2239.8	-2563.6	-2777.0	-3581.7	-4335.4	-3850.6	-4092.8	-5866.6
Exports of GNFS	249.8	747.6	917.7	828.2	1288.8	1463.8	814.2	535.5	935.9	1605.7	1681.3
Imports of GNFS	-983.0	-1749.4	-2713.9	-3068.0	-3852.4	-4240.8	-4395.9	-4870.9	-4786.5	-5698.6	-7548.0
Gross domestic expenditure	2799.6	3286.2	4908.4	5740.7	6730.7	7453.2	8846.6	10066.8	9865.4	11596.6	14562.4
Consumption	4926.6	1658.2	4265.1	4763.8	5317.5	5655.7	6904.2	7614.0	7721.1	8946.5	10697.2
Private	4450.5	895.5	3277.0	3139.3	3610.0	4176.7	4050.0	4261.0	4485.5	5956.7	7679.8
Public	476.0	762.7	988.2	1624.5	1707.6	1479.0	2854.2	3353.0	3235.5	2989.7	3017.4
Domestic investment	-2126.9	1628.0	643.2	976.9	1413.2	1797.5	1942.4	2452.8	2144.4	2650.2	3865.2
Fixed capital formation	-2126.9	1628.0	643.2	976.9	1413.2	1797.5	1942.4	2452.8	2144.4	2650.2	3865.2
Private	-2198.2	1272.9	289.2	523.0	735.4	902.2	821.2	701.2	569.7	1257.8	1568.2
Government	71.3	355.1	354.0	453.9	677.8	895.3	1121.2	1751.6	1574.6	1392.4	2297.0
Gross national disposable income	3025.0	3528.5	5173.4	5169.9	5940.2	7556.9	7541.1	8375.0	8873.1	10662.2	11816.0
Private	2542.3	2569.5	4243.8	3968.5	4413.7	5462.7	5667.2	6495.7	6937.6	8707.3	11239.6
Public	482.7	959.0	929.6	1201.4	1526.5	2094.2	1874.0	1879.3	1935.5	1954.9	576.5
Gross national savings	-1901.5	1870.3	908.2	406.1	622.7	1901.2	636.9	761.0	1152.0	1715.7	1118.9
Private	-1908.2	1674.0	966.8	829.2	803.7	1286.0	1617.1	2234.7	2452.1	2750.6	3559.8
Public	6.7	196.3	-58.6	-423.1	-181.1	615.2	-980.2	-1473.7	-1300.0	-1034.9	-2440.9
Gross National Product	2463.4	2871.9	4138.2	4277.6	5041.1	5952.0	6178.3	6769.8	6975.8	8486.9	10002.9
Net factor payments	397.0	587.5	1026.1	776.8	873.9	1275.8	913.4	1038.4	961.0	983.1	1307.1

p Data for 2002 are based on projections

Source: IMF

Table 1.4.a Gross national income by expenditure at current prices, 1992-2002 (Percentage of GDP at market prices)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002p
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Resource gap	-35.5	-43.9	-57.7	-64.0	-61.5	-59.4	-68.0	-75.6	-64.0	-54.5	-67.5
Exports of GNFS	12.1	32.7	29.5	23.7	30.9	31.3	15.5	9.3	15.6	21.4	19.3
Imports of GNFS	-47.6	-76.6	-87.2	-87.6	-92.4	-90.7	-83.5	-85.0	-79.6	-75.9	-86.8
Gross domestic expenditure	135.5	143.9	157.7	164.0	161.5	159.4	168.0	175.6	164.0	154.5	167.5
Consumption	238.4	72.6	137.1	136.1	127.6	120.9	131.1	132.8	128.4	119.2	123.0
Private	215.4	39.2	105.3	89.7	86.6	89.3	76.9	74.3	74.6	79.4	88.3
Public	23.0	33.4	31.8	46.4	41.0	31.6	54.2	58.5	53.8	39.8	34.7
Domestic investment	-102.9	71.3	20.7	27.9	33.9	38.4	36.9	42.8	35.7	35.3	44.4
Fixed capital formation	-102.9	71.3	20.7	27.9	33.9	38.4	36.9	42.8	35.7	35.3	44.4
Private	-106.4	55.7	9.3	14.9	17.6	19.3	15.6	12.2	9.5	16.8	18.0
Government	3.5	15.5	11.4	13.0	16.3	19.1	21.3	30.6	26.2	18.6	26.4
Gross national disposable income	146.4	154.5	166.2	147.7	142.5	161.6	143.2	146.1	147.5	142.1	135.9
Private	123.0	112.5	136.4	113.4	105.9	116.8	107.6	113.3	115.3	116.0	129.3
Public	23.4	42.0	29.9	34.3	36.6	44.8	35.6	32.8	32.2	26.1	6.6
Gross national savings	-92.0	81.9	29.2	11.6	14.9	40.7	12.1	13.3	19.2	22.9	12.9
Private	-92.3	73.3	31.1	23.7	19.3	27.5	30.7	39.0	40.8	36.7	40.9
Public	0.3	8.6	-1.9	-12.1	-4.3	13.2	-18.6	-25.7	-21.6	-13.8	-28.1

p Data for 2002 are based on projections
Source: Table 4

Table 1.5 Macroeconomic balances, 1993-2002 (percentage of GDP at market prices)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1. Foreign Savings										
Current Account Balance excluding net official transfers	6.1	8.6	-8.4	-17.5	-5.7	-33.0	-40.1	-33.0	-29.7	
2. Private Sector										
Gross Domestic Investment	55.7	9.3	14.9	17.6	19.3	15.6	12.2	9.5	16.8	19.8
National Savings	76.7	43.4	43.4	30.3	27.5	30.7	39.4	40.6	36.5	42.1
Investment minus Savings	-21.0	-34.1	-28.5	-12.7	-8.2	-15.1	-27.2	-31.1	-19.7	-22.4
3. Public Sector										
Gross Domestic Investment	15.5	11.4	13.0	16.3	19.1	21.3	30.6	26.2	18.6	24.7
National Savings	8.6	-1.9	-12.1	-4.3	13.2	-18.6	-25.7	-21.6	-13.8	-29.8
Investment minus Savings	7.0	13.3	25.1	20.6	6.0	39.9	56.3	47.8	32.3	54.5
4. Public and Private										
Gross national savings	71.3	20.7	27.9	33.9	38.4	36.9	42.8	35.7	35.3	44.4
Investment	85.3	41.5	31.3	26.0	40.7	12.1	13.7	19.0	22.7	12.3
Investment minus Savings (%of GDP)	-14.1	-20.8	-3.4	7.9	-2.2	24.8	29.1	16.7	12.6	32.1

Table 2.1 Balance of payments, 1992-2002 (Millions of US $)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Trade of Goods (net)	-262.7	-239.0	-331.4	-323.2	-418.5	-441.1	-498.6	-474.5	-433.5	-469.6	-479.3
Exports	15.2	36.1	64.5	80.6	95.3	53.5	28.2	20.1	36.7	19.8	22.1
Imports	-277.9	-275.1	-395.9	-403.8	-513.8	-494.6	-526.8	-494.6	-470.3	-489.5	-501.4
Services, net	-205.2	-217.9	-316.1	-313.0	-408.9	-344.8	-444.6	-449.1	-409.5	-361.9	-405.2
Receipts	72.8	57.2	79.8	90.8	104.9	149.8	82.2	45.6	60.7	127.5	96.1
Payments	-277.9	-275.1	-395.9	-403.8	-513.8	-494.6	-526.8	-494.6	-470.3	-489.5	-501.4
Income (net)	-	-	0.2	7.6	-7.3	-3.4	4.3	6.1	-1.4	-3.9	-6.1
Receipts	-	-	0.3	7.9	8.3	10.2	11.6	8.2	9.1	9.1	8.4
Payments	-	-	-0.1	-0.3	-15.6	-13.6	-7.3	-2.1	-10.5	-13.1	-14.5
Transfers, net	295.2	234.9	356.0	286.3	325.7	403.5	304.2	321.0	298.0	292.4	222.1
Private	127.5	165.4	276.3	215.3	243.9	352.1	245.4	243.6	195.7	175.0	179.1
Official	167.7	69.5	79.7	71.0	81.8	51.4	58.8	77.4	102.4	117.3	43.0
Current account balance including transfers	105.3	52.1	97.7	17.8	-48.9	14.4	-177.1	-204.7	-104.5	-87.1	-196.5
Cuurent account balance (excl. offical transfers)	-62.3	28.2	17.9	-53.0	-130.8	-0.4	-235.9	-282.1	-206.8	-204.4	-240.5
Capital account	-	0.2	25.0	7.5	40.3	104.7	80.3	205.6	101.3	101.4	156.3
Foreign direct investment	-	-	-	-	36.7	38.7	30.4	83.0	27.9	12.1	12.5
Official longterm capital	-	0.2	29.2	7.5	3.6	28.9	64.4	109.6	48.9	100.7	167.7
Loan disbursements	-	0.2	29.2	7.5	3.6	28.9	64.4	110.2	49.4	102.4	170.5
Amortization payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	1.7	2.8
Short term capital	133.8	48.0	-48.5	-91.5	-66.5	37.1	-17.8	-10.2	18.8	-18.7	-5.7
Financing						-111.7	172.2	11.1	14.6	-6.3	1.4
Change in NFA of Bank of Eritrea (- increase)	-	-	-	-	-	-111.7	172.2	11.1	9.2	-14.4	-6.9
Gross reserve of Bank of Eritrea (- increase)	-	-	-	-	-	-113.1	173.8	13.5	19.0	-13.9	-6.9
IMF (net)	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Other assests (net)	-	-	-	-	-	1.4	-1.5	-2.3	-9.8	-0.5	0.0
Change in arrears (+ increase)	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Debt relief (foregiveness and rescheduling)	-	-	-	-	-	0.0	0.0	0.0	5.4	8.1	8.3
BOP support loans	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Financing gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.8
Memorandum Items:	0.0										
Gross reserves in convertible currency (in million US$)	4.9	88.8	168.6	154.3	177.0	242.9	69.1	55.7	36.6	50.6	57.5
(in months of imports of goods and services)	0.2	3.9	5.6	4.6	4.1	4.9	1.4	1.1	0.9	1.2	1.3
Net donor support (as percentage of GDP)	8.8	22.3	25.1	15.3	12.8	12.4	17.6	26.7	24.1	32.7	41.4
Grants	8.8	22.2	20.1	14.0	11.5	7.9	8.6	11.1	16.3	18.1	7.1
Net official disbursement	0.0	0.1	5.0	1.3	1.3	4.5	9.0	15.6	7.8	14.6	27.8
Financing gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
GDP (in million US$)	450.9	370.5	469.4	518.6	618.2	649.5	713.9	703.0	626.5	688.4	603.3
GNP (in millions of U.S. dollars)	537.5	465.8	624.2	633.7	747.9	826.8	837.7	830.4	726.6	778.7	703.3
Imports of defense goods (in mil. US$)	-	-	-	-	-	22.9	141.7	89.5	103.0	135.2	97.9
Imports of goods, and nonfactor services (in million US$)	214.5	283.7	409.3	454.5	571.5	589.0	596.1	597.4	498.6	522.8	530.6
NPV of external debt (in million US$)	-	-	-	-	-	41.0	83.3	155.8	331.5	340.0	376.1
NPV of external debt-to-exports ratio (in percent) 2/	-	-	-	-	-	60.5	80.2	138.8	363.5	328.5	310.8
Debt service/exports of goods and nonfactor services (%)	-	-	-	-	-	0.3	0.8	5.6	3.4	4.6	23.5
Imports of goods, and nonfactor services (percent of GDP)	47.6	76.6	87.2	87.6	92.4	90.7	83.5	85.0	79.6	75.9	88.0

p Data for 2002 are based on projections

Source: Bank of Eritrea and IMF

Table 2.2 Value of merchandize exports, 1992-2002 (Million US $)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[p]
Food and live animals	0.9	5.3	19.1	22.4	14.5	11.3	7.8	8.4	11.4	4.0	3.8
Beverages and tobacco	1.4	1.7	1.5	3.1	4.1	1.2	0.0	0.1	0.1	0.1	0.2
Crude materials (US$ million)	12.4	14.7	21.4	24.8	19.3	18.0	12.0	3.0	3.9	1.6	1.8
Animal & vegetable oils, fats & waxes	0.0	0.0	0.0	0.3	0.4	0.2	0.0	0.4	0.0	0.0	0.0
Chemicals and related products	0.1	1.2	1.2	1.9	2.1	1.1	0.5	0.6	0.7	0.5	0.5
Manufactured goods	0.8	10.1	11.0	15.9	13.9	8.9	3.5	2.8	2.7	8.8	10.0
Machinery & transport equipment	0.4	0.7	1.9	3.2	4.4	1.5	0.6	3.7	0.4	0.1	0.1
Miscellaneous manufactured articles	0.4	6.4	8.3	12.2	23.1	9.8	1.9	1.2	0.5	0.4	0.4
Total	15.2	36.1	64.5	80.6	95.3	53.5	28.2	20.1	36.7	19.8	22.1

[p] Data for 2002 are based on projections
Source: IMF

Table 2.2a Value of merchandize exports, 1992-2002 (percentage of total)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[p]
Food and live animals	5.9	14.7	29.6	27.8	15.3	21.1	27.8	41.6	31.1	20.4	17.4
Beverages and tobacco	9.4	4.6	2.3	3.9	4.3	2.3	0.1	0.3	0.1	0.7	0.8
Crude materials (US$ million)	81.3	40.6	33.3	30.7	20.3	33.6	42.6	14.8	10.7	7.9	8.3
Animal & vegetable oils, fats & waxes	0.0	0.0	0.0	0.4	0.4	0.4	0.0	1.9	0.1	0.2	0.2
Chemicals and related products	0.7	3.3	1.9	2.4	2.2	2.1	1.9	3.2	1.8	2.3	2.3
Manufactured goods	5.5	28.1	17.1	19.8	14.6	16.7	12.5	14.1	7.4	44.5	45.3
Machinery & transport equipment	2.8	1.9	2.9	4.0	4.6	2.8	2.2	18.2	1.0	0.5	0.5
Miscellaneous manufactured articles	2.4	17.8	12.9	15.1	24.2	18.4	6.6	5.7	1.3	1.9	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[p] Data for 2002 are based on projections

Table 2.3 Merchandize imports- value, 1992-2002 (Million US $)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[p]
Food & live animals	35.4	31.8	69.2	67.7	85.4	83.3	62.4	91.7	117.3	153.9	148.6
Beverages and tobaco	4.9	6.9	7.0	1.7	3.7	3.1	2.7	2.3	1.4	1.9	2.1
Crude materials	1.3	6.0	8.0	10.5	18.3	9.4	5.9	9.4	6.1	3.6	3.9
Mineral fuels, lubricants,& related materials	1.6	1.3	2.1	7.7	6.2	7.3	5.6	3.9	5.3	3.1	2.9
Animal & vegetable oils, fats,& waxes	0.7	2.0	5.4	4.6	8.7	8.0	9.7	11.0	11.6	14.3	18.9
Chemicals and related products	11.5	10.8	19.5	22.9	33.0	25.4	20.7	36.6	25.1	24.9	27.5
Manufactured goods	38.3	42.5	52.0	75.9	115.4	94.2	87.1	78.0	75.7	75.0	82.3
Machinery and transport equipment	19.7	73.0	122.2	185.1	171.7	160.9	141.0	122.2	80.3	91.2	100.0
Miscellaneous manufactured articles	17.8	21.3	38.1	18.6	39.5	33.7	31.3	28.6	25.6	31.7	34.8
Petroleum							21.4	33.2	42.4	40.7	37.5
Others	146.8	79.5	72.3	9.3	32.0	69.3	139.0	77.6508	79.6	49.1	43.0
Total	277.9	275.1	395.9	403.8	513.8	494.6	526.8	494.6	470.3	489.5	501.4

[p] Data for 2002 are based on projections
Source: IMF

Table 2.3a Merchandize import, 1992-2002 (Percentage of total)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Food & live animals	12.7	11.6	17.5	16.8	16.6	16.8	11.8	18.5	24.9
Beverages and tobaco	1.8	2.5	1.8	0.4	0.7	0.6	0.5	0.5	0.3
Crude materials	0.5	2.2	2.0	2.6	3.6	1.9	1.1	1.9	1.3
Mineral fuels, lubricants,& related materials	0.6	0.5	0.5	1.9	1.2	1.5	1.1	0.8	1.1
Animal & vegetable oils, fats,& waxes	0.2	0.7	1.4	1.1	1.7	1.6	1.8	2.2	2.5
Chemicals and related products	4.1	3.9	4.9	5.7	6.4	5.1	3.9	7.4	5.3
Manufactured goods	13.8	15.4	13.1	18.8	22.5	19.1	16.5	15.8	16.1
Machinery and transport equipment	7.1	26.5	30.9	45.8	33.4	32.5	26.8	24.7	17.1
Miscellaneous manufactured articles	6.4	7.7	9.6	4.6	7.7	6.8	5.9	5.8	5.4
Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	4.1	6.7	9.0
Others	52.8	28.9	18.3	2.3	6.2	14.0	26.4	15.7	16.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 2.4 Direction of exports, 1992-2000 (Millions of Nakfa)

Destination	1992	1993	1994	1995	1996	1997	1998	1999	2000
Belgium	0	0	0	0	0.1	0	0.2	0	0.3
Djibouti	0	0	0.7	1.4	2.2	2.7	0.5	28.3	0
Ethiopia	40.0039	130.4	207.5	354.2	342.4	238.1	52.2	0	0
Germany	0.13217	1.375	0.1	5	1	2.1	3.6	5.6	4.6
Italy	3.43684	5.424	10.2	15.2	22.3	18.3	10.4	8.6	7.4
Japan	0.1	0	16.3	6.3	0	0	26	0	0
Korea, Rep. of	0	0	0.2	0	0	0	0	0.5	0
Netherlands	0.13596	0.216	0	1.6	1.3	1.4	5.7	2.6	9.8
Saudi Arabia	0.13127	3.561	50.3	15.9	20	7.3	2.3	12.9	17.4
Sudan	0	46.6	57.9	76	51.5	62.3	53.5	54.9	94.8
Sweden	1.16588	0.619	0	0.1	0.6	0	0	0	0
United Arab Emirates	0.2898	0.135	0	1.3	1.3	0.9	14.3	7.4	0.5
United Kingdom	0.29469	0	10.2	1.8	4	1.8	2	2.7	0
United States	0	0	1.2	0.6	39.9	3.2	4	4.8	0
Yemen	0.21246	0	7.4	27.4	0	0.2	0.8	4.4	4.9
Other	0.29735	21	35.1	22	33.8	37	21.4	30.9	49
Total	46.2003	209.33	397.1	528.8	520.4	375.3	196.9	163.6	188.7

Source: Customs office

Table 2.4a Direction of exports, 1992-2000 (percent of total)

Destination	1992	1993	1994	1995	1996	1997	1998	1999	2000
Belgium	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Djibouti	0.0	0.0	0.2	0.3	0.4	0.7	0.3	17.3	0.0
Ethiopia	86.6	62.3	52.3	67.0	65.8	63.4	26.5	0.0	0.0
Germany	0.3	0.7	0.0	0.9	0.2	0.6	1.8	3.4	2.4
Italy	7.4	2.6	2.6	2.9	4.3	4.9	5.3	5.3	3.9
Japan	0.2	0.0	4.1	1.2	0.0	0.0	13.2	0.0	0.0
Korea, Rep. of	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0
Netherlands	0.3	0.1	0.0	0.3	0.2	0.4	2.9	1.6	5.2
Saudi Arabia	0.3	1.7	12.7	3.0	3.8	1.9	1.2	7.9	9.2
Sudan	0.0	22.3	14.6	14.4	9.9	16.6	27.2	33.6	50.2
Sweden	2.5	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
United Arab Emirates	0.6	0.1	0.0	0.2	0.2	0.2	7.3	4.5	0.3
United Kingdom	0.6	0.0	2.6	0.3	0.8	0.5	1.0	1.7	0.0
United States	0.0	0.0	0.3	0.1	7.7	0.9	2.0	2.9	0.0
Yemen	0.5	0.0	1.9	5.2	0.0	0.1	0.4	2.7	2.6
Other	0.6	10.0	8.8	4.2	6.5	9.9	10.9	18.9	26.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Customs office

Table 2.5 Indices of export, import (value, volume & price) and exchange rate and terms of trade, 1992-2002

Index of	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[p]
Export											
Value	100.0	236.5	423.1	528.7	625.2	351.0	183.1	131.9	228.0	161.2	197.3
Volume	100.0	174.2	266.9	313.9	338.9	180.0	96.8	59.1	80.8	53.3	53.7
Price /1	100.0	135.8	158.5	168.5	184.5	195.0	189.1	223.0	282.2	302.2	367.4
Import											
Value	100.0	99.0	142.5	145.3	184.9	178.0	189.6	178.0	169.3	228.2	215.3
Volume	100.0	65.2	85.0	89.0	112.8	105.2	113.6	93.9	74.7	89.4	68.4
Price /2	100.0	151.9	167.6	163.3	163.9	169.1	166.9	189.4	226.6	255.3	314.6
Real effective exchange rate	100.0	93.1	95.6	99.0	106.0	109.2	116.7	113.5	122.2	133.3	NA
Nominal effective exchange rate	100.0	96.0	96.1	97.5	101.6	104.9	104.4	96.3	87.6	83.0	NA
Exchange rate	100.0	149.6	160.9	163.8	164.4	174.7	179.2	205.3	238.0	264.5	320.8
Terms of trade	100.0	101.5	104.2	99.7	99.7	96.8	93.1	92.3	95.2	96.5	98.1
Domestic agricultural prices											
Sorghum (Nakfa/M. ton)	NA	NA	1459.0	1445.0	1845.0	1950.0	2420.0	4040.0	3820.0	NA	NA
Maize (Nakfa/M. ton)	NA	NA	1555.0	1759.0	1645.0	1860.0	2750.0	3430.0	3750.0	NA	NA
Barley (Nakfa/M. ton)	NA	NA	1360.0	1400.0	1655.0	2150.0	2800.0	3340.0	2760.0	NA	NA

1. Sub-saharan export price
2. Sub-saharan import price

Table 3.1 Summary of central government operations, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Total revenue	488.8	893.2	990.9	1345.2	1384.9	2022.8	1688.7	1895.5	2030.2	1925.6	2014.8
Tax revenue	297.6	517.6	657.5	715.6	830.4	959.4	977.0	1018.7	982.7	1278.8	1436.8
Nontax revenue	63.8	179.3	315.8	339.7	380.0	447.9	512.3	518.7	473.5	572.9	645.8
Direct taxes	434.8	488.5	542.2	601.8	670.6	747.0	747.0	747.0	747.0	0.0	0.0
Indirect taxes	109.2	143.6	142.8	151.0	180.7	212.8	198.5	236.8	238.1	297.0	345.8
Import duties & taxes	118.7	180.7	187.1	224.9	269.7	298 7	266.1	263.3	271.0	409.0	445.1
Extraordinary revenue	0.0	0.0	0.0	0.0	0.0	0.0	113.9	276.9	289.7	174.9	0.0
Total expenditure & net lending	734.8	1559.0	2029.5	2680.0	2722.4	2590.8	4309.5	5609.9	6060.5	5790.5	7458.6
Current expenditure	462.0	862.3	965.7	1918.9	1674.7	1412.8	2781.6	3213.9	3292.5	3137.8	2891.2
Capital expenditure	91.4	455.3	453.9	581.9	869.0	1147.8	1437.4	2245.7	1702.6	1369.3	1646.5
Overall balance											
excluding grants	-64.6	-424.4	-428.7	-1122.4	-1128.9	-535.3	-2530.1	-3572.4	-2932.4	-2582.8	-2815.5
including grants	116.8	82.6	197.3	-664.6	-650.3	-247.4	-2010.7	-3083.4	-1776.8	-1145.2	-2109.6
Financing	70.0	-10.7	381.8	718.2	799.6	403.5	2244.1	3212.8	3128.7	2522.7	2835.7
External	0.0	1.3	154.2	46.0	54.7	204.8	485.7	873.1	1170.6	1052.6	1789.3
Domestic net	70.0	-12.0	227.6	672.2	744.9	198.7	1758.4	2339.7	1958.1	1470.0	1046.4
Rescheduled & debt forgiveness	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.4	118.4
As percentage of GDP at market prices											
Total revenue	23.7	39.1	31.8	38.4	33.2	43.3	32.1	33.1	33.8	25.7	23.2
Tax revenue	14.4	22.7	21.1	20.4	19.9	20.5	18.6	17.8	16.3	17.0	16.5
Nontax revenue	3.1	7.8	10.1	9.7	9.1	9.6	9.7	9.0	7.9	7.6	7.4
Direct taxes	21.0	21.4	17.4	17.2	16.1	16.0	14.2	13.0	12.4	0.0	0.0
Indirect taxes	5.3	6.3	4.6	4.3	4.3	4.6	3.8	4.1	4.0	4.0	4.0
Total expenditure & net lending	35.6	68.2	65.2	76.6	65.3	55.4	81.9	97.9	100.8	77.2	85.8
Recurrent expenditure	22.4	37.7	31.0	54.8	40.2	30.2	52.8	56.1	54.7	41.8	33.2
Capital expenditure	4.4	19.9	14.6	16.6	20.9	24.5	27.3	39.2	28.3	18.2	18.9
Overall balance											
excluding grants	-3.1	-18.6	-13.8	-32.1	-27.1	-11.4	-48.1	-62.3	-48.8	-34.4	-32.4
including grants	5.7	3.6	6.3	-19.0	-15.6	-5.3	-38.2	-53.8	-29.5	-15.3	-24.3
Financing	3.4	-0.5	12.3	20.5	19.2	8.6	42.6	56.1	52.0	33.6	32.6
External	0.0	0.1	5.0	1.3	1.3	4.4	9.2	15.2	19.5	14.0	20.6
Central bank financing	3.4	-0.5	7.3	19.2	17.9	4.2	33.4	40.8	32.6	19.6	12.0

[P] Data for 2002 are based on projections
Source: Ministry of Finance and IMF

Table 3.2 Government revenue, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[p]
Total revenue and grants	670.2	1400.2	1616.9	1803.0	1863.5	2310.7	2208.1	2384.5	3185.8	3363.2	2720.7
Revenue	488.8	893.2	990.9	1345.2	1384.9	2022.8	1688.7	1895.5	2030.2	1925.6	2014.8
Tax revenue	297.6	517.6	657.5	715.6	830.4	959.4	977.0	1018.7	982.7	1278.8	1436.8
Direct taxes	63.8	179.3	315.8	339.7	380.0	447.9	512.3	518.7	473.5	572.9	645.8
Personal income	16.8	37.0	79.1	74.2	113.6	117.2	128.0	131.4	122.7	136.9	153.6
Business profits	27.1	95.1	160.7	185.0	230.7	292.9	334.1	337.7	299.9	387.5	434.8
Rehabilitation tax	19.0	40.9	73.0	73.2	23.3	18.1	17.5	11.3	10.4	2.9	3.3
Other 1/	0.9	6.3	3.0	7.3	12.4	19.7	32.7	38.2	40.6	45.5	54.1
Agricultural tax	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0	0.7	0.7	0.8
Lottery and dividends	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1
Rural land fee	0.0	0.0	0.0	0.0	0.0	3.0	2.2	0.0	2.9	2.9	3.2
Rental income tax	0.0	0.0	0.0	0.0	0.0	16.4	29.7	0.0	36.9	41.8	50.0
Indirect domestic taxes	109.2	143.6	142.8	151.0	180.7	212.8	198.5	236.8	238.1	297.0	345.8
Sales tax on domestic goods & services	109.2	143.6	142.8	151.0	180.7	212.8	198.5	236.8	171.8	213.0	243.3
Import duties and taxes	118.7	180.7	187.1	224.9	269.7	298.7	266.1	263.3	271.0	409.0	445.1
Custom duties	46.1	73.7	80.2	136.0	167.8	184.2	167.3	162.0	162.7	241.3	219.1
Import tax	70.9	104.4	106.9	88.9	101.9	114.5	98.8	101.2	108.4	167.7	226.0
Excise on imports						9.1			7.4	15.0	9.4
Others	1.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Export tax	5.9	14.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nontax revenue	191.2	375.6	333.4	629.6	554.5	1063.4	597.8	599.9	757.8	471.9	578.0
Port fees & charges	152.4	244.5	152.9	233.5	281.9	444.3	99.7	107.0	14.4	18.3	22.0
Contributions & other	38.8	131.1	180.5	396.1	272.6	619.1	498.0	492.9	743.3	453.6	556.0
Extraordinary Revenues	0.0	0.0	0.0	0.0	0.0	0.0	113.9	276.9	289.7	174.9	0.0
Local transfer to defence	0.0	0.0	0.0	0.0	0.0	0.0	87.1	0.0	38.2	25.2	0.0
Surtax	0.0	0.0	0.0	0.0	0.0	0.0	26.8	276.9	251.5	149.7	0.0
Grants	181.4	507.0	626.0	457.8	478.6	287.9	519.4	489.0	1155.7	1437.6	705.9
Public Contribution (transf. to defense from al	0.0	0.0	0.0	0.0	0.0	0.0	61.2	131.4	195.8	40.4	30.0
Grants in kind/earmarked	181.4	507.0	626.0	457.8	478.6	287.9	458.2	357.6	959.8	1397.2	675.9
Humanitarian	181.4	142.4	456.3	170.6	194.6	32.7	90.7	142.0	781.7	866.3	149.6
Capital projects	0.0	364.6	169.7	287.2	284.0	255.2	367.5	215.6	178.1	530.9	462.3
Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0

p Data for 2002 are based on projections
Source: Ministry of Finance and IMF

Table 3.3 Total government expenditure, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Total expenditure and net lending	734.8	1559.0	2029.5	2680.0	2722.4	2590.8	4309.5	5609.9	6060.5	5790.5	7458.6
Current expenditure	462.0	862.3	965.7	1918.9	1674.7	1412.8	2781.6	3213.9	3292.5	3137.8	2891.2
Wages, salaries, and allowances	136.9	233.3	460.8	652.3	798.3	706.8	858.3	982.0	1222.8	1168.2	926.9
defense	...	...	...	...	483.6	387.1	488.5	617.9	855.4	818.1	454.3
others	...	...	...	...	314.7	319.7	369.8	364.1	367.4	350.1	472.6
Materials and services	319.0	546.2	427.5	844.2	718.1	519.7	1679.7	1877.0	1547.0	1407.8	1313.3
defense	...	...	...	...	454.3	247.1	1447.8	1606.6	1298.2	1066.9	840.7
others	...	...	...	...	263.8	272.6	231.9	270.4	248.8	340.9	472.6
Pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	21.0	21.6
Interest	0.0	0.9	3.4	16.9	36.2	49.3	67.3	112.2	175.0	253.1	289.5
Domestic	0.0	0.9	3.4	16.9	36.2	49.3	62.9	100.9	157.0	202.5	193.2
External	0.0	0.0	0.0	0.0	0.0	0.0	4.4	11.3	18.0	50.6	96.3
Grants and contributions	6.1	81.9	74.0	405.5	122.1	137.0	176.3	242.7	326.1	287.6	339.9
Grants to individuals	...	...	...	...	...	...	...	...	...	229.6	...
Grants to institutions	...	...	...	...	...	...	...	...	...	58.0	...
Capital expenditure /1	91.4	455.3	453.9	581.9	869.0	1147.8	1437.4	2245.7	1702.6	1369.3	1646.5
Central Treasury	91.4	89.4	130.0	248.7	529.3	687.8	584.2	1157.0	417.9	593.2	939.0
Externally financed	0.0	365.9	323.9	333.2	339.7	460.0	853.2	1088.7	1284.7	776.1	707.5
Net lending	0.0	0.0	0.0	-33.2	-29.9	-2.5	-0.2	8.3	-32.5	1.3	-7.5
Overall balance											
excluding grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	300.0
including grants											
Financing	70.0	-10.7	381.8	718.2	799.6	403.5	2244.1	3212.8	3128.7	2522.7	2835.7
External	0.0	1.3	154.2	46.0	54.7	204.8	485.7	873.1	1170.6	1052.6	1789.3
Domestic	70.0	-12.0	227.6	672.2	744.9	198.7	1758.4	2339.7	1958.1	1470.0	1046.4
Rescheduled & debt forgivenes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.4	118.4

[P] Data for 2002 are based on projections
Source: Ministry of Finance and IMF

Table 4.1 Monetary survey, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Monetary Survey											
Net foreign assets	29.8	553.3	1092.6	1035.6	1194.9	1855.2	789.8	943.2	511.5	1029.7	1391.2
Foreign assets	29.8	575.6	1125.1	1098.4	1247.4	2095.0	1084.2	1403.7	1298.5	2559.7	3612.8
Of which: foreign reserves	0.0	72.9	454.5	426.4	851.0	1724.3	525.7	534.3	370.1	697.1	844.9
Foreign liabilities	0.0	22.3	32.5	62.8	52.4	239.8	294.5	460.5	787.0	1530.0	2221.6
Net domestic assets	1158.4	1257.7	1543.0	2191.9	2734.4	3188.2	5298.5	7309.6	8974.7	10933.1	12398.0
Net domestic credit	-212.5	165.0	654.1	1872.3	2910.6	3571.0	6101.0	8231.3	10235.5	10896.5	12287.8
Net claims on the central government	-305.1	-103.8	87.5	760.2	1500.1	1602.0	3336.3	5564.2	7613.1	7855.2	8721.6
excl. Customs deposit accounts						1602.0	3336.3	5564.2	7622.7	7856.3	8722.7
Credit to central government	0.0	0.0	311.0	1012.0	1816.0	2008.5	3787.8	6499.8	8207.1	8662.0	9528.4
Deposits of central government 4/	305.1	103.8	223.5	251.8	315.9	406.5	451.5	935.6	594.0	806.8	806.8
o/w Project account						175.1	174.8	500.4	105.8	244.5	0.0
Claims on local government	2.3	82.9	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Credit to the economy	90.3	185.9	566.6	1112.1	1410.6	1969.0	2764.7	2667.1	2622.2	3041.1	3566.0
Credit to public enterprises	70.1	120.4	237.7	460.5	458.7	385.4	614.9	697.1	402.3	744.3	851.2
Credit to private sector	20.1	65.5	328.9	651.6	951.9	1582.1	2148.7	1969.4	2110.8	2187.7	2605.6
Claims on nonbank financial institutions	0.0	0.0	0.0	0.0	0.0	1.5	1.1	0.7	109.2	109.2	109.2
Valuation							17.5	212.2	237.1	437.6	511.3
Other items (net)	1370.9	1092.6	888.9	319.6	-176.2	-382.8	-820.0	-1133.9	-1497.9	-401.0	-401.0
Money and quasi money	1188.2	1811.0	2635.6	3227.4	3929.4	5043.5	6088.3	8252.7	9486.2	11962.8	13789.3
Money (M2)	1188.2	1811.0	2635.6	3227.4	3929.4	4985.1	6002.3	7984.1	9196.2	11424.5	13030.8
Money (M1)	519.4	866.8	1258.4	1295.8	1677.0	2284.0	2731.4	3895.1	4399.6	5480.5	6234.1
Currency outside banks	0.0	0.0	0.0	0.0	0.0	573.9	825.1	1137.8	1467.7	2092.0	2391.5
Demand deposits	519.4	866.8	1258.4	1295.8	1677.0	1710.1	1906.3	2757.4	2931.9	3388.5	3842.6
Time and savings deposits	668.8	944.2	1377.2	1931.6	2252.4	2701.1	3270.9	4088.9	4796.7	5943.9	6796.7
Foreign currency deposits	0.0	0.0	0.0	0.0	0.0	58.4	86.0	268.7	290.0	538.3	758.4

[P] Data for 2002 are based on projections
Source: Bank of Eritrea and IMF

Table 4.1a Change in money supply and sources of change, 1992-2002
(change as percent of previous period stock of money)

	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Net foreign assets	97.5	-5.2	15.4	55.3	-57.4	19.4	-45.8	101.3	35.1
Foreign assets	95.5	-2.4	13.6	68.0	-48.2	29.5	-7.5	97.1	41.1
Of which: foreign reserves	523.4	-6.2	99.6	102.6	-69.5	1.6	-30.7	88.4	21.2
Foreign liabilities	45.9	93.5	-16.5	357.5	22.8	56.4	70.9	94.4	45.2
Net domestic assets	22.7	42.1	24.8	16.6	66.2	38.0	22.8	21.8	13.4
Net domestic credit	296.4	186.2	55.5	22.7	70.8	34.9	24.3	6.5	12.8
Net claims on the central government	-184.4	768.3	97.3	6.8	108.3	66.8	36.8	3.2	11.0
excl. Customs deposit accounts	-	-	-	-	108.3	66.8	37.0	3.1	11.0
Credit to central government	-	225.4	79.4	10.6	88.6	71.6	26.3	5.5	10.0
Deposits of central government 4/	115.3	12.7	25.5	28.7	11.1	107.2	-36.5	35.8	0.0
o/w Project account	-	-	-	-	-0.2	186.2	-78.8	131.0	-100.0
Claims on local government	-100.0	-	-	-	-	-	-	0.0	0.0
Credit to the economy	204.8	96.3	26.8	39.6	40.4	-3.5	-1.7	16.0	17.3
Credit to public enterprises	97.4	93.8	-0.4	-16.0	59.5	13.4	-42.3	85.0	14.4
Credit to private sector	402.5	98.1	46.1	66.2	35.8	-8.3	7.2	3.6	19.1
Claims on nonbank financial institutions	-	-	-	-	-23.5	-39.2	15951.5	0.0	0.0
Valuation	-	-	-	-	-	1111.9	11.7	84.6	16.8
Other items (net)	-18.6	-64.0	-155.1	117.2	114.2	38.3	32.1	-73.2	0.0
Money and quasi money	45.5	22.5	21.7	28.4	20.7	35.6	14.9	26.1	15.3
Money (M2)	45.5	22.5	21.7	26.9	20.4	33.0	15.2	24.2	14.1
Money (M1)	45.2	3.0	29.4	36.2	19.6	42.6	13.0	24.6	13.8
Currency outside banks	-	-	-	-	43.8	37.9	29.0	42.5	14.3
Demand deposits	45.2	3.0	29.4	2.0	11.5	44.6	6.3	15.6	13.4
Time and savings deposits	45.9	40.3	16.6	19.9	21.1	25.0	17.3	23.9	14.3
Foreign currency deposits	-	-	-	-	47.3	212.4	7.9	85.6	40.9

[P] Data for 2002 are based on projections
Source: Table 1

Table 4.2 Analytical presentation of the Bank of Eritrea, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Net foreign assets	0	72.9	454.5	426.4	851.0	1734.2	524.7	510.8	246.3	521.9	658.6
Foreign assets	0	72.9	454.5	426.4	851.0	1738.8	533.1	550.0	385.8	715.9	864.9
International reserves	0	72.9	454.5	426.4	851.0	1724.3	525.7	534.3	370.1	697.1	844.9
Non reserve assets	0	0.0	0.0	0.0	0.0	14.5	7.4	15.8	15.8	18.8	20.0
Foreign liabilities	0	0.0	0.0	0.0	0.0	4.6	8.4	39.2	139.5	194.0	206.3
Liabilities to IMF	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities	0	0.0	0.0	0.0	0.0	4.6	8.4	39.2	139.5	194.0	206.3
Net domestic assets	171	204.1	280.5	913.6	1643.0	2983.9	2463.9	3660.2	4156.5	3628.0	4119.5
Net domestic credit	-72.0228	-103.8	87.5	760.2	1600.1	1938.9	1790.4	3195.8	4060.7	3900.2	4355.8
Net claims on central government	-72.0228	-103.8	87.5	760.2	1500.1	1602.0	1336.3	2858.1	3551.1	3236.6	3675.4
excl. Customs deposit accounts						1602.0	1336.3	2858.1	3560.7	3237.7	3676.5
Credit to central government	0	0.0	311.0	1012.0	1816.0	2008.5	1787.8	3793.7	4145.1	4043.4	4482.3
Deposits of central government	72.0228	103.8	223.5	251.8	315.9	406.5	451.5	935.6	594.0	806.8	806.8
o/w Project account						175.1	174.8	500.4	105.8	244.5	0.0
Claims on local government	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit to the economy	0	0.0	0.0	0.0	0.0	101.5	75.5	94.9	161.5	116.8	133.5
Credit to public enterprises	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit to private sector	0	0.0	0.0	0.0	0.0	101.5	75.5	94.9	161.5	116.6	133.4
Claims on other banking institutions	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Claims on nonbank financial institutions	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit to commercial banks	0	0.0	0.0	0.0	100.0	235.4	381.5	364.2	447.9	652.4	652.4
Other deposits in foreign currency						0.0	2.8	121.4	99.9	105.6	105.6
Valuation							13.2	124.8	137.8	250.9	286.8
Other items (net)	243.0228	307.9	193.0	153.4	42.9	1045.0	660.3	339.6	-42.0	-523.1	-523.1
Assets	261	359.0	286.0	479.0	465.0	1282.5	1137.2	1072.4	1077.9	1084.9	
Liabilities	17.9772	51.1	93.0	325.6	422.1	237.5	476.9	732.8	1119.8	1608.0	
Reserve Money (M0)	171	277.0	735.0	1340.0	2494.0	4718.2	2988.6	4171.0	4402.8	4149.8	4778.1
Currency outside banks	0	0.0	0.0	0.0	0.0	573.9	825.1	1137.8	1467.7	2092.0	2391.5
Cash in vault	0	0.0	0.0	0.0	0.0	226.9	400.5	288.9	479.8	273.0	658.4
Deposits of commercial banks	171	277.0	735.0	1340.0	2494.0	3822.9	1737.2	2522.2	2418.0	1698.8	1642.3
Deposits of private sector						9.1	5.6	1.0	4.6	5.4	5.4
Deposits of other financial institutions						0.0	0.0	0.0	0.0	0.3	0.3
Deposits of public sector						85.5	20.2	221.1	32.8	80.3	80.3

[P] Data for 2002 are based on projections

Source: Bank of Eritrea and IMF

Table 4.3 Analytical presentation of commercial banks, 1992-2002 (Millions of Nakfa)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[r]
Net foreign assets	29.8	480.4	638.1	609.2	343.9	121.0	265.1	432.3	265.2	507.8	732.6
Foreign assets	29.8	502.7	670.6	672.0	396.3	356.2	551.2	853.7	912.7	1843.8	2748.0
Foreign liabilities	0.0	22.3	32.5	62.8	52.4	235.2	286.1	421.4	647.5	1336.0	2015.4
Net domestic assets	1158.4	1330.6	1997.5	2618.3	3585.4	4254.0	4969.6	6339.2	7616.1	9171.4	10473.6
Net domestic credit	244.5	546.8	1337.5	2508.1	3804.4	5681.8	6445.5	7725.2	8972.8	8862.8	10127.2
Net claims on central government	-19.5	0.0	0.0	0.0	0.0	0.0	2000.0	2706.1	4062.0	4618.6	5046.2
Loans and overdrafts	213.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Holding of government securities	0.0	0.0	0.0	0.0	0.0	0.0	2000.0	2706.1	4062.0	4618.6	5046.2
Deposits of central government	233.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Claims on local government	2.3	82.9	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Credit to the economy	90.3	185.9	566.6	1112.1	1410.6	1867.5	2689.2	2572.2	2460.8	2924.5	3432.6
Credit to public enterprises	70.1	120.4	237.7	460.5	458.7	385.4	614.9	697.1	402.3	744.3	851.2
Credit to private sector	20.1	65.5	328.9	651.6	951.9	1480.6	2073.2	1874.5	1949.3	2071.1	2472.3
Claims on nonbank financial institutions	0.0	0.0	0.0	0.0	0.0	1.5	1.1	0.7	109.2	109.2	109.2
Net claims on the Bank of Eritrea	171.5	278.0	770.9	1396.0	2393.9	3814.3	1756.2	2446.9	2449.8	1319.4	1646.3
Total reserves	171.5	278.0	770.9	1396.0	2493.9	4049.7	2137.7	2811.1	2897.8	1971.8	2300.6
Required reserves	237.6	362.2	527.1	645.5	785.9	863.3	1030.3	1324.8	1538.2	1849.3	2110.7
Execess reserves	-66.2	-84.2	243.7	750.5	1708.0	3186.4	1107.4	1486.3	1359.5	122.5	190.0
Credit from the Bank of Eritrea	0.0	0.0	0.0	0.0	100.0	235.4	381.5	364.2	447.9	652.4	652.4
Valuation							4.3	87.4	99.3	186.7	224.4
Other items (net)	913.8	783.8	660.1	110.2	-219.0	-1427.8	-1480.3	-1473.4	-1455.9	121.9	121.9
Deposit liabilities to nonbank residents	1188.2	1811.0	2635.6	3227.4	3929.4	4375.0	5234.8	6771.5	7881.3	9679.2	11206.2
Local currency deposits	1188.2	1811.0	2635.6	3227.4	3929.4	4316.6	5151.4	6624.2	7691.2	9246.4	10553.3
Demand deposits	519.4	866.8	1258.4	1295.8	1677.0	1615.5	1880.5	2535.3	2894.5	3302.5	3756.6
Savings deposits	664.7	940.2	1367.3	1893.5	2177.5	2631.2	3225.1	3994.8	4739.2	5872.7	6715.3
Time deposits	4.1	4.0	9.9	38.1	74.9	70.0	45.8	94.1	57.5	71.2	81.4
Foreign currency deposits	0.0	0.0	0.0	0.0	0.0	58.4	83.2	147.3	190.1	432.8	652.9

[r] Data for 2002 are based on projections
Source: Bank of Eritrea and IMF

Table 4.4 Exchange rate movements, 1992-2002

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Exchange rate											
Nakfa/US $ (average)	4.6	6.2	6.6	6.8	6.7	7.2	7.4	8.2	9.6	10.9	14.2
Nakfa/US $ (end of period)	NA	6.5	6.7	6.7	6.8	7.2	7.6	9.6	10.2	13.8	NA
Indices											
Real exchange rate	100.0	93.1	95.6	99.0	106.0	109.2	116.7	113.5	122.2	133.3	NA
Annual % change	-	-6.9	2.7	3.6	7.0	3.0	6.9	-2.7	7.7	9.1	NA

[P] Data for 2002 are based on projections
Source: Bank of Eritrea and IMF

Table 5.1 External debt, 1993-2002 (Millions of US $)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 [P]
Total external debt	2.4	31.7	39.1	47.0	75.9	141.1	274.9	321.9	414.5	607.1
Medium & Longterm debt	2.4	31.7	39.1	47.0	75.9	141.1	274.6	321.9	414.5	607.1
Short-term debt	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Official	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
By creditor type										
Official creditors	2.4	31.7	39.1	47.0	75.9	140.3	249.9	290.9	383.5	594.3
Mulitlateral	2.4	18.7	23.8	29.0	37.9	59.4	95.5	131.4	218.0	390.4
Bilateral	0.0	13.0	15.3	18.0	38.0	80.9	154.4	159.5	165.6	203.9
By debtor type										
Official debt	2.4	31.7	39.1	47.0	75.9	141.1	274.9	321.9	414.5	607.1
Private debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total debt service	0.0	0.2	0.3	0.4	0.7	1.6	4.0	13.4	15.5	36.7
Interest payments	0.0	0.2	0.3	0.4	0.7	1.6	3.3	4.6	5.3	6.8
Amortization	0.0	0.0	0.0	0.0	0.0	0.0	0.7	8.8	10.2	29.9
Of which official	0.0	0.0	0.0	0.0	0.0	0.0	0.7	8.4	9.8	11.7

[P] Data for 2002 are based on projections

Source: Eritrean authorities and the World Bank debt reporting system

Table 5.2 External public debt, outstanding commitment and disbursement by creditor type, 1993-2002 (Millions of US $)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
Official loan disbursements	12.6	115.2	32.2	20.4	55.2	193.9	340.5	376.9	975.4	1969.7
BOP support (program)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Project	12.6	115.2	32.2	20.4	55.2	193.9	340.5	376.9	975.4	1372.3
ERP									614.9	664.8
Private sector reconstruction									96.1	103.9
Other ERP									518.9	560.9
Non-ERP	12.6	115.2	32.2	20.4	55.2	193.9	340.5	376.9	360.5	707.5
Demobilization								0.0	0.0	597.4
Amortization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	39.5
Interest	0.0	0.7	1.0	1.1	1.7	3.0	9.2	13.1	50.6	96.3
Other public borrowing										
Loan disbursements						4.4	184.3	57.9	4.5	0.0
Amortization and interest payments						0.0	0.0	3.6	4.5	259.4
Rescheduled and debt forgiveness								-2.0	95.4	118.4
External debt stock	12.6	130.0	165.2	187.1	267.1	467.5	857.4	1386.4	2549.6	5870.3
Bond stock						5.6	204.1	297.9	338.4	182.2
To IMF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest payments	0.0	0.1	0.3	0.4	0.5	0.8	3.1	2.5	4.6	6.8
to multilateral creditors	0.0	0.1	0.2	0.2	0.2	0.4	1.3	1.5	1.9	3.1
to bilateral creditors	0.0	0.0	0.2	0.2	0.3	0.4	1.8	0.9	2.7	3.7
to other creditors										
Loan disbursements	2.4	29.3	7.5	7.9	28.9	64.4	110.2	49.4	102.4	170.5
Multilateral creditors	2.4	16.3	5.1	5.2	8.9	21.5	36.1	37.4	88.3	132.9
Bilateral creditors	0.0	13.0	2.4	2.7	20.0	42.9	74.2	12.0	14.1	37.6
Other creditors										
(of which: ERP loans)									56.4	46.7
(of which: BOP support loans)								0.0	0.0	0.0
Amortization payments	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	1.7	2.8
Multilateral creditors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.7
Bilateral creditors	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.0	1.1
Other creditors										
Other public borrowing (net)						0.6	22.6	5.7	0.0	-18.2
New issuance						0.6	22.6	6.0	0.4	0.0
Amortization						0.0	0.0	0.4	0.4	18.2
IMF (net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NPV of debt					41.0	83.3	155.8	331.5	340.0	376.1
NPV of external debt-to-exports ratio (%)					60.5	80.2	138.8	363.5	328.5	310.8
Debt service/exports of GNFS (%)					0.3	0.8	5.6	3.4	4.6	23.5

Table 6.1 Consumer price index and demographic data, 1992-2002

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[P]
CPI index, average	68.3	71.6	81.0	90.7	100.0	103.7	113.6	123.1	147.6	169.2	184.3
CPI change, average		4.6	11.6	10.7	9.3	3.7	9.5	8.4	19.9	14.6	8.9
CPI index, period-end	72.4	80.1	86.0	96.5	99.9	107.7	117.4	129.8	164.7	177.4	191.1
CPI change, period-end	8.8	9.6	6.8	11.0	3.4	6.8	1.0	2.1	18.0	13.9	12.1
Population (million people)	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3
Population growth	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

P Data for 2002 are based on projections