Report No. 6754-BU

Burundi
Structural Adjustment and Development Issues
Background Papers

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Africa Region

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Currency Equivalents and Units

Currency unit = Burundi Franc (FBu)
Exchange rate = US$ 1.00 = FBu 114.17 (Annual average 1986)
= FBu 123.12 (Average Jan.-Nov. 1987)
= SDR 1.00 = FBu 134.08 (Annual average 1986)
= FBu 159.50 (Average Jan.-Nov.1987)
Standards = Metric system

Fiscal Year - January 1 to December 31

Glossary of Abbreviations and Acronyms

ADF	African Develcpment Fund
BCC	Burundi Coffee Company
BEI	Development Budget
BNDE	National Bank for Economic Development
BO	Ordinary budget
BRB	Bank of the Republic of BurunJi (central bank)
CADEBU	Burundi Savings Bank
CCI	Chamber of Commerce and Industry
COGERCO	Company for the Management of the Cotton sector
COOPEC	Rural Cooperative of Credit
COTEBU	Textile Company of Bujumbura
CPI	Center for Industrial Promotion
EDF	European Development Fund
FP	Family Planning
FWA	Fully Washed Arabica (coffee)
IEC	Information/Education Campaign
ICA	International Coffee Association
IDA	International Development Association
IMF	International Monetary Fund
ISABU	Agronomic Sciences Institute
KAP	Knowledge, Attitudes and Practices
MCH	Maternal and Child Care
MOH	Ministry of Health
OCIBU	Industrial Culture Office of Burundi
ONAPHA	National Pharmaceutical Office
OTB	Burundi Tea Office
PE	Public Enterprise
PEP/PIP	Public Expenditures Program/ Public Investment Program
PHN	Population, Health and Nutrition
PTA	Preferential Trade Agreement
RDC	Regional Development Companies
SAL	Structural Adjustment Lending
SAP	Structural Adjustment Program
SCEP	Service in Charge of Public Enterprises
SME	Small and Medium Enterprise
SMIG	Minimum Daily Wage
SNES	Service National d'Etudes Statistiques
SOSUMO	Sugar Production Enterprise in Mosso
TRC	Tanzania Railway Company
UNFPA	United Nations Fund for Population Activities
WHO	World Health Organization

PREFACE

This report is largely based on the findings of an economic mission which visited Burundi during November/December 1986. The mission comprised Mmes. Maria E. Freire (Mission Chief), Dale Hill (agriculture), Judith Press (SMEs, consultant), Miriam Schneidman (population, health, nutrition), and Messrs. Didace Butare (industry, Resident Mission), Jean M. Cour (urban and regional development), Martyn Kebbell (export promotion, consultant), Janvier Kpourou-Litse (employment, external debt, statistical appendix), Benoit Millot (education), and Jan Weijenberg (agriculture).

Additional contributions were received from Messrs. Robert Broadfield (energy sector issues and updating), Marc Blanc and J.J. Raoul (transport sector), and Christian Schmidt (financial sector). The sections concerning the structural adjustment program reflect the work of various Bank missions which visited Burundi between May 1985 and December 1986 for the preparation and supervision of the First SAL as well as of IMF missions which have collaborated closely in discussions on the adjustment program and the joint work carried out to prepare two Policy Framework Papers (1986 and 1987) for Burundi. Ms. Lynne Sherburne-Benz (consultant) was responsible for finalizing the report following its discussion with the authorities.

The report was discussed with the Government in October/November 1987. Many of the recommendations made in the report have already been adopted by the Government; others are expected to be addressed in the context of the dialogue between the Government of Burundi and the Bank. Whenever possible, a note has been inserted to that effect.

The statistics used in the report are based on data provided by the Burundian Government. These generally cover the period up to December 1986. Many of the official data for the 1984-86 period used in compiling the Statistical Appendix are preliminary and subject to revision by the authorities.

COUNTRY DATA-BURUNDI

AREA (Thousand sq. km.)	POPULATION	DENSITY (1985)
27.8	4.9 million (1986) Rate of growth: 2.6% (from 1982 to 1985)	189 per square km. 210 per square km. of arable land.

POPULATION CHARACTERISTICS (1982-1985)	
Crude birth rate (per 1000)	47
Crude death rate (per 1000)	19
Percent urban	5

HEALTH (1979)	
Population per physician	45020
Population per hospital bed	744 (1970)

INCOME DISTRIBUTION	
% of national income, highest quintile	--
lowest quintile	--

ENERGY CONSUMPTION PER CAPITA	
(Kilograms of oil equivalent)	15

ACCESS TO SAFE WATER (1980)	
% of population - total	24
- urban	90
- rural	20

ACCESS TO ELECTRICITY	
% of population - total	--
- rural	--

FOOD & NUTRITION (1982-1985)	
calorie intake as % of requirements	102.1
per capita protein intake (gm/day)	78.1

EDUCATION (1985)	
Adult literacy rate %	30
Primary school enrollment %	64

GNP PER CAPITA IN 1985 a/: US$240

GROSS DOMESTIC PRODUCT IN 1986

	US$ MLN.	%	ANNUAL RATE OF GROWTH (%, CONSTANT 1970 PRICES) 1980-85	1986
GDP at market prices	1305.3	100.0	3.0	4.6
Gross domestic investment	168.3	12.9	4.5	19.1
Gross national savings	67.3	5.2	2.2	66.5
Current account balance	-72.8	5.6	-4.7	0.8
Exports (g+nfs)	157.4	12.1	14.5	-2.9
Imports (g+nfs)	244.2	18.7	4.1	2.2
GDP at factor cost	1187.7	100.0	3.1	3.3
Primary sector	719.8	60.6	2.4	3.2
Secondary sector	162.5	13.7	5.0	3.4
Tertiary sector	305.4	25.7	3.7	3.5

GOVERNMENT FINANCE (Central Government)	(Fbu bln.)	% of GDP	
	1986	1986	1981
Current revenue b/	24.09	16.2	13.3
Current expenditure c/	18.07	12.1	12.2
Current surplus	6.02	4.1	1.0
Development expenditure c/	16.98	11.4	12.1

a/ The per capita GNP estimate calculated by the same conversion technique as the World Bank Atlas. All other conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

b/ It does not include official capital grants.

c/ On a cash basis.

--/ not available.

../ not applicable.

COUNTRY DATA - BURUNDI

(Millions Fbu Outstanding End Period)

MONEY, CREDIT AND PRICES	1980	1981	1982	1983	1984	1985	1986
Money Supply a/	12681	15698	15378	16756	19954	23822	24774
Claims on Government (net)	4615	7308	9541	12389	14090	15796	14712
Claims on the Economy	8276	11000	10959	11813	11430	12678	13645
Credit to Public Enterprises	1857	574	458	4354	4150	5128	7219
	(percentage or Index Numbers)						
Money as % of GDP	15.3	18.0	16.9	16.6	16.9	18.4	16.6
CPI Average 1980=100	100.0	113.3	119.8	129.8	148.5	154.0	156.8
Annual Percentage Changes in:							
Consumer Price Index	12.3	13.3	5.7	8.3	14.4	3.7	1.8
Claims on Government (net)	25.2	58.3	30.5	29.9	13.7	12.1	-6.9
Claims on the Economy	23.0	32.9	-0.4	7.8	-3.2	10.9	7.6
Bank Credit to Public Enterprises	--	-57.7	-20.2	850.8	-4.7	23.6	40.8

BALANCE OF PAYMENTS	1980	1981	1982	1983	1984	1985	1986
	(US$ MILLIONS)						
Exports (g+nfs)	81.0	87.7	102.6	96.7	101.3	123.8	157.1
Imports (g+nfs)	205.6	198.6	258.1	255.7	247.9	223.0	243.7
Resource Gap (deficit=-)	-124.6	-110.9	-155.5	-159.0	-146.6	-99.2	-86.6
Factor Services (net)	-7.1	-20.1	-26.2	-26.4	-26.9	-32.7	-52.4
Current Transfers (net)	47.1	63.7	55.6	51.6	44.4	46.3	66.3
Balance on Current Account	-84.6	-67.3	-126.1	-133.8	-129.1	-85.6	-72.8
Official Capital Grants	35.2	38.5	40.1	39.9	39.8	39.8	39.8
Direct Priv. Foreign Investment	1.1	0.6	1.5	0.4	0.9	1.6	1.5
Net MLT Loans	30.6	22.3	40.7	110.7	81.1	56.1	80.2
Short Term Capital (net)	12.8	12.4	14.5	20.4	2.0	2.3	-1.2
Allocation of SDRs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Errors & Omissions	-1.0	-37.4	-6.1	-23.2	3.6	-2.7	-8.9
Increase in Reserves(-)	-8.0	-31.0	-35.4	14.0	-1.8	11.4	38.7
Petroleum Imports	24.7	32.2	30.1	28.7	32.8	32.3	26.8

RATE OF EXCHANGE	Annual Averages						
	1980	1981	1982	1983	1984	1985	1986
US$ 1.00 = Buf	90.0	90.0	90.0	93.0	119.7	120.7	114.0

MERCHANDISE EXPORTS (AVERAGE 1980-1986)

	US$ Mln.	Percent
Coffee	80.6	87.4
Tea	3.8	4.1
Cotton	1.2	1.4
Other	6.6	7.1
Total	92.2	100.0

EXTERNAL DEBT AS OF DEC. 31, 1986	US$ Mln.
Public Debt, Incl. Guaranteed	526.41
Non Guaranteed Private Debt	--
Total Outstanding and Disbursed	526.41

DEBT SERVICE RATIO FOR 1986 b/	Percent
Public Debt, Incl. Guaranteed	23.2
Non Guaranteed Private Debt	--
Total Outstanding and Disbursed	23.2

IDA LENDING AS OF DEC. 31,1986	US$ Mln.
Outstanding and Disbursed	184.0
Undisbursed	106.1
Outstanding Incl. Undisbursed	290.1

a/ Includes money and quasi-money.

b/ Debt service as a percentage of exports of goods and non-factor services.

BURUNDI

STRUCTURAL ADJUSTMENT AND DEVELOPMENT ISSUES

BACKGROUND REPORT

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INTRODUCTION

1. The last World Bank Country Economic Memorandum (No. 4784-BU) was published in December 1984 and was based on the results of an economic mission which took place in May 1983. The report provided the first assessment of the public investment program included in the Fourth Development Plan (1983-87). Its preliminary conclusions were presented at a donors' Round Table which took place in Bujumbura in January 1984. An update of economic developments was included in the President's Report for SAL I (No. P-4250-BU) distributed to the Executive Directors on April 30, 1986. That report provided the background for the Government's structural adjustment program as well as the details of the proposed policy reforms.

Progress Since Last CEM

2. At the time of the 1983 mission, Burundi's economy was at the peak of an expansionary policy which had begun with the coffee boom in the late 1970s, and had continued through the end of the decade, despite a drastic decline in the terms of trade, brought about by falling coffee prices and higher oil prices. The lack of adequate adjustment policies, together with adverse climatic conditions, precipitated a rapid change in economic performance. GDP, which had grown by more than 6 percent per year during 1978-81, declined in real terms in 1982-83. The external current account balance moved from a surplus during 1977-78 to a deficit of 12.4 percent of GDP in 1983, and foreign exchange reserves fell from 11 months of imports equivalent in 1977 to less than one month in 1982. The situation on the public finance front was also deteriorating rapidly, the overall budget deficit reaching an all-time high of 16 percent of GDP, compared with 6.8 percent in 1978.

3. The last CEM addressed the need for better macroeconomic policies with special emphasis on the composition and level of the public investment program (the main focus of the last CEM), the improvement of producer incentives, and the adoption of prudent budgetary policies. Specific sector recommendations were to (a) review the role of the large Rural Development Companies; (b) improve the research basis on agriculture; (c) reform the incentive structure in order to improve industrial efficiency and promote export-oriented activities; (d) analyze the potential for using domestic energy resources; (e) prepare and implement a program of family planning; (f) concentrate health resources on the needs of the rural population; (g) implement cost recovery mechanisms in social sectors and tap the potential for cooperation between Government and private institutions to ensure maximum coverage of social services within the financial capacity of the Government.

4. In many of these areas, progress has been significant. At the macroeconomic level, the preparation of the Government's adjustment program, based on substantial analytical work, has led to the development of an adequate macroeconomic framework as well as to the identification of policy issues concerning the incentive structure, public resources management, resource mobilization, and trade policies. The ongoing program addresses fundamental areas such as agricultural pricing, trade

liberalization, and tariff reform; improved public expenditures management; rehabilitation of the public enterprise sector; and strengthening the agricultural sector institutional capacity.

5. At the sectoral level, Bank economic and sector work expanded considerably, leading to a better understanding of major sectoral issues and to a closer dialogue with the Government. Sector reports and project preparation work on agriculture (internal sector review dated March 1986, and RDC review, report No.5949-BU, dated November 22, 1985); population/health (internal sector review of September 1985, and PHN project under preparation); transport (sector review dated April 1985); energy (energy assessment report, 1985; and preparation for energy and power project); water supply, telecommunications and technical assistance were instrumental vehicles to address major sectoral issues. For example, the rural development approach based on large rural development companies is being reviewed with Bank support; the Agricultural Support Services Project focuses on the need for more efficient research and extension services; the Forestry project and the energy assessment reports addressed the issues of pricing and use of domestic energy resources. Moreover, a great step forward was made in terms of family planning (which the Bank is supporting through its first PHN project), and commitment of public resources to rural areas. In education, Government's commitment to pursue the objective of universal primary education within the existing financial constraints is much in line with the last CEM's recommendations.

Organization of Present Report

6. The present report reviews past economic developments as a basis to assess the medium- and long-term perspectives of Burundi's economy. It aims at updating the analytical basis for Bank's dialogue with the Government on development options in major sectors (as an input to the next Development Plan) and provides the basis for a medium-term strategy (MTS) which will serve as an input for Bank's country strategy in Burundi and for aid coordination. Some policy issues will provide the basis for a Second Structural Adjustment operation.

7. The report is organized as follows. Chapter I contains a review of major economic developments, both at macro and sectoral level. It describes the main problems facing Burundi's economy during 1983-86, as well as the objectives and broad strategy of the Government Structural Adjustment Program. Chapter II focuses on the long-term aspects in key sectors such as agriculture, urban development, employment, export promotion, small enterprises, and social sectors. Chapter III presents two alternative macroeconomic scenarios covering the 1987-96 period, with particular attention to the external aid requirements. In addition to the Statistical Appendix, several annexes are included. Annex I includes the details of demographic projections prepared under different assumptions of fertility rates. Annex II is a technical note on Burundi's export competitiveness. Annex III addresses some trade promotion issues. Annex IV provides an updating of the last energy assessment report.

CHAPTER I

RECENT POLICY REFORMS AND ECONOMIC PERFORMANCE

A. An Overview of Recent Policy Reforms

1.1 The Government of Burundi has adopted major reforms in its macroeconomic and sector policies during the last year. The thrust of these policies has been to reduce administrative controls and liberalize the economy, to improve the efficiency in resource allocation and to better utilize public resources. Such reforms were the first steps of Burundi's structural adjustment effort.

2. With the change in government in September 1987, support for the economic reform has been strengthened. In the field of rural-urban linkages there is strong new support for orienting agricultural production towards the market, providing non-agricultural employment, and increasing the monetization of the rural economy. The construction of infrastructure facilitating marketing, improved incentives for artistans, and the development of secondary urban centers is also being encouraged. In the area of agriculture, the Government's emphasis on improving input supply and services, promoting the diversification of exports, and stimulating production through the development of decentralized urban centers also reinforces the adjustment program.

Background

1.3 Due to a combination of favorable factors in the mid-1970s -higher coffee prices, increased foreign aid, political stability since 1976 - economic performance during the 1978-81 period (covered by the Third Development Plan) was largely positive. Despite the disruptive effects of the Tanzania/Uganda war on the supply of essential imports, real GDP growth averaged 6.6 percent per year during this period, investment rose to 14 percent of GDP (compared with 8 percent in the preceding period), and manufacturing output grew by 14.6 percent per year. Transport infrastructure expanded considerably and now encompasses a road network which is basically adequate to the country's needs. Power generating capacity almost doubled.

1.4 Developments were not as positive in other areas. The deterioration of the terms of trade (45 percent between 1978-81), due to the decline of coffee prices, oil price increases and accelerating international inflation, together with expansionary fiscal and monetary policies, led to serious domestic and external financial imbalances. Between 1978 and 1983 (the first year of the Fourth Development Plan), the external current account deficit increased from 5 percent of GDP to 12 percent; and the budget deficit from 7 percent to 16 percent. Inflation ran at 15 percent a year. The exchange rate of the Burundian franc, pegged to the U.S. dollar at the same rate since 1977, appreciated rapidly. At end-1983, public domestic debt had increased by 32 percent; public external debt (DOD) had reached US$292 million, or ten times the 1977 level; and the Government had domestic arrears equivalent to 30 percent of total expenditures. To control the increasing deficit in the balance of payments, administrative controls and quantitative restrictions were

imposed on imports and foreign exchange allocation. Moreover, price controls were enforced for imported and domestic goods. This network of controls had adverse effects on the economy: it led to a system of distorted prices, high rents accruing to importers, weak incentives to invest in productive sectors, and a slowdown in economic activity.

1.5 At the end of 1983, the Government took some adjustment measures. The currency was depreciated by 30 percent against the US dollar; producer prices of the main export crops were increased (coffee by 9 percent; tea by 50 percent; and cotton by 17 percent); some tax rates (on beer, transaction tax) were raised; public wages were frozen; and an effort was made to reduce both recurrent and capital public expenditures. The impact of these measures was felt in 1984. While government revenues increased significantly due to higher coffee revenues (in part because of the devaluation), imports restrictions hindered the output of the modern sector. In addition, climatic conditions were extremely adverse: a prolonged drought led to a reduction in agricultural value added of over 5 percent and a decline in real GDP of 1 percent. The inflation rate approached 15 percent.

Table 1.1: BURUNDI - MAIN ECONOMIC INDICATORS, 1978-87

	1978	1981	1982	1983	1984	1985	1986	1987 (est.)
As % of GDP								
Exports	12.3	9.1	10.1	8.9	10.3	10.8	12.1	8.7
Imports	20.5	20.5	25.5	23.6	25.1	19.4	18.7	21.5
Current Account	5.1	6.9	12.4	12.4	13.1	7.4	5.6	11.9
External Debt (DOD)	6.8	15.9	19.7	27.1	33.5	38.5	40.4	48.0
Gov't. Revenues a/	17.1	13.3	15.4	12.8	14.4	14.2	16.0	13.9
Current Expenditures b/	11.7	12.2	13.5	11.7	12.4	11.7	12.1	12.7
Capital Expenditures b/	12.1	12.1	13.4	17.2	15.0	11.3	11.4	12.5
Total Gov't deficit	6.8	11.1	11.5	16.1	12.9	8.8	7.5	11.3
Fixed Gross Investment	14.3	13.6	15.1	19.3	17.6	14.3	12.9	17.5
As % of exports								
External Debt	47.8	179.3	195.7	302.1	297.3	348.1	292.8	485.0
Debt Service	4.6	10.9	10.7	12.5	18.5	23.9	23.2	38.4
Terms of Trade (1978=100)	100.0	55.9	57.6	71.5	75.6	69.5	83.4	65.1
CPI (annual change %)		13.3	5.7	8.3	14.4	3.7	1.8	5.5
GDP f.c. growth (%)	0.9	14.3	-5.3	2.7	-1.0	5.9	3.3	4.5
GDP m.p. growth (%)	-1.1	10.3	-3.0	1.1	3.0	4.2	4.6	1.7
GNP per capita (US$)	148	225	228	237	210	238	259	253

a/ Excludes foreign capital grants.
b/ On a cash basis.

1.6 The economic situation recovered in 1985. Despite a slowdown in public investment, GDP growth reached 4.2 percent due to a substantial recovery in agricultural value added and expansion of new manufacturing units. The balance of payments improved as well. The current account deficit declined from 12.0 percent of GDP in 1984 to 7.4 percent in 1985, due largely to a significant increase in coffee exports and a reduction in imports as a result of tight import restrictions.

1.7 The growth of real GDP in 1986 accelerated slightly to 4.6 percent. The inflation rate was reduced to a record low of 1.8 percent - the combined effect of good agricultural production and reduced trade margins. The economic situation shows some signs of weakening in 1987. Although the GDP growth rate (at factor cost) will very likely be maintained at about 4.5 percent, the external current account deficit is expected to double to about 12 percent of GDP as a result of an import growth of 20 percent and an export decline of 14 percent. The domestic inflation rate is estimated to increase from 1.8 percent in 1986 to 5.5 percent in 1987, while the debt service rises from 23 percent to 38 percent of exports. These developments are examined in greater detail later in this chapter.

Adjustment Policies

1.8 Faced with serious external and domestic imbalances, the Burundian Government requested assistance from the Bank and the IMF at the end of 1984 to help prepare and implement a coherent reform program with the dual objective of restoring financial equilibria in the short-term, and initiating medium- and long-term structural change in the economy. Preparatory work was initiated mid-1985 and the first measures were implemented in July 1986.

1.9 The main elements of the short-term financial program included: the adoption of a flexible exchange rate policy and prudent financial policies compatible with the objectives of: (i) reducing the budgetary deficit; (ii) maintaining an external balance compatible with the availability of concessional foreign aid and the need to reduce the debt service ratio; (iii) avoiding inflationary pressures; and (iv) increasing credit to the private sector. In July 1986, the exchange rate was adjusted by 15 percent in terms of the SDR. Since then, regular monthly adjustments have been made to correct for the appreciation in the real effective exchange rate which had occurred over the past few years. Between July 1986 and March 1987, the currency had depreciated by 23 percent against the SDR.

1.10. To improve resource mobilization, the previous turnover (transaction) tax was replaced by a single-stage sales tax applied to domestic goods and services and imports, and its rate was raised from 6 percent to 12 percent. Tax collection was also improved, and the exemptions granted under the Investment Code were revised. Targets were set for the growth of recurrent expenditures, payment of domestic arrears, and the size of the public investment program. The objectives set for recurrent expenditures and payment of arrears were met. However, as coffee revenues were lower than expected (due to lower world prices and lower volume exported), public revenues and savings were also lower than anticipated -- by 16 percent and nearly 40 percent, respectively. This, in turn, affected the capacity to reduce Government's domestic debt: repayments to the central bank reached FBu 2.4 billion, less than half the amount expected. However, progress was made in other areas: credit allocation policies were streamlined, and interest rates were raised to positive real levels.

1.11 The medium-term structural adjustment program has been designed to rationalize the incentive system (through reducing administrative controls and liberalization of the economy) and to improve the efficiency of resource allocation as well as the utilization of public sector resources. In the process, the Government has implemented major changes in trade and industrial policies and taken important steps to strengthen public expenditure management and reform the public enterprise sector.

1.12 Deregulation. The first steps towards economic deregulation were in the areas of import licensing and price determination. At present, most import licenses are granted automatically, except for a limited number of luxury goods and 3 groups of local manufactured goods, subject to temporary quantitative restrictions. The regulations on the trader profession have been abolished, eliminating the provisions which had led to monopolization. Most price controls have been removed. For eight strategic products (salt, cement, sugar, etc.), prices can be submitted to a ceiling (for no more than four months), to offset possible speculation caused by acute shortages or temporary import difficulties. The new pricing policy applies to the public enterprises as well, except in those cases involving social services and natural monopoly where public intervention is needed.

1.13 Production incentives. The measures were complemented by a set of incentives designed to stimulate investment and production in productive sectors. The Investment Code was revised, now providing automatic incentives to all investors, Burundian and foreign, who meet specified criteria (concerning the utilization of labor and the rate of return), and the exclusive local market guarantee was eliminated. Because incentives are provided mainly in the form of income tax relief, rather than exemption of import duties (as in the previous Investment Code), only businesses that are financially profitable will benefit. Other incentives include elimination of all export taxes on manufactured goods; the reactivation of the drawback system; and an increase in producer prices of major export crops. Measures were taken to simplify the credit allocation system, and a Guarantee Fund was reactivated to support small investors.

1.14 The Government restructured import tariffs with a view to reducing the high rates of effective protection enjoyed by many import-intensive industries and providing a basic rate of protection for production of intermediate goods based on domestic resources. To this end, the number of duty rates was reduced from 57 to 5; a minimum duty of 15 percent (to be raised to 20 percent in January 1988) was introduced on all imports, and the maximum duty was reduced to 100 percent (applied to luxury goods). Non-luxury goods are now taxed at the range of 15-50 percent. This range will be narrowed in 1990 to 15-40 percent. For a few cases in which higher rates might be necessary to protect industries of national interest (notably infant industries), selected enterprises can be granted a temporary relief in the form of an import surcharge (with a maximum rate of 30 percent) levied for a maximum period of three years. The rate of the import surcharge will be gradually reduced during the three year period.

Table 1.2: BURUNDI - INCENTIVES, 1981 86

	1981	1982	1983	1984	1985	1986
Real effective exch. rate (1980=100)/	118.4	129.7	139.0	126.7	127.7	104.2
Real interest rate	1.1	7.3	4.5	-1.3	9.4	11.0
Real deposit rate	1.1	-5.0	1.2	-7.4	3.3	7.5
Producer prices/export prices: (in percentage)						
Coffee	69.0	65.3	57.5	48.0	49.9	47.6
Tea (dry leaves)	49.5	41.0	42.6	23.5	30.7	39.1
Cotton fiber	78.8	70.1	64.6	41.2	50.0	80.0

1.15 Institutional Reforms. Important measures were implemented to improve the allocation of public resources and the efficiency of the public enterprise sector. Concerning public expenditures management, the Government has reduced the public investment program under the Fourth Development Plan (1983-87) to make it compatible with the overall macroeconomic and financial program. (This implied a reduction of about 30 percent in nominal terms from the level under the Third Plan.) The allocation to priority sectors, notably agriculture, was maintained and priority was given to completion of ongoing viable projects and the beginning of high priority projects. The preparation of a three-year public expenditure program was initiated to provide a tool for the preparation of the annual budget. The capacity to prepare and appraise projects is being strengthened. A Public Debt Management Committee has been created to ensure that new foreign loans are at concessional terms.

1.16 Concerning the public enterprises sector, the Government has created an oversight agency to coordinate the rehabilitation program for the sector and follow-up on its development. This Service in Charge of Public Enterprises (SCEP) has already begun helping in the preparation of rehabilitation programs for five priority enterprises: CADEBU (savings), OTRACO and OTRABU (transport), ONAPHA (pharmaceuticals), and Verrundi (glass products). Those rehabilitation programs would be the basis for "performance contracts" to be negotiated between the Government and the enterprises concerning the policies and objectives to be pursued by the enterprises and the financial assistance to be made available to support their rehabilitation effort. To this end, the Government has established an Intervention Fund. Moreover, four enterprises facing serious financial problems were closed: SOBECOV (foodcrops commercialization), SUPOBU (fishing), AGRIBAL (Agriculture), and SOMEBU (studies). The research department of LAPHAVET (production and research of veterinary products) has been re-integrated in the public administration. Finally, most prices have been deregulated and the public enterprises are now expected to operate under the same market conditions as the private sector.

1.17 Particular attention was given to the coffee sector, the main source of export revenues. Measures were taken to reduce the moisture content of the fully washed coffee (para. 2.14), and efforts are being made to improve quality, study the economic and financial aspects of the coffee pricing policy, formulate a strategy for coffee production, and review the

sliding scale (echelle mobile).[1] The agricultural institutional framework is being reviewed, in particular in which concerns the role of the Regional Development Companies (RDCs). Their multiple functions, which included provision of social services, infrastructure maintenance, commercial activities and agricultural extension, are being streamlined in order to increase their efficiency and ensure financial sustainability in the long-run.

1.18 The economic policies and institutional changes which have taken place under the Government's adjustment program represent a fundamental change in the basic economic environment conducive to growth and development. These measures have helped to reduce distortions in the incentive structure and will favor a more efficient allocation of resources and production factors, in line with Burundi's resource endowment. They also provide the flexibility for domestic prices to respond to changes in domestic and external supply and demand conditions. These reforms should enable the economy to proceed to the next stage of adjustment, namely, the reorientation of productive activity in accordance with comparative advantage.

B. Recent Economic Performance

Sector growth and policies

1.19 Production. The relatively good performance of the Burundian economy during 1978-81 (Table 1.3) was attributable to (i) good climatic conditions (hence good agricultural performance and an excellent coffee crop in 1981); (ii) rapid growth in the manufacturing sector, which benefitted from the coming on stream of some large projects (e.g., COTEBU, textiles, expansion of the brewery) and the expansion of domestic demand as a result of an increase in public wages in 1981; and (iii) the rapid expansion of the public administration sector -- by 13 percent per year. Economic growth slowed down markedly in 1981-84 as a result of two bad agricultural years (1982 and 1984), cuts in public investment in 1984, and decline in domestic demand following the application of strict public wage policies. In 1985-86, GDP growth recovered again to reach an annual average of 4.2 percent. This is explained by the good climatic conditions, recovery of agricultural output, expansion of manufacturing activities (glass bottles, second brewery, expansion of textiles output), recovery of construction activities, and increase in public investment in 1986. The GDP structure has undergone little change: agriculture still contributes to more than half of GDP; and manufacturing's share of GDP increased only from 3 to 4.4 percent between 1977-86.

1/At present, all agents intervening in marketing and processing of coffee are remunerated on the basis of a cost-plus price. Budget revenues are perceived as residual, absorbing the fluctuations in the international price for coffee.

Table 1.3: BURUNDI: GROWTH AND COMPOSITION OF GDP, 1976-86

	Rate of growth (%)					As % of GDP			
	1976-81	1981-84	1985	1986	1987 a/	1976	1982	1986	1987 a/
Agriculture:	6.6	-3.8	8.0	3.2	4.7	54.9	52.6	51.5	54.9
coffee	34.5	-18.4	34.1	2.2	6.7	6.4	3.7	4.3	4.3
Manufacturing	14.6	8.2	16.8	0.8	4.8	3.3	4.3	4.4	4.4
Construction	2.2	3.0	-10.0	9.9	5.0	2.0	3.8	3.0	2.9
Services	7.0	2.6	1.1	3.5	4.2	21.0	25.6	28.4	28.5
Government	12.5	2.3	1.5	3.4	4.5	4.9	12.4	12.0	12.1
GDP market prices	5.1	0.3	4.2	4.6	4.5	100.0	100.0	100.0	100.0
GDP factor cost	6.6	-1.3	5.9	3.3	4.5	88.7	92.5	91.0	90.9

a/ Preliminary
Source: Statistical Appendix, Tables 2.1 and 2.2.

1.20 Agriculture. Agricultural output has shown large fluctuations, mainly due to changes in weather conditions (Table 1.3). Since 1970, per capita production increased by about 0.2 percent per year. Government policies have been characterized by non-intervention in the determination of food prices but close control over cash crops, both in terms of price determination and marketing, as well as in monitoring of plantation and maintenance activities, in the context of agricultural extension services. Producer prices for cash crops remained unchanged between 1976-1984, leading to an erosion in producer incentives. This situation has since been reversed: producer prices for the main cash crops (coffee, tea and cotton) were increased in 1984 and 1986, leading to some catch-up in real purchasing power. The sector remains essentially subsistence oriented: only 30 percent of the agricultural production is commercialized -- even less (17 percent) when export crops are excluded. Chapter II reviews the evolution of the sector in detail.

1.21 Notwithstanding the relatively good performance of the sector, the development of the Burundian agriculture faces serious constraints. Besides the limited land still available for cultivation (about 25 percent of total arable land, but of poor quality), farmers' revenues are very low: about US$670 per year (with each household averaging 8 people) of which less than 20 percent is monetary income. This limits the capacity to purchase such cash inputs as fertilizers and the possibility of increasing productivity per farmer. The allocation of budgetary resources to the agricultural sector has also been inadequate: during the last five years, less than 3 percent of total recurrent expenditures went to agriculture. Essential infrastructure, research and extension services have suffered, and suitable technical packages adapted to local conditions have not been developed. Imports and distribution of fertilizers have been monopolized by some parastatals (OCIBU and RDCs) within a system of administered pricing and allocation which stifled efficiency and did not satisfy demand for fertilizers. Finally, agricultural planning and project implementation suffer from lack of clear performance objectives, targets and accountability. Aid coordination is poor, which tends to hinder the impact of a multitude of agriculture projects being financed.

1.22 Coffee. Vulnerability to fluctuations of output and prices of coffee is the single most important feature of the Burundian economy -- coffee accounts for 80 percent of export earnings and about 20 percent of Government revenues. Incentives are given to producers to continue planting new trees, and improve pruning and maintenance, through extension services particularly focused on ensuring that the required new planting is undertaken, that no trees are removed and that tree care is adequately carried out. Production has fluctuated in a two-year cycle, along a positive trend: annual production during 1981-85 averaged 32,000 tons, compared with 22,000 tons during 1975-80. Burundi has invested in the construction of washing stations to improve the quality of exported coffee. In 1983, Burundi's fully washed Arabica coffee (FWA) received a premium of 18 percent over the export price of its partially washed coffee. In 1985, this premium had eroded to less than 4 percent, due to declining coffee quality (because of high levels of humidity) and weak management capacity of the coffee marketing board (BCC). The Government has taken steps to reduce the humidity content of fully washed coffee from 13 percent in 1985 to 10 percent in 1986 and has prepared an action plan to improve processing and marketing as well as to establish a long-term strategy for coffee production, taking into account the opportunity costs of further expansion of coffee plantings and the outlook for coffee international prices.

1.23 Manufacturing. Burundi has a small industrial sector. Manufacturing accounts for less than 5 percent of GDP. During the Third Plan period, manufacturing was the fastest growing sector (14 percent per year in real terms) due to Government's policy of encouraging industrialization by heavy protection and direct public sector investment. The thrust was mostly on the production of consumer goods (beer, cloth, and some intermediate goods relying heavily on imports). The growth rate decelerated during 1981-84 to 8 percent per year, in part reflecting the slowdown in investment in large projects, controls on foreign exchange, and reduced domestic demand. It reached a high 16.8 percent in 1985 as two new projects came on stream (a second beer plant, and a plastic case factory), COTEBU increased its production, and the new bottle glass factory doubled output. Growth slowed considerably in 1986 to about 1 percent but increased again to almost 5 percent in 1987. Past industrial policies embodied in an overvalued exchange rate, duty-free imports of capital goods and negative real interest rates encouraged the use of capital intensive processes, the establishment of large-scale plants and high dependence on imported inputs and spare parts. On average, manufacturing enterprises import about 50 percent of their inputs. This situation, coupled with shortages of foreign exchange in recent years, led to a low capacity utilization rate which stood at about 30 percent during 1980-85.

1.24 Until recently, the high levels of protection to import-substitution industries and the absence of competing imports have discouraged exports. The depreciation of the FBu in late 1983 and mid-1986, together with the flexible exchange rate policy now in place, has had a positive effect on manufactured exports. While still small, their share in total exports has increased from about 1 percent during 1977-80 to 5.6 percent in 1986 and an estimated 13 percent in 1987. The principal manufactured goods exports include beer, glass bottles, cotton cloth, tobacco, and asbestos products.

Investment and Savings

1.25 The Government's Third Development Plan aimed at raising Burundi's investment rate through direct public investment, in part to offset the perceived lack of private sector participation. This tendency was specially visible during the period 1981-84 when public investment grew by 12 percent in real terms. Since 1984, public investment has declined slightly, and in 1986 its share of total investment stood at 81 percent, compared to 87 percent in 1983. The share of the public enterprise sector has been maintained at about 40 percent of total investment. In terms of structure (Statistical Appendix, Table 2.5), the rural sector absorbed about 15 percent of total investment until 1984, 20 in 1986 and 26.6 percent in 1987; the share of mining, industry and energy rose from 23 percent to 37 percent -- mainly because of two large hydroelectric projects; roads declined from 17 percent to 13.8 percent; and social and administrative infrastructure remained at about 21 percent until 1985 but fell to 14 and 13 percent in 1986 and 1987, respectively.

Table 1.4: PATTERN OF NATIONAL EXPENDITURE, 1978-86

	Rate of growth (%)					As % of GDP				
	1978-81	1981-84	1985	1986	1987 a/	1978	1982	1985	1986	1987 a/
GDP, market prices	5.1	0.3	4.2	4.6	4.5	100.0	100.0	100.0	100.0	100.0
Imports	-1.5	13.6	-11.2	-0.3	19.4	20.5	25.5	19.4	18.7	21.5
Exports	7.8	3.6	11.2	-2.9	-13.7	12.3	10.1	10.8	12.1	8.7
Total resources	3.8	2.0	0.5	4.7	9.9	108.1	115.3	108.6	106.6	112.8
Consumption	2.9	2.0	3.1	2.7	1.5	93.9	100.9	94.8	95.9	93.7
Public	1.4	-0.1	2.0	14.0	-4.9	14.0	15.0	12.7	14.2	13.0
Private	3.1	2.3	3.2	1.7	2.8	79.8	85.9	82.1	81.7	80.6
Gross dom. investment	10.4	1.9	-14.5	19.1	84.6	14.3	14.5	13.9	10.7	19.1
Fixed Investment	-1.6	13.4	-9.0	12.0	40.5	14.3	15.1	14.3	12.9	17.5
Public	-5.1	12.0	-10.8	10.1	49.2	13.0	13.8	11.9	10.5	15.1
Private	82.7	23.0	0.8	21.2	2.2	1.2	1.4	2.4	2.4	2.4
Memorandum:										
Domestic savings	10.6	-13.3	4.2	85.1	59.2	6.1	-0.9	5.2	4.1	6.3
National savings:	12.7	-17.3	-3.6	66.5	187.1	9.2	2.0	6.4	5.2	7.2
Public	26.5	-17.7	-7.4	44.5	496.2	4.0	2.3	1.4	3.2	0.2
Private	-14.3	-15.4	11.5	140.0	-106.2	5.2	-0.3	5.0	2.0	7.4

a/ Preliminary.
Source: Statistical Appendix, Tables 2.3 and 2.4.

1.26 Burundi has a comparatively low rate of gross domestic savings around a 4.7 percent of GDP in recent years. [2] Since the late 1970s there has been no noticeable rise in the national or domestic savings rate. Foreign savings have financed more than half of total investment. Public savings (excluding official capital grants) declined rapidly between 1978-

2/This compares with 6 percent for the Sub-Saharan countries as a group; 6 percent for Uganda; 20 percent for Kenya; 15 percent for Zambia; 9 percent for Zimbabwe; and 18 percent for Mauritius.

83 (from 5.2 percent to 1.1 percent of GDP) but, in 1986, increased to about 3.2 percent of GDP, primarily because of higher coffee revenues. Foreign financing available in the form of grants and loans to the Government increased from 6 percent of GDP in 1978 to 12 percent in 1982-83 in line with the increase in public investment; it declined after 1984 following the slow-down in public investment. In 1987, the launching of major public projects (e.g., the SOSUMO sugar project) contributed to a substantial increase in public investment.

Table 1.5: Burundi - MACROECONOMIC BALANCES
(in percentage of GDP at market prices)

	1979	1980	1981	1982	1983	1984	1985	1986	1987 a/
Foreign savings b/	7.5	9.2	6.9	12.4	12.4	13.1	7.4	5.6	11.9
Private sector									
Investment	1.8	1.1	1.6	1.4	2.5	2.7	2.4	2.4	2.4
National savings	4.7	1.6	7.8	-0.3	9.4	8.9	5.0	2.0	7.4
Invest-savings	-3.4	-0.4	-6.1	1.7	-6.9	-1.2	-2.6	0.4	-5.0
Public sector									
Investment	13.7	12.8	15.4	13.1	20.3	15.7	11.4	8.3	16.8
Fixed Invest.	13.7	12.8	11.9	13.8	16.6	14.9	11.9	10.5	15.1
Change in stocks	0.0	0.0	3.4	-0.7	3.5	0.8	-0.4	-2.2	1.7
National savings	2.7	3.1	2.3	2.3	1.1	1.3	1.4	3.2	-0.2
Invest.-savings	10.9	9.7	13.1	10.8	19.2	14.3	10.0	5.2	17.0
Investment-Savings	7.5	9.2	6.9	12.4	12.4	13.1	7.4	5.6	11.9
Memorandum item:									
Share of GDI financed by foreign savings (%)	50.3	66.3	50.9	81.9	64.2	74.5	51.7	43.4	68.1

a/ Estimate.
b/ Current account deficit.

Source: Statistical Appendix, Table 2.3.

The External Sector

1.27 After deteriorating between 1980 and 1984, Burundi's balance of payments improved between 1984 and 1986. The improvement is largely attributable to: (i) the contraction of imports through administrative controls until mid-1986, and (ii) a 17 percent increase in the volume of coffee exported in 1985 and a 50 percent increase in coffee prices in 1986. The impact of the liberalization measures (in effect since August 1986) on the import bill was partly offset by the combined effect of the currency adjustment, the tariff reform (which increased the minimum level of import duties and removed some exonerations), and higher lending interest rates on short-term import credits. These factors led to a decline in the current account from $129 million in 1984 to $76 million in 1986 (5.6 percent of GDP) and to an improvement in the overall balance (Table 1.6). In 1987,

the substantial decline in the coffee world price (almost 50%) led to a deterioration in the external position: the current account deficit is estimated at $157 million (12 percent of GDP). Net foreign exchange reserves at end-1986 covered 2.5 months of imports compared with 0.7 at end-1984.

Table 1.6: SUMMARY BALANCE OF PAYMENTS
(US$ million)

	1977-80	1981	1982	1983	1984	1985	1986
Resource balance	-63	-111	-156	-159	-147	-99	-87
Exports, nfs	91	88	103	97	101	124	157
(coffee)	(74)	(66)	(78)	(70)	(83)	(94)	(114)
Imports, nfs	154	199	258	256	248	223	244
Non-factor services (net)	-11	-20	-26	-26	-27	-33	-40
(Interest)	(2)	(6)	(7)	(8)	(10)	(13)	(17)
Current transfers	36	64	56	52	44	46	66
Current Account	-39	-67	-126	-134	-129	-86	-73
Direct investment	0	1	1	0	1	2	2
Capital grants	24	38	40	40	40	40	40
MLT loans (net)	26	22	41	111	81	56	80
Disbursements	29	26	45	117	90	72	99
Repayments	3	4	4	6	9	16	19
Short-term capital (net)	-4	12	14	20	-2	2	-1
Other capital n.e.a/	-3	-37	-6	-23	4	-3	-9
Overall balance	4	-31	-35	14	-2	11	39
Memorandum items:							
Net reserves as months of imports	8.6	3.0	0.7	1.3	0.7	1.3	2.5
Debt service ratio	5.3	10.9	10.7	12.5	18.5	23.9	23.2
Resource balance/GDP (%)	8.7	11.4	15.3	14.7	14.9	8.6	6.6
Current account/GDP (%)	4.6	6.9	12.4	12.4	13.1	7.4	5.6

a/ Includes short term capital and errors and omissions.

Source: Statistical Appendix, Table 3.2.

1.28 Merchandise imports (Table 1.7) increased substantially in 1982 (by 30 percent in current U.S. dollars) to recover from the abnormally low level in 1981, which was due to the transport disruption associated with the Uganda/Tanzania war that year. In 1983, however, merchandise imports declined (in comparison with the 1981-82 value), following the imposition of restrictions on non-essential imports, and quantitative restrictions on products competing with local manufactures. These affected mainly imports of consumer goods which fell in 1983 by 23 percent (compared with the 1981-82 average). Since 1983, total imports have grown at an average of 3.5 percent, with the share of consumer goods increasing again in 1986. The growth registered in intermediate products is somewhat lower than would be expected on the basis of past growth in secondary production, but this is related to both the low utilization rate of newly-installed manufacturing capacity and under-invoicing (or unofficial) imports, especially for items which were subject to high duties or administrative controls.

Table 1.7: COMPOSITION OF IMPORTS,1977-86

	1977-80	1981	1982	1983	1984	1985	1986	Av.growth 1983-86 real (%)
				(US$ millions)				
Merchandise imports:	122.9	167.0	214.2	183.0	187.0	188.5	203.1	3.5
Structure:				(in percentage)				
Consumer goods	44.8	34.0	37.0	28.1	31.8	29.4	32.8	8.9
(Food)	(11.6)	(11.1)	(11.5)	(8.1)	(9.8)	(8.8)	(8.0)	(2.8)
Capital goods	22.8	20.2	23.8	30.5	25.4	30.7	28.0	1.7
Raw materials	23.1	25.8	25.0	25.8	25.2	23.8	26.0	3.8
Oil products	9.3	20.0	14.2	15.6	17.6	17.1	13.2	-2.1

Source: Statistical Appendix, Table 3.5.

1.29 The country's weak and narrow export base (dominated by coffee) is particularly susceptible to external shocks. Between 1981-86, total merchandise exports grew at an annual rate of 12.3 percent in dollar terms (7.8 percent in volume terms), with 80 percent of the increase coming from coffee. The remainder came mostly from manufactures and tea. Exports of cotton (the main agricultural export after coffee and tea) declined drastically from 2,000 tons in 1982 to 170 in 1986 following the decline in international prices since 1984 which reduced its competitiveness abroad. In 1987, despite a substantial increase in exports of cotton fiber and manufactured products, total exports have declined by 23 percent in dollar value, due to a 40 percent drop in world prices.

1.30 The dependence on coffee makes Burundi's balance of payments quite vulnerable to changes in the quality of this product as well as to adverse developments in transport and marketing. For example, the deterioration of coffee quality has resulted in a decline in the ratio between the export price for Burundi's coffee and the international price -- this fell from 98 percent in 1983 to 84 percent in 1986 (para. 2.24). Also in 1986, Burundi did not profit from an exceptional year of high prices and absence of quotas. Because of difficult transport conditions and a lack of aggressive marketing, Burundi failed to sell a large part of its coffee output. Coffee stocks reached 19,000 tons early December 1986, compared with 8,000 tons in December 1985. Foregone export earnings are estimated in the range of US$10-15 million.

Table 1.8: BURUNDI'S COFFEE EXPORTS AND WORLD COFFEE PRICES, 1980-869

	Exports ('000 tons)	Coffee prices (USc/Kg)			
		World Prices			
		Constant 1/	Current	Burundi	(%)
1980-82	25,359	298	312	272	87.1
1983	24,835	287	290	283	97.6
1984	29,001	320	318	286	90.0
1985	34,097	321	321	273	85.0
1986	28,281	381	429	402	93.7

1/ In 1985 prices.
Source: Statistical Appendix, Table 3.4.

External Public Debt

1.31 Burundi's outstanding external debt, including undisbursed, stood at $868 million at the end of 1986, of which $526 million was disbursed. Of this amount, 67 percent was owed to multilateral organizations, 28 percent to bilateral creditors, and the remaining 5 percent to financial institutions. The World Bank group held 35 percent of total debt at end-1986; the African Development Bank and the African Development Fund, together, held 17 percent. Among bilateral donors, France continues to be the most important creditor (13 percent), followed by China (5 percent) and the Kuwait Fund (5 percent). After increasing substantially between 1981 and 1983 (from U$26 million to US$117 million), net MLT flows declined rapidly to $71 million in 1985 as important projects were completed. In 1986, project-related flows rose to US$85 million. Burundi also received support to the balance of payments: US$22 million from the first tranche of SAL I credit (financed by IDA, Special African Facility, Switzerland and Japan) and US$10 million from the IMF Structural Adjustment Facility. Capital grants have remained at about US$40 million during 1981-85; the increase in dollar terms to US$47 million in 1986 is in part the result of the depreciation of the dollar vis-a-vis the main European currencies.

Table 1.9: STRUCTURE OF NEW COMMITMENTS OF PUBLIC DEBT AND GRANTS
1979-1986
(millions of US$)

	1979	1980	1981	1982	1983	1984	1985	1986
Capital grants	25.4	35.2	38.5	40.1	39.9	39.8	39.8	47.0
Official loans								
Concessional	63.4	105.7	126.3	48.3	53.4	76.1	135.9	78.1
Bilateral	38.7	18.7	25.9	27.6	37.9	19.9	47.6	19.3
Multilateral	24.7	87.0	100.3	20.8	15.5	56.2	88.3	58.8
Non-concessional	0.9	2.8	24.3	12.3	15.0	11.1	-	-
Bilateral	0.9	2.8	0.3	-	-	3.1	-	-
Multilateral	-	-	24.0	12.3	15.0	8.0	-	-
Private loans	1.4	-	6.9	30.1	0.5	-	2.7	-
Suppliers credits	1.4							
Financial institutions			6.9	30.1	.5		2.7	-
Total loans	65.6	108.5	157.4	90.8	68.8	87.1	138.7	78.1

Source: Debt Reporting System and Staff estimate

1.32 Most of Burundi's external debt (96 percent) is the direct obligation of the central Government; only 4 percent of the public debt is the obligation of public and mixed corporations and the National Development Bank. About 85 percent of outstanding debt is on concessional terms.. Non-concessional borrowing occurred mainly during 1981-82, to finance some industrial ventures, but on the whole, the term structure of Burundi external debt was relatively good at end-85: interest rate, 1.5 percent; 38 years maturity; 9 years of grace period - which corresponds to

a grant element of 72 percent. However, due to the non-concessional loans and the bunching of maturities of concessional loans, debt service payments increased from US$10 million in 1981 to US$41 million in 1986, or 26 percent of export earnings. Taking into account the dependence of export revenues on coffee, this ratio is quite high. However, Burundi's debt structure does not lend itself to Paris Club type rescheduling. As indicated below, 41 percent of debt service falling due in 1987 is due to preferred creditors and is not eligible for rescheduling. Debt service owed to Paris Club Countries (Belgium, France, Netherlands and USA) represents about 32 percent of the total debt service. However, of these countries only France, Belgium and Switzerland, sharing 26 percent of the debt service, have used amounts exceeding the normal lowest "de minimus" level (SDR 250,000) for Paris Club Agreements.

Table 1.10: Debt Service 1987 (US$ 000)

	Principal	Interest	Total	Percent
Multilateral	9,441	6,514	15,615	41
Paris Club Debt	7,615	4,719	12,374	32
Other Creditors	8,431	1,675	10,106	27
Total	25,487	12,567	38,095	100

1.33 Debt management. The recently established external debt management committee has played a useful role in debt monitoring, but there are still some weaknesses which need to be addressed. Debt statistics are not centralized in one institution, and the debt aggregates reported vary between institutions. In order to ensure a better coordination and monitoring of the debt strategy, the Government should strengthen the supervision and management capabilities of the current Committee with technical assistance from UNCTAD.

Public Finance

1.34 The adverse external developments of the early 1980s together with expansionary financial policies, led to large budget deficits. In 1983, the first year of the Fourth Development Plan (1983-87), the overall deficit (in cash terms) reached 16 percent of GDP compared with 4 percent in 1978. This resulted from a sharp decline in coffee revenues[3] and the difficulty of compensating for it by increasing revenue from other sources or by sufficiently curtailing the growth of current expenditures. Between 1981-83, recurrent expenditures grew at 15.6 percent in nominal terms (6 percent in real terms) and capital expenditures by 26 percent in nominal terms (17.4 percent in real terms). Instead, Government resorted to borrowing to finance budget deficits (about two thirds of it from external sources and the rest from domestic sources, mainly the central bank), while

3/Until 1980, coffee provided 30 percent of budget revenues. Between 1980-1983, this contribution became marginal due to the decline in world prices.

accumulating arrears. Foreign borrowing reached a record level of FBu 10 billion in 1983 (close to 10 percent of GDP). Domestic borrowing reached 3 percent of GDP in 1983-84.

Table 1.11 SUMMARY GOVERNMENT FINANCE, 1981-86
(in FBu billions)

	1981	1982	1983	1984	1985	1986
Revenues and grants	16.0	17.6	16.6	21.8	24.5	29.0
Revenues	11.6	14.0	12.9	17.0	19.7	23.8
(Coffee)	0.03	0.6	0.2	2.7	3.7	5.6
Total expenditure 1/	21.6	25.4	31.8	31.6	31.6	34.0
Recurrent	10.1	12.7	13.5	14.1	16.1	17.6
Salaries	5.3	5.9	6.0	6.5	7.1	7.8
Goods and services	3.7	5.2	5.3	4.8	3.8	4.2
Transfers and subsid.	1.3	1.1	1.3	1.2	2.2	2.1
Interest	0.3	0.5	0.9	1.6	2.0	2.2
Capital expenditure	11.5	12.7	18.3	17.5	15.5	16.4
Overall balance 1/	-6.1	-7.7	-15.2	-10.4	-5.8	-4.7
Change in arrears	0.8	1.5	2.4	-1.4	-1.6	-1.4
Overall balance (on cash basis)	-5.3	-6.2	-12.8	-11.9	-7.4	-6.1
(before capital grants)	(-9.7)	(-10.5)	(-16.3)	(-15.3)	(-12.2)	(-11.2)
Financing:						
External (net)	2.3	4.3	9.7	8.1	5.3	6.5
Domestic (net)	3.0	2.0	3.1	3.8	2.1	-0.4
As % of GDP:						
Overall deficit 2/						
After grants	-6.0	-7.5	-12.5	-8.9	-5.7	-4.1
Before grants	-11.1	-11.5	-16.2	-12.9	-9.4	-7.5
Recurrent expenditure 2/	12.0	13.4	11.8	12.4	12.6	12.1

1/ On commitment basis.
2/ On cash basis
Source: Statistical Appendix, Table 5.1.

1.35 The situation improved in 1984 and 1985. The overall deficit (on a cash basis and excluding capital grants) fell to nearly 13 percent and 9 percent of GDP, respectively, and arrears began to be paid. This improvement arose from a sharp increase in receipts from coffee export duties (Table 1.11) resulting from the 30 percent devaluation in 1984, and in 1985 from a 17 percent increase in volume of coffee exports together with lower outlays of goods and services. At the same time, capital expenditure declined with the completion of some important projects. In 1986, revenues increased by 20 percent due to the combined effect of several factors: devaluation of the FBu, higher coffee exports, and tariff reform -- which increased the minimum taxes and eliminated some import-duty exonerations granted under the previous Investment Code. Recurrent expenditures expanded by 9 percent and development expenditures by 6 percent, the overall deficit fell to 7 percent of GDP. In terms of the

Government's short-term financial program, the performance targets were met on the expenditure side but not on the revenue one. This divergence, which led to the need to negotiate a new Standby program, was mainly due to lower than expected coffee revenues, not fully offset by adjustments on the expenditure level.

1.36 Public revenue. Burundi's tax effort is comparable with other countries at the same level of development. Tax revenue averaged 12.6 percent of GDP during 1981-82, and has been maintained at a level of 13% between 1984 and 1987. The 14.3 percent rate recorded in 1986 is somewhat exceptional as it is linked to the higher coffee prices and revenues (Table 1.12). This compares with the average 12.5 percent for all Sub-Saharan countries in 1983, but is lower than that of some neighboring countries: 20.2 percent in Zambia, 18.5 in Malawi, 19 percent in Kenya, and 18 percent in Zaire. [4]

Table 1.12 GOVERNMENT REVENUE PERFORMANCE, 1981-86
(in percentage)

	1981	1982	1983	1984	1985	1986
Total Revenue/GDP	18.3	19.3	16.5	18.5	19.0	19.53
Tax revenue/GDP	11.5	13.8	11.8	13.6	14.1	14.3
(without coffee)	(11.4)	(13.2)	(11.8)	(11.3)	(10.5)	(10.9)
Real tax revenue index a/	100	117.8	103.0	120.7	129.9	147.7
Income taxes/noncoffee monetary GDP	6.4	7.1	6.5	6.2	6.0	
Coffee revenue/total rev.b/	0.3	4.1	--	15.7	18.7	21.0
Import taxes/imports of goods	18.7	16.6	16.2	14.5	13.8	19.5
Taxes on domestic goods/GDP	8.0	9.2	8.4	7.9	8.0	9.2

a/ Deflated by GDP deflator.
b/ Excluding grants.

Source: Statistical Appendix, Table 5.1.

1.37 Taxes on incomes have shown low buoyancy with regard to monetized GDP. Indirect taxes (taxes on domestic goods and services and on international trade) are the major source (70 percent) of government revenues. The most important taxes on domestic trade are the transaction tax and the tax on beer, which account together for 35 percent of total tax revenues. In the past, Government used the beer tax as a vehicle to raise revenues as needed. However, due to the high price elasticity of demand, the last increase in 1983 (43 percent) had to be reversed, as it led to a sharp drop in beer consumption and eventually to a decline in total receipts collected. Until recently, the transaction tax was imposed on all transactions; it led to a high cascade effect (sometimes to 25 percent) and had limited coverage. In the context of the financial program, the Government has undertaken to reform this tax. Since August 1986, the tax is levied at one stage only: at the wholesale level for all imports and at the

4/Source: IBRD, World Development Report, 1986.

factory level for local manufactured goods. Its rate went up from 6 to 12 percent. Revenues from import duties have fallen 19 percent of import value in 1981 to less than 14 percent in 1985, as the result of a change in composition of imports towards goods with no or lower tariffs (capital goods which were exempt under the Investment Code). The recent tariff reform which increased the minimum import duties rates and eliminated part of the exemptions is expected to lead to an increase in the tax base.

Table 1.13 STRUCTURE OF GOVERNMENT RECURRENT EXPENDITURES, 1981-86
(in percentage)

	1981	1982	1983	1984	1985	1986 (Prov.)
Economic Classification						
Wages	52.7	46.8	44.7	45.8	47.9	45.6
Operating expenditures	24.8	23.9	17.1	19.6	25.7	24.8
Transfers subsidies	12.9	8.8	9.3	8.8	12.2	10.7
Debt (interest)	2.8	3.6	6.3	11.0	13.4	12.5
Other non-wage expend.	6.8	16.9	22.6	14.8	0.8	6.4
Functional Classification						
Directly Productive	5.5	6.0	5.2	4.4	3.9	4.6
Agriculture	(5.2)	(5.7)	(4.9)	(4.2)	(3.7)	(4.3)
Infrastructure	10.0	8.0	5.3	4.0	6.3	7.0
Energy, mining	(7.5)	(6.1)	(3.7)	(2.8)	(4.1)	(4.4)
Roads,transport	(2.5)	(1.9)	(1.6)	(1.2)	(2.2)	(2.6)
Social Services	29.4	27.8	28.6	27.2	28.5	36.2
Education	(22.8)	(21.4)	(22.4)	(20.7)	(21.2)	(28.7)
Health	(5.4)	(5.3)	(5.2)	(5.5)	(6.2)	(7.7)
Administrative a/	55.1	58.2	60.9	64.4	61.3	52.2

a/ Includes military related expenditures.

Source: Statistical Appendix, Tables 5.1 and 5.2

1.38 Public expenditure. Roughly half of Burundi's budgetary resources have been absorbed by recurrent expenditures, and half by development expenditures. Recurrent spending (on a cash basis) has been on the order of 12-13 percent of GDP. The major item has been wage payments (accounting for 45 percent of the total), followed by operating expenditures. Increases in the wage bill have resulted from "wage drift" due to normal promotions within the wage scale (every 2-3 years), the automatic annual increase of 3 percent, and from new hirings. The number of non-military personnel grew at a rate of 1.5 percent per year from 1981 to 1984, the net result of an increase in permanent staff of 7 percent p.a. and a reduction of about 22 percent in temporary (sous-contract). In 1985 non-permanent staff declined by 5 percent and permanent staff increased by 9 percent; in 1986, permanent staff increased by 2.3 percent, non-permanent staff remained the same. Most of the these increases were absorbed by the Ministry of Education: larger number of teachers were recruited in line with the Government's objective of extending universal primary education. Debt service payments (interest) have risen fast, representing 13 percent of recurrent expenditures in 1986. Part of these debt payments were made

on behalf of public enterprises. Efforts are underway to make public enterprises responsible for the payment of their own debt.

1.39 In terms of functional classification, the share of expenditures on productive services (e.g., agriculture, industry and commerce) and infrastructure is small and has declined from 15.5 percent in 1981 to 10.2 percent in 1985. This development raises concerns about the Government's ability to ensure adequate maintenance and rehabilitation of the country's physical and social infrastructure which continues to absorb a large share of governmental development expenditures (Table 1.14). It also shows the relatively larger weight of administrative, political and military expenditures on the recurrent budget.

1.40. Capital expenditures grew rapidly until 1983 but declined in nominal terms between 1983-85 -- capital outlays are particularly sensitive to fluctuations in revenues and are also influenced by the availability of foreign aid. Capital expenditures have ranged between 45-55 percent of total central government expenditures. They have been financed increasingly by foreign aid, whose share went up from 40 percent in 1981 to 83.2 percent in 1985. In terms of structure, infrastructure projects, notably by transport and energy, have the largest share -- about 50 percent. This proportion has declined in the investment program for 1987-89 (see Chapter III), infrastructure projects giving way progressively to agriculture investments. The share of industrial investments increased significantly in 1986 due to three important projects: SOSUMO, a new tea factory and extension of COGERCO (cotton).

Table 1.14 STRUCTURE OF GOVERNMENT CAPITAL EXPENDITURES, 1981-89
(in percentage)

	1981	1982	1983	1984	1985	1986 (Prov.)	1987-89
Directly productive	19.0	24.7	20.6	19.8	24.6	46.0	45.0
Agriculture	15.1	21.8	12.5	15.1	23.2	30.3	36.5
Industry	4.7	2.9	8.1	4.7	1.4	15.7	8.5
Infrastructure	43.3	46.2	49.2	48.0	51.6	40.2	43.9
Transport/power	36.2	37.9	41.7	44.7	47.8	36.8	39.4
Water supply/housing	7.1	8.3	7.5	3.3	3.8	3.4	4.5
Social service and administrative infrast.	36.9	29.1	30.2	32.2	23.8	13.8	11.1
Memorandum item: Sources of financing							
Domestic	59.0	37.9	30.2	11.0	16.5	22.1	20.0
Foreign grants	30.2	28.4	20.3	27.3	30.2	31.7	30.0
Foreign loans	10.8	34.5	49.6	51.8	53.3	50.6	70.0
Index capital expendit.a/	100.0	103.7	138.2	114.5	98.8	97.8	..

a/ Deflated by GDP deflator.
Source: Statistical Appendix, Table 2.5

1.41 The Fourth Development Plan (1983-87) was planned to involve investment expenditures of about FBu 129 billion (in 1984 constant prices) or about FBu 26 billion per annum, for an estimated 460 projects. About

half of this amount would be for 27 large projects. During the 1983-86 period, actual spending was lower than what had been planned: FBu 17.0 million in constant 1984 prices. In the context of its financial adjustment program, the targets of capital expenditures for 1986-87 were reduced by 30 percent, i.e. to an average of Fbu 17 billion per year. The investment program was cut in a rational manner, maintaining the allocations to the key sectors, notably agriculture (30 percent of the total investment). The completion of ongoing viable projects and the beginning of high priority projects has been given the highest priority in the exercise.

1.42. Important steps have been taken to reinforce the management of public expenditures, notably to (a) improve the capacity to appraise development projects, based on common criteria and guidelines; (b) adopt a unified system of budget preparation (which would replace the present Ordinary/Extraordinary Budget classification); (c) prepare a comprehensive three-year public expenditures program (PEP) including recurrent and capital expenditures; (d) identify within the public investment program a "core" program of projects of highest priority for which full funding would be assured; and (e) assure the following in establishing the investment program: (i) it must not lead to a level of indebtedness that could jeopardize the country's creditworthiness; (ii) the contribution of the central government budget should not require recourse to bank credit; and (iii) its foreign currency component would be financed through grants or concessionary loans.

Monetary Policies

1.43 Monetary and credit developments have been mostly dependent on the evolution of the budget deficit and the coffee sector, which absorbs more than 30 percent of total credit and can produce large oscillations in money supply. Since 1981, broad money increased in line with the trend of nominal GDP, around 10 percent per year. In 1982, the deterioration in the banking system's net foreign assets position contributed to the slow growth in money supply. The latter accelerated in 1983 and again in 1985 when credit to Government expanded by 14 percent and foreign assets increased by 65 percent. Bank credit to parastatals rose significantly between 1981 and 1985. Credit to the private sector other than parastatals actually declined by 25 percent between 1981-85.

1.44 Despite an array of monetary/credit policy instruments, the stance of policy in recent years has been to accommodate the expansive government budgetary policies and the resulting high levels of domestic liquidity. Interest rates, unchanged in nominal terms since October 1981, have been revised in August 1986, with the objective of bringing them to a real positive level. Assuming that domestic inflation would reach 10 percent in 1986, the interest rate of deposits at more than one year was raised by 6 percent. The adjustment in the other rates included: an increase in the minimum lending rates between 0.5 and 6 percentage points for rediscountable credits and between 0 and 4 percentage points for non rediscountable credits. The lending rates to industry were lowered by 3 percentage points in order to stimulate activity in the sector. BRB also increased its rediscount rates by 1 to 5 percentage points, with the exception of short-term credit to industry whose rediscount rate declined

by one percentage point. The deposit rates were also modified: minimum deposit rates were raised by 3 to 5 percentage points from a range of 4.5 to 8.5 percent to a range of 8 to 13 percent. A minimum 3 percent interest rate was imposed on sight deposits. (Statistical Appendix, tables 6.6, 6.7)

Table 1.15 MONETARY INDICATORS, 1981-86
(Annual percentage change)

	1981	1982	1983	1984	1985	1986
Net foreign assets	-42.6	-75.7	114.3	-15.9	65.0	178.6
Net Domestic Assets	42.0	11.7	18.4	5.4	16.0	-5.3
Claims on Government	58.3	29.6	30.4	13.7	12.1	-11.4
Claims on private sector	32.9	-0.4	8.9	-3.2	10.9	1.0
Broad money	25.1	-1.0	26.4	2.3	20.0	3.3
Money	16,7	-6.3	19.6	7.3	24.9	..
Quasi-money	66.8	17.2	45.3	-6.4	7.1	..
Selected indicators:						
Broad money/GDP (%)	17.7	17.0	19.6	16.9	18.6	17.7
Bank credit/GDP	20.0	21.2	22.0	20.4	21.7	19.2
Index of real broad money	100.0	93.4	108.8	97.5	112.7	111.4
Index of real credit	100.0	103.6	108.4	104.2	116.6	106.8
Gov't share on credit	41.0	48.7	56.1	56.0	55.0	51.9
Parastatals share on credit	2.8	2.1	6.8	17.3	18.4	..

Source: Statistical Appendix, Table 6.1.

1.45 The monetary system has kept very high levels of liquidity. Refinancing declined from 26 percent in 1981 to a negligible level in 1985-86. Private sector financing is dominated by short-term credit (60 percent), mostly to finance the coffee campaign and import credits. Long-term credit is devoted mostly to civil engineering works under procurement with the Government. Agriculture represents less than 3 percent of total credit to the economy. The change in interest rates in August 1986 had a substantial impact on the structure of deposits, as the commercial banks were reluctant to accept/renew term deposits due to the new higher rates and the slack in demand for credit at the new lending rates. Term deposits actually declined by 25 percent between end-1985 and end-1986, while sight deposits increased by 13 percent. The structure of credit changed in favor of short-term deposits (66 percent at end-1986) due to the financing of coffee stocks. Medium and long-term credit increased by 5 percent in relation to end-1985. In May 1987, the interest rates were revised downward to about the same levels preceding the 1986 reform.

1.46 In the context of the first phase of its structural adjustment program (SAP), the ceiling above which the commercial banks need authorization from the central bank was raised from FBu 3 million to FBu 10 million. The system continues, however, to be highly regulated. Besides the large number and widely dispersed interest rates (37 rates), credit policy toward the private sector is regulated by: (i) quantitative limits

imposed on credit extended by commercial banks to enterprises; (ii) a liquidity ratio; (iii) a ratio of bank resources allocated for medium-term loans that can be rediscounted by the BRB; (iv) a coefficient of individual bank's own working capital; and (v) risk centralization. Commercial banks have also to submit monthly statements showing the credits extended to the private sector, classified according to the nature, maturity and beneficiaries. All these regulations have an adverse effect on the efficiency of the financial sector and may hinder the successful implementation of the Government's adjustment program. In the short run, there is a need to review the level and structure of interest rates, to make them more coherent with supply and demand for money, and provide the necessary incentives for private investment. An overall review of the present regulations is also necessary to improve efficiency of the sector and make it consistent with the ongoing liberalization process. This is discussed further in Chapter II.

Prices and Price Determination

1.47 After a period of rapid inflation during 1978-80 (about 20 percent per year), the rate of inflation decelerated to 13 percent in 1981 and 7 percent in 1982-83, as a result of a slow- down of international inflation and a modest increase in food prices -- food accounts for 50 percent of the consumer price index (CPI). In 1984, the inflation rate soared again to (14 percent due to: the excess liquidity built during 1983, the downturn in agricultural output, and the general increase in prices of imported goods following the late-1983 devaluation. In 1985, prices moved moderately (by 3.7 percent) and in 1986, domestic inflation was kept at a low 1.8 percent, despite a 23 percent devaluation against the SDR. This may be explained by the lagged effect of the devaluation (the imported goods at the new exchange rate entered the market about 3-4 months after the devaluation took place), and the effect of increased competition in reducing traders' and importers' margins. In 1987, however, inflation is estimated to be near 6 percent.

1.48 Before August 1986, all imported and locally produced goods were subject to price control (the responsibility of the Ministry of Commerce and Industry). Prices were set on a "cost plus" basis, with the manufacturer receiving a negotiable net profit margin of 10 to 20 percent. Gross wholesale and retail mark-ups were also set for imported goods and varied between 15 and 30 percent. Price control aimed at preventing producers and traders from making excessive profits in a monopolistic market, but they had serious drawbacks. The cost-plus formula discouraged importers from looking for the cheapest source of supply; and assured of a fixed profit margin, manufacturers had little incentive to reduce costs and become more efficient. Moreover, the system allowed firms operating at low capacity to pass on all the costs (including depreciation) and thus remain financially profitable. Aware that price control could hamper the process of relative price adjustment and resource allocation, in August 1986 the Government liberalized most prices. Price controls remain for only eight products of strategic importance (e.g.,sugar, cement, salt, metal sheets, etc.) or can be applied to products subject to temporary import difficulties, for no more than four months and only in case of acute shortages.

Table 1.16 RECENT PRICE CHANGES, 1981-86
(annual percentage changes)

Average	1978-80	1981	1982	1983	1984	1985	1986
Consumer price	24.0	13.3	5.7	8.3	14.4	3.7	1.8
Food price		8.3	7.1	8.1	13.6	7.8	2.0
GDP deflator	22.2	-6.8	6.6	8.0	15.4	6.0	2.3
Import prices	28.2	3.0	5.4	-6.5	15.0	4.8	3.6
MUV	12.7	0.5	-1.4	-2.6	-1.7	0.9	18.9

Source: Statistical Appendix, Table 6.4.

Wages and Employment [5]

1.49. In 1982, out of a population of 4.3 million, Burundi's active labor force was estimated at 2.26 million. Of this, 2.5 percent was employed in the modern sector, 13.5 percent in the informal sector and 84 percent in traditional agriculture. The public sector absorbed 66 percent of modern employment. It is estimated that between 1979 and 1985, about 60,000 people entered the labor force each year. During the same period, the modern sector provided between 1,900 and 2,100 permanent new jobs each year, of which 400-900 in the public sector. This is clearly below the target of the Fourth Development Plan which aimed to create 5,900 new jobs in the modern sector each year.

1.50 During the past six years, the cost per job created in the modern sector averaged between US$60,000-70,000 at 1981 constant prices. This high value reflects both the concentration of public investment in capital-intensive infrastructure projects, as well as the effect of past policies which discouraged labor intensive activities, notably: (i) investment incentives in the form of tax exemptions on imported equipment; (ii) low interest rates; (iii) high social charges, and (iv) relatively cheap energy. Some of these policies have been modified in the context of the Government's structural adjustment program. Moreover, additional measures were implemented to reduce the social charges borne by the employers: the progressive payroll tax was abolished and a study is underway to analyze the feasibility of extended health insurance benefits to benefit private sector employees. The new environment is expected to provide increased incentives for higher utilization of labor and accelerated growth of employment in the modern sector. Other issues concerning labor regulations and population mobility are still to be addressed. These are discussed in Chapter II of the present report.

5/Detailed discussion on employment policies is provided in Chapter II.

Table 1.17 SIZE OF POPULATION AND LABOR FORCE, 1979-85

	Size (thousand)			Percentage			Growth
	1979	1982	1985	1979	1982	1985	79-85
Population	4,022	4,355	4,729	100.0	100.0	100.0	2.7
Urban Population	211	258	291	5.2	5.9	6.2	5.5
Working Age Population	2,105	2,280	2,475	52.3	52.4	52.3	2.7
Active Population	2,085	2,258	2,446	100.0	100.0	100.0	2.7
of which Urban	117	143	162	5.6	6.3	6.6	5.6
Rural	1,968	2,115	2,284	94.4	93.7	93.4	2.5
Sectoral Distribution:							
Modern	51	58	59	2.4	2.5	2.4	2.4
w/o: civil service	21	23	22	1.1	1.0	1.0	0.9
Informal	280	304	330	13.4	13.5	13.5	2.8
Traditional Agriculture	1,754	1,898	2,057	84.1	84.0	84.1	2.6

Source: Government and mission estimates.

1.51. The official minimum daily wage (SMIG) was set at FBu 140 in 1983 for Bujumbura and Gitega; and at FBu 88 for the rest of the country. Between 1976-83, the SMIG in Bujumbura and Gitega grew at about 7.2 percent per year, which led to some erosion in workers' purchasing power (inflation averaged about 10 percent per year); for the rest of the country the increase was much smaller. Specific minimum wages are also enforced for labor categories, ranging between FBu 140 for unskilled labor to FBu 1,200 for professionals (Statistical Appendix, Table 1.5). The minimum wage level is relatively low by African standards although higher than in Rwanda (Table 2.8, in Chapter II section C). Employers bear substantial social charges which range between 30 and 50 percent of the wage bill. These include: monthly housing allowances; contribution to the social security; the employee and his family's medical bill; and until recently, a progressive payroll tax.

1.52. It is not clear whether the current minimum wage legislation has had adverse effects on employment generation. In fact, the current regulation on labor mobility -- which limits the flows of rural labor toward urban centers -- has produced artificial shortages of labor, and as a result, current wages are far above the minimum wage. Unskilled labor in the modern sector earns higher salaries than those freely negotiated in the informal sector where unregistered small enterprises escape the application of minimum wage and the contribution to social charges, and where wages are responsive to changes in the supply of labor.

1.53 Civil Service Salary Scale and Wages. Since 1985, civil servants are classified by salary scales corresponding to three major occupational streams: low-level, middle-level and higher-level staff (being almost impossible to move from one occupational stream to another). Monthly salary ranges from a minimum FBu 7,000 to a maximum FBu 67,300. The lowest level corresponds to the minimum salary paid by the private sector to specialized semi-skilled labor; however, for higher level staff, the lowest monthly salary is below the minimum FBU 30,000 imposed in the private sector for professional workers. Moreover, for most skilled workers, salaries in the private sector are already 30 to 40 percent higher than

those paid by the public service. Civil servants receive, however, extra benefits in the form of monthly allowances (FBu 1500 to FBu 15,000) and other fringe benefits of which housing is the most important, representing 30 to 40 percent of the base salary. A more detailed comparison between civil service and public sector wages will be possible once the ongoing compilation of salaries data (by sectors, type and level of training) is completed.

Distribution Impact of Recent Reforms

1.54 The social implications of the Government program during its first year were clearly positive, especially in two areas: (i) the increase in agricultural producer prices (28 percent for coffee and 13 percent for tea) resulted in a shift of income towards the rural sector where the poorest and most vulnerable groups are concentrated, and (ii) the urban population benefited from the trade liberalization measures as profit margins previously allowed for under importer and trader monopolies were reduced (e.g., the wholesale margin on imported salt declined from 129 percent in May 1986 to 49 percent in May 1987, on sugar from 163 to 70 percent), offsetting the effect of the exchange rate adjustment in the retail prices of essential imported goods and even leading to a decline in some retail prices (e.g.,sugar, cement). In addition, the program did not call for major reduction in the number of civil servants, it involved only a slowdown in the growth of public employment and compensation. Finally, in the context of a more rational allocation of public resources, higher priority is being given to social sectors such as education, health and family planning, which in the long run will have the greatest impact on the welfare of the population at large.

CHAPTER II

THE LONG-RUN CHALLENGE

2.1 In spite of scarce natural resources and geographic constraints (being a land-locked country), Burundi has managed to accommodate its high population growth while maintaining political and social stability and an adequate level of food availability. This situation will, however, be increasingly difficult to maintain in the long term. If the Government's objectives to increase per capita income levels, maintain a sustained growth rate, and reduce dependence on external aid are to be met, important structural changes would be required. The Government has already begun to implement important measures under its structural adjustment program. These policies have contributed to reducing distortions in the incentive structure and promoting efficient resource allocation. While further measures are needed to reinforce the program already initiated, both at the macroeconomic and sector level, main key issues are still to be addressed in the context of development strategies to be prepared for the medium and long term. The following sections address some of those issues.

A. AGRICULTURE

2.2 The Government's objectives, as included in the Fourth Plan, were to improve food security -- that is, ensure adequate food supplies to meet nutritional needs, while minimizing imports and avoiding shortfalls and disruption in food supplies -- and increase both production and quality of export crops while raising farmer incomes and promoting local processing of agricultural products. This was to be achieved through a combination of integrated rural development projects managed by regional development companies (RDCs), and central programs focused on strengthening research and seed production, fertilizer utilization, development of specific export crops, and non-traditional foodcrops for diet improvement and import substitution.

2.3. Overall performance is difficult to assess due to poor and fragmented information available for the foodcrop sub-sector,[1] which accounts for 75 percent of total agricultural value added. According to national accounts data, primary sector growth averaged less than 2 percent per year during 1977-86; the export sector grew at 10.0 percent per year, and the foodcrop sector at about 1 percent. This value, which corresponds to an actual decline of per capita food production, is, however, inconsistent with developments in food imports and average caloric availability (see para. 2.4) and indicates that agricultural production data may be seriously underestimated. However, even if one accepts the possible scenario that food production has provided an adequate average nutritional status, the development of the sector in a medium- and long-run perspective would require increased investment, strengthening and reorientation of Government support services, and policy actions on such areas as pricing and marketing incentives, input supply, food aid, and population settlement.

1/Better agricultural production statistics are expected to be available shortly upon completion of SNES' regional surveys.

Food Security

2.4 Despite serious constraints, Burundi's performance in sustaining food production in the face of population pressure has been more favorable than in many other African nations. Imports of main foodstuffs such as cereals and legumes have been negligible; production statistics (although of poor quality) indicate a maintenance of per capita caloric availability on the average; and recent regional surveys (conducted in four regions accounting for more than 50 percent of the population) have shown that average per capita caloric availability has remained sufficient in these regions, despite increasing population density,[2] and considerable differences among regions and families. This relatively good performance, at least on average, has been due to several positive characteristics of Burundian agriculture: good climate, relatively fertile soil, and skillful farmers who have succeeded in adapting to increasing demographic pressure by: (i) intensification of land use through increased multiple cropping, new associations, and improved crop husbandry; (ii) extension of land cultivated through reduction of pasture, fallow lands (and in some cases, forest), and increased cultivation of swampy bottom lands; and (iii) seeking supplemental employment or, in some cases, renting additional plots even in remote regions.

Table 2.1 PRODUCTION AND IMPORTS OF MAIN FOODCROPS, 1979-85
(in thousands of tons)

Crops	1979	1980	1981	1982	1983	1984	1985
Roots and Tubers	989	1030	1090	1073	1088	1174	1218
Cassava	385	400	451	444	444	511	504
Yam and Cocoyam	103	100	106	104	106	109	119
Sweet potatoes	468	500	497	490	502	517	555
Cereals	169	208	216	211	216	214	244
Maize	135	140	146	144	148	139	157
Sorghum	20	52	53	52	53	49	59
Rice	9	10	10	9	9	18	20
Legumes	314	329	339	333	325	278	349
Beans and peas	303	316	324	319	310	259	333
Fruits and vegetables	1308	1251	1409	1386	1331	1371	1574
Bananas	1185	1100	1239	1220	1160	1197	1384
Total	2780	2818	3054	3003	2960	3032	3385
Selected Food Imports							
Cereals 1/	13.0	17.4	13.6	15.5	15.9	12.1	20.2
Rice	0.06	0.04	0.04	0.18	1.5	2.9	0.0
Fruits,vegetables	3.0	1.4	1.6	2.0	1.4	.3	.5
Sugar	8.3	4.2	7.1	8.3	5.6	10.0	12.5
Vegetable oil	0.9	0.9	0.9	1.1	0.6	1.3	1.3

1/ Includes wheat, wheat and corn flour, "semoule".
Source: Statistical Appendix, Tables 2.4, 3.6, 7.4

2/A comprehensive survey in the densely populated Buyenzi province, covering agricultural production, actual consumption, and anthropometric measurements, showed that both per capita caloric availability and consumption changed little overtime (between surveys in 1967, 1981 and 1985), despite population growth.

2.5 However, while Burundi may have maintained an average caloric availability of 2200 calories (slightly above estimated caloric requirements of 2020-2150 calories per day), few structural changes have taken place. Burundi's agriculture remains basically oriented toward subsistence, with low and stagnating levels of productivity per farmer, limited trade, minimal use of cash inputs, and low monetary income. Moreover, specific nutritional requirements and family-level food security have not been ensured: (i) while protein and caloric needs have been covered on average (102 percent and 113 percent, respectively, according to the most recent food balance sheets), lipid coverage remains highly deficient (46 percent); (ii) recent nutrition surveys show that protein-calorie malnutrition among children less than five years old is a serious problem, and there are also indications of possible adult malnutrition; (see section on nutrition); and (iii) while farming production systems are well-adapted to reducing the risk of periodic food shortages, the low level of rural monetization and undeveloped marketing systems are potential constraints to maintaining food security in times of adverse climatic conditions.

Government Programs

2.6 Government intervention in production of foodcrops has taken place mainly for some imported products such as vegetable oil, sugar, rice, wheat, and some vegetables (e.g., potatoes, avocadoes, cabbage, tomatoes) which have been promoted in the context of public investment projects. These projects have shown a good potential for production, but in some cases their economic justification is uncertain. For example, the SOSUMO project is expected to produce sugar at prices higher than international prices; palm oil production is expected to increase by four times by the year 2000, following investments in Rumonge, but the economic justification of the project is not evident; wheat production for domestic processing and consumption does not look promising, in view of the high processing costs of the existing mill plant and the low international prices; dairy production suffer also the competition of imports (particularly under current conditions where such imports are being subsidized by exporting countries). Production of vegetables and fruits for the urban market has, however, been well accepted by farmers and represents a good way for diversifying sources of farmers' incomes.

2.7 Support to main staples production has been provided mainly through research and extension programs. Concerning research: (i) FAO fertilizer trials during the 1970s achieved increases of 60 to 150 percent in yields for the major foodcrops, with only wheat and rice testing poorly. In all other cases, the return was more than twice the cost, and in some cases (peas, groundnuts) substantially higher. Phosphate fertilizer application on foodcrops has more recently been tested in farm conditions and promoted in a few project areas (notably in Kirimiro), with encouraging results; (ii) research to produce improved varieties has also accelerated but with limited success, so far mainly because the research is fairly recent, and few so-called improved varieties have outperformed the traditional varieties when used in actual farming conditions. Success, in terms of significant improved yields, has been obtained only in rice and potatoes, and to a more limited extent in corn in some regions (Buyenzi). Farmer acceptance of other improved varieties (e.g., beans) is generally poor and highly variable; many farmers mix the new varieties with their own

to minimize risk. On the other hand, the high demand for disease-resistant tuber varieties (cassava, sweet potatoes, and white potatoes) remains largely unmet, as a result of an inefficient seed production and distribution system. Also, quality control of seed production has been inadequate, and some improved varieties are only accepted at subsidized prices. Use of pesticides has been, so far, concentrated on export crops.

2.8 For many years, the dominating extension services' focus was on coffee (pruning, increasing density, application of fertilizer and pesticides). Recent government extension efforts have focused more on food crops, notably on: (i) clearing and thinning of banana groves, to allow intercropping, with good success in increasing returns; (ii) protection of seeds against insects, a useful intervention with high returns; (iii) digging of erosion control ditches -- a labor-intensive solution poorly accepted by farmers; and (iv) composting, generally implemented by farmers, but with limited results due to poor quality and difficult handling on sloping fields, where complementary on-farm erosion measures are needed. Livestock efforts have been concentrated on improving cattle breeds and animal health, with insufficient attention paid to small ruminants and integrated livestock/foodcrop systems. In general, extension services have failed to respond to client demands, and effectiveness has been hampered by poor institutional coordination with research organizations, the low skill and experience level of agents, the lack of adequate operating funds and transport, and the lack of integration/coordination of the separate crop, livestock, and forestry services.

2.9 In prices and marketing, Government intervention has remained minimal. In the mid-1970s, a parastatal (SOBECOV) was created to market and store foodcrops, but its results were disappointing and the Government has closed it down. A new organization (SOGESA) has since been created to manage stocks and rent out storage space. At present, most foodcrop prices are market determined, which helps to explain the relatively good performance of foodcrop production. However, measures to regulate markets, including past attempts to monitor activities of specialized traders, need to be avoided in order to improve incentives for increased marketed production. The new Government has already made significant progress in this area, notably by eliminating the restrictions on foodcrop sales by small farmers.

Imports and Food Aid

2.10 Imports of foodstuffs have oscillated greatly, depending on climatic conditions and needs for raw materials of the food processing industry. During 1979-85, they averaged 55,000 tons a year, of which about 40 percent were used by the food industry (flour, malt, some sugar). Foodstuffs' share in total imports of goods has declined from 21 percent (11 percent excluding inputs for local food processing) in 1979 to 16 percent in 1985. As a whole, food imports represent about 2 percent of total food production. Major products imported (Statistical Appendix, Table 7.5) are wheat and corn flour (15-25 percent of food imports), malt (15-20 percent); sugar (13-18 percent); dairy products (6-10 percent) and vegetable oil (2-6 percent). In terms of consumption, wheat and sugar play an important role (supplying 50 percent of consumption in normal years).

2.11. Food aid averaged 7,000-9,000 tons per year during recent years, but rose to 21,000 tons in 1984 due to shipments of emergency aid called for after the drought. Most of those were, however, delivered in 1985, which explains the all-time high 20,000 tons of cereals imported in that year. Cereals, principally wheat, are the most important component of food aid (60-75 percent of tonnage). The bulk of food aid has been distributed by NGOs -- chiefly the Catholic Relief Services (CRS), financed by USAID, which benefitted in the past more than 80,000 people (mothers and children) and Caritas (an ecumenical church-sponsored organization, supplied by EEC) -- and is used mainly for maternal and child health programs. The World Food Program is another important source of food aid which is distributed to schools, reaching 25,000 students, and through food-for-work programs, benefitting 3,500 workers. Other bilateral and multilateral sources are less important, at least in normal production years. They include mainly: Belgium, wheat; EEC, milk products; and USAID, wheat and corn.[3] At present, there is no institution responsible for coordination and policy-making related to food aid. There is a clear need in view of the problems experienced in the past in distributing emergency food aid, the need to avoid the possible adverse effects of food aid on production incentives, [4] and the importance of regular food aid to certain groups of the population (through the maternal and child health programs - the majority of which are no longer receiving food aid with the withdrawl of CRS from their programs in this area).

Shortages/Disruptions

2.12 Burundi is subject to less food shortages than many other African countries due to its favorable climate as well as its traditional production systems, which include bananas and tubers as reserve crops (for example, cassava can remain in the soil until needed). In the last 40 years, the country experienced no more than three serious draughts. Government concern over disruptions or shortfalls in food supplies was, however, renewed by the 1984 drought (actually a displaced second rainy season) which resulted in a substantial decline in production of main staples such as beans, and price increases of more than 100 percent for beans and cereals. Calls for food aid were made too late, preventing the shipments (most of which arrived in 1985) from having a positive effect in stabilizing the market.

2.13 In response to this concern, the Government requested a study (financed by the FED) to assess the need for strategic food stocks. This alternative should be carefully analyzed. Centralized food stock systems are expensive (involving substantial management and preservation costs), and often are unresponsive to the needs of vulnerable rural families. [5] The

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3/In 1984/85, other countries answered the Government's request for food aid: Japan (rice, dairy and fish products), China (corn), Italy (fish products), and Germany.

4/In 1987, for example, 1,400 tons of rice arrived as food aid at a time when there was a 7,000 ton surplus of local production due to the 1987 bumper crop.

5/The World Bank Report " Food Security in Developing Countries, February 1986" provides a comprehensive discussion of the multiple aspects involved with food security, and the policy options to address it. It also reviews progress made in this front by several countries.

ongoing study is being broadened to consider fully the effects of shortfalls, the role of improved marketing in mitigating its effects in urban areas, and alternative solutions for rural areas, where foodstocks would be most hard to distribute. There are traditions of mutual aid at the rural community level which deserve to be supported, notably through cooperatives. In addition, the use of existing storage facilities in both rural and urban areas, supplied by local production, should be explored. Support of local cooperatives, a study of the feasibility of using cooperative storage in addition to centralized storage to alleviate shortages in drought years, and the establishment of a sound food aid policy should be pursued before adopting the more costly foodstocks alternative.

Increasing Export Earnings from Cash/Industrial Crops

2.14 Export crop production accounts for about 8 percent of cultivated land and 12 percent of total agricultural production (in volume). Coffee, cotton, tea are the most important, followed by quinine and tobacco. Government intervention in this area has been strong and clear. Investment projects have been implemented to improve both quantity and quality of main export crops, notably coffee, with assistance from the World Bank; cotton with French aid; and tea with support of the European Development Fund. Other crops such as quinine, tobacco, and vegetables are being developed by the private sector.

Table 2.2: SELECTED INDICATORS FOR MAIN EXPORT CROPS

	1981	1982	1983	1984	1985	1986
Coffee:						
Production ('000 tons)	43.8	20.3	36.0	27.0	32.5	30.3
Exports ('000 tons)	27.1	30.5	24.8	29.0	33.9	30.0
Producer price (FBu/kg)	115	115	115	125	125	160
(Real prices 1981=100)	100	93.4	86.4	82.6	76.7	95.7
Export price (FBu/kg)	219.3	231.8	263.4	342.4	329.4	442.1
Producer/export price (%)	69.0	65.3	57.5	48.0	49.9	47.6
Gov't revenues/exp.price (%)	0.6	8.1	0.5	27.0	23.0	42.2
Cotton (fiber):						
Production (tons)	2341	2077	1696	2325	2593	3115
Exports (tons)	781	2063	1923	404	225	179
Producer price (FBu/kg)	30	30	30	35	35	35
(Real prices 1981=100)	100	93.4	86.4	88.7	82.3	80.3
Export price (FBu/kg)	144.7	108.1	129.5	203.0	191.0	124.0
Producer/export price (%)	78.8	70.1	64.6	41.2	50.0	80.0
Tea (dry leaves):						
Production (tons)	2271	2178	2334	3445	4145	3696
Exports (tons)	2237	2253	2179	3344	4116	3449
Producer price (FBu/kg)	10	10	10	15	18	18
(Real prices 1981=100)	100	93.4	86.4	114.1	105.8	117
Export price (FBu/kg)	94.7	117.4	108.4	281.1	175	148.4
Producer/export price (%)	49.5	41.0	42.6	23.5	30.7	39.1

Sources: Statistical Appendix, mission estimates.

2.15 To improve the country's balance of payments position, export crops would need to grow at a considerable rate during the next ten years. Official projections for 1987-96 include an average annual growth rate of 3.2 percent for coffee production, 10 percent for tea, and 13 percent for cotton. While these rates are in line with past developments, there are serious issues concerning each of these crops. Coffee exports face serious problems of quality and marketing; cotton exports, despite the recovery in 1987, face competitiveness problems due to high production costs; and tea exports face depressed world prices, despite the recent progress in improving the marketing capacity of OTB (the parastatal in charge of the tea sector) and the quality of the Burundian tea.

2.16 Coffee is the principal export crop, using 5-10 percent of the cultivated area on a typical farm (80-100 trees per smallholder family). Production and exports fluctuate greatly due to the coffee production cycle (3-year cycles), climatic conditions and, to some extent, to the unofficial quantities traded across the borders. The Government has undertaken important measures to increase production and quality of this crop. With the World Bank's assistance, projects have encouraged plantation expansion and re-planting, new variety research, improved cultivation methods, and greater use of fertilizers and insecticides. As a result, coffee production shows a marked positive trend: average production increased from 22,000 tons in 1975-80 to 32,000 tons in 1980-85, well above the export quotas granted by the International Coffee Agreement (revived in 1980). Burundi's quotas were 24,000 tons (400,000 bags) for ICO year 1981/82; 25,800 tons for 1982/83; 28,200 for 1983/84; 32,248 tons for 1985/86.[6] (The quota system was suspended on February 19, 1986 following the drought in Brazil and reinstated in October 1987.) Moreover, to improve the quality, the Government has invested in the construction of washing stations to produce "fully-washed" (FW) coffee, for which world market prices have been 14-18 percent higher than for washed coffee. At present, about 10 percent of national coffee production is processed as fully washed in 34 washing stations, 30 of which are owned and operated by two regional development companies (Buyenzi and Kirimiro). This is expected to rise to 30 percent by mid-1990s as more washing stations start operations in four regions.

2.17 There are, however, several issues to be addressed. First, due to inadequate storage, processing and marketing, Burundian FW coffee has lost its premium and was sold in 1985 and 1986 at the semi-washed coffee prices. This situation was the result of: excessive moisture content of parchment coffee; insufficient fermentation and drying due to stations working over capacity; and mixing of good and bad quality coffee. These factors led to external buyers losing confidence in the quality reliability of Burundi's FW coffee. The Government has recently taken measures to reduce the moisture content of the coffee and to increase the capacity of existing washing stations. Complementary measures as discussed below are still necessary.

2.18 Second, marketing still needs to be improved. At present, coffee marketing involves farmers, private traders, RDCs, and two parastatals: OCIBU, which is in charge of the organization and financing of the coffee

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6/The ICO year runs from October through September

campaign, import and distribution of inputs, collection of semi-washed parchment coffee and hulling; and BCC, the fully government-owned public enterprise which has the monopoly of coffee exports. All intermediaries are paid a fixed cost-plus price under the " echelle mobile" pricing system, prepared each year before the official campaign begins in April. The system is quite rigid and provides few incentives to improve efficiency. Moreover, OCIBU's hulling factories are not designed to distinguish between different coffee qualities and to ensure consistency in quality. BCC is in charge of the transport of coffee -- the traditional route being Bujumbura-Kigoma by barge and Kigoma-Dar-es-Salaam by the Tanzania Railway Company (TRC) -- but its marketing capability is limited. Little has been done to promote its coffee, find new buyers abroad, and adapt its selling strategy or transportation routes to changing conditions. This situation proved to be difficult in 1986, when a large potential windfall was lost due to lack of an aggressive marketing strategy. While prices were at their highest, Burundi began by selling well in January/February, even above the quota (for which it was penalized). During February-June, however, no contract sales were signed -- prices were falling, after the ICO quota was removed, and the transport conditions on the route served by TRC deteriorated. Incapacity to decide to ship coffee by air or road led to excessive stock accumulation (19,000 tons early December as compared with 8,000 in December 1985). The Government is implementing a program to reinforce BCC's managerial capacity and expects to avoid these problems in the future.

2.19 Cotton. Government efforts to improve performance in the cotton sector have been supported by French bilateral aid (Caisse Centrale de Cooperation), which has been particularly active in improving the management of COGERCO (the main parastatal), providing extension services, and encouraging cotton production in new settlement areas. Cotton production declined during 1981-83 (Table 2.3) as the result of climatic conditions, lower yields, and insufficient farmers incentives, but it recovered in 1984. As the result of a 17 percent increase in producer prices (after being constant since 1977) and improved yields (associated with a new system of fertilizer and pesticide application), production responded with a 51 percent increase. Yields improved from 900 kg/ha in 1982 to 1,100 kg/ha in 1985 and are expected to reach 1,300 kg/ha by 1990. Fertilizers are currently provided free to farmers who participate in the cotton program, but are reportedly being used on foodcrops as well.

2.20 Prospects for the growth rate of cotton exports will depend on the financial situation of the cotton sector, a function of both the oscillating international prices and the high producer prices (among the highest in Africa). Burundi's cotton exports fell from 2,063 tons in 1982 to 179 tons in 1986, for at the low 1986 world prices (which had fallen from US$ 1.8/kg in 1985 to US$ 0.8/kg in 1986) Burundi's cotton ceased to be competitive. While a large part of the crop was used by COTEBU, the surplus available for export could not be sold at a profit: part was sold to Zaire in 1985 and 1986 below production cost. Since COTEBU consumption is expected to level off at 1800 tons a year, additional production could be exported, provided that the production cost is sufficiently reduced. In 1987, following the 60 percent increase in world prices, Burundi managed to export 3,600 tons of cotton fiber.

2.21 The high cost of cotton fiber also affects the production costs of cotton cloth produced by COTEBU, which is required to purchase fiber from COGERCO at 10 percent above production cost. COTEBU, whose financial difficulties were partly solved in 1983 (through the ban on imported cloth, limits on imports of second-hand clothing, and the requirement in 1985 that school children wear uniforms made from COTEBU fabric), will face increased foreign competition under the Government structural program. An overall study of the cotton sector is necessary to prepare COTEBU to face international competition by 1990. The present requirement that the firm should buy fiber from COGERCO may need to be reviewed.

2.22 Tea, introduced in mid-1960s with the assistance of the European Development Fund (EDF), has shown a remarkable improvement since 1980 due to a rehabilitation program financed by EDF. Cultivation practices were improved and yields increased substantially -- from 1,500 kg/ha in 1980 to 3,800 kg/ha in 1985. Producer prices, which had remained constant since 1977, were raised in 1984 (by 50 percent) and again in 1986 (by 18 percent). As a result, production of green leaves increased at an annual rate of 23 percent to reach 19,000 tons in 1985. It declined in 1986 to 16,750 tons due to an adverse rainfall pattern as well as to the OTB's strategy to concentrate on high quality tea. The quality of export tea and its marketing have improved and production costs have been reduced. In 1985 and in 1986, Burundian tea obtained the second highest prices in the London market.

2.23 Exports (dry tea) increased from 1,267 tons in 1980 to 4,116 in 1985, an average growth of about 27 percent per year. In 1986, in face of the decline in world prices, OTB adapted its marketing strategy, by concentrating on high quality tea and exporting low quality tea to Kenya. Total exports nonetheless declined to about 3,500 tons; the average export price was barely enough to cover production costs. The financial situation continues to be difficult in 1987 as international prices continue to fall. The issues to be addressed concern the cost structure and efficiency of the sector, and the feasibility to pass to the producer some of the costs financed at present by OTB, notably fertilizer costs. OTB fears that farmers' incentives to expand tea production will decline if they have to pay for production inputs.

Strategic Issues for the Long-run

2.24 The Government's goal of developing agriculture as the priority of the next Plan is well justified. Burundi's natural comparative advantage lies in agriculture -- in its relatively good soil and the resourcefulness of its farmers. These factors provide a good basis for increased revenues and adequate returns on investments in the sector.

(a) Capacity for Meeting Food Demand

2.25 According to recent projections of food demand prepared by UNDP, using the 1979 urban consumption patterns and assuming a population growth rate of 2.9 percent per year (6 percent for the urban population), demand for the main food staples would grow by 60-70 percent between 1982 and 2000 (2.7 to 3.3 percent per year). Demand for products consumed mainly in urban areas was forecast to grow, ranging from 152 percent for rice to 315 percent for wheat products. Globally, the projections imply a requirement of 62 percent in foodcrop production between 1982-2000.

2.26 This increase in production (at least for the main staples) is considered feasible by Burundian authorities, through a combination of extension of cultivation (increased double cropping and cultivation of fallow lands) and application of existing (improved crop husbandry) and improved technologies (improved seeds and fertilizer use). Surveys conducted by ISABU in every region found that, on average, 45 percent of farmers say that they can increase production through extension of cultivation, and 89 percent through increasing yields (Statistical Appendix, Table 2.1). On a national scale, 75 percent of arable land is currently cultivated, but this rate is over 90 percent in the most densely populated regions, where intensification will have to play a greater role. However, under current conditions of low input utilization, further intensification in these regions may be difficult. The importance of this constraint is difficult to document with the information currently available. For example, in the Buyenzi region, where the average farm size has stabilized since 1981, after declining by 15 percent since 1967, out-migration during the last five years was quite low (2 per 1000), and farmers in all income and farm size groups have increased coffee acreage. Furthermore, although densities in this region are very high (over 300 people per square kilometer), they are still lower than those in large areas of neighboring Rwanda, where intensification is still continuing.

2.27 Clearly, the degree to which continued population growth can be accommodated during the next twenty years without a deterioration of nutritional levels will vary among regions and farmers according to farm size, market access, and the degree of intensification already achieved. During the preparation for the Fourth Plan, agricultural information was disaggregated by ecological regions, which led to a better understanding of Burundi's diverse ecological conditions. There is now a pressing need to go beyond that level of analysis to: (i) investigate the causes of malnutrition; (ii) explore the diversity of farm/livestock systems, to identify the actual farm-level constraints (not necessarily just land, but in many cases, cash or family labor[7]); and (iii) assess how farmers' evolving practices and crop systems (e.g., disappearance of fallow) may affect long-term soil fertility.

2.28 In short, it seems that there is substantial potential for increased foodcrop production in Burundi through: (i) intensification from application of fertilizer (particularly in combination with manure or compost); (ii) use of more suitable improved varieties -- still to emerge from intensified research efforts; and (iii) low-cost change in crop husbandry and agricultural practices (mainly timely weeding and thinning); and (iv) increased double cropping, whose potential is attested to by the wide range of yields between regions (according to population density). The realization of this potential, however, will depend on improved

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7/While the Plan reported a high degree of rural underemployment, recent studies in Mugamba and Bututsi showed that farm workers work fully 46-50 hours per week on average. Women, in particular, work full 12 hour days most of the year. Recent ISABU studies in Kirimiro and Mugamba confirmed the existence of family labor constraints during peak seasons. Moreover, the presence of a casual farm labor market has been confirmed in several surveys: 37 percent of farm families covered by SNES surveys in coffee-growing areas reported paying cash wages during the year.

extension and support services, based on analysis of current farm practices and understanding of farm level conditions; more attention in research to on-farm experimentation; and improved communications between research and extension services. Two other areas requiring priority attention are input distribution and marketing, and quality seed production. Moreover, questions of possible soil degradation and malnutrition due to distribution inequalities, are still pending, and call for specific and immediate actions. (See para. 2.36, 2.37, and section on nutrition.)

(b) Increasing Export Crops and Competition with Foodcrops

2.29 As mentioned before, among Government's priorities is the the expansion of production and quality improvement of main exports. Past efforts were mainly concentrated on coffee and the results have been encouraging. Concerning export diversification, several studies have been undertaken to assess the export potential of tropical fruits and vegetables. Most have concluded that the low levels of production and the high transportation costs would adversely affect the potential for these products to compete in European markets. However, private initiatives are being developed with great success. Recently, two foreign-owned firms were created to export flowers, and some small entrepreneurs have begun exporting small plants to Europe by air. Possibilities to export top quality asparagus to the European winter market are also being tested. Based on these successful experiences, policy measures that rely on the private sector (both foreign and domestic) to encourage export promotion could result in successful export diversification. This is discussed in detail later in this chapter (section E).

Table 2.8: LAND AND LABOR RETURNS FOR MAIN CROPS, 1985

Crops	Average Yield (kg/ha) (1)	Price 1985 (FBu/kg) (2)	Income (000FBu/ha) (3=1*2)	Work days (4)	Daily Income (5=3/4)
Food crops					
Corn	800	41.9	33.5	232	144.5
Sorghum	780	33.4	26.1	177	147.2
Rice	1,410	30.0	42.3	590	71.7
Wheat	410	40.9	16.8	274	61.2
Beans	800	46.5	37.2	210	177.1
Peas	550	82.6	45.4	210	216.3
Sweet Potato	5,240	10.1	52.9	372	142.3
Cassava	6,370	21.1	134.4	342	393.0
Potatoes	5,750	18.9	108.7	435	249.8
Palm oil	2,520	7.9	19.9	244	81.6
Groundnuts	790	74.5	58.9	240	245.2
Bananas	11,240	11.0	123.6	253	488.7
Industrial crops					
Coffee	240	160	38.4	500	76.8
Dry Tea	731	17	12.4	526	23.6
Cotton	1185	35	41.5	255	162.8

Sources: Government and mission estimates.

2.30 For the traditional export crops -- coffee, cotton, and tea -- higher production levels would depend on farm-level incentives and relative returns compared with alternative crops. Estimates of returns to labor and land of various export and foodcrops (Table 2.3) imply that coffee is competitive at least with half of the foodcrops in terms of returns to land, but less so in terms of returns to labor. Its value is accentuated, however, by its being a major source of reliable cash income (along with banana beer). This may explain why farmers in Buyenzi have increased coffee acreage in the last five years, independently of income and farm size, and despite the competing food production needs. Diversification prospects of cash crops would be improved through: improvements in input supply and technologies for both cash and foodcrops, to facilitate further intensification; development of food-product markets, to encourage specialization and to relieve risk aversion constraints; and review of taxes and regulation affecting the markets for traditional crops to enable farmers to make the best decision with the benefit of correct market signals. In the future, Burundi could even export foodcrops to the regional African market. The informal flows that occur between Burundi and the neighboring areas of Rwanda and Zaire could expand provided that enough surplus is produced and administrative constraints removed.

(c) Market Development and Regional Specialization

2.31 The Government considers that regional specialization is as a necessary element of future agricultural development. Opinions differ, however, on whether and how such specialization (now very low) should be stimulated. The current effort to assemble complete information on land resources, so as to better target research and extension services is an important first step. However, rather than try to determine which crop should be grown in each region, the emphasis should be put on developing marketing opportunities, lowering production costs, and improving the share of sale proceeds retained by the farmer, in view of the demonstrated capacity of Burundi farmers to respond to demographic pressures and market incentives. Regional specialization will occur naturally when farmers increasingly produce for the market and move away from risk-averse subsistence farming. Only then will the comparative advantage associated with relative endowments of soil and climate induce specialization. In particular, there is a need to study: (a) the impact of village taxes and market regulation (such as licensing of traders) on producer and trader incentives; and (b) technologies for processing and improving storage which might be attractive to the private sector and cooperatives. Existing efforts to strengthen the cooperatives and encourage their involvement in the marketing and storage of food products (as well as distribution of inputs) should also be continued.

Policy Agenda

2.32 To attain Government objectives in agriculture in the short-term, there is a need to: (i) improve coffee marketing and pricing, seed production and input distribution (with increased reliance on the private sector) and links between research and extension and the farmers; (ii) gather information needed for the formulation of long-term strategies in key areas such as export market prospects and cost competitiveness, soil

quality and land use patterns, fertilizer response, migration and settlement, farmer motivation in export vs. foodcrop production, incidence of nutritional problems, and foodcrop marketing; and (iii) improve institutional and policy making capacity to maintain/improve production incentives, provide efficient support services, and improve planning, programming and monitoring. The longer-term agenda includes the design of strategies[8] to: improve food security and export earnings; and address complementary issues regarding land use and management, settlement, and non-farm employment generation, which have received inadequate attention in the past. Some of these issues are discussed below.

Short-term agenda

2.33 Fertilizer and Pesticides. Expanded fertilizer utilization has been hindered by several constraints: (i) insufficient knowledge of fertilizer performance in on-farm conditions and thus lack of sound recommendations for farmers; (ii) uncertainty about fertilizer demand, given its high cost and the low purchasing power of farmers; and (iii) lack of experience in distribution and marketing arrangements, currently in place in only a few regions. Most soils in Burundi show phosphate deficiency and are generally acid. Adequate response to phosphate fertilizers can only be obtained if combined with measures to reduce soil acidity (e.g., through liming). In addition, fertilizer application on slopes will require complementary anti-erosion measures. In this context, the actions to be taken include: (i) updating information from the FAO's fertilizer trial program in the 1970s and extending it with more experimentation on common crop associations and in actual farm conditions; (ii) conducting fertilizer trials, and (c) increasing imports of phosphate to meet the farmers' demand -- under conservative assumptions, demand has been estimated to grow by 12 percent a year during the coming decade.

2.34 Import and supply policy needs to be clarified as soon as possible. It is important that early promotion efforts price fertilizer at full cost. At present, hidden subsidies exist since farmers do not pay import duties and distribution costs. Moreover, policies vary among different projects and implementing agencies. In the short run, the RDCs and OCIBU and other parastatals could continue their role in fertilizer import, wholesale distribution and promotion, possibly aided by a centralized agency for promotion of inputs, while promoting the gradual transfer of retail distribution to traders and cooperatives. In the long run, the role of the Government should be limited to carrying out trials and clarifying recommendations, managing stocks used for demonstration trials and promotion, and investigating supply sources options. A similar strategy should be implemented for pesticides, which will become increasingly important as improved varieties are more vulnerable to insect and pest attacks. Modern legislation on pesticide usage should be prepared now, before demand accelerates.

8/New data expected to become available during the next year includes: food marketing and regional production potential (ISABU), nutrition (Ministry of Health), agricultural production and farm systems by region, (SNES), migration (Ministry of Plan, regional planning cell), and on soil quality and land use (ISABU).

2.35 Incentives for Foodcrop Production and Marketing. The Government's role in foodcrop pricing and marketing should remain limited. Incentives for increased market production can, however, be improved by providing cost-reducing and yield increasing innovations to farmers. In addition, the Government should continue to strengthen storage facilities and aid in the diffusion of information on the levels of production to help rationalize market circuits. Subsidies on inputs (mostly hidden) should be avoided, however. Government policies should be reviewed in the following areas:

(i) Wheat. So far, promotion of wheat production in the Mugamba region has failed due to both farmers' food security concerns (wheat is grown only during certain months to bridge seasonal gaps in supplies of other foodcrops) and the lack of possibility to increase producer prices as a way to stimulate production. Imported flour is already much cheaper than the flour produced by the Minoterie of Muramvya, which absorbs most of the domestic production and has a monopoly on wheat imports. Wheat and flour prices, controlled by the Government, are almost 40 percent higher than border prices. A realistic assessment of local import-substitution potential needs to be undertaken; in addition, care should be taken that food aid shipments (which are significant in the case of wheat) do not interfere with production incentives. Better coordination at institutional level is also needed to define a food aid policy and and monitor its implementation.

(ii) Regulation and taxation of food marketing. Burundi's private marketing sector is small but efficient, given existing incentives. While production for marketing is limited, some pockets of specialization do exist. Most of them are close to urban markets, but, as shown by recent surveys, flows can originate in more distant areas when prices are sufficiently attractive. Recent measures to regulate traders through licensing and by restricting market days may increase costs for traders, and reduce incentives for increased market production. It would be useful to analyze this issue in a few dynamic areas[9] to investigate the evolution of prices, the incentives for market production, and the influence of the recent marketing regulations. The incidence of marketing taxes should also be studied in the context of a study of communal finances.

(iii) Input pricing policy. In the case of fertilizer and pesticides, import costs are recovered but handling and distribution costs are covered by the overhead costs of RDCs and other parastatals. The ongoing Bank study on Agricultural Financial Issues (to be discussed with Government by mid-1988) will shed some light on the importance of these subsidies and will provide a basis for specific recommendations on pricing. In the case of seeds, inefficient production and poor quality control of few improved varieties (e.g., beans) have led to an interim subsidized marketing policy. Decisions are needed in the short-term on whether to price these varieties at full cost, which would imply reduced demand and production, or to reduce production costs and improve quality control.

9/ISABU surveys provide qualitative information only on marketing flows and were undertaken at different times in each region. Some analysis of marketing flows and the behavior of intermediaries in a few areas is being undertaken in three communes in the Buyenzi region. Upon completion of these studies, the need for further surveys should be considered.

2.36 Coffee Pricing Mechanism (Echelle mobile). Each year, the Government determines prices to be paid to farmers for parchment coffee, as well as the amount to be paid to each of the intermediaries -- licensed traders or RDCs, OCIBU, and BCC -- in principle to finance their operation costs, including financial charges. Upon payment by foreign buyers, the difference between the f.o.b. cost Dar es Salaam and the realized sales prices is withheld by the Treasury through the Central Bank after replenishment of a one billion FBu Stabilization Fund. The system provides no incentives for higher efficiency at the intermediary level. For example, RDCs received in 1986 a premium of FBu 29.9/kg of fully washed parchment coffee, compared with a processing cost of about 17 FBu/kg (including depreciation). The IDA-financed Agricultural Services project under preparation is expected to improve quality and processing of coffee. Measures to increase flexibility and efficiency in the coffee pricing system will be addressed under the next phase of the adjustment program. These measures, to be implemented gradually in the medium-term, would aim at distributing the benefits and risks of world coffee price fluctuations among producers, traders, and the final sellers; they would include: (i) introduction of an advalorem coffee export tax; (ii) paying OCIBU and BCC for their processing and marketing services on a fee or consignment basis rather than on a cost-plus basis; (iii) improving the management of the washing stations, possibly with transfer of ownership from the RDCs to the farmers; and (iv) introducing incentives for improving coffee quality at producers' level. A study of the present pricing mechanism (financed by Caisse Centrale de Cooperation Economique) has provided recommendations in line with the above objectives.

Long-term Agenda

2.37 Resource Management. Knowledge of Burundi's natural resources (soil quality, trends in erosion and soil fertility) and patterns of land use is very limited. Priority should be given to: (i) completing the soil mapping exercise begun by ISABU; (ii) examining alternatives to control soil erosion (ditches, agroforestry, terracing, crop rotations, etc.) emphasizing on-farm erosion control and maintaining soil fertility (mulching, composting, use of manure alone or in combination with chemical fertilizers, etc.); (iii) analyzing land use data collected by SNES regional surveys, soon to be completed; (iv) updating aerial photos and satellite imagery to indicate priority areas where environmental programs (re-forestation, integrated watershed management) would be launched; and (v) clarifying institutional responsibility for resource management programs (which would comprise resource inventories, on-farm soil erosion programs and off-farm programs such as afforestation, drainage of marshes, new irrigation, etc.). Some of these issues will be addressed in the context of the planned Agricultural Support Services Project to be financed by IDA.

2.38 Increasing employment and income-earning options for farmers. Given the prospects for continued high population growth, and the already high population density in Burundi, providing productive employment for the rural population is a major long-term challenge. While this subject is mentioned several times throughout the present report, two main issues are relevant in the agricultural context. The first concerns the constraints to non-farm employment generation. The major constraint for farmers to

pursue off-farm employment is structural: the market for basic consumption products is limited by the reduced size of the urban population and the low monetization of the rural economy. However, administrative controls on internal migration also hamper the development of non-farm employment. Permanent settlement outside the home village requires first, permission to leave their village, and second, certified approved residence and employment in the new one. These requirements constrain farmers' and traders' mobility and limit the growth of their activities.

2.39 The second concerns land tenure and settlement policy. Farmers need to be able to choose between intensifying cultivation, extending their land-holdings through market transactions or relocating in frontier areas. Prevailing land tenure traditions and the restrictions on relocation may hinder the most efficient use of land. With the increased scarcity of land, land disputes are on the rise (particularly in Ngozi), and land values (official or otherwise) are increasing. Moreover, informal land transactions and rentals (sometimes in distant regions[10])are becoming more frequent. It will be essential in the long term to ensure that the land market is open and flexible, that tenure is secure, and that formal land registration is strengthened and supported. The recent revision of the land laws called for written land registration and consolidated past edicts, centralizing responsibility for enforcement in the Ministry of Justice. This laid an important foundation for improved land security, which will be a condition for both continued intensification and new settlements.

2.40 Settlement in frontier areas is currently controlled by the provincial and communal administrations. The new land law does not deal with the process of applying for available land parcels, the criteria used in land allocation or the rules regarding size of land parcels granted and/or administrative fees required. There is no evidence that the current informal settlement policy is having harmful effects. However, it is known that farm size of recent settlers in the frontier areas is much larger than that of longtime residents. The current system should be evaluated and alternative settlement policies considered. The experience with the Kinyinya settlement project has been mixed, and yet several new organized settlement projects are being prepared at the present time. It seems important that migration survey data (expected soon) be fully analyzed, and that settlement strategies be clarified before these new projects are started.

Institutional Issues

2.41 The institutional and policy environment for agricultural development in Burundi has improved in the last four years with the liberalization of marketing and prices for rice, and the avoidance of large scale marketing interventions and subsidies still ongoing in many other African countries. However, further improvements are required.

2.42 In the last five years, the share of agriculture has averaged 3.5 percent of recurrent expenditures in the central Government budget and between 15-20 percent of development expenditures. The overall impact of

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10/As many as 20 percent of farmers in Ngozi are reported to be cultivating also parcels in Imbo.

the sector on recurrent resources is, however, difficult to determine because of the complex budgeting arrangements associated with the Regional Development Companies. It is clear, however, that a better allocation of resources will be necessary to promote the needed intensification effort. After institutional restructuring has been undertaken, and high-cost programs such as seed production rationalized, investment should be intensified in research, training, and extension. Moreover, the private sector, including cooperatives, needs to play an increasing role in the production and distribution of inputs, and the processing and marketing of export crops. This approach is being tested in the IDA-financed Kirimiro Project area, where there is a substantial demand for fertilizer, and will be further pursued in the Muyinga agricultural development project scheduled to begin next year.

2.43 Farmers' ability to continue to adapt to population pressure and to meet their nutritional and cash needs will depend on adequate institutional support in such areas as technology development, input supply, and diffusion of known effective cultural practices and improved varieties. Substantial strengthening and reorganization of the existing support services will be needed to face the long-term challenges ahead. In particular, a short-term priority will be assuring a smooth transition from the RDC framework to an integrated agricultural services system operated efficiently at the provincial level but guided and monitored by a strengthened planning staff at the the Ministry of Agriculture. Efforts are underway to propose changes in organization, authority relationships, budgeting procedures (vastly complicated by the RDC framework) and program priorities, in the context of the planned Agricultural services project. Moreover, improved aid coordination is needed to ensure coherent approaches to support extension and research activities, policy toward pricing and private sector participation, and monitoring and evaluation of projects.

B. RURAL-URBAN LINKAGES AND REGIONAL DEVELOPMENT

2.44 Despite the country's high demographic pressure on already constrained agricultural land, migration to urban centers has been limited, with the result that urban growth has averaged only 5 percent per year in the last decade. The share of urban population is estimated at about 5 percent in 1985. The developmental role of urbanization has been neglected in the past. Recently, the Government has become aware of the importance of urban growth as an engine of growth, promoting the specialization of functions and activities, expanding the market for both agricultural and other locally produced goods, and thus contributing to increased monetarization of the economy. The following paragraphs address the urban dimension of Burundi's long-run development in terms of: (i) population and employment; (ii) monetization of the agricultural sector and rural development; and (iii) urbanization and regional development, as well as the need for a concerted urbanization policy.

Population and Employment

2.45 Burundi's population growth has accelerated from 2 percent per year during the 1970s to about 3 percent, the projected rate for the 1985-2000 period. The past low growth was, in part, due to net emigration to neighboring countries. Today, these migration flows have declined. The consequences of the current demographic growth will be felt in terms of regional migration and increasing pressure on agricultural land. In both fronts, the prospects are uncertain.

2.46. Internal migration, although insufficiently documented, seems to have accelerated. These flows, controlled by the administration to avoid spontaneous population concentration, have been mostly between rural regions, depending on the land constraints in the regions of origin and the food self-sufficiency possibilities in the regions of destination. Historically, internal migration has been important, for example, from the overpopulated and intensively cultivated areas of Buyenzi and Kirimiro to the Imbo plains along Lake Tanganyika and the Tanzanian border (Mosso). The absorptive capacity of these developing areas is, however, limited[1] and the new rural settlements tend to perpetuate the traditional cultivation methods which are characterized by low productivity levels. In a future deregulated environment, people would migrate according to expected returns, to wealthier areas such as plains, coast, transportation axes, and urban centers/regions. The present range of migration rates (from -0.6 percent in Muramvya to +0.8 percent in Cibitoke Provinces) would probably increase significantly.

2.47 In terms of employment generation, while agriculture can no longer absorb the bulk of labor force growth, non-farm employment opportunities remain limited. As discussed in the employment section of this report, for an average of 60,000 new entrants in the labor force (growing to 70,000 in 1990), the modern sector (accounting for less than 5 percent of total labor force) has created less than 3,000 jobs. Of these, less than half

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1/The recent study of the Kinyinya project (Mosso region) shows that available land will be fully occupied before 1995.

are permanent jobs. In the rural sector, less than 5 percent of the active population are pure non-farmers (Table 2.4). Rural non-farm activities can rarely provide an adequate standard of living because of the limited market for their goods and services, which reflects the low level of farmers' monetary income and purchasing power. On the other hand, the informal urban sector is underdeveloped, its growth being restrained by policies to control urban growth and informal (non-registered) activities. In this context, more than 90 percent of new entrants into the labor force remain in agriculture, despite the increasing difficulties of finding new land. A new category of households, the landless farmers, is emerging, notably in the rural villages of Buyenzi and Kirimiro. Only a dramatic increase of non-farm employment -- 6 percent per year compared with present 2.5 percent -- could solve Burundi's employment problem.

Table 2.4 - STRUCTURE OF RURAL HOUSEHOLDS IN THE NGOZI PROVINCE BY DEGREE OF NON-FARM ACTIVITIES, 1986
(in thousands FBU per household)

	Household Structure (%)	Average Cash Income	F [illegible]	Total Income	Food Purchased	Food Self-Consumption % Food Cons.
Non Agri. households	8.7	137.0	14.[illegible]	151.0	56.0	20%
Mixed households	26.3	41.[illegible]	50.0	[illegible]	14.0	78%
Agri. households	70.0	15.4	60.6	76.0	2,4	96%
Total households	100.0	26.7	56.0	82.8	7.5	88%

Source: Mission estimates based on 1986 SNES Survey.

Monetization of the Agricultural Sector and Rural Development

2.48 The role of urbanization (and dynamic rural-urban linkages) on Burundi's rural development relates to the growth of markets and can be analyzed from three viewpoints: (a) the demands of the agricultural sector for inputs and services (needed to obtain higher levels of agricultural productivity), which grow as rural incomes and agricultural output rise; (b) the demands of the rural sector for non-food goods and services, which stimulate non-rural activities and incomes; and (c) the demands of urban or non-rural areas for agricultural products which rise directly with urban growth and may exert appreciable effects on rural markets. These aspects are intimately related and have important feedbacks into each other. As mentioned before, an increase in agricultural production would require increased investment and use of cash inputs, as well as market growth. The development of the market for locally produced foodstuffs would also be essential to protect against the effects of seasonal food shortages and reduce sensitivity to climatic hazards -- these are likely to increase in the future as smaller-size farms have less flexibility in adjusting their crop mixes. At present, the size of the domestic market is very small, and the infrastructure insufficient to stimulate larger flows of agricultural

products among regions: it consists of several hundreds of small isolated market places, with few links among them.

2.49 While the present level of food self-sufficiency (96-98 percent) could be maintained for some time, based on traditional farming practices, long-term self-sufficiency can only be possible with substantial changes in organization of production and improved marketing. Past expansion of cultivated area has been made with little investment and marginal use of cash inputs: food production costs represent only 4 percent of the value of food output, of which only 0.4 percent is for cash inputs (fertilizers, energy, transport, services, etc.). Future expansion of cultivated area (on marginal land), conservation and improvement of soil fertility, and necessary increases in yields and productivity will require larger investment and greater use of cash inputs.

Table 2.5 STRUCTURE OF RURAL HOUSEHOLD EXPENDITURES IN NGOZI PROVINCE, 1985
(In FBU per Household, averaging 4.7 persons)

	Average	%
Total expenditures incl. self-consumption	84,400	100
Self-consumption	56,500	67
Total Monetary expenditures	27,900	100
of which:		
Agricultural production inputs	5,000	18
Food purchase from local origin	5,600	20
Imported food	1,600	6
Other goods and services	14,000	50
Local taxes, transfers, savings	1,700	6

Sources: SNES and mission estimates for self-consumption.

2.50 To finance this increase in investment and utilization of cash inputs farmers' cash income would need to grow rapidly. (Agricultural credit can finance some of these costs but to a limited extent.) Such growth would need substantial structural changes. Not only cash incomes are low -- representing [2] 32 percent of the average rural household income; 20 percent for agricultural households-- but they have remained constant in real terms between 1971-85. Moreover, agricultural production costs, although low in absolute terms (FBu 5,000 per household), represent a high 18 percent of the average cash income and 25 percent of the agricultural income.

2/According to the recent household income and expenditure surveys in the Ngozi Province.

Table 2.6: SOURCES OF MONETARY INCOME OF RURAL HOUSEHOLDS BY TYPE OF HOUSEHOLD IN NGOZI PROVINCE, 1986 ('000 FBU per household)

	Non agric. households	(%)	Mixed households	(%)	Agric. households	(%)	Average households	(%)	1971 (%)
Agric. Income	39.4	28.8	24.6	59.7	13.5	87.7	17.4	65.1	62.8
Coffee	14.7	10.7	10.3	24.9	5.97	38.8	7.43	27.7	22.2
Banana beer	15.7	11.5	7.9	19.2	3.5	22.7	5.1	19.2	17.1
Food products	8.6	6.3	5.8	14.0	3.5	22.9	4.3	16.1	23.0
Other agric. income	0.4	0.3	.7	1.8	0.5	3.3	0.5	2.2	
Non agric. income	97.6	71.2	16.6	40.3	1.9	12.3	9.3	34.9	37.2
Commerce	42.9	31.3	4.8	11.7	0.3	1.9	3.1	11.5	13.8
Salaries	33.9	24.7	4.3	10.4	0.4	3.0	2.7	10.1	5.1
Artisanal product.	1.4	1.0	3.2	7.8	0.08	0.5	0.9	3.4	9.7
Transfers	19.4	14.2	4.3	10.4	1.0	6.9	2.6	10.0	8.8
Total Monetary Income	137.0	100.0	41.2	100.0	15.4	100.0	26.7	100.0	100.0

Sources: Mission estimates, based on SNES Survey, 1986; and SEDES household survey, 1971.

2.51. The low level of rural cash incomes has, in turn, limited demand for non-farm goods and services, hence the growth of non-farm activities in rural areas and consequently specialization. Out of 100 rural households, 70 may be considered as purely farmers, 26 are predominantly farmers but draw part of their income from other sources than agriculture, and only 4 (of which one civil servant) are basically non-agricultural households. However, almost all rural households produce some food: the food self-consumption ratio varies from 96 percent for agricultural households to 78 percent for mixed households and 20 percent for non-agricultural households. The matrix of the monetary flows (Table 2.7) among different types of households in a commune shows that 69 percent of the monetary income of the rural non-agricultural population comes from sales to the agricultural households. The past stagnation in farmers' purchasing power may therefore explain why the proportion of non-agricultural households and their cash income level have also remained constant during that period.

2.52. The impact of the major agricultural development projects on the growth of local markets has been also very limited. Institutions which could stimulate demand for locally produced goods and services (missions, regional development companies, communes, public works agencies) have failed to generate cash flows into the rural areas and tended to keep the status quo by relying on force account, mandatory community labor, and work teams and purchasing goods and services outside of the region. There have been few successful projects to generate permanent salaried rural employment: a few "bricketteries", and about 100 UNICEF-sponsored cooperative mills. Self-employment artisan activities are in general part-time, limited by the market, the time of the farmer, and the need to continue cultivating the land, either for nutritional needs or risk of losing it, under traditional land tenure conventions. In these conditions, non-farm production activities remain at low level of productivity and

quality which hinders their competitiveness against imported goods.

Table 2.7 MONETARY FLOWS AMONG RURAL HOUSEHOLDS OF A TYPICAL RURAL COMMUNE OF 10,000 HOUSEHOLDS (in Million FBU)

Expenditure / Income	Agric. Househ. PP	Non-ag Househ. PNP	Local Gover't	Total Area	Rest of Country	Rest of World	Total
Agric. hous. (PP)	34.0	30.0		64.0	134.4		198.4
Non-agric. hous.(PNP)	56.2	8.4	1.0	65.6	16.0		81.6
Local government	3.8	3.2		7.0			7.0
Total area	94.0	41.6	1.0	136.6	150.4		287.0
Rest of country	69.4	34.0	3.0	106.4			106.4
Rest of world	35.0	6.0	3.0	44.0			44.0
Total	198.4	81.6	7.0	287.0	150.4		437.4

Note: PP: agricultural households; PNP: non-agricultural and mixed households. Coffee appears as sold to the rest of country (RDC, OCIBU, etc.) and not as exports to the rest of world.

2.53 The low level of monetization of the rural economy limits also the level of tax revenues accruing to the communes. The current decentralization policy has increased the role and responsibility of communes in local development. However, communes do not receive subsidies from the central government budget and have to be financially self-sufficient. A complex system of local taxes has been developed to finance their current expenditures but the surplus available for investment is very low and unpredictable. Communes can only tax goods and services which are traded, that is less than 30 percent of the gross local production. Although the average taxation is low (of the order of FBu 700 per household), the rate of taxation on traded food products and/or non-farm activities has been relatively high and could not be substantially increased without jeopardizing the development of the market economy.

2.54 In addition to the monetary taxation, households contribute to the communal budget through "travail communautaire" (one workday per adult and per week) and various in-kind contributions (building materials, etc.). While these contributions reduce the financial burden of the communes, they restrain the volume of public works and services offered to local firms and the sources of non-agricultural activities which could generate monetary income. Future growth of communes' financial resources, which are essential to local development, will only be possible in the long term if the tax base (the monetized local GDP) is widened. In the medium term, however, the necessary increase in communal resources, notably for those communes with the greatest needs (urban and peri-urban communes) will require some support from the central government.

Urbanization and Regional Development

2.55 Since rural areas cannot by themselves generate non-farm employment and cash income at the rate required by the expansion of labor force and the growth of demand for agricultural cash inputs, that growth can only result from a specialization between agricultural and nonagricultural activities, both functional (in terms of production systems) and geographic (by type of settlement, rural and urban). Intensification of monetary exchanges between the various types of households will thus be possible. Burundi's key issue in coming decades is thus how to increase both mobility and specialization of population and activities, together with increased agricultural productivity and generation of agricultural surplus.

2.56 The present potential for a structural change in the physical distribution of population is limited, as population flows are mostly oriented towards low-density rural areas, with no modification of patterns of activities. This can be explained partly by cultural factors, but also, and most important, by political and administrative regulations. Informal population and activities are periodically forced to leave the urban sites where they settled without permission, with important consequences for the urban economy as a whole. The economy of Bujumbura is sluggish, and so it that of most secondary towns: many small and medium enterprises have closed down, private investment is minimal, urban incomes are low and towns have little, if any, influence on their hinterland to which they have little to provide and from which they do not demand much in terms of food, employment and financial resources.

2.57 Burundi's rural economy cannot significantly improve without the impetus provided by an accelerated growth of non-farm activities, food markets and development of rural towns and secondary cities. These must become attractive for population and private capital through provision of basic infrastructure and support to economic activity, and their influence on the hinterland should be enhanced. This fundamental change requires the official awareness and acceptance of the fundamental role of urban areas in regional and agricultural development. As mentioned before, the large regional development projects, acting as enclave-type projects, have "short circuited" urban private agents in the provision of goods and services and have been detrimental to the growth of secondary towns with which they have almost no relations. Moreover, the idealistic image of urban areas, free from unemployment, clean, fully controlled and organized must be revised. In most countries of Sub-Saharan Africa, real towns are dynamic poles in terms of population distribution, specialization of activities, employment creation, savings and investments, but this dynamism does rarely conform with that image. They are, however, essential pieces to foster structural change through trade and other rural-urban linkages.

Conclusions and Recommendations

2.58 Past urban policies in Burundi have been characterized by prudent measures to avoid a rapid population concentration on urban sites, for fear that such growth would lead to social problems related with the lack of employment opportunities, housing shortages, and adequate social infrastructure. However, these policies may have hindered the natural

growth of rural towns and secondary cities which could provide an important market for agricultural goods, hence favoring and enabling higher levels of productivity and surplus, as well as generating employment opportunities. Moreover, the growth of these centers would increase the possibilities for investment, technical change and productivity growth in local agriculture. First, urban growth would contribute to reduce the costs of supplying physical infrastructure services. Second, the labor market would become less dispersed and labor more accessible, and the skills and quality of labor would become less costly to improve because the costs of investment per worker in health, education and training are reduced. Third, financial services both to mobilize savings and to support investment could be more readily provided.

2.59 The reforms to pricing and exchange rate policies included in the Government's structural adjustment program are expected to have a positive effect in increasing agricultural revenues, and hence the demand for non-farm goods. These conditions provide a favorable setting for the implementation of an adequate strategy to favor the intensification of urban-rural linkages. This would require a re-orientation of existing policies (concerning employment mobility and informal activities) and consideration of the impact that investments in infrastructure or social services can have in promoting decentralized urban development. Part of the resources needed for this growth may come from rural areas, facilitated by its increasing monetization, and could take place through various channels: marketing of agricultural products, higher producer prices (in the case of export crops), provision of goods and services to rural areas, and improved internal rural-urban terms of trade, national and local taxation with a transfer of resources between rural and urban communes, and transfer of savings from rural to urban areas through financial intermediation.

2.60 In this context, actions would be needed in several areas:

(i) Information and data base. In the framework of development planning, greater attention should be given to regionalized data, using a common territorial subdivision for all sectors (provinces and communes). Areas which need to be better covered include:

- population distribution. There is a need to improve data on urbanization and internal migration, and to follow-up on the development in peri-urban areas and immigration areas (e.g., Mosso, Imbo). The next population census (planned for 1989) should adopt a suitable methodology to address these points. The census could also be simplified, with a view to reduce the interval between censuses from 10 to 5 years, within the same budget. Exploitation of census should be considerably accelerated.

- maps on land use/potential: given Burundi's land potential problems, priority should be given to preparation of "basic maps", including present land use and completion of land potential maps. These maps would provide a socio-economic-demographic picture of the country, with identification of poles of activities and concentration of urban population. Satellite imagery can provide updated annual information on land use trends at a reasonable cost. Moreover, all decision-makers should have access to these instruments and be trained to use them, including RDCs

(currently working without maps) and provincial governors and communal administrators to enhance their role of active promoters of development in their territory.

- analysis of monetization of the economy and urban-rural linkages. In order to improve the knowledge on these points, the present rural household surveys should be revised with a view to include wider groups of population (including non-farmers) as well as more information relevant to the analysis of the links between urban and rural areas.

(ii) Planning-programming system and local institutions. The preparation of a long-term development framework with a regional focus would be useful as a framework for the decision-makers involved in development planning and programming as well as a basis for improved coordination between the Ministry of Planning and other Ministries with responsibility on regional development, as well as between the central administration, provincial governors and communal administrators. At present, governors and communal administrators work without reliable directives, due to the lack of regional sector policies and programs. (The governor is the representative of the Ministry of Interior, but also of the Planning Ministry in matters of regional development.) Technical assistance is to be made available at the level of governors and communal administrators to strengthen their role as "amenageurs de leur territoire" and provision of an assistant/deputy for economic matters. For the communal administrators, priority should be given to the urban, peri-urban communes, and immigration communes. Programming in the Ministry of Planning should emphasize the regional/provincial aspect of development to the extent possible. Moreover, these provincial development programs should be adapted to the urban growth needs, that is, centered on the capital town and answering to the need to improve regional management using the town as a growth pole of its hinterland.

(iii) Sectoral recommendations. Regional Planning (amenagement du territoire) is one of the main responsibilities of the Planning Ministry. In the past, it has mainly focused on rural/agricultural development, leaving the aspects of urban development to the Ministry of Public Works. Coordination between the two Ministries is needed as a basis for a consistent regional development policy addressing both rural and urban objectives. Moreover,

- investments to support urban development and rural-urban linkages should be considered, both in Bujumbura and in secondary towns. Public work programs could be used to promote local entrepreneurs and private real estate investment, concentration of rural savings for development of urban activities, revision of the work program of RDCs to make sure that they serve the interest of the city in which they have the headquarters, etc. A directive could be considered whereby RDCs would purchase part of their needs in locally produced goods and services from the closest secondary town.

- in the context of rural/regional development planning, decisions concerning the location of infrastructure and services (schools, dispensaries, etc.) should be made within a regional development perspective. A coherent spatial policy to concentrate these investments in

areas with potential for urban growth would have a substantial impact in developing the market for non-farm goods as well as in generating employment. Moreover, the new areas of agricultural development need to be the subject of "directive guidelines" (schemas directeurs). In the case of Imbo nord, for example, while the irrigation perimeter which is well conceived, all the rest is left to local, inconsistent initiatives. So called "villages" mentioned in the project map are impossible to identify in the field. Finally, it is important to address the question of whether the new developing areas would perpetuate the traditional subsistence agricultural systems or whether they could provide the opportunity for the development of more modern and higher productivity farming systems, notably through the development of commercial farms if possible.

- elimination of constraints on population and labor mobility, already addressed in the present report is also of great priority.

2.61 The implementation of an adequate regional development strategy would require greater coordination among government agencies, among foreign donors, as well as the reinforcement of the communes's financial and managerial capacity. The planned Bank-financed Urban II project covers many of the elements described above as essential to a successful process of decentralized urban development.

C. EMPLOYMENT

The Modern Sector

2.62 Assessment of actual employment trends is hampered by a lack of comprehensive employment data. While information is available on employment in the government sector, comprehensive data on the rest of the economy is not readily available. At present, employment data for the modern sector -- the informal sector is even less covered -- are compiled by: (i) the Institut National de la Sécurité Sociale (INSS) for permanent employment in the private and parapublic sectors and fixed-term employment in the public sector; (ii) the Ministry of Civil Service on civil service employment and salaries; and (iii) SNES and the Ministry of Labor and Social Affairs (on employment and wages in the modern sector).

Recent Employment Trends

2.63 In 1982,[1] out of a population estimated at 4.3 million, the working age group (defined as age 15 to 64) amounted to 2.28 million, and the active labor force to 2.26 million, of which 2.5 percent was in the modern sector, 13.5 percent in the informal sector and 84 percent in traditional agriculture. The public sector absorbed 66 percent of modern employment (39 percent in the civil service and 27 percent by parastatals) and the private sector the remaining 34 percent. During 1983-84 (data for 1985 is not available), the share of the parastatal sector increased to 31 percent while that of the private sector declined to 31 percent. In terms of modern sector employment, agriculture has declined in importance; the

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1/Data on population and employment provided by the 1979 Census were updated by the Ministries of Planning and Labor in 1982.

manufacturing sector's share has remained relatively constant; while the construction and commerce sectors, more sensitive to economic shocks, showed large fluctuations from year to year. The transport sector has been quite important in employment creation: it generated 14 percent of the new permanent jobs in the modern sector in 1983 and 1984.

2.64 The working age population as a percentage of total population was estimated at 52 percent in 1982. Assuming the same rate during 1979-82, Burundi's active population growth grew at 2.7 percent per year, which is equivalent to about 60,000 new entrants each year into the labor force. During the same period, only about 1,400 new permanent jobs were created every year in the modern sector, of which 27 percent in the public service. The Fourth Development Plan (1983-87) estimated that 24,000 new jobs would be created per year, of which 5,900 in the modern sector. Actual data (Statistical Appendix, Table 1.4) indicate that 2,100 new jobs were created in 1983, but that in 1984 total employment in the modern sector declined by 3,400, mainly due to slowdown in construction activities and public employment. It recovered by 1,700 in 1985.

2.65 In the past six years, the cost per job created in the modern sector reached a high level of between $60,000-$70,000 at 1981 constant prices. This reflects the concentration of most public investment in infrastructure investments as well as the bias of past policies against labor intensive investment, notably: (i) the investment incentives granting benefits to investors in the form of tax exemptions on imported equipment; (ii) low interest rates; (iii) high social allowances; and (iv) cheap energy which favors the use of capital intensive technology. As a result of these policies, together with high protection, investment has expanded along with unused capacity. In the manufacturing sector, for example, existing firms operate at less than 50 percent of their capacity; the ICOR was estimated in 1984 at a high 8.5.[2] While the adjustment measures have led to an increase in the relative cost of capital versus labor (increased interest rates, adjustment in exchange rate, revision of exemptions on import duties for equipment), further areas need to be addressed to improve employment generation incentives.

2.66 Wages. The minimum wage law was first established in 1949. In 1976, an agreement between the Government, the Trade Union (UTB) and the employers imposed a minimum daily wage (SMIG) of FBu 80 in Bujumbura, FBu 60 in Gitega and FBu 50 in the rest of the country. This minimum wage has since been revised twice: in 1980, by 31 percent and in 1983, by 33 percent to reach FBu 140 in Bujumbura and Gitega. For the rest of the country, the SMIG was increased by 76 percent (to FBu 88) in 1980 and has remained at the same level thereafter. Between 1976-84, the nominal minimum wage in Bujumbura and Gitega grew at about 7.2 percent per year, which probably did not prevent some erosion in workers' purchasing power (inflation grew faster than that); for the rest of the country the increase was much smaller. Apart from the general minimum wage, the labor code sets occupation specific minimum wages for labor categories, ranging between FBu 140 for unskilled labor to FBU 1,200 (FBU 30,000 per month) for professionals (Statistical Appendix, Table 1.4). Information on the SMIG

2/Burundi Manufacturing Industry: Performance, Policies and Prospects, May 1984.

for several African countries suggests that Burundi's minimum wage is relatively low by African standards, although higher than in Rwanda. A more meaningful comparison would require inclusion of other benefits for which information is not available at this time.

Table 2.8: MINIMUM WAGES IN BURUNDI AND SELECTED AFRICAN COUNTRIES

	SMIG month (US$)	Index (Bur=100)	1984 GNP/ capita (US$)	Annual SMIG GNP/capita (Ratio)	Index (Bur=100)
Burundi	23.4	100.0	220	1.27	100.0
CAR	29.7	127.1	260	1.37	107.8
Gambia	27.9	119.2	260	1.28	100.1
Mauritania	61.3	261.9	450	1.63	128.3
Rwanda	19.9	85.0	280	0.85	66.9

2.67 In addition to wages, employers bear substantial social charges which range between 30 and 60 percent of the wage bill. Those include: (a) monthly housing allowances ranging from FBu 600 to 12000; (b) monthly spouse and child allowances of FBu 300 and FBu 150, respectively; (c) a contribution to the INSS (social security) to cover pension, death and survival benefits (7.5 percent of the employer's monthly gross salary up to FBu 25000, of which 4.5 is paid by the employer and 3 percent by the employee); (d) for the private sector, the employee and his family's medical bills; and (e) until recently, a progressive payroll tax, starting at 5 percent on a wage bill up to FBu 4 million and rising to 30 percent for wage and salary payments in excess of FBu 7 million. (Wages below FBu 3000 a month were exempted.)

Table 2.9: SOCIAL CHARGES ON EMPLOYERS
(in percent of base wage)

Employers contribution to social security	4.5
Payroll tax (forfaitaire) a/	5.0
Tax on foreign workers	3.0
Housing	17.0
Paid vacation and holidays	5.0
Seniority premium	3.0
Family allocation	8.0
Total b/	45.5

a/ Lifted in 1987.
b/ Does not include health coverage, which represents between 5 and 20 percent of worker salary.

Source: Government and mission estimates.

2.68 It is not clear whether the current minimum wage per se has had any particular effect on employment generation. In fact, the current limitation of labor mobility -- which prevents rural labor from moving into urban centers and requires the Ministry of Labor's approval of all modern

sector employment decisions, possibly leading to artificial labor shortages -- and the high social charges are more relevant as factors in increasing labor costs. In part because of these social charges, unskilled labor obtain higher remuneration (and job security) than what is freely negotiated in the informal sector where unregistered small enterprises escape the labor regulations, wages are more responsive to changes in labor supply, and apprentices and family members offer labor at lower price.

The Social Security System

2.69. The social security system consists of INSS and Mutuelle. INSS was created in 1962; it covers work-related risks for all workers governed by the labor code (private and public sector employers other than permanent civil servants). The INSS premiums amount to 7.5 percent of gross salary with a ceiling of FBu 25,000 per month. Of this 7.5 percent, 4.5 percentage points is borne by the employers for permanent employees and 2 percent for temporary employees. (This differential has inevitably pushed some employers to declare their permanent workers as temporary ones, and has thereby introduced distortions in labor statistics.) The level of INSS benefit is relatively low: pensions amount to FBu 1000 per quarter, compared to the SMIG of about FBu 3,640 per month in Bujumbura. The Mutuelle was created in 1981 to provide compulsory medical insurance for all civil servants, employees of public enterprises, local government employees and university students. The current premium (increased in 1986) represents about 7.5 percent of gross salary, of which 4.5 percent is borne by the employer who is no longer liable for any separate portion of medical care costs. The Government has recently extended the benefits to non-workers, peasants and traders, but not yet to the private sector.

Civil Service Salary Scale and Wages

2.70 In Burundi, the Government is the most important employer, accounting for nearly 40 percent of employment in the modern sector.[3] It includes the Presidency, National Assembly, 20 Ministries, 15 provinces and 18 districts. In addition, the central Government comprises several decentralized agencies such as: the University of Burundi, the Center for Promotion of Industry (CPI), the Agronomic Sciences Institute (ISABU), the Geographical Institute (IGEBU), and a social security system consisting of the National Social Security Institute (INSS), and the civil servants' mutual insurance company (Mutuelle). Civil servants are classified by salary scales corresponding to three major occupational streams: low-level, middle-level and higher-level staff. Each stream is further subdivided into 8 grades. The present scales exist since the 1985 public service job regrading exercise. While the change in the job regrading provides a more coherent professional stream by which civil servants can progress, it makes it impossible to move from one occupational stream to another. The following table shows the range for each salary category.

3/A review of the trend and importance of wages and salaries in government budget is included in Chapter I under public finance.

Table 2.10: SALARY BY WORK CATEGORY IN CIVIL SERVICE
(in FBU/month)

	Lowest	Highest	Differential
Lower level	7,000	29,000	1 to 4.2
Middle level	12,000	43,700	1 to 3.6
Higher level	25,000	67,300	1 to 2.7

2.71 The monthly salary ranges from FBu 7,000 for the lowest paid civil servant to FBu 67,300 for the highest paid civil servant, or a salary differential of 1 to 10. The lowest monthly salary corresponds to the minimum salary paid by the private sector to specialized semi-skilled labor; the lower limit for higher level staff is below the minimum FBU 30,000 monthly salary imposed in the private sector for professional workers. Moreover, as the private sector is not subject to ceiling for maximum wages, the public sector may face difficulties in retaining qualified staff. For most skilled workers, salaries in the private sector are already 30 to 40 percent higher than those paid by the public service.

2.72 Civil servants receive, however, some extra benefits in the form of monthly allowances (FBu 1500 to FBu 15,000) and other fringe benefits such as housing. The allowances (see Statistical Appendix, Table 1.6) are granted for (i) certain types of jobs or responsibilities (occupational, coordination and control allowances); (ii) skills in short supply because of the level of sophistication required or job-specific constraints (encouragement allowances); and (iii) protocol requirements. However, the most important fringe benefit in the modern sector in general and in public service in particular is housing. For some employees, this means a salary premium of 30 to 40 percent. Some Government employees are provided with direct housing and charged a nominal rent for it; others lease houses at subsidized interest rates, while the remaining receive a housing allowance instead. The net monetary benefit to the employee of actual housing is in most cases higher than the housing allowance; employees with the same basic salary can in fact have quite different total remunerations. This situation may lead to serious distortions and should be reviewed.

Government Policies

2.73 The Government has already taken some actions to improve the incentives for higher employment generation. In particular, the payroll tax (tax forfaitaire) has been abolished and a study is underway to investigate the feasibility of extending the civil service health insurance scheme (Mutuelle) to private sector employees. Moreover, the Government structural adjustment program is expected to have important implications for the relative prices of labor and capital. For example, the Investment Code has been revised: benefits are now granted to labor-intensive investments (up to a cost-per-job of US$20,000); and exemptions of import duties on equipment have been eliminated for most cases. Moreover, the higher real interest rates, together with the price and import liberalization reform and the currency adjustment, will favor labor intensive activities as the cost of imported equipment and credit will

increase substantially in relation to the cost of labor.

2.74 Additional issues which need to be addressed are reviewed below:

(a) Regulation of Labor Market. All recruitment and employment decisions of private and parastatal enterprises are subject to approval by the Ministry of Labor. Its Department of Manpower (DMO) records all demands and offers of unskilled and semi-skilled jobs, provides advertising services free of charge and approves work contracts, in connection with the "Commission de Placement"[4] which prepares the list of workers seeking employment and suited to particular positions. The lists are then forwarded to employers for mandatory consultation; in the case of higher-level employees (cadres), Cabinet approval is required. This system is supposed to support both efficiency and equity objectives. It was justified on the grounds that the modern sector labor market (concentrated in Bujumbura) was small enough to benefit from a centralized placement service, and that in order to avoid potential political pressure on hiring decisions, the Ministry of Labor's intervention could be effective to counterbalance such pressure.

However, the current system's possible advantages in terms of equity are outweighed by shortcomings which hinder the enterprises' efficiency. In general, the administrative procedures are long, time consuming and difficult; and candidates with the wrong profile are often sent to employers. All these problems translate into high opportunity costs for employers and inefficiency for the economy as a whole. It is recommended that the role of DMO be revised to let market forces play an increased role in employee selection and compensation. Employers should be given the opportunity to play a more active role in the hiring process. This would not only reduce distortions in the labor market but also free up the DMO, allowing it to focus on other priority activities such as evaluating employers' specific skills needs and monitoring training.

(b) Burundianization of Employment. The Government is pursuing a policy aiming at phasing out the reliance on expatriates, who currently account for 0.6 percent of the total work force. Burundianization has proceeded quite rapidly in the low level positions in both the private and public sector, but shortages in middle and higher level, technical and managerial positions have made it necessary to continue hiring expatriates with an explicit local counterpart-training agreement. All expatriates need a work permit for which an annual charge equivalent to 3 percent of gross salary is made. Hiring of expatriates has to be approved by a Committee comprising the Trade Union representatives, Ministry of Labor and Social Affairs officials and representatives of the immigration service. Since mid-1986, non-Burundian importers have to deposit FBU 10 million ($80,000) to continue in business. While this measure was aimed at increasing participation of Burundians in the economy, its effects can be detrimental to the incentives for increased private investment and job creation.

4/Comprising members of the trade union, representatives of the Ministry of Labor and Social Affairs and representatives of the immigration service. All expatriates are also subject to these procedures.

(c) Technology Transfer. Transfer of technology regulations are rather rigid. It is forbidden to import second-hand technology. At the same time, it is not easy to find technologies adapted to Burundian market constraints. Positive promotion of such technology would require: (i) introducing more flexibility in the regulations on technology, notably by eliminating the ban on imports of second-hand equipment; (ii) investing in research and development and in manpower training; and (iii) improving institutional capacity in project identification and appraisal, which would reduce present vulnerability to initiatives from equipment suppliers. The creation of the Industrial Promotion Center (CPI), which has the mandate to prepare industrial projects, assist enterprises, conduct industrial research and create training centers, is already an attempt to solve these issues. Its performance is reviewed in the next section dealing with small and medium enterprises.

(d) Qualifications of the Labor Force. While skilled personnel is in short supply, education programs are often out of line with the requirements for skilled labor: employers think that some of the subjects taught are not very relevant to the needs of the labor market. There is also an apparent consensus on the need for: (i) a shift of emphasis from general to technical education; (ii) improved coordination with employers on specific training needs; and (iii) a gradual improvement of vocational training.

The Informal Sector

2.75 The near stagnation in modern sector employment growth as indicated by available statistics suggests that a large proportion of new entrants into the labor force either remain self-employed in agriculture or seek employment in the informal or small-scale non-farm sector. Data on the informal sector is very scarce, however. There are no time series on sector activities and employment. The annual Censuses of informal activities undertaken by the Département de l'Artisanat of the Ministry of Trade and Industry suffer from inadequate definitions and survey methods. The only reliable sources are: the 1979 census; sub-sector studies carried out by the Ministry of Labor and the University of Bujumbura which provide mainly descriptive information on the nature of working conditions; and the surveys of the informal sector in Bujumbura and secondary towns in 1986 which the World Bank helped finance.

2.76 In contrast to the situation in many African countries, Burundi's informal sector is not very active and remains predominantly a rural phenomenon: about 85 percent of informal non-farm employment is concentrated in rural areas. Moreover, informal activities constitute seldom the principal occupation of the rural labor force; they are rather sources of additional income, particularly during the off-season. It is estimated that the informal sector could absorb as much as 20 percent of new entrants in the labor force. Past evidence indicates, however, a much more modest growth or indeed stagnation, as shown by the 1980 and 1986 Bujumbura surveys which found that informal sector activities may have declined. The structural and institutional constraints at the root of this situation are both internal -- inherent to the sector's functioning and hiring modes -- and external, i.e., related to Government policies toward the informal sector.

2.77 The main internal constraints are: the lack of qualifications of labor force, the lack of working capital and credit, and the poor infrastructures, all of which limit the scope for productivity improvements. The sector is characterized by limited management and technical skills. According to the 1986 Bujumbura survey, 80 and 95 percent of laborers and apprentices, respectively, have barely primary school education. The apprenticeship system, the main source of technical and managerial skills transfer, does not facilitate improvement in the organization of enterprises: training is imparted on the job in specific enterprises, in relative isolation from more efficient ones. A typical informal entrepreneur is unable to undertake a correct cost-pricing exercise; about 85 percent of enterprises do not have an accounting system; and 92 percent do not have a bank account. The lack of credit and facilities for stock storage which most informal enterprises face forces them to order raw materials in small quantities, only for their immediate needs. Moreover, clients are often required to finance the cost of raw materials in advance.

2.78 External constraints concern the institutional arrangements and government policies. The Departement de l'Artisanat (within the Ministry of Commerce and Industry) has the responsibility to coordinate and promote informal sector activities. The Code de l'Artisanat, which regulates operation of small scale enterprises, offers in theory the possibility for access to a Guarantee Fund for small enterprises, but this is not yet operational. Also, registration to the "Chambre des Métiers" gives enterprises the possibility to qualify for public market bids. These efforts have had little impact on the development of informal sector enterprises, however, since they are not adapted to the actual conditions under which these enterprises operate. Public procurement orders are often too large, and the artisans who succeed in being admitted to the "Chambre des Métiers" are often unable to supply the quantity requested within the deadline. Similarly, conditions of access to the Guarantee Fund and to banking credit in general appear to be designed for modern small-scale enterprises rather than small artisans.

2.79 Progress has been made to stimulate the development of training programs and production facilities for the artisans (Urban I project). The Department of Artisanat has also been involved in undertaking feasibility studies for artisans. However, the Department's effectiveness in meeting demands for assistance is being hampered by a shortage of skilled staff, particularly staff with adequate knowledge of survey methods and legal expertise. In addition, because the Ministry of Commerce and Industry deals mainly with formally registered firms, the Department has had difficulties in defining an operational framework relevant to the informal sector, and in coordinating with other Ministries involved.

2.80 A major constraint to the development of the sector stems from the strict regulations embedded in urban planning and migration policies, which in the past permitted only few artisans to establish themselves in towns. These policies compel most artisans to operate in the periphery of the cities, and therefore, increase the cost of reaching their clientele. Allowing more artisans to settle in town would expand the market for their goods and services, facilitate the provision of skills and technology

necessary to ensure the quality standards required to compete with the formal sector, and allow for the provision of other support services (e.g., credit), to which artisans have no access, partially because of the lack of legal status. Also, tax policy is not conducive to the sector's development. In addition to a flat fee, enterprises in Bujumbura pay an annual tax which increases with the number of employees. The tax rate differs also among activities in a somewhat arbitrary fashion: for example, the rate on trade, services and bakeries is 5 times higher than that applied to tailors or carpenters.

Recommendations

2.81 While there is an official commitment to support the development of the informal sector, several policy areas need to be reviewed and reformed. At the institutional level, there is a need to: (i) clarify institutional responsibilities and provide the needed training support and resources to either the Departement de l'Artisanat or to other involved departments, notably in the Ministry of Labor; and (ii) design a strategy for the informal sector with the following objectives: enhance the production and employment potential of informal sector enterprises through training and assistance to increase the general productivity of the artisans; improve product quality and encourage appropriate labor-intensive technologies; and facilitate the integration of the informal sector into the economy through better access to existing promotion mechanisms, marketing assistance, access to credit, and help in the development of sub-contracting relationships with the remaining sectors of the economy. The strategy should give special attention to particularly disadvantaged groups such as new migrants, women and youth.

2.82. Other areas where policy action should be taken include:

(i) revision of the procurement procedures to facilitate the participation of informal enterprises, notably by splitting public orders into smaller batches shared by several workshops;

(ii) review of the present local taxation policy, particularly in Bujumbura;

(iii) relaxation of administration procedures limiting migration to allow artisans to settle in town (close to their clientele) and thereby bring informal activities into viable clusters. In the short-term, an intermediate measure could be to establish a legally approved site for informal activities within the cities.

(iv) review of ongoing training programs to ensure an appropriate balance between the contents of training programs and evolving labor requirements, with priority to support of apprenticeship and on-the-job training.

2.83 At the sectoral level, priority (in terms of feasibility studies and training) should be given to activities for which there is a demand, such as those fulfilling basic needs of the urban or rural population (food, housing, clothing and health); meeting the production requirements of cottage and agricultural enterprises (implements, tools and small

equipment); and promoting as much as possible efficient import substitution and export-oriented activities. In this context, priority should be given:

- in agro-industry, to: (i) the development of small farm implements and other capital goods needed for agricultural production in rural areas; (ii) non-industrial food processing activities; and (iii) the development of technology for preserving perishable goods;

- in construction activities, to: (i) road maintenance; (ii) the development of local building materials; (iii) carpentry and cabinet making; (iv) interior servicing, lay-out of facilities and finishing small, interior equipment;

- in small-scale manufacturing to: clothing, leather processing, production of shoes, small implements, and equipment for hide tanning and leather working.

D. SMALL- AND MEDIUM-SCALE ENTERPRISES

The SME Sector

2.84 After a period of emphasizing large public sector projects as an instrument for industrial growth, the Burundian Government now recognizes that further industrial development appropriate to the country's scale and needs should largely involve privately owned small- and medium-scale enterprises (SME). This view is based on the very high investment cost per job of large projects and the considerable employment generation potential of SMEs. In the past, the growth of the sector was partly hindered by cultural values which gave higher social status to administrative and military positions compared with trade and industrial activities. This environment has changed. In April 1984, the President made a public appeal for the national talents to concentrate on economically productive activities, start their own businesses and rely on their own capacities to be economically successful. This, together with the Government's ongoing economic program, augurs well for a more dynamic growth of SMEs in the future.

2.85 Data on the sector of Small- and Medium-Scale Enterprises[5] is not fully developed. Periodic surveys of manufacturing enterprises were only started in the mid-1970s and cover only 40 firms, most of which have assets exceeding US$300,000. According to the most recent data available (July 1986), there are 123 industrial firms in Burundi. Despite a considerable growth in the past (11 percent per year during 1977-86), modern manufacturing contributes only to 5 percent of GDP and 9 percent of employment in modern sector. A large part of this growth was due to public investments which represented 80 percent of total industrial investment

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5/The present report defines firms with investments of up to FBu20 million (about US$165,000 equivalent) as small-scale, while firms with investments up to FBu50 million (US$415,000) are referred to as medium-scale. Informal enterprises, analyzed in the previous section are below these limits. In Bujumbura, 77 percent of informal enterprises had investments lower than FBu 2 million (US$17,000).

during 1978-81. The situation changed markedly during 1981-85, as private investment represented 60 percent of total industrial investment during this period.

2.86 Between 1976-1985, of a total of 203 new enterprises created, 66 were industrial units. Of these, 44 were exclusively private (29 owned by Burundians and representing 4 percent of the total investment; 15 by foreigners, accounting for 24 percent of capital), 17 were owned by Burundian nationals and foreigners, and 5 were mixed enterprises. Despite the small number of entirely state-owned enterprises, the State detained 72 percent of total capital, a large part of which corresponded to two large public enterprises: COTEBU (textiles), and VERRUNDI (glass bottles). Excluding these two enterprises, the share of private ownership is 57 percent, of which 49 percent by foreigners and 8 percent by Burundians. The pace of new enterprises creation has fluctuated markedly, between 13 in 1981 and 2 in 1983. In 1985 and 1986, the number of new enterprises increased substantially: 18 in 1985 and 11 during the first half of 1986.

2.87 The structure of the industrial sector shows a predominant orientation toward meeting domestic demand for basic goods and heavy dependence on imported inputs (64 percent of intermediate inputs). Exports are mainly concentrated on processed coffee, tea, cotton and a few other goods such as beer, soft drinks, cigarettes, fibrociment, and more recently textiles and glass bottles. Manufactured exports have grown rapidly in the last seven years, but their share in total exports is still low (8 percent). As in other countries of comparable stage of industrial development, food processing (excluding coffee and tea) dominates the sector, contributing 59 percent of total manufacturing value added and 17 percent of manufacturing employment. The brewery (Brarudi) accounts for more than two-thirds of the value added in food processing and 26 percent of its employment. It also generates some vertical integration such as bottle caps and beer bottle projects. Other predominant activities are linked to shelter (basically construction materials), clothing (weaving, spinning, etc.) and other diverse activities, including gem-cutting, furniture making, and wire drawing. Except for coffee and tea processing, manufacturing activity is mainly concentrated in Bujumbura and a few other secondary cities (the exceptions being: the Brasserie of Gitega, the Minoterie of Muramuga, the Mini-Huilerie of Rumonge, the Sechage de Tabac at Bibitoke, and the Sucrerie at Mosso).

Major Constraints and Development Potential

2.88 Burundi has the basic infrastructure necessary for industrialization. Electric power and water are available in the major urban centers (Bujumbura and Gitega) and a relatively good telephone system connects the capital with Europe and neighboring countries. Nevertheless, Burundian manufacturers work in a very difficult environment: (a) there is a shortage of skilled personnel in all the sectors of the economy; (b) the small market and the low purchasing power of its population limit investment opportunities and domestic demand, although firms manufacturing light consumer goods do take advantage of the sizable unrecorded trade between Burundi and its neighbors; and (c) the country's land-locked position and vulnerability to transport conditions in the major transit corridors increase the prices of imported inputs and often result in

interruption of crucial supplies, forcing firms to hold large stocks of inputs and spare parts.

2.89 Despite these constraints, and particularly for SMEs, the development potential is significant, as they are less constrained by transport difficulties and produce basic goods accessible to low income groups. An appropriate program to encourage the development of SMEs would include as a first and minimum step (i) the elimination of anti-labor bias still remaining in the incentive structure (see employment section), and (ii) the simplification of the administrative procedures for establishment of SMEs and benefitting from incentives. It has been estimated (see Chapter III) that modern industry would need to grow at about 14 percent per annum to allow GDP to expand at 4.5 percent per year during the next ten years. While such growth may be over-optimistic, a number of measures could be taken to promote the faster development of the sector.

Institutions

2.90 The principal institutions with the responsibility for promoting industrial development are the Ministry of Commerce and Industry, the National Bank for Economic Development (BNDE), the Industrial Promotion Center (CPI) and the Chamber of Commerce and Industry (CCI). The distinct responsibilities of each institution needs to be reaffirmed to avoid possible overlapping of duties and to fill in any existing gaps. Their role as a channel for broad-based private sector interests as well as for recommending policy reforms needs to be strengthened.

2.91 The industrial section of the Ministry of Commerce and Industry (MCI) is headed by the Director General of Industry, to whom the Directors of Industry and of Artisanat report. Any existing ambiguity in the definition distinguishing between artisanat and industry, or to the classification of small- and medium-scale enterprises (SME) should be clarified. Once definitions are agreed upon, responsibilities for each area should be clearly divided between organizations to assure adequate coverage and eliminate any redundancy that might exist. Procedures on policy formulation and preparation of legislation to promote the sector also need to be reviewed.

2.92 The Banque Nationale de Developpement Economique (BNDE) was set up in 1967 to provide loan and equity funds for agriculture, industry and tourism, and financing for housing. Between 1977 and 1983, BNDE channeled US$3.4 million, under the IDA Credit 731-BU, providing financing to industrial investment projects. This credit was also to strengthen BNDE's project appraisal capabilities and internal organization. While progress was made in BNDE's institutional development under the credit, the institution remains weak: its role is not sufficiently clear and, as a result, its portfolio is over-diversified, including numerous, very small loans which absorb much of BNDE's energy, while not being central to its development role. BNDE's role should be re-examined in order to strengthen its role in development financing.

2.93 The Centre de Promotion Industrielle (CPI) was created in 1981 to help promote and develop Burundian industry through provision of assistance to industrial enterprises. Its main activities have included the

preparation of project feasibility studies and, recently, the provision of technical assistance to firms in technology choice, management, and training. Since it was established, CPI received technical assistance from UNIDO. CPI's role has been hampered by frequent changes in management as well as by the difficulties in gaining acceptance by the private sector: it is perceived as an agent of the MCI (CPI is under the ministry's administrative supervision), an impression which CPI shares as it does not see itself as a channel for private sector concerns. Recent CPI efforts to reach out to the private sector have, however, met with some success -- in particular technical assistance in management provided to some enterprises. The program is, however, very recent: it started only in October 1986. In this context, it could be opportune to review the role of CPI, as well as of MCI and CCI, so as to avoid overlapping and dispersion of activities and human resources. Moreover, considering the difficult financial situation of CPI, such review should be given high priority.

2.94 In the past, the Chamber of Commerce and Industry (CCI) represented a relatively small segment of the community, mainly the larger enterprises based in Bujumbura. In line with its program to promote private sector participation in the economy, the government has encouraged the CCI to expand its activities and play a more aggressive role in representing the business community throughout the country, and promoting private sector development through training and other programs. The CCI's structure has been modified significantly and its budget increased considerably. CCI management is enthusiastic about the Chamber's expanded role, and a program to make the Chamber and its services known throughout the country has been planned.

Issues

2.95 To promote private sector development at a significantly faster rate, a number of specific measures need to be implemented, as a complement to those already implemented in the context of the Government's adjustment program. One important issue is the role of foreign nationals who will be needed both to fill some work positions (until more Burundians can be trained to meet the extra demand for technical/skilled positions) and to invest in the country. If the process is carefully managed, and sufficient additional growth is induced, there should still be a greater number of such jobs being created for Burundian than otherwise, as well as a greater transfer of technology into the country. While investment in viable SME projects by Burundi nationals should be encouraged, it is important that investment by foreign nationals should not be discouraged.

2.96 Promotion of new enterprises should focus primarily on the transformation of local raw materials, whether for import-substitution or export. In some instances, there may be a need for close coordination with other sectors to promote both forward and backward linkages -- for example, with the agricultural and forestry sectors to develop suitable industrial raw materials or appropriate basic agricultural implements. In order to promote viable new enterprises, efforts are necessary to: (a) develop entrepreneurs who can generate new ideas; (b) further technical assistance to help develop viable projects and promote sound management of firms; (c) ease access to banking credit currently unavailable to many SME's (for equipment and working capital) often partly due to guarantee problems; and

(d) make available equity financing, which is also a problem for some potential entrepreneurs.

Possible Approaches

2.97 To help develop local potential entrepreneurs, it is suggested that Burundi set up a program modelled on the Indian-developed Entrepreneurship Development Program. This program aims at identifying potential entrepreneurs, through combined selection/motivation tests, to whom technical assistance and financial support would be provided. This program has obtain excellent results in many African countries, such as Guinea and Togo. The planned IDA-financed Small Enterprises Project includes support to a pilot program of this kind. In the medium-term, a risk capital fund could help both new and established firms with inadequate equity; a well-managed fund could provide significant managerial assistance to those firms in which it held a stake. Similarly, an industrial leasing firm for SMEs could usefully channel term financing to the sector, while avoiding the guarantee problem in particular; in addition, in order to recover its investment, it would be in the leasing firm's interest to ensure that the equipment purchased was appropriate and the project viable, as well as that the entrepreneur was qualified to manage the SME. Where feasible, such mechanisms should be developed within the framework of existing institutions to avoid an overlapping of functions and dispersion of scarce human skills.

2.98 To assist existing enterprises, the operations of the Guarantee Fund, currently under restructuring, may play a significant role, particularly when their main financing need is for incremental permanent working capital. An effective channel also needs to be developed to provide technical assistance to these firms; possibilities include strengthening CPI's nascent technical assistance operation or supporting the creation of such an operation within the newly reinforced Chamber of Commerce and Industry.

2.99 For both new and existing firms, it may be desirable to prepare specific technical assistance programs focussed on subsectors which may have significant medium-term potential. Possible subsectors include the clothing industry, wood (furniture) industries and branches of the food processing industries (one particular subsector is the weaning foods industry, which needs to develop to fill a vacuum left by the recent withdrawal of a foreign relief agency). Such programs could also serve to bring different SMEs in the same subsector into contact, possibly encouraging the firms to undertake, inter alia, the joint purchase of necessary imported inputs, thereby achieving economies of scale and a decrease in the level of stocks required by each firm. This approach could also help to develop standards for each industry, as well as a more consistent product quality, which are necessary if SME are to be able to develop any export capability.

Potential Problems

2.100 Given the weaknesses of the existing institutions, it might be tempting to create new institutions to carry out the programs proposed above. Before new programs are launched, a full review of the existing

institutions should be undertaken, with the objective of reorienting and restructuring these institutions as necessary. Any major foreign-financed industrial program would need to help implement the necessary changes. New approaches, such as those outlined above, should then be introduced to the extent that the system can support them, and be integrated into the new structure, with minimal creation of additional agencies.

2.101 Technical assistance programs for a few individual subsectors would be necessary. It would be important, however, to avoid the situation in which temporarily resident expatriates run the program while the national counterparts feel they have no particular responsibility for the program's outcome, and often receive inadequate training. It is thus suggested that the programs should be fully staffed by Burundi nationals from the outset, with technical assistance funds available to bring experts in as needed.

Summary of Proposed Actions

(a) Policies towards the sector should continue and be reviewed as necessary. The provisions contained in the Investment Code in support of SMEs need to be strengthened and made more precise. Revisions of employment policies (outlined in the last section) would also need to be implemented.

(b) Most of the interventions in the industrial sector development should be streamlined and the functions of the relevant institutions reviewed to avoid duplication and focus on specific necessary tasks. In order for the changes to be productive, close aid coordination would be required.

(c) A suitably modified version of the Entrepreneurship Development Program should be set up and implemented by the Chamber of Commerce and Industry in the context of its planned regional outreach program.

(d) Specific technical assistance programs should be considered for a limited number of industrial sub-sectors where SME could have a significant developmental impact fairly rapidly. The goal of the programs should be (a) to help existing firms to operate as efficiently as possible, and (b) to encourage/help start up new firms, where appropriate, in different regions of the country, assisting in the choice of appropriate technology, defining market strategy, etc. A longer-term goal of the programs should be to become a self-supporting resource group for the subsector, perhaps becoming the purchasing/import (and perhaps eventually export) agent for the subsector, etc.

(e) A general technical assistance fund could be set up, probably in the CCI, with resources made available to any institution working to promote SMEs, for specific assistance, from either national or foreign experts, in undertaking their duties but requiring skills outside their normal range (e.g., a commercial bank considering financing an individual project could not call in an expert to undertake the entire project evaluation, but could ask for an expert to help define the project's export market potential or to help define the appropriate technology and capital cost for the project).

E. EXPORT PROMOTION

2.102 One of the key objectives of the Government's adjustment program is the expansion and diversification of Burundi's export base. Some measures already in place include the re-activation of the duty drawback scheme and elimination of taxes on manufactured exports. Further measures are still needed to overcome important constraints concerning institutional, market-related and physical factors, as well as some commercial practices. These actions are reviewed in the following paragraphs after a review of recent export performance.

Structure of Exports

2.103 Burundi's exports of merchandise are small, accounting for about 8 percent of GDP, and heavily dependent on primary products, of which, coffee and tea, account for about 85 percent. While still small, the share of industrial exports has increased from 2.4 percent in 1981 to 5.3 percent in 1985 and 5.6 percent in 1986 and an estimated 13 percent in 1987, reflecting an average 40 percent growth per year over the same period. The growth between 1981-85 was mainly attributable to export growth in two industries: textiles and glass bottles. Both were originally established to serve the export market, the latter commencing production in 1983. With the exception of exports of beer, which have fluctuated considerably over the last four years, the remaining exports declined from FBu 160.6 million in 1981 to FBu 87.4 million in 1985, but the trend was reversed in 1986, as exports of such products as tobacco, soap, and metallic products rose again, contributing to a 50 percent increase in the value of manufacturing exports.

Table 2.11: EXPORTS OF MERCHANDISE, 1981-86
(FBu millions)

	1981	1982	1983	1984	1985	1986
Primary Products						
Coffee	5994.4	7061.4	6542.1	9930.1	11354.0	17057.0
Tea	211.9	255.3	227.7	863.9	711.7	515.0
Others	588.0	583.0	521.0	475.0	664.0	630.0
Manufactured Products						
Cotton fabrics	19.0	30.0	22.0	247.6	420.0	428.0
Bottles	-	-	-	48.3	197.7	193.0
Beer	9.6	95.9	61.7	103.9	11.3	126.6
Others	160.6	131.7	111.1	140.5	87.4	333.0
Other	9.9	12.8	10.8	19.3	16.1	23.4
Total		6744.3	7900.6	7486.6	11825.0	18280.01559
5.0						

Source: BRB Annual Report 1985.

2.104 The structure of Burundi's exports differs considerably by destination, i.e., between African and non-African markets. Burundi's most important external market is the EEC, which absorbes over half of the

country's exports, all of them in the form of primary products. Burundi also exports a substantial amount of ivory to several Asian and Middle Eastern countries; in 1985 these amounted to FBu 455 million (20 percent of non-coffee exports). Exports to African countries are predominantly manufactured goods. In 1985, Burundi's four neighbors, Rwanda, Uganda, Tanzania and Zaire, absorbed 94 percent of its manufactured exports (SITC Sections 1, 5 and 6) but less than 6 percent of its total exports. Of theses countries, Rwanda is the most important market, reflecting the good transport links between the two countries, Rwanda's relatively undeveloped manufacturing sector and the existence of the trade and customs agreement among Rwanda, Zaire, and Burundi (CEPGL). The Eastern part of Zaire is also an important export market for Burundi. Moreover, in the first nine months of 1986 Uganda became an important market, second to Rwanda. Exports to Uganda increased almost sixfold over its 1985 level.

Liberalization and the Policy Environment

2.105 The past policy environment was a significant factor hindering Burundi's export performance. Most industries were established to serve the domestic market; they were protected from foreign competition by high tariffs and quantitative restrictions and from domestic competition by market guarantees. Under this regime, the incentives to export and to improve efficiency were negligible. As a result, production costs are now high, productivity is low, technology is often inappropriate, and there is considerable underutilized capacity. Moreover, by international standards, quality is typically low.

2.106 It is too early for the effects of liberalization on domestic competition to be felt fully. The most immediate, first-round effect was the increase in the costs of imported raw materials used by domestic industry, caused by higher tariffs and the FBu depreciation. With prices on domestic markets relatively stable (bolstered by the increasing threat of foreign competition), producer margins are being reduced. To maintain profit levels, producers are, therefore, under pressure to both reduce costs and expand output. In comparison to last year, there is an apparent growing interest among manufacturers to seek export orders and some, notably Verrundi (glass) and Brarudi (beer) have substantially increased export sales in new markets. Moreover, the new trade and industry policies have given clear signals to the private sector that new investment will need to be more efficient and more in line with the country's resource base, in order to be able to effectively compete with foreign and other domestic companies.

2.107 However, even when the effects of the adjustment program have worked through the economy, further measures will need to be implemented to offset the still existing bias in favor of import substitution. For example, effective rates of protection still remain well in excess of 50 percent. Moreover, while the Government has re-introduced the duty drawback scheme for exporters, its impact on domestic producers has been hampered by several factors: (i) many producers do not feel confident that it will operate in practice and do not care to apply; (ii) there are no guidelines on the method of application; (iii) recent exports are likely to have been manufactured with raw materials incurring the lowest pre-liberalization tariff rates, thus reducing incentives to apply; and

(iv) there is uncertainty within the Government concerning the scheme's administration and requisite procedures. If exporters are to succeed, it will be essential to ensure that that the duty drawback system can operate efficiently and effectively.

Market Prospects

2.108 In the short term, before any significant new industrial investment is accomplished, the structure of export markets is likely to remain the same. Africa will provide the main market for Burundi's non traditional exports, while coffee, tea and other primary products will continue to be sold in non-African markets. In the short-term, the scope for increasing sales of manufactured goods to the more developed countries is limited, given the high transport costs, relative low quality by international standards, and lack of experience of existing enterprises in export marketing. These problems can be solved only over the longer term.

2.109 To examine Burundi's market potential in ZEP countries, estimates were made of export similarity between Burundi and other ZEP countries and of export market share indices in various ZEP countries. Details are given in the Technical Note in Annex II. Despite serious data limitation which prevented a comprehensive analysis, the results indicate that ZEP countries could provide the basis for achieving a significant growth in Burundi's exports in both the short-term (existing products) and the long-term (new products).

2.110 Burundian exports to Kenya are limited to tea at present. However, there is a significant correspondence between the type of goods that Burundi exports to other ZEP countries and those imported by Kenya from ZEP countries, many of which are more distant than Burundi and also landlocked. A small share of the Kenyan market in these products could make a substantial increase proportionately in Burundi exports. In particular cotton fibers and aluminum profiles may be worthy of more investigation. Some of these are currently supplied by Zambia.

2.111 The export similarity indices calculated between Burundi and Rwanda, and Burundi and Kenya indicate that Rwanda is not a competitor on Burundi's key export markets; Kenya is, however, in Rwanda and to a lesser extent in Zaire. The export market share indices calculated for Tanzania, Uganda and Zaire also indicate markets in which Burundi could to expand its share. Considerable scope to increase exports to Uganda exists for cotton and other textiles, construction materials, metallic manufactures, cereal products and furniture (these are currently supplied by Kenya). In Zaire, Kenya suppliers dominate several markets which are also served, to a small extent, by Burundi. Given that Burundi has better communication with Zaire than Kenya, its exporters should be able to significantly expand these market shares.

2.112 An examination of foreign exchange rates with ZEP countries also suggests that Burundi has obtained a significant price advantage in these markets.[1] Although an export-weighted average for selected ZEP countries

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1/ Domestic price indices were not available to compare price trends internationally; however, initial research suggest prices on Burundi markets have been relatively stable.

showed a slight appreciation of the Burundian franc, this was mainly due to the very large devaluation in Tanzania and Zaire. The FBu became cheaper in Kenya, Uganda and Rwanda. However, Zambia and Malawi are becoming more price competitive vis-a-vis FBu priced exports. Clearly, it is important to monitor the relative exchange rate of the Burundian Franc against the currencies of key export markets and major competing countries, in order to avoid the deterioration in the competitiveness of Burundian exports.

2.113 A more comprehensive analysis would be necessary to compare the competitiveness of Burundi's exports with those of Zambia, Zimbabwe, Malawi, Tanzania and Kenya in ZEP markets as well as to assess the importance of the EEC market. The preliminary indications obtained so far indicate that ZEP countries offer Burundi a significant potential for export growth. However, even these relatively unsophisticated markets will not be easy to penetrate. These countries tend to have similar resource bases to Burundi, are at similar stages of development and therefore have established similar industries. Even if at present these industries do not export, the potential is there. Burundian exporters are therefore likely to face strong competition. Moreover, although negotiations are proceeding on trade liberalization amongst ZEP countries, trade barriers in general remain relatively high in neighboring countries.

Domestic Constraints

2.114 While the overall prospects for export growth appear positive, their realization will depend on the elimination of present constraints on exporters. While operating conditions in Burundi are difficult for all industries in general, the problems for exporters are particularly severe. Export industries are more demanding in terms of management, organizational and administrative skills; quality control, packaging and presentation take on new dimensions when facing international competition. Marketing and sales costs are also substantial and therefore need to be concentrated where the potential returns are greatest. Transport and logistic problems will increase as alternative routes to new export markets are explored and monitored. In terms of new investment, the skills required for project identification become critical and demanding. Moreover, because of its very early stage of export development, few, if any, support services (marketing, packaging design, advertising resources, etc.) exist in Burundi to assist export initiatives. Clearly, these problems need to be overcome urgently, with support from the Government, at least in the short beginning.

Export Promotion: Action Program

2.115 While many of the problems outlined above are amenable to Government action, only the commitment of the private sector can guarantee the success of an export promotion program. The new government is already taking steps to encourage this private sector involvement. The proposed action program, takes into account the particular problems faced by existing domestic-oriented industries and outlines a range of short-term support measures that should help them to make the transition into export markets. Significant export growth will come, however, from investment in new industries designed to cater to foreign markets and to operate in the more competitive international trading environment.

2.116 The objectives of the action program are to increase the neutrality of investment incentives between import substitution and export activities and to ensure that policy and incentives are simple and transparent in their operation and minimize the degree of administrative discretion involved in their administration. These recommendations should be implemented gradually in accordance with the needs of the export sector.

Short-Term Measures

2.117 To correct the most important distortions in the policy environment and provide immediate assistance to existing activities while ensuring that new investment decisions are made in a more neutral environment, the following actions are needed:

(i) The existing duty drawback system should be revised to incorporate all indirect taxes whereby rebates are calculated according to an agreed imported cost component that is revised periodically to take account of price changes. Some progress has already been made towards these ends.

(ii) To help reduce the anti-export policy bias, it would be appropriate to introduce a concessionary corporate tax rate based on export performance, whereby a concessionary rate (for example, of 5 percent) would apply to the profits attributable to export sales, and the standard rate of 45 percent to the proportion of tax "attributable" to local sales (defined as the proportion of sales revenue obtained from local sales). Given the low level of export production at present, this measure would have in fact a positive impact on budget revenues. Traditional coffee exports could be exempted from this scheme if desired. (Details are given in Annex II, Technical Note B.)

(iii) At present, marketing expenses are not deductible from the profit tax basis. Given the high cost of export marketing, this acts as a major deterrent to companies. Alternative schemes to relax this restriction would involve: full deduction for companies preparing audited accounts or up to a maximum of turnover, provided documentary evidence is produced.

(iv) Exempt expatriates from the FBu 10 million deposit required from expatriate traders, when those are engaged in export activities.

(v) Simplify procedures to facilitate travel of industrialists abroad. Such procedures are at present tedious, time-consuming and inflexible and act as a major disincentive to export marketing initiatives.

(vi) Provide direct support measures to existing industries in such areas as market information, marketing forums and technical assistance, etc. While the establishment of a centralized agency for export development should be envisaged in the medium-term, immediate assistance could be channelled through the existing Chamber of Commerce. This would cover the employment of specialists in export marketing, the development of an export market data base, and arrangement of direct marketing initiatives in foreign markets (missions, preparation of contact

lists and participation in trade fairs). In addition, the role of the Department of External Trade should be reviewed.

(vii) Launch a study to identify and evaluate Burundi's long-term resource and market potential which would provide the foundation for identifying viable export activities, directing future development efforts and guiding new investment in the medium to long term.

Medium-Term Measures

2.118 In the medium term (2-3 year), government assistance should be consolidated to ensure that it is made available in a consistent manner. At present, the government departments and organizations involved in export development are fragmented, having ill-defined and overlapping objectives. There is no central agency responsible for providing assistance to exporters and potential exporters. The Center for Industrial Promotion (CPI) was established to identify new industrial (but not necessarily export) projects. The Chamber of Commerce provides some assistance to members interested in exporting; the Ministry of Commerce coordinates export policy; and Burundi's diplomats promote export and investments interests largely on an uncoordinated day-to-day basis. Burundi's exporters are thus at a considerable disadvantage, compared to some of their competitors in neighboring countries: there is little information available to them about prospective export markets (size, growth, sources of supply, prices, competition, and trade barriers); no effective channel through which exporters can apply for technical assistance; and no organization able to comprehensively promote export development and represent exporters' interests.

2.119 Moreover, in terms of project identification, the Center for Industrial Promotion has had limited success in its five years of operation. This has been mainly due to the relative inexperience of its management and staff in project identification, inappropriate technical assistance projects, and an overbearing emphasis on the management assistance aspects of the Center's work. Effective assistance in project identification is an essential prerequisite to the establishment of new export activities in the early stages of development where entrepreneurial skills are scarce and market signals weak (resulting from discontinuities in production functions, economies of scale and inadequate market intelligence). This function must be strengthened in Burundi.

2.120 Over the next two years, the Government would need to establish an Export and Investment Promotion Board which would centralize and coordinate Burundi's export and investment promotion initiatives. Before its establishment it would be useful to program visits to other countries which have established similar institutions such as Kenya, Mauritius, Sri Lanka and Taiwan, to learn from their experience and to develop a better understanding of the possibilities and limitations involved. The functions of the Board would be to:

(i) assemble and make available to exporters and potential investors commercially relevant market information which would assist them in evaluating individual market potential;

(ii) assist exporters to make commercial contacts in foreign markets;

(iii) form a conduit to channel technical assistance to export industries in disciplines such as marketing, sales, quality control, production engineering, design and packaging;

(iv) undertake direct promotional initiatives in foreign markets such as the organization of trade missions, participation in trade fairs, publicity programs to raise awareness of Burundi as a source of supply and to attract foreign investment into the country;

(v) coordinate the activities of commercial attaches in Burundi's foreign embassies;

(vi) assist the government in preparing cases for negotiations on trade barriers reduction in existing and potential markets;

(vii) maintain the existing policy environment in Burundi and represent private sector views to the government;

(viii) identify new viable and import substitution activities and promote these to local and foreign investors.

2.121 The governing authority of the Board could comprise representatives of both the private sector and the Government, with the Chamber of Commerce assuming a substantial role in the organization, management and supervision of the Board, perhaps on a joint venture basis with the Ministry of Commerce. The CPI's role in industrial project identification role would need to be incorporated into the wider sectoral responsibilities of the Board to avoid duplication. Given the acute shortage of marketing and promotional skills in Burundi, the Board would have to rely heavily, at least in its early years, on specialist expatriate staff and management.

Long-Term Measures

2.122 The monitoring and development role of the proposed Export and Investment Development Board, however, needs to take into consideration two long-term policy issues. First, given the increasing levels of competition by the developing countries to attract foreign investment and to compete on international markets, it may be necessary to establish a Free Trade Zone. Ideally this would occur only after the results of the long-term study have been finalized and a list of viable export projects and promotional prospectuses prepared. Second, as the structure of Burundi's economic activities develops and intermediate industries are established, indirect export activities (domestic industries supplying inputs for export products) would emerge. As these grow in importance, it would be essential to incorporate them into the duty drawback scheme by, for example, introducing a domestic letter of credit scheme. Final consideration should be given to developing export support services: public relations, packaging and design. These will become increasingly important, the greater the degree of penetration of major markets.

F. MAJOR ENERGY SECTOR ISSUES[2]

2.123 Indigenous biomass fuels -- wood, charcoal, agricultural residues, and peat-- satisfy about 90 percent of final energy demand in Burundi, conventional commercial fuels less than 10 percent. Most biomass fuels are gathered, not sold, hence there are no accurate measures of consumption. Assuming a conservative average energy use of 0.5 m3 of fuelwood equivalent per person per year, total biomass energy consumption would be about 2.4 million m3, or 600,000 TOE. Fuelwood is estimated to account for 70 percent of total biomass consumption, and agricultural residues for most of the balance. About 15 percent of the woodfuel is converted into charcoal, the principal urban household fuel. The remainder is used as firewood by rural households and small businesses. Traditional charcoal production methods, with a low average yield of 10 percent, predominate. Charcoal is burnt in low-efficiency metal cooking stoves, firewood in open, three-stone fireplaces at even lower efficiency.

2.124 Wood and Charcoal. Forests and woodlands cover about 130,000 ha, of which about 60,000 ha is natural forest and 70,000 ha plantations. Mean annual wood increment is low, only about 3m3 /ha, which suggests total sustainable supply of about 400,000 m3 per year. This represents 25 percent of estimated woodfuel consumption. As a result of the large supply deficit, wood stocks are declining rapidly and substitution by agricultural residues increasing, with negative consequences on soil fertility and crop yields.

2.125 Public reforestation averaged 6,000 ha/year over the 1978-85 period, only a fraction of what is needed to arrest the destruction of wood stocks and achieve the Government's target of 300,000 ha of new plantations by 1995. Land constraints are a problem for increased plantations, but these could be alleviated by using poor mountain ridge land, which has little or no agricultural potential and would be environmentally improved by reforestation. Although the public investment program must be expanded, shortages of finance and land suitable for plantations make it unlikely that public investment can close the supply/demand gap. Effective parallel efforts are therefore needed to: (a) raise current forest yields from their low average of 3 m3 /ha/year; (b) encourage a massive expansion of private tree planting through agro-forestry extension and subsidized seedling programs; [3] (c) raise the efficiency of traditional charcoal production by introduction of modified earth kilns of the "casamance" type; and (d) popularize more efficient charcoal stoves in Bujumbura, the major source of charcoal demand, as well as in other towns.

2.126 Progress is being made in areas (a) and (b) through intensified training of forestry staff and strengthening of agro-forestry extension services. These efforts need to be continued and expanded. A program to train charcoalers in the more efficient charcoal production methods, which

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2/The Technical Note on Energy in Annex III provides a comprehensive review of the sector and updates the earlier Energy Assessment Report.

3/Such subsidies would be necessary to enable the wood producers to compete with wood gathered freely in the open natural forest which is sold in the market at a much lower price than its economic cost.

could roughly double wood yields, is an urgent priority. So, too, is expansion of an existing improved stove program in Bujumbura. This requires an aggressive production and mass-marketing effort, with the objective of familiarizing a significant proportion of the urban population with the improved stoves by end-1987.

2.127 Peat. Although Burundi's indigenous peat resources total over 57 million tons, most are isolated, costly, and environmentally difficult to exploit. Production is limited to the highland bogs and totalled 15,000 tons in 1986. Consumption is about 12,000 tons, of which the army accounts for 90 percent. At its current financial cost of FBu 8/kg (FBu2.2/kWh) peat is competitive with fuel oil (FBu 5.0/kWh) but not fuelwood (FBu 1.0/kWh) for industrial process heating. However, because of its high ash content it cannot be burnt in fixed-bed boilers. Installation of fluidized-bed boilers is only marginally economic vis-a-vis fuel oil and operationally risky, because the technology is not proven in Burundian conditions. The present scope for peat substitution for indigenous fuelwood and imported oil is therefore limited. However, peat may have potential as a household fuel if carbonized to reduce weight, smoke, and smell. The feasibility of this option should be tested.

2.128 Consumption of commercial energy increased by an average of 9 percent p.a. between 1980 and 1985, but, at 15 kgoe per capita, remains one of the lowest in the world. Petroleum products account for 67 percent of the total, electricity for 29 percent, and peat for 4 percent. A commercial energy balance for 1980 and 1985 is given in Table 2.12.

Table 2.12 COMMERCIAL ENERGY BALANCE, 1980,1985
(tons of oil equivalent)

	1980	1985	
Primary Production			
Hydropower	1,080	11,777	
Peat	1,020	2,873	
Total	2,100	14,650	
Imports			
Gasoline	18,050	18,098	
Kerosene	910	2,726	
Diesel and Fuel Oil	16,300	28,715	
(subtotal petroleum)	(35,260)	(48,999)	
Electricity	10,200	10,773	
Total	45,460	59,772	
Transformation/Losses			
Petroleum Products	-220	-710	a/
Electricity	150	-520	b/
Final Consumption			
Petroleum Products	35,040	48,289	
Electricity	11,430	21,010	
Peat	1,020	2,873	
Total	47,490	72,172	

a/ Assuming two-thirds of private generation is diesel.

b/ Diesel generation minus Regideso's own use and system losses. The latter have risen sharply with the shift to indigenous hydro generation.

Sources: Ministry of Commerce and Industry; Bank of the Republic of Burundi and IBRD estimates.

2.129 An international oil company is currently exploring in the areas of Lake Tanganyika and the Ruzizi plain, but the prospects of a commercial oil discovery in Burundi are uncertain. Petroleum imports, which totalled 49,000 TOE in 1985, will therefore continue to be the sole source of supply. Consumption rose by an average of 7 percent per year between 1980 and 1985, diesel and fuel oil accounting for 85 percent of the increase. Although only 2,700 tons in 1985, kerosene consumption was more than three times its 1980 level, a result of increased use by urban households.

2.130 The major issues in the petroleum subsector remain the high cost (average US$94/barrel in 1985) and vulnerability of supply, which are partly a function of the country's landlocked location. Direct purchase of supplies on the Middle East market and the negotiation of lower transport charges from Mombassa have reduced costs by about 15 percent since 1980. Further savings may be possible through use of the Dar-es-Salaam/Kigoma route, and its cost and reliability should be evaluated. Diversification of supply routes would also increase the security of supply. The services of a petroleum supply and distribution expert would strengthen Burundi's ability to examine product purchase and transportation alternatives. The mandate of that adviser would include the design of a contingency plan to ensure that the most effective use is made of petroleum stocks in the event of a supply disruption.

2.131 Eighty percent of petroleum product demand is for transport fuels -- diesel oil and gasoline. Consequently, the scope for cost-effective conservation or substitution by indigenous fuels is limited. Burundi peat is not technically suitable, and the long-run marginal cost of electricity is nearly double that of diesel oil for industrial process heating. Maintaining petroleum prices based on the economic cost of supply is the key to ensuring that energy consumers make the correct fuel-choice decisions.

2.132 Until 1982, the 28.2 MW Ruzizi hydro plant on the Rwanda/Zaire border was the principal source of electric power supply to Burundi. Indigenous hydro plants have since been commissioned at Mugere (8MW) and Rwegura (18 MW). This has dramatically reduced dependence on imported power, which fell from 98 percent in 1981 to 46 percent in 1985. However, it has also caused a sharp rise in the cost of power, and in the long-term debt and interest obligations of REGIDESO, the power utility company.

2.133 Participation with Rwanda and Zaire in the 26.6 MW Ruzizi II hydroelectric project (39.9 MW after 1993) means that Burundi will likely have excess power capacity from 1989 to 1993. A priority in the power subsector is to utilize this surplus power, to the extent justified by the economic viability of additional power demand. This is the main objective of planned power system investments.

2.134 The power investment program for 1986-90 totals FBu 8,700 million (US$76 million in 1986 prices), of which about 75 percent is allocated to expansion of the transmission and distribution system. The projects within the program respond to Government development objectives, but not all have been selected on the basis of rigorous technical and economic analysis to

ensure that they are optimal investment choices. In 1987, REGIDESO will begin preparation of a long-term, least-cost investment plan for national power development based on economic analysis of technically sound alternatives to determine the lowest cost investment among alternatives, as well as on analysis of REGIDESO's financial situation to ascertain its capacity to invest and internal/external financing constraints. As Burundi is part of a regional interconnected network, a review of least-cost options should include comparison of national investment projects with projects which could be developed jointly, at the lowest cost to all network users. The preparation of the national development plan should also be used to train planners within REGIDESO where such skills are presently in short supply.

2.135 REGIDESO's future capacity to invest must be assessed taking into account its difficult financial situation which, in 1985, deteriorated to the extent that operating revenue failed to cover operating costs while debt service arrears rose to FBu 300 million (US$2.63 million). Higher electricity tariffs are essential if REGIDESO is to cover its operating, maintenance and depreciation costs and its debt service, but must be complemented by improved revenue collection and better control of operating costs to arrest their recent upward trend. Average tariffs (FBu 11.5/kWh, or US cents 10.1/kWh) should be raised progressively from their current 60 percent of LRMC (long run marginal cost) to 80 percent of LRMC by 1992. Simultaneously, reductions in the cost of power connections from their 1985 level of FBu 60,000 (US$526) per customer are also necessary if power connections are to be increased as planned.

2.136 With perhaps the exception of solar water heating, windspeeds, and crop drying, potential for non-biomass renewable energy is probably limited, although current research should provide more conclusive data. Biogas is now being explored by Germany, Belgium, and China. Germany is going to finance a Special Energy Program which will look at possibilities for renewable energy in Burundi. Efforts should focus on practical testing of these technologies in applications where they may be able to substitute for imported petroleum fuels, for example, in industrial and commercial water heating.

G. TRANSPORT

2.137 International transport. As a landlocked country, Burundi is dependent on transit through neighboring countries. Owing to the long distances to the transit ports on the Indian Ocean (1,428 km by the central route and 2,273 km by the northern route), transport costs are obviously high even in the best conditions. In addition to the long distances, other factors which add to these costs, include the conditions of transport infrastructure, cumbersome transit procedures, the poor efficiency of transport operators, and imbalanced import and export flows. Overall transport costs are estimated to add about 30-40 percent to the costs of imports and exports.

2.138 In the late 1970s, the two corridors suffered the worse disruptions in transit due to unusually high Zambian traffic and turmoil in Uganda. With the end of this disruption, the situation improved. In most

countries involved in the northern corridor (Burundi, Rwanda, Kenya, and Uganda) investments were made to improve maintenance and extend infrastructure. Direct transport costs are estimated to have decreased in the northern corridor from US$340/tons in 1979 to US$200 /tons in 1985. Indirect costs have also fallen: transit times fell from 35-45 days to 20-30 days in the northern corridor and to 40-60 days (from several months) in the central corridor. Further reduction in costs are possible but will require full and effective implementation of multi-country agreements (such as the transit agreement signed in 1985) as well as improvements in the efficiency of all transit operators.

2.139 The main problems affecting the northern corridor servicing Burundi are the following:

(i) improvement in road infrastructure. Because of poor conditions of roads, international transport costs are higher than could be. Investments in road rehabilitation are less than what is needed, and maintenance is also inadequate;

(ii) streamlining of transit procedures. Following the conclusion of the Northern Corridor Transit Agreement in November 1985, substantial improvement is expected in simplifying procedures (which had required up to 15 different forms). However, the implementation of the agreement, which includes several components is still lacking, and further meetings will be necessary to agree on the details of implementation.

2.140 The central corridor (Bujumbura port - Kigoma - Dar-es-Salaam) is the cheapest alternative for Burundi: unit transport costs are US$110-150/tons lower than via Mombasa. Further improvements in the Tanzania Railway Company and in the handling of freight at Dar-es-Salaam are needed, and operations could also be improved in the Kigoma port. To improve transport conditions on this route, the Government has finalized a master plan for the Bujumbura port. Transport procedures need, however, to be streamlined by using a single transport document (progress is underway with support from EEC), and a better coordination of operations between Bujumbura, Kigoma and Dar-es-Salaam is called for in order to decrease delays and improve the reliability of that route.

2.141 Transport security is an important concern, and alternatives should be evaluated to provide the Government with a rapid solution when disruption occurs, as it happened in 1986. Alternatives include: (a) air transport; (b) the southern corridor (through Mpulungu in Zambia); and (c) the Isaka route, with the TRC railroad from Dar-es-Salaam to Isaka and road transport from Burundi to Isaka. The Government is considering investments in the construction of two alternative road connections between Burundi and Isaka.[4] These alternatives should, however, be carefully compared both between themselves and with the lake/rail alternative and associated investments in the Bujumbura port and shipyard already planned.

2.142 Domestic Transport. Road investment has had the largest share in public investment expenditures in the last five years and, at present,

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4/Bujumbura - Kayanza - Kobero - Bukoba; and Bujumbura - Gitega - Ruizigi - Cankuzo, Bukoba.

Burundi's road network is quite adequate for the needs of the country, and so far appropriately maintained. In order to ensure that this favorable situation can continue in the future, it is important that new investments in road construction are not made at the expense of routine maintenance and periodic rehabilitation of the network as needed. In the context of the IDA-financed Fourth Highway Project, the Bank and GOB have agreed to exchange views every year on the size of the highway investment program and the balance between new investments and maintenance expenditures. Unfortunately, the imbalance has persisted and is likely to continue: large investment are being planned, the allocations made in 1987 for maintenance are about 20 percent lower than what would be required: FBU 450 million compared with the estimated needs of FBU 510 million. Strengthening the PIP/PEP preparation, with the help of an economist/planner in the Ministry of Transport, is expected to help solve this problem in the future.

2.143 Domestic Enterprises. Burundi has a sector actively engaged in urban and international transport, and two parastatals: OTRABU in charge of international freight and OTRACO providing passenger traffic services. Both are facing financial problems and the Government has included them in the first group of PEs to be rehabilitated. Recent analysis has shown that for OTRABU to be profitable, it would have to double the volume of freight handled at present, which would give it a quasi monopoly in the sector (this despite the fact that part of the company's operating costs are currently subsidized by foreign aid). While monopolization is clearly to be avoided, solutions for OTRABU should be sought by (a) reducing operating costs, and (b) considering the participation of the private sector in the company.

2.144 Passenger transport in Burundi is split 50/50 between OTRACO and the private sector, with OTRACO operating mostly large buses in Bujumbura and the private sector -- consisting of about 300 small operators -- handling the bulk of intercity passenger transport and a sizeable share of the Bujumbura transport. Although there seems to be a fair degree of competition between OTRACO and the private sector, OTRACO is in fact being subsidized since it operates with buses provided by foreign donors. In order to break even, OTRACO would need to increase the urban fare from FBu 20 to FBu 35. This has been resisted by the Government. The options would be to let OTRACO fix the rate as it seems needed and let it react to the decline in demand if this occurs, or open to increase competition. Privatization of OTRACO could also be considered. These options are being evaluated by the consultant in charge of preparing a rehabilitation program for the company.

H. SOCIAL SECTORS

POPULATION

2.145 The issue of population growth is central to the development of Burundi. By setting a time limit to expansion of agricultural production by exploitation of land reserves, it dictates the speed at which agricultural productivity must grow, and technologies change, in order to maintain and improve food supplies and rural incomes. It also sets the pace at which (i) employment opportunities must increase to accommodate the swelling labor force, and (ii) educational, health, and other public services must expand to improve human resources and the living standards of the population. The impact of population growth will thus be felt in every sector, increasingly so with the passage of time. The Government of Burundi is well aware of the fundamental importance of population issues and has already begun to develop population policies and programs.

2.146 With an estimated population of about 4.9 million (1986), Burundi is the second most densely populated country in Sub-Saharan Africa (an average population density of 180 per sq. km.). The demographic features of the population are similar to those of other countries in Sub-Saharan Africa (Table 2.13): a predominantly young age structure (42 percent of the population is under 15 years), declining mortality and no offsetting reductions in fertility. Population growth, which averaged only 2 percent per year during the 1970s, accelerated to 2.8 percent during 1980-85 and is currently estimated at 3 percent, due in part to the decline in emigration to neighboring countries.

Table 2.13: DEMOGRAPHIC INDICATORS, 1979

	Burundi	Sub-Saharan Africa
Life Expectancy (years at birth)	47	47
Infant Mortality Rate (per. thous. live births)	133	145
Crude Death Rate (per thousand pop.)	19	18
Total Fertility Rate (children per woman)	6.5	6.6
Crude Birth Rate (per thousand pop.)	47	48
Rate of Natural Increase (%)	2.8	3.0

Sources: Burundi: Population and Health Sector Review; IBRD, Accelerated Development in sub-Saharan Africa, IBRD; Population Reference Bureau.

2.147 The relatively high rate of population growth is likely to hinder the Government's ability to sustain long-term economic growth, raise standards of living, and improve the quality of human capital. At this rate of growth, Burundi's population will reach 7-7.5 million at the turn of the century. This substantial increase (50-60 percent) over the next 15 years or so will take place irrespective of the Government's efforts to introduce family planning, which will take time to produce results. In the long-run, however, an effective population program can play a major role in influencing the demographic dynamics (e.g., curbing fertility, the most important determinant of future population growth, and altering the age structure) and helping the Government improve the quality of human resources, through expansion of education, health, and social services. Moreover, investments in family planning and maternal and child health care will benefit from important synergisms: e.g., an increase in birth spacing

will tend to improve the nutrition status of mother and child; immunization against measles and protection against diarrheal diseases will help to alleviate malnutrition. The following paragraphs address the consequences of population growth on selected socio-economic variables and proceed with a review of Government efforts in human resources development (education, nutrition, and health).

Population Growth and Socio-Economic Consequences

2.148 To illustrate the potential impact of the introduction of family planning, a set of three population projections were constructed for the 1985-2015 period [1] : (i) scenario I assumes that the Total Fertility Rate (TFR) [2] remains at the present level of 6.5; (ii) scenario II "gradually declining fertility," is based on the assumption that the TFR falls to 4.2 by 2010-15 and reaches 2.1 (replacement level) by 2035, a decline which could be expected from overall improvements in socio-economic conditions; and (iii) scenario III, "accelerated fertility decline", illustrates the potential impact of a strong family planning program, with the TFR declining to 3.1 by 2010-15 and reaching replacement level by 2025.

Table 2.14: PROJECTED SIZE AND GROWTH OF THE POPULATION

Fertility Assumption	Total Population (millions)			Average Annual Rate of Population Growth (%)		
	1990	2000	2015	1985-90	1995-2000	2000-2015
Constant	5.485	7.440	12.153	3.01	3.05	3.42
Gradual decline	5.485	7.385	10.786	3.01	2.90	2.32
Accelerated decline	5.442	6.973	9.290	2.86	2.33	1.77

2.149 Total Size. As the population projections above illustrate, Burundi's predominantly young age structure carries with it a substantial amount of built-in momentum (potential for natural increase). Under scenario I, the total size would reach 12 million in 2015, representing more than a two and a half fold increase; it would double once again in the following 20 years. Under scenario II, the population would reach 10.8 million in 2015, doubling in the following 30 years. Under the family planning scenario (III), the population would reach 9.3 million in 2015, doubling in the next 40 years. This last scenario would also lead to a more favorable age structure: a relative increase in the productive age groups and a decrease in the dependent groups (less than 15 and more than 65 years).

2.150 Labor Force. As discussed in other parts of this report the ability of the agricultural sector to continue absorbing labor force growth

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1/All scenarios assume a continual improvement in life expectancy and zero net emigration.

is being taxed and the modern sector appears unable to generate sufficient jobs to all entrants. The annual number of individuals entering the working-age groups is currently estimated at about 65,000 and is projected to increase to 84,000 and 110,000 during 1990-95 and 1995-2000, respectively, regardless of the fertility assumption. The effect of the family planning program on the working-age groups would begin to manifest by 2005, when the births averted by the program would have entered the labor force. During 2010-15, the average annual number of entrants would be 190,000 under the first scenario, compared with 137,000 under the family planning one. The net difference in the working-age population between the constant and accelerated decline scenarios would be only 38,000 by 2005 but would reach 438,000 by 2015.

2.151 Savings and Investment. Other things being equal, the highest level of domestic savings and investment are likely to be associated with lower rates of population growth and a relatively large proportion of adults in the working-age groups. As mentioned in Chapter I, the rate of domestic savings in Burundi is low: it averaged 4.5 percent of GDP during 1978-86, compared with an average investment rate of 16 percent. While rapid population growth is not the only factor which explains the low domestic savings, it tends to have a depressive effect on savings, through the pressure it exercises on consumption, especially if employment and income are not keeping pace with population growth. A lower rate of population growth would free more national resources for capital accumulation and improvements in the standard of living. The investment rate necessary just to maintain the average per capita income will be relatively high, given the prevailing population growth rate in Burundi. As indicated in the table below, with a population growth rate of 3.0 percent during 1985-2000 (second scenario), the investment rate would need to be 18 percent of GDP just to achieve a per capita increase of 1.0 percent.[3] Under the family planning scenario, since population growth would average 2.3 percent during 1995-2000 and 1.8 percent during 2010-15, the same level of investment would lead to an increase in per capita incomes of 1.7 and 2.2 percent, respectively.

Table 2.15: CAPITAL REQUIREMENTS FOR A GIVEN ANNUAL RATE OF INCREASE OF PER CAPITA INCOME (Percentage of GDP)

Percentage increase of per capita income	Annual Rate of Population Growth (%)		
	1.8	2.8	3.0
0	8.1	10.85	13.5
1	12.6	14.85	18.0
2	17.1	19.35	22.5
3	21.6	23.85	27.0

2.152 Projected trends in the age structure under the three population scenarios will be associated with different investment levels and patterns. The higher dependency ratios[4] projected under scenario I (95 in 2000 and 93

2/TFR is defined as the average number of children that would be born alive to a woman during her lifetime if she were to pass through all her childbearing years conforming to the age-specific fertility rates of a given year.

in 2015) would require higher investment levels in human capital (e.g., health, education) than under the family planning scenario (dependency ratios of 83 and 59 in 2000 and 2015, respectively) since these services are used disproportionately by the dependent age groups. To illustrate this point, the investment requirements for Maternal Child Health services were estimated under the three population scenarios (Table 2.16). Under the first two scenarios, the projected increase in the client population would absorb most of the increase in recurrent budget funds allocated for MCH services and make quantitative improvements difficult; such improvements would require real annual growth rates of 4-6 percent, which is out of line with the projected medium-term trend in overall recurrent expenditures (8 percent in current terms). Under the family planning scenario, however, Government's goal of providing MCH services would be made easier, but full coverage would still have to be postponed beyond 2000.

Table 2.16: REQUIRED GROWTH IN MCH RECURRENT EXPENDITURES
(millions of FBu, 1985 prices)

Fertility Assumption	Constant coverage rate 1990	2000	2015	Growth rate	Increasing coverage rate 1990	2000	2015	Growth rate
Constant	361.7	469.4	781.1	3.1	361.7	867.5	1551.9	6.0
Gradual	361.7	452.4	531.6	1.6	361.7	643.4	992.8	4.1
Accelerated decline	348.6	370.4	384.1	0.4	348.6	526.8	625.2	2.4

Family Planning Policies and Programs

2.153 Burundi has recently adopted a policy to reduce population growth through the promotion of family planning services, to be provided in the context of the maternal and child health care program. Political support has been mounted at the highest level. The Central Committee of the UPRONA Party adopted an official population policy in July 1983, and Presidential statements have called attention to the imbalance between population and national resources. Policy and program formulation is, however, in the initial stages. The Government intends to establish a national Family Planning Commission, to coordinate, oversee and evaluate all multisectoral activities, under the forthcoming IDA-financed Population and Health project. The Ministry of Health has only recently begun the process of elaborating a coherent set of population policies and an actionable program with specific demographic objectives and targets: the target of a contraceptive prevalence rate (CPR) of 14 percent by 1992 has very recently been adopted. The links between demographic and socio-economic parameters are not analyzed in a systematic fashion. With the exception of the Economic and Social Research Institute (CURDES) at the University of Bujumbura, the present capacity for carrying out this work is still limited. The demographic unit of the Ministry of Interior (CEDED), which made important contributions in the preparation of demographic projections for the Fourth Development Plan, has not yet expanded its program to this type of analyses.

3/Based on a ICOR of 4.5.

2.154 Supply of Family Planning. The Ministry of Health, with assistance from UNFPA, has taken initial steps to improve the availability of family planning services. Until recently, family planning services were available mainly in hospitals. In 1982, services were introduced in a pilot project (Muramvya) and have been gradually expanded to other provinces. As of December 1986, services were available in 13 of the 15 provinces. According to one study, 55 percent of the health centers surveyed were providing some family planning services in 1986, versus only 6 percent three years ago. [6] The mission-administered health centers, however, promote mainly natural methods of contraception (e.g., rhythm, Billings) and there are no community-based distribution channels. As discussed in the health section below, accessibility to services is reasonably good by African standards.

2.155 It is still early to evaluate the effectiveness of the family planning activities. Given the current low level of activities, the contraceptive prevalence rate is estimated at only 1.6 percent, which implies that some 13,000 women (aged 20-44) are using modern contraceptives. According to UNFPA, the contraceptive mix among urban consumers comprised pills (47 percent), injectables (48 percent), and IUDs/other (5 percent), while the mix among rural women consisted of injectables (57 percent), Billings/condoms (18 percent), and pills (16 percent). No information is yet available on other important indicators (e.g., acceptance and discontinuation rates, worker performance).

Table 2.17 CONTRACEPTIVE USE in 1984, 1986

	Number of women contracepting	Contraceptive Prevalence Rate (%)
1984	7,949	1.1
1986	12,796	1.6
of which:		
Bujumbura Province	6,869	7.1

Source: UNFPA

2.156 Demand for Family Planning. The Ministry of Health, with the assistance of major donors, has begun to assess and stimulate demand for family planning. A pilot KAP (knowledge, attitudes and practice) survey of 308 women and 292 men, carried out in 1985, indicated that there is some unmet demand for family planning but this has not yet been quantified.[7] With regard to knowledge, the survey revealed that while 80 percent of respondents claimed some prior knowledge of contraception (with Depo

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4/Ratio of persons in the dependent ages (less than 15 and over 64) to the economically productive ages (15-64) of the population.

5/Women of reproductive age giving birth in a particular year and children 0-5 years old.

provera being the most frequently cited modern method in rural areas), response rates to more specific questions (concerning the female cycle and lactation) indicate that there are serious knowledge gaps. Concerning attitudes, the survey indicated that the desired average family size was 6.2, with about one-third of respondents wanting 7 or more children and another third wishing 4 or less. Stated ideal family sizes were consistently higher than optimal family sizes recommended by respondents to other couples, which indicates a certain awareness of demographic pressure but not necessarily a willingness to assume personal responsibility. Questions aimed at assessing practice confirmed that usage rates are low, with less than 10 percent using some form of contraception (including natural methods), of whom 95 percent were practicing abstinence.

2.157 In the last few years, the Party has launched an information/education/communications campaign (IEC) to stimulate demand for family planning at the local level. This effort was, however, hampered by the limited institutional capabilities of the Ministry of Health to implement a nationwide IEC program. Under the IDA-financed Population and Health Project, which is under preparation, the Government is planning to strengthen the Ministry's capabilities and to introduce a nationwide IEC program to generate demand, raise awareness and improve knowledge about the potential health benefits of and the means available for birth spacing.

Table 2.18: EDUCATIONAL INDICATORS (%)

	male	females
Literacy Rates (1979)	43.0	26.0
Enrollment Rates (1985/86)		
Primary Education	84.0	46.0
Secondary Education	4.3	2.2

Sources: 1979 Census and Ministry of Education.

2.158 While IEC efforts are important, an expansion of educational and economic opportunities for women as well as improvements in child survival will be indispensable in bringing about a reduction in desired family size, and ultimately in fertility. Despite Government efforts to expand educational opportunities, literacy and enrollment rates for Burundian women remain relatively low (Table 2.18). The experience in Sub-Saharan Africa has shown that smaller desired family sizes are usually associated with levels of education beyond primary schooling.[8] Recognizing that for the foreseeable future the highest level of education to be attained by most Burundian girls (and boys) will be primary education, Government has taken the sound decision to introduce population education in the primary school curriculum. Other efforts by the Ministry of Women's Affairs (with assistance from UNICEF) are planned to ameliorate women's income earning opportunities, notably by facilitating their assess to banking credit. These interventions, however, remain limited in number and scope. Improvements in child survival, resulting from expansion in health services

6/This survey, covered some 50 public and private health centers, (about one quarter of all facilities) and was carried out as preparatory work for the forthcoming IDA-financed Population and Health Project; the numbers must be interpreted cautiously, however, since services are not standardized and there is substantial variability in quality.

and higher socio-economic conditions, should also lead to a decline in fertility, but this will take place slowly as behavioral responses adjust with a lagged effect to lower child mortality.

Recommendations

2.159 While the Government's overall strategy of promoting birth spacing in the context of the MCH program is sound, the institutional and policy framework needs to be considerably strengthened. In this regard, the following measures are proposed:

- strengthening and expanding the work program of the demographic unit of the Ministry of Interior (CEDED), with a view to: (a) developing a data collection program (i.e., 1989 Census, an internal migration study); (b) analyzing the socio-economic consequences of population growth, in collaboration with technical ministries (as inputs into the national Plan); and (c) assisting the Ministry of Health in identifying feasible demographic targets and, eventually, undertaking an evaluation of the program's impact. UNFPA is ready to assist Government in this respect.

- developing specific policy objectives, evaluation criteria and a surveillance system for the family planning program.

- increasing the availability of family planning services by: (a) setting up community-based distribution schemes, and (b) designing a referral system for the mission facilities.

- expanding educational opportunities for women in both formal and non-formal education programs.

EDUCATION

Government Objectives and Strategy

2.160 Developments in the education sector in the next few years will be a function of Government's objective to reach full enrollment of 7-year-olds by 1987/88 and universal primary education enrollment by 1991/93, while maintaining a prudent budget policy in the context of the ongoing adjustment program. To achieve the enrollment goals, the number of new classrooms needs to average 600-700 per year over the next six years (compared with 300-400 in the past) and the number of teachers would have to increase at about 6-8 percent per year. These objectives are likely to be achieved if recent performance both in physical and financial terms continue. Primary education enrollments increased by 49,000 between 1984/85 and 1985/86, and 53,000 between 1985/86 and 1986/87, bringing to 466,000 the total number of children enrolled in primary education in 1987; the rate of 7-year-old enrollments reached about 75 percent (against less than 60 percent two years earlier).

2.161 To limit the effects of this growth in the central government budget, the Government has initiated a number of actions to improve utilization of resources: (a) the double-shift system is being extended to the 5th year and will ultimately be extended to the 6th grade in 1988-89;

7/More comprehensive and representative data will be available upon the completion of a on-going national Health and Demographic Survey in late 1987.

(b) efforts are being made to reduce the oversupply of teachers in urban areas; (c) non-qualified teachers are being progressively replaced in order to offset the negative effects of the double-shift system on the quality of education; and (d) the construction of new premises (apart from those covered by externally-financed projects) is taking place solely with the contribution of local communities.

2.162 To achieve the Government's objective of universal primary education within adequate financial limits (e.g., maintaining the share of education expenditures in the central government budget at the present 19 percent level) some trade-offs will be necessary. The most important is the required slowdown in enrollments in post-primary education levels, notably in secondary education (whose enrollments increased by 10 percent between 1984/85 and 1985/86) and in higher education (11 percent in the first year). At the level of boarding-schools (the most expensive category of secondary education and largely accounted for by the teacher training schools -- Ecoles de Formation des Maîtres, EFI), enrollments (19,700 in 1985/86) will need to increase to provide the number of teachers needed in order to achieve universal primary enrollment. Measures to reduce their unit costs are being prepared.

2.163 Since 1983, the construction of primary schools has been financed exclusively by contributions from the local communities and external donors without any financial contribution from the central budget. The rhythm of school construction has, however, continued to rise, leading to the opening of some 300-400 classes each year. If Government's objectives are to be met, there will be a need for additional financial support, specially in poorer areas, where communal resources are insufficient to allow for the required construction of educational infrastructure.

2.164 At the secondary level, measures have been taken to reduce the very high unit costs (about 12 times those at the primary level, and 225 percent of per capita GDP), while encouraging education quality. To this end: (a) few new teacher recruitments have been made but the non-qualified teachers have been gradually replaced; (b) tuition fees have been gradually increased, leading to a transfer of a large part of education costs to students and/or their families; (c) school gardens have been established (as well as coffee plants and pigsties) to help alleviate the high unit cost of boarding schools (food is 25 percent of total cost). Higher education (which now includes the new hospital center in Bujumbura) has unit costs which are 100 times those at the primary level (and 14 times the per capita GDP). To decrease these costs, a system of student loans has been introduced to replace former grants, the student/teacher ratio is being increased, expatriate personnel are being replaced with nationals, and research is being reorganized to try to make it profitable.

2.165 Investments in post-primary levels are mainly financed by foreign aid (60 percent during 1979-83) and this share is expected to increase in the future (to 79 percent during 1986-87). On the whole, capital expenditures on education represent about 5 percent of total public investment.

8/One study in Burundi confirmed this general finding; women with post-primary education had a desired family size of about 2 children less than illiterate women, while no significant differences were found in desired family size between rural women with and without primary education. See J.P. Robatel/Alii, Les problemes de population au Burundi, Fribourg, 1977.

Issues

2.166 To achieve the goal of full primary-school enrollment and allow for the necessary recruitment of qualified teachers within the financial parameters described above (maintaining the share of education in the central government budget at 9 percent), the education budget would need to grow at about 6.5-7 percent per year in nominal terms, while the available resources for post-primary education level would grow at the maximum of 3 percent per year, which corresponds to the annual salary increases in the civil service. As a result, real expenditures at the secondary and higher education levels would have to be frozen. Further enrollment growth could only be possible by reducing unit costs, removing inefficiencies, and mobilizing alternative resources. Some of these possibilities are reviewed below.

2.167 At the primary education level there is room to improve efficiency in the following areas: high level of substitute teachers, unemployed teachers in the cities, and only part-time use of school principals. There are also important regional disparities in the quality of education provided, despite the gradual extension of the double-shift system and the replacement of non-qualified teachers; as well as disparities in access to educational facilities. The average student/classroom ratio has increased significantly from 40 in 1979/80 to 64 in 1985/86, but there are still large variations among provinces (ranging between 56:1 to 71:1). Regional variations in the student/teacher ratios (57:1 on the average) are even more evident (between 49:1 to 73:1), indicating that staff allocation do not keep pace with school construction. Another problem could be that of the future of children formerly enrolled in the religious centers.

2.168 Concerning cost recovery, the population has made substantial contributions to the construction effort, both in cash, by means of special levies on the adult population (FBu 50-200 per parent), and in kind, through the provision of an unpaid labor force (in particular to transport materials). The supply of materials falls under one of these categories depending on whether the materials are purchased (bricks) or not (sand). Most of municipalities, which do not use the direct levy system find it difficult to finance the supply and transportation of materials (basically metal sheeting, bricks, and wood) out of their own funds. Moreover, the quality of the construction work carried out under the municipalities does not always guarantee adequate durability of the structures. It is possible that parents are still willing and able to make a larger contributions to the recurrent costs of basic education. The degree of elasticity of demand is, however, unknown.

2.169 At present, 13 percent of primary school graduates are accepted into secondary education schools. Within the overall financial package available for education, it will not be possible to increase this percentage in the next 5-6 years. On the contrary, in view of the growing number of students in primary education, it is likely that the proportion of primary school graduates entering secondary education will have to decline so as to limit the overall growth of general secondary education enrollments at 2 percent per year (compared with 5 percent during 1977-85 and 13 percent during 1983-85), and 3 percent per year for technical education (compared with 8 percent during 1983-85). The question of

distribution of secondary school students among general, technical and teacher-training courses is also relevant. In the case of teacher training, the flows to be enrolled are a direct function of the demand for teachers resulting from the objective of reaching universal primary education.

2.170 Sources of inefficiency at the secondary education level concern in particular the utilization of human resources. Teacher workloads are significantly lighter than the average observed in Sub-Saharan Africa; teacher/student ratios are below the African average (1:20 against 1:30); and a high rate of non-teaching personnel (32 percent) are employed on administrative tasks and/or on activities related to the boarding schools. Moreover, some 55 percent of the school meals cost is currently covered by the World Food Program. If this external subsidy is reduced, alternative sources of financing will have to be found. In general, when the first cohorts enrolled during the universal education campaign graduate, a heavy demand will be placed upon the secondary system. Trade-offs will have to be then weighted concerning the priority to be given to physical expansion, quality improvements, and an additional transfer of costs to the users.

2.171 In higher education, several factors contribute to the high unit costs (and even more, to the cost per graduate): high repetition rates (e.g., 51 percent of students of the first year of law studies, 18 percent of total students in the Schools of Humanities and 22 percent in the School of Science), sparsely-attended Schools, widely-scattered establishments with overlapping courses and subjects, and very low teacher/students ratios (1:7). The particular effect of each one of these factors has not yet been fully determined, and will need to be studied in greater depth. Also, the combination of social costs (accommodations, food, health, transportation) and of government loans (respectively FBu 133 million and 305 million in 1986) should receive detailed study.

Recommendations

2.172 The effects of the Government objective to promote universal primary education in a relatively short period has important consequences for the overall education system in terms of its human, physical and financial needs. In order to have a global view of all these aspects, the Government is preparing, with the help of IDA, an overall strategy for the sector. The strategy will set objectives and targets for the next five years and cover ways to reduce unit costs at all education levels, slow down growth in secondary and high education, and increase cost recovery, particularly in boarding schools.

2.173. In the next five years, the primary education objective overrides considerations on labor market requirements. This important aspect should, however, be addressed in order to assess the consequences of the massive increase of primary education graduates and their absorption into the labor force. From the financing point of view, a public expenditure program, including investment and recurrent expenditures (as well as external and domestic financing) is under preparation. This program will take account both of the demands resulting from universal primary education (in particular, training and recruitment of teachers) and of measures to reduce and recover costs at the different education levels, as summarized below.

2.174. For primary education, the following are recommended: (i) a reduction in the teacher substitution rate; (ii) complete absorption of the excess number of unemployed teachers in the cities; (iii) an examination of the possibilities for rationalizing the use of school principals' time; (iv) harmonization of the conditions of access and quality of services in the different regions; and (v) better quality control of the buildings constructed.

2.175 For secondary education: (i) limit the growth of new entrants into secondary education to 3 percent a year; (ii) refrain from taking immediate action to increase the capacity of the technical tracks; (iii) adopt or reinforce measures designed to increase teacher workloads, raise teacher/student ratios, and reduce the proportion of non-teaching staff; (iv) eliminate boarding schools wherever they are not absolutely essential, through the adoption of a rigorous policy on the geographic placement of students; (v) implement regular increases (for day and boarder students) in tuition fees with a view to increasing parents' contribution to boarding-school costs, with the objective of raising annual contributions from FBu 6,000 to FBu 8,500 over a 4 year period; (vi) transfer the externally-financed portion of the school meal costs to domestic financing; and (vii) improve data on technical education costs. [9]

2.176. It is also necessary to analyze the links between the output of the education system and the job market. The analysis of wage profiles in the modern sector by qualification and type/level of training can be carried out shortly, based on data already available. Such data, combined with information of training costs -- already available for primary and secondary education and expected in the near future on technical and higher education -- would make it possible to estimate and compare rates of return for each level/type of training as a measure of demand for education.

2.177 There is also a need to assess the possibility to increase the role of the local authorities in education and other social sectors. In particular, they could coordinate primary health care services, MCH and Family Planning activities, and basic education, all of which affect overlapping population groups, and could benefit from using common inputs and infrastructures. For such potential to be exploited, it would be necessary to strengthen the institutional and fiscal capacities of the municipalities. In this context, a preliminary study needs to be prepared with a view to making specific proposals in this direction. Basic education would be one of the first beneficiaries of decentralization. In terms of secondary education, the municipalities might offer a joint response (in both the private and the public sector) to the heavy pressures that will be brought to bear over the medium term.

9/The available information on higher education is insufficient to propose actions aimed at reducing its high unit costs. A study has been prepared which will help the authorities rationalize student flows and regroupings of subjects which are common to different schools as well as to increase financial efficiency in the sector. The objectives of the Government over the next five years include: to reduce the share of higher education in the education budget from 21 percent at present to 16 percent in 1992, by means of increasing workload of teachers (from 4 to 8 hours per week) and the ratio of students per teachers (from 6:1 to 13:1), concurrently with reducing the present share of non-teaching staff from 37 to 10 percent.

NUTRITION

Nutrition Status

2.178 Information on nutrition status in Burundi is generally fragmented and incomplete. National food balance sheets indicate that average coverage rates of calories (102 percent) and protein (113 percent) are adequate but that lipid coverage rates (46 percent) are grossly deficient. These averages, however, mask important regional and seasonal disparities -- 5 of the 11 natural regions are meeting less than 100 percent of their caloric requirements -- as well as distributional problems, since increasing numbers of smallholders are finding it difficult to meet their basic nutritional needs; this is related to declining landholdings, weak purchasing power and limited off-farm employment opportunities.[1] Moreover, part of the ongoing adjustment to increasing demographic pressure takes place through shifting to higher yielding but nutritionally inferior foodcrops.

2.179 Information on the nutrition status of the most vulnerable groups (e.g., 0-5 year olds) has improved in recent years, as the number of regional surveys (e.g., Imbo, Bututsi, Buyenzi) has increased. Based on these surveys which, however, only covered some 3,000 children, it appears that protein calorie malnutrition in children less than five years of age constitutes a fairly serious problem.[2] The proportion of second and third degree malnutrition in Burundi is about 32 percent (using a weighted average to reflect sampling sizes), which is comparable to estimates from Sierra Leone (30.5) but higher than those from Togo (15.3) and Zimbabwe (21).[3] Survey data also revealed important regional variations. The lowest rates of moderate and severe malnutrition were found in Ruyaga (25.5 percent), a peri-urban area, and the highest in Cankuzo (44 percent) and Buyenzi (51.7 percent), the latter being one of the most densely populated provinces. Severe malnutrition ranged from about 2 percent (Ruyaga,

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1/For example, the Buyenzi study revealed that while average caloric availability was adequate, 27 percent of the households (with 7 or more members) met on the average only 88-92 percent of their caloric requirements, and 13 percent (with 8 or more members) met even less (77 percent).

2/Protein calorie malnutrition amongst 0-5 year olds is defined according to three anthropometric indicators: weight-for-age; height-for-age; and weight-for-height. Weight-for-age data (used to measure 'underweight') are classified according to the Gomez system, which compares w/a to a reference standard; children who fall below 75 and 60 percent of the reference are classified as suffering from moderate (2nd degree) and severe (3rd degree) malnutrition, respectively. Information on height-for-age and weight-for-height are used to define chronic (long term) and acute (short term) malnutrition; children who suffer from chronic and acute malnutrition are said to be 'stunted' (less than 90 percent of reference median height-for-age) and 'wasted' (less than 80 percent of reference median weight-for-height), respectively.

3/Cross-country comparisons are drawn from PHN Sector Reports prepared by the World Bank.

Kinama) to 12 percent (Buyenzi). Height-for-age data also revealed substantial deficits, with about 52 percent (weighted average) of the children classified as chronically malnourished.[4] The prevalence of acute malnutrition (weighted average) was estimated at 4 percent in the Burundi surveys, which compared to 1 percent in Cameroon, 3 percent in Sierra Leone, and 8.5 percent in Zimbabwe.

2.180 Recent surveys have indicated that the most severe incidence of protein calorie malnutrition amongst infants occurs during the weaning period, beginning at 12 months and sometimes lasting well beyond (e.g. up to 36 months). It is generally recognized that shortened birth intervals, resulting from a new pregnancy, often lead to early weaning, with adverse effects on the nutritional status of the infant and sometimes a fatal outcome. One survey in Buhonga showed that mortality rates were 2-3 times higher during the weaning period (12-24 months) than in subsequent months (24-36).[5] A nutrition survey in the Imbo region revealed that the prevalence of malnutrition was highest amongst the 12-17 month year olds, with 50 percent having insufficient weight.[6] None of these studies have identified the socio-economic factors (e.g., household resources, food availability, mother's beliefs and educational level) that explain the acute nutritional problems during weaning.

2.181 Data on the nutrition status of adults in the Bututsi, Imbo and Buyenzi studies indicate that 15-20 percent of the men and 26-30 percent of the (non-pregnant) women were considered underweight ("very thin") for their height. Of particular concern is the proportion of mothers who are underweight since this affects the nutrition status of the child they are breast feeding. For example, the nutrition status of infants 0-6 months was found to be considerably better in Bututsi than in the Imbo, where 11 percent of mothers were classified as very thin, compared with 16 percent in Imbo. Specific nutrition problems identified in some studies include anemia, goiter and vitamin deficiencies (e.g., vitamin A). In the Imbo region, for example, anemia is a particularly acute problem for women in the reproductive age groups (the prevalence of moderate and severe anemia was 30 and 8 percent, respectively); this is partly attributed to the high prevalence of infectious diseases which hinders the absorption of nutrients.

Nutrition Policies/Programs

2.182. The Government's approach to nutrition is focused on the need to expand domestic production but neglects inter-sectoral issues linked to the causes of malnutrition (e.g., differential access to land). The process of establishing objectives and targets is just beginning; preventive nutrition

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4/This data must be interpreted cautiously, keeping in mind recognized measurement problems (e.g., difficulty of assessing height); for comparison, chronic malnutrition was 18 percent in Liberia, 24.2 percent in Sierra Leone, 27.9 percent in Zimbabwe and 61 percent in Madagascar.

5/Study cited in Etudes Preliminaires a la Situation de la Femme et de L'enfant au Burundi, Curdes, June 1985.

6/Enquete Nutritionnelle Imbo-Nord et Centre, Ministry of Health, July 1985.

programs, targeted on the most vulnerable groups (infants and women in the reproductive age groups), reach only a small proportion of the population at risk (table 2.18) and include mainly growth monitoring and some education activities. Health centers operated by the religious missions have better coverage rates and experiment with innovative nutrition schemes (e.g., kitchen gardens are used to promote both better agricultural practices and improved nutrition). Until 1986 Catholic Relief Services supported a feeding and education program which served some 82,000 children and mothers, (with an additional 11,000 recipients in food-for-work programs), but the closing down of this operation has exacerbated the situation. The development of culturally acceptable and financially affordable weaning foods, to address the serious malnutrition problem during the weaning period, is taking place on a very small scale; no nationwide effort has yet been mounted to disseminate information concerning the preparation of weaning foods and the special nutritional needs of infants. Similarly, no specific interventions have yet been envisioned to deal with goiter, anemia and various vitamin deficiencies even though fairly standard and inexpensive technologies are available, which could have a considerable impact.[7]

Recommendations

2.183 While it is difficult to form a coherent picture of the nutrition status of the population based on the fragmentary information presented above, the following four actions should be considered:

- elaborating a national program targetted on the most nutritionally vulnerable groups should be the main priority; in this respect, Government might consider two broad policy options: (a) setting up a domestic feeding program, using local resources and relying on the communal administrative structure, and/or (b) seeking external food aid to cushion the negative impact of the withdrawal of the CRS program; inspite of the well-known pitfalls associated with food aid, in the short-run, well-targetted interventions could be effective, especially until a viable national program would be put in place.

- establishing an institutional unit with responsibility for coordinating agricultural, health and nutrition policies; the optimal location of such a unit (e.g., in the Planning, Health, Agriculture ministry) remains to be determined by Government.

- reinforcing the nutrition cell of the Ministry of Health, which has been instrumental in carrying out recent surveys, with a view to broadening research activities and translating these results into operational objectives and targets.

- improving nutrition information, with particular emphasis on regions (e.g., Buragane, Mosso, Buyogoma) of which there is

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7/One study carried out in Indonesia revealed that the productivity of workers who received iron supplements over a 2-month period increased by 15-25 percent. The productivity increase was estimated to be worth $260 for each dollar invested in iron supplementation.

relatively inadequate knowledge, and to determinants of malnutrition during the weaning period. Household surveys such as Buyenzi with both agricultural and nutrition components are good models to follow.

HEALTH

Health Status

2.184 Morbidity patterns in Burundi are similar to those prevailing in other countries at comparable socio-economic levels. According to epidemiological bulletins (1981) the most prevalent communicable diseases among children were: malaria (43 percent), acute respiratory infections (25 percent), measles (15 percent) and intestinal disorders (diarrhea and dysentery). The most recent public health problem plaguing Burundi is the Acquired Immuno Deficiency Syndrome (AIDS), with high seropositivity rates in Bujumbura and somewhat lower ones in rural zones. The principal causes of mortality, reported in hospitals, which represent about 85 percent of the total deaths (1981) were: infectious and parasitic diseases (51 percent) respiratory tract infections (13.5 percent), perinatal related factors (6 percent), and digestive/nutrition related problems (14 percent). There is no information on maternal mortality but it seems that this is a problem which has been somewhat neglected. The rate of complications from pregnancy and delivery was about 13 percent for hospital reported cases (1985), which represent about a quarter of all deliveries; according to some analysts, rates might, however, be as high as 20 percent, especially in home deliveries. Complications of pregnancy and childbirth, in association with low socio-economic and health conditions, tend to result in large number of female deaths. Data from the Prince Regent Charles Hospital for 1980-82 substantiate the synergistic effect of poor health and nutrition status and confirm the severity of the malnutrition problem, which was discussed in the previous section. Children whose primary and secondary diagnosis was protein calorie malnutrition had a Case Fatality Rate (CFR) of about 40 and 37 percent, respectively. [8]

Health Policies and Programs

2.185 The Government's health strategy, which is in accordance with the Alma Ata declaration of providing 'health for all', is to promote the development of social and preventive medicine, increase health coverage, and improve the standard of living, particularly in rural areas. This would be accomplished through: decentralization of services, improvements in health infrastructure, programs against communicable diseases, environmental hygiene, health education, and personnel training. Given the epidemiological patterns described above, MCH/FP interventions should have the highest rates of return in terms of morbidity and mortality reduction. It is therefore encouraging that the Government has made an impressive effort to improve access to and availability of these primary health services.

8/The CFR refers to the proportion of persons contracting a disease who die of that disease.

2.186 Access, Distribution and Utilization. By African standards, Burundi is relatively well-off in terms of access to health care:[9] 61 percent of the population has access to a health center within a 5 km. radius and 74 percent within a 6 km. radius.[10] The reasonably good access is due to the small size of the country, its dense population and a generally well developed health infrastructure. The health infrastructure comprises 31 hospitals and about 200 health centers/dispensaries; 16 percent of the hospitals and 30 percent of the health centers are operated by religious missions, under guidance and support of CARITAS, a coordinating agency for these health facilities. The distribution of facilities, personnel and equipment is skewed in favor of urban/regional hospitals. There are currently no well-established norms to ensure an equitable distribution of resources. Utilization rates are particularly low for hospital in-patient care (somewhat less than 50 percent) and maternity care (approximately 30 percent), but it is unclear how much of this is due to supply-related factors (e.g., availability of services in other facilities, shortages of personnel and equipment) and to demand-related causes (need, intensity of use, and cultural acceptability).

2.187 Primary Health Care -- availability and coverage. Immunization against communicable diseases is the most widely provided MCH service. In fact, the Burundi Expanded Programme of Immunization (EPI) has been cited as one of the most successful national public health activities in Africa by a USAID assessment team. This is partly attributable to the well-developed health infrastructure and to the logistical and supervisory system established by the Ministry of Health. The EPI, initiated in 1980, reached an access rate of 75 percent and a coverage rate of 60 percent in 1986, compared with 20 and 11 percent, respectively, six years earlier.[11] While these achievements are impressive, the coverage rates have so far been insufficient to have a discernible effect on morbidity/mortality rates at the national level, with the possible exception of measles (e.g., the number of cases in 1984 dropped to half as many as in 1981).[12] In 1985 the EPI program became part of a larger effort to combat childhood communicable diseases (CCCD), which includes diarrheal/disease control and malaria treatment. Other MCH services (prenatal care, growth monitoring) have been introduced only recently in public health centers/dispensaries, in the context of a UNFPA-financed MCH/FP program; a pilot program to train traditional birth attendants, which perform 75 percent of all deliveries,

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9/Accessibility refers to proximity to a health center and ability to pay for services. Since information on ability to pay in Burundi is not available, accessibility is defined in the former sense.

10/This figure may overestimate effective accessibility, as it neglects the nature of the terrain that individuals need to travel.

11/Access refers to proximity to a health center which provides vaccination services; coverage is expressed as the number of vaccinated children to the population at risk (0-2 year olds).

12/The impact on morbidity/mortality is difficult to quantify since the reporting system is not fully developed; in the short run, in fact, improvements in reporting can actually lead to increases in the number of cases. It is estimated that the coverage rate must reach about 80 percent before the morbidity and mortality impact is reflected in the reporting system.

is being planned by the Health Ministry, with a view to reduce delivery-related complications. Inspite of the overall expansion in MCH services coverage rates remain low, especially in public facilities (table 2.18). Moreover, there are great variations in the quality of services, due to insufficient training, occasional shortages of medical supplies, poor physical condition of some facilities and lack of systematic supervision from the central and provincial levels. Aware of the potentially serious impact of AIDS on mortality (children and young adults) the MOH has very recently set up a national committee; WHO has prepared a control program; and under the World Bank's PHN project which is under preparation, AIDS related information will be disseminated as part of the IEC component.

Table 2.19 MCH SERVICES: AVAILABILITY AND COVERAGE RATES a/

	Availability (%)		Coverage (%)		
Type of Service	Public	Missions	Public	Missions	Average
Prenatal	97	94	35	108	50
Deliveries			20	33	24
Consultation of sick children			33		
Well baby clinic visits	75		53	75	60
Nutrition activities	24	88			

a/ Availability refers to the provision of different types of services in health facilities. Coverage is a measure of the extent to which the services rendered cover the potential need for these services in a community; it is expressed as a ratio between the number of services rendered and the number of instances in which the service should have been rendered.

Source: Sante Maternelle et Infantile, Planification Familiale, Ministry of Health, December 1988.

Health Financing

2.188 Recurrent expenditures. Between 1981-85, recurrent expenditures on health increased by 13 percent per annum (in real terms), with the share of the central government budget being maintained at about 5 percent. During 1984-85 there was a particularly rapid annual expansion (21 percent in real terms) due to increases in personnel and medicine. Total public expenditures on health have averaged less than one percent of GDP, which is comparable to that in other low income countries (e.g., Uganda 0.83, Ethiopia 1.09, Sri Lanka 1.9). The total per capita expenditure on health, including external financing, was estimated at US$6 in 1986. The allocation pattern of recurrent expenditures has favored urban and secondary/tertiary level services. The share of personnel in total recurrent expenditures has averaged a reasonable level of 56 percent during 1982-86. In 1985, the hospital sub-sector (of which only a small proportion represents primary care) absorbed 80 percent of total resources, while only 20 percent was available for primary level services. Bujumbura, which accounts for 12 percent of the population, received 50 percent of the medical supplies and has 20 percent of the paramedical personnel. While this skewed allocation is common in many developing countries, a larger share should be allocated to primary health care if Government's stated objectives are to be met.

2.189 Public Investment Program. The 1983/86 Public Investment Program (PIP) included 17 projects totalling FBu 4.4 billion, of which foreign financing covered Fbu 3.1 billion. The implementation rate over this period is estimated at about 70 percent. The hospital sub-sector continued to get the largest share of the program (70 percent), of which the Kamenge Teaching Hospital represented 36 percent. Domestic financing was allocated almost exclusively to the hospital sub-sector, while community funds were mobilized for health center construction. Training related investments (12 percent) and various primary health care programs (18 percent) received about 30 percent of the total. This allocation pattern of investment, in favor of secondary and tertiary level care, is clearly inconsistent with the Government's stated policy objective of providing the rural population with basic health services.

2.190 The 1987 Investment program of the Ministry of Health includes 18 projects (14 new ones) with a total value of FBu 722 million. Most of these projects have no feasibility studies. No distinction has been made between domestic and foreign sources of financing, and the associated incremental recurrent costs have not been estimated. Out of this list, only two projects were retained in the 1987 budget (voted by the National Assembly): Gitega Laboratory and the Equipment of Health Centers, representing about FBu 40 million. The remaining projects will, probably, be gradually phased in the next five years. Close to 70 percent of the value of the proposed projects is for hospital construction, rehabilitation and extension, and modern technological equipment. Some hospital rehabilitation is justified (e.g., Prince Regent Charles), but at least three other projects being proposed by the MOH appear to be of a relatively low priority: construction of polyclinics for physicians (Fbu 80 million), purchase of radiological equipment (FBu 141 million), and extension of specialized hospital services (FBu 36 million). While all tiers of the health system need strengthening, the primary health network, which is expected to serve as the vehicle for the provision of MCH/FP services, should be accorded priority, based on cost effectiveness and equity considerations.

2.191 It is likely that shortfalls in recurrent funds will hinder the operation of newly constructed facilities. For example, assuming an incremental recurrent/capital ratio of about 20 and 15 percent for urban and rural hospitals, respectively, the recurrent costs to sustain the five new hospitals constructed during 1983/86 would be about FBu 573 million, and FBu 224 million, excluding the Kamenge Hospital, which is included in the budget of the Ministry of Education. However, even the FBu 224 million, represent a 24 percent increase in the 1985 ordinary budget of the Ministry of Health. Assuming that the share of Health in total Government expenditures remains constant at 5.1 percent, the recurrent budget of the MOH is unlikely to be able to sustain the recurrent costs of recent and planned infrastructure investments and at the same time protect budgetary resources for priority areas (e.g., EPI, MCH/FP).

2.192 Sources and Modes of Health Financing. Historical data on sources of health sector financing is incomplete, especially with regard to the local communities. During 1985/86, external financing covered about 20 percent of total health recurrent expenditures, the central government

about 44 percent, and the private sector/religious missions financed the remaining 36 percent (Statistical Appendix, Table 9.4). External financing included multilateral (e.g., UNFPA, UNICEF, USAID, WHO, WFP) and bilateral (e.g., Algeria, Belgium, France, Saudi Arabia, West Germany) assistance.

2.193 As mentioned above, the religious missions play an important complementary role in the provision of health services and represent about 8 percent of total recurrent expenditures (1985/86). The introduction of relatively high user fees (e.g., in comparison to public facilities) has enabled mission facilities to recover most of their operating costs; under the forthcoming IDA-financed Population and Health project, the Ministry of Health will be experimenting with similar financing mechanisms in public facilities. Efforts to take over these facilities would imply an additional administrative and financial burden which the Ministry can not easily absorb.

2.194 Information concerning the level and nature of the contributions made by the local communities is not available. In recent years, some communes have participated financially and in kind (e.g., community volunteer work) to ensure provision of basic health services. Two examples are the community participation in the EPI programme (e.g., picking up petroleum costs for refrigerators) and the construction of 27 health centers. Not all communes, however, have the financial means to contribute to health sector financing. This underscores the need for designing and experimenting with different modes of financing.

2.195 Currently, there are two public insurance schemes: the Mutuelle for government employees and the 'carte medicale' for the population at large. The Government's contribution to the Mutuelle has doubled from about FBu 60 million in 1982 to FBu 140 million in 1985, representing 10 and 15 percent, respectively, of total health recurrent expenditures. This increase is of concern since scarce public resources are used to subsidize the insurance coverage of a relatively small number of civil servants. With regard to the 'carte medicale', it appears that the revenues generated cover only a very small proportion of total costs. A Bank-funded Health Financing Study, currently underway, is intended to review, assess and make recommendations on existing and alternative financing schemes, both individual insurance schemes, and mechanisms for health center operations.

Recommendations

2.196 While important strides have been made in policy formulation and provision of services, to expand health coverage and to raise the quality of services, further actions are required in the following areas:

(i) Maternal Child Health/Family Planning Program.

- strengthen the network of health centers, to serve as a vehicle for the MCH/FP program;

- establish criteria for health center construction to ensure that new construction is limited to unserved rural areas;

- improve availability of services by removing rigidities (e.g., providing services at all times to clients);

- increase the internal efficiency of the system by: (a) standardizing services; (b) integrating vertical programs (e.g., EPI); (c) improving targetting of high-risk groups; and (d) strengthening the institutional capacity in terms of planning, record-keeping and evaluation.

Qualitative deficiencies, which relate to the poor physical condition of some health centers, inadequate staff training, occasional shortages in medical supplies and a poorly developed health education program are being tackled by the Government with assistance from IDA, who has a Population and Health project under preparation.

(ii) Resource allocation.

- increase the share of MCH/FP activities in the health sector budget in relation to the hospital sector;

- avoid additional hospital construction and expensive rehabilitation/equipment, especially in light of low utilization rates and high recurrent costs;

- mobilize and direct external assistance to cost-effective primary health care interventions;

- improve allocation of resources by: (a) elaborating well-defined norms and standards; (b) separating the budgetary allocations for secondary/tertiary and primary level services, to improve knowledge and better control of flows to specific functional and geographical areas; (c) reviewing the insurance scheme for civil servants (Mutuelle), with a view to improving efficiency and reducing costs; and (d) improving the quality of the PIP/PEP in the health sector by defining criteria for priority investments, incorporating all sources of financing and analyzing recurrent cost implications of new investments.

(iv) Information/data base. In order to support policy and program formulation the following areas should be analyzed: (a) determinants of infant, child and maternal mortality; (b) financial viability of hospital sub-sector; willingness and ability to pay for health services among the rural population and urban poor; (c) operational experimentation with alternative modes of health financing; and (d) financial capacity of communes to expand their involvement in health care.

I. DOMESTIC RESOURCE MOBILIZATION

Mobilizing Private Savings

The Financial Sector

2.197 Burundi's financial sector comprises 7 banking institutions and 8 non-banking ones. The banking sector includes the Bank of the Republic of Burundi (BRB), the central bank; three commercial banks [1] all majority Burundi-owned; and two development banks: BNDE and SBF (Societé Burundaise de Financement), both majority government-owned. The non-bank financial sector includes two insurance companies (SOCABU, publicly owned and a recently established private firm with foreign capital), a public sector savings institution (CAMOFI), a savings institution (CADEBU), a social security fund (INSS), a postal checking system (CCP), a holding company (formed jointly with Libya), and a fund for investing in and lending to financial institutions -- Fonds de Promotion Economique (FPE). Since 1985, rural credit cooperatives (Caisses Coopratives d'Epargne et de Credit, COOPECs) began to be created with French technical assistance. These cooperatives are not accredited by the Central Bank and come under the jurisdiction of the Ministry of Rural Development.

2.198 The Government, together with other public sector institutions, has a dominant position in the financial system, controlling interest in all financial institutions. In the commercial banks, public ownership represents close to 50 percent of their capital, needing Burundese private shareholders to marshal a majority. Foreign shareholding is limited to the commercial banks (49 percent in two banks and substantially less in the third one) and to BNDE through three foreign government aid organizations and the European Development Bank.

2.199 There is, in principle, a certain degree of competition within the financial system. The commercial banks compete with each other and with BRB, CADEBU, CAMOFI, and CCP for public sector deposits, with CADEBU and CPP for private sector deposits. On the credit side, development institutions participate in short-term credit, namely coffee financing,[2] while commercial banks are required to allocate a portion of their resources to medium-term credit. However, the competition is distorted in several ways: (a) a compulsory savings scheme allocates in effect more than 80 percent of individual savings to CADEBU; (b) BRB regulates deposit and lending interest rates; and, most important, (c) financial institutions are differentiated in terms of the interest rates they pay on government paper. Moreover, the instruments of monetary and credit policy are cumbersome and inefficient, as discussed later in this section.

2.200 Financial situation. With one exception, financial institutions are in a fairly sound condition. Capital funds are adequate, rates of

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1/The Banque de Credit de Bujumbura (BCB), Banque Commerciale du Burundi (BanCoBu) and Banque Belgo-Africaine (BBA).

2/Since 1983, BNDE and SBF (and then CADEBU since 1986) participate in the financing of the coffee campaign, which was previously of exclusive competence of commercial banks. In 1986, they were allocated 34 percent of that financing.

return reasonable in general, and the problem of non-performing loans still manageable. CADEBU is a special case which requires immediate action. The institution was saved from certain bankruptcy by the introduction in 1976 of a compulsory savings scheme which increased its resources considerably but its situation is very difficult. Its management is very weak, and the exact situation of CADEBU is not known. Profits as stated in the annual report are probably fictitious, the accumulated losses may well exceed 10 percent of the deposits, and the capital remains insufficient. A full, independent audit of CADEBU is urgent and must precede the preparation of any rehabilitation plan for the institution.

2.201 There has been excess liquidity in Burundi's financial system for some time. Since 1981, the proportion of rediscounted credit declined from 21 percent to less than one percent in 1985. In 1986, the use of rediscounting was minimal even during the coffee campaign. This liquidity is accounted largely by substantial deposits of 10-15 public sector institutions, which account for the bulk of the 45 percent of the total deposits held by public enterprises. These deposits, divided between the BRB and commercial banks (two-fifths each) and CAMOFI (one-fifth), could become highly volatile if those enterprises were permitted to subscribe interest-rate competitive government securities. Given the Government's objectives to reduce its indebtedness towards the central bank, the transfer of liquidity from cash-rich PEs to the central budget through the purchase of Treasury bills is a real possibility. Such shift of resources could amount to about FBU 3-4 billion, which would shrink the deposit base of the financial system by 20-25 percent. This would, however, have no consequences for the central bank, and would create limited difficulties for the commercial banks, which are highly liquid at present, but could pose serious problems for CAMOFI. There is a possibility that CAMOFI could try to compete in the more competitive environment, but it would be extremely difficult. The financial situation of this enterprise needs therefore to be reviewed.

2.202 On the credit size, there are some problems. OCIBU, having now large amounts of liquidity, is able to finance part of the coffee campaign out of its own funds, which would reduce participation of the financial institutions in coffee financing -- an operation which is almost costless and riskless. At the same time, some of the companies involved in import trade and retailing may face financial difficulties following the import liberalization and increased competition. The medium- and long-term credit area is, however, the most preoccupying. More than 30 percent of the total credit is medium and long-term, of which 60 percent has been extended for housing. The public housing company (SIP) is having difficulties in meeting its commitments, because of the inability of the Government to transfer in time to the company the housing payments withheld from civil servants salaries. In the private sector segment of the housing market, the glut of medium- and high-priced houses in Bujumbura raises a doubt on the ability of some borrowers to reimburse their loans.

Policy Issues

2.203 One of the main problems of Burundi's financial sector is the heavy regulatory environment in which it operates, which hinders its efficiency and competition among the financial institutions. Some of the main points are reviewed below.

Interest Rates

2.204 At present, there are four categories of interest rates, excluding the rate on the unofficial market. Of the four categories, only one is entirely free and determined by market forces: the rate at which financial institutions lend each other their excess liquidities on the call money market, for which no information is available. The interest rates on rediscountable and non-rediscountable credits and the rediscount rate are regulated by the central bank. Until recently, different rates were applied to different financial institutions but the scale has now been simplified and unified. The most serious drawback of the system, apart from the arguments in favor of a liberalization of the interest rates, lies in the delays in adjusting the scale to changing circumstances.

2.205 In August, 1986, as part of the Stand-by arrangement negotiated with the International Monetary Fund, the BRB introduced a new interest rate structure, with a view to raising rates to a real positive level. It raised the minimum deposit rates by between 3 and 5 percent for most categories of time deposits, but by up to 8 percent for others (Statistical Appendix, Table 6.4); minimum remuneration on one year deposits was raised to 12 percent. Maximum lending rates were generally raised less than deposit rates. Interest rates for non-rediscountable loans were raised by 1 to 5 percent (to between 12 and 20 percent), and rates on rediscountable loans by 2 to 6 percent (to a range of 8-17 percent). Discount rates were set at a range of 7-16 percent. Moreover, demand deposits of over FBu 100,000 (about US$830 equivalent) were remunerated at 3 percent.

2.206 The new interest rate structure led to several problems. As the minimum remuneration on term deposits was equal to, or exceeded, the maximum charge on most loans, banks were reluctant to accept new deposits or renew old ones. This situation was aggravated by the lack of a mechanism (e.g., T-bills), to mop up excess liquidity. As a result, the term deposits in the commercial banks declined from FBu 2.5 billion at end-1985 to FBU 0.8 billion at end 1986. Furthermore, the unofficial financial market among both firms and financial institutions became more attractive. In April 1987, the interest rate structure was revised again, lowering the rate on demand deposits to 2 percent and most of the other rates, which now range between 3-7 percent for deposits and 11-16 percent for non-rediscountable credits.

2.207 While this step was adequate, taking into account the much lower inflation rate in 1986 (1.8 percent), it should be noted that revisions of the interest rate structure are cumbersome procedures which take time and always involve some degree of arbitrariness. To make the financial sector efficient, the central bank should be encouraged to let the financial institutions and market forces determine freely their deposit and lending rates. As a minimum, rates on non-rediscountable credit and on demand deposits should be deregulated and the other rates linked to a central rediscount rate. This would enable the central bank to change the whole scale rapidly by moving up or down the central rediscount rate.

2.208 Interest rates on advances to the Government are determined by agreement between the Government and the central bank. The rate is agreed

upon at the beginning of each financial year for ordinary advances (which must be repaid before the end of the year) and case by case (and once for all) for longer-term advances, generally to finance the investment budget. The system is overly complicated and consideration should be given to merging all types of advances, with a ceiling consistent with the financial program of the Government. The rates could be determined by reference to the central rediscount rate or better to a market oriented Treasury bill rate.

2.209 Interest rates on Government paper. The interest rate on some FBu 5 billion of Government securities held by financial and quasi-financial institutions is another crucial issue. These institutions account for 20 percent of the use of funds by financial institutions. They have been issued to selected institutions at different interest rates which are negotiated between the Ministry of Finance and the purchaser and seem to bear no relation with the maturity of the securities and the conditions of the market. For example, rates on Treasury bills (tax free and not negotiable) range from 4 to 8 percent. Investment bonds with a seven year maturity (subscribed by the commercial banks in 1985, by CAMOFI in 1986, and by SBF in 1987) bear interest rates which vary between 4.675 percent for the commercial banks, 8 percent for CAMOFI and even higher for SBF.

2.210 The system represents a major obstacle to fair competition in the financial field and a costly way to subsidize specific institutions. Moreover, its cost to the Treasury is substantial in terms of interest overpayments and losses of tax revenues. There is a clear need for reform in this area, and the Government should replace the existing arbitrary arrangements by an open auction system. Treasury bills (3-6 months maturity) could be sold at monthly auction open to all financial institutions and be granted no tax advantages. Investment bonds would be sold at a unified and gross interest rate. The issue of those bonds could be enlarged to the general public and the commercial banks should be given the option to purchase the bonds to meet their medium-term credit obligation. This would also provide the financial institutions with a safe and convenient vehicle to invest their excess liquidities.

Monetary and Credit Policies

2.211 Monetary and credit policies include limitations on financial sector's net claims on Government and on outstanding credit to the economy. The authorities also aim at directing credit toward priority projects. In addition to the interest rate regulation, policy instruments include (i) a system of a priori authorization for new loans for clients whose individual credit has exceeded FBU 10 million; (ii) a rediscountable medium-term credit requirement; and (iii) a liquid assets ratio.

2.212 The prior authorization system, in theory aimed at insuring that the credit is sound (and not to limit global expansion of credit), has several shortcomings. Requests are often rejected without explanation and authorizations may take up to three months. In giving prior authorization, BRB also decides whether the loan can be classified as rediscountable, an important factor in computing liquid asset ratios and medium term credit requirements. The system is cumbersome, slow, and open to arbitrary judgements. It should be dismantled and replaced by a system of reserve requir-

ements, straight or marginal, should the need arise. The procedure of rediscountable credit should also be simplified. A criterion to determine rediscountable credits by nature should be prepared and the responsibility for such classification should be left to the financial institution. Only doubtful cases would be submitted to BRB.

2.213 The method of computing the minimum rediscountable medium-term credit ratio[3] is conceptually weak and the penalty in case of deficiency questionable. For example, medium-term credit must represent at least 8 percent of demand deposits but only 4 percent of time deposits with a maturity exceeding two years. The penalty, in the form of an interest free deposit requirement, seems to be unfair to the banks and may hinder savings mobilization; moreover, the requirement that the amount of the penalty should be deposited at CAMOFI, provides CAMOFI with inexpensive resources at the cost of the commercial banks. The computation should be simplified and the banks given the choice, if they do not find acceptable credit opportunities, to invest part or all of the required amount on special investment bonds at relatively low interest rates (but not free) or in medium-term interest-paying deposits with financial development institutions.

2.214 The liquid assets requirement has been set too high and should be lowered. Banks at present have no choice once they have exhausted their credit opportunities, but to deposit in a non-interest bearing account with the central bank any additional deposit they may receive. In order to improve their acceptance of new deposits (now bearing a minimum 2 percent) they should be offered short-term investment instruments (Treasury Bills) as suggested earlier.

Guarantees

2.215 The current system of guarantees discourages the incentives for the commercial banks to finance development projects. Under the revised Code Foncier, in effect since January 1987, the Government will have a prior claim on all guaranteed property (all guarantees in Burundi are on mortgages), even when the state has not previously laid claim to the mortgage. Under this system, a bank may have held a mortgage as a guarantee on a loan for 10 years, but if the debtor has financial problems with both the bank and the state (e.g., taxes), the Treasury automatically has the prior claim, with no ceiling. In the past, the Treasury's right to preempt the guarantee was limited to debts towards the state accumulated over a relatively brief period of time so that, although a guarantee's value was affected by this right, the banks could still count on a significant portion of the mortgage. The new system is expected to have a negative impact on bank lending, since the banks consider the new situation to be equivalent to lending without a guarantee.

3/This percentage was established in 1978 at 8 percent of the sum of the following deposits: 100% of demand and time deposits of less than one year; 75% of deposits of 1-2 years; 50% of deposits of more than two years; 100% of documentary credit deposits.

Determinants of Financial Savings Level

2.216 It is not clear at which level real deposit rates should be fixed. The problem is complicated by the fact that domestic inflation has fluctuated considerably from year to year (between 22.2 percent and 2.5 from 1981 to 1986). The low level of cash incomes is an important factor explaining the low level of financial savings, and the impact of real interest rates on savings may be less than expected. Moreover, as financial intermediation costs are typically high in an undeveloped economy such as Burundi, an appropriate lending interest rate policy may be incompatible with positive real deposit rates rigidly determined. In this context, more adequate rates would be established if they were allowed to respond more freely to the market conditions.

Table 2.20: TERM AND SAVING DEPOSITS, 1981-86
(end-year, millions of FBu)

	1981	1982	1983	1984	1985	1986
Individuals	1482	1516	2077	2392	2263	2645
Private enterprises	137	132	575	698	547	463
Public sector	1550	2191	2816	2258	2801	1295
Other	198	31	132	94	119	84
Total	3356	3870	5601	5443	5729	4437
By financial institution:						
Commercial Banks	1194	1453	2818	2227	2432	881
CAMOFI	769	1057	1032	1109	1408	1307
CADEBU	1402	1361	1751	2107	1890	2247
(Compulsory savings)	(1304)	(1328)	(1723)	(2080)	(1856)	(2206)
(Voluntary savings)	(99)	(32)	(28)	(27)	(34)	(41)
Memorandum item:						
Share of CADEBU on individual savings (%)	94.6	89.8	84.3	88.1	83.5	85.0
Real interest rates	1.1	-5.0	1.2	-7.4	3.3	7.5
Index of private financial savings in r.t. (1981=100)	100.0	95.9	121.7	121.5	108.8	124.1

Source: Bank of the Republic of Burundi

2.217. Other factors have an important role in attracting small savings in Burundi such as easy access to the savings institution, security of the deposit, and trust in the institution. In the past, CADEBU had the major role in capturing private savings, since a compulsory savings scheme was introduced in May 1976. Under this system, 5 percent of the salaries of all workers in the public and private sectors is withheld at source for deposit in CADEBU for three years. Traders must also participate in this compulsory scheme. Each trader must pay between FBU 2,500 and FBU 15,000 to receive a professional card, which is renewable annually. (Farmers' participation (FBu 500 worth of savings bonds each year) has been abolished by the new Government in early October 1987.) After three years, savings of the first year are reimbursed to civilian workers; armed forces personnel collect all the amounts saved during the preceding three years in one lump sum at the end of the three year period. CADEBU operates through its ten branches. The commercial banks have also branches open to the

public in a total of eight towns, including Bujumbura. As shown in the table above, CADEBU is by far the most important channel of the private savings. It has been using them to finance consumer loans, commercial building construction, and housing. Due to administrative difficulties, CADEBU has faced problems in managing the large amount of accounts and the depositors confidence has eroded in the past. The COOPECs system recently established has good potential to replace CACEBU in mobilizing rural savings.

The COOPEC system

2.218 The COOPEC system (Savings and Credit Cooperatives) has been set up under the Rural Development Ministry. The central COOPEC office is located in Gitega with the assistance of France's Credit Mutuel: 10 branch offices were opened in 1985, 10 in 1986, and 17 are expected for 1987. It is estimated that about 200 branches would be needed to cover the whole country as the system is planned: each COOPEC is locally administered, and it is hoped to limit the number of members to about 1,000 per COOPEC (the current range is 1,000-1,500 each, with a total of about 22,000 members). A COOPEC survey has revealed that 70 percent of depositors gave the safekeeping of their savings as the major reason for having joined their local COOPEC, supporting the view that high interest rates are often not a determining factor in mobilizing savings; the COOPECs pay 3 percent on all deposits.

2.219 While it is too early to assess the long-term success of the COOPEC system, the early results are quite promising in terms of the acceptance of the system by the rural population. At the end of 1986, the 20 COOPECs had 32,745 members for a capital of FBu 69.9 million at end-1986 (almost three times the previously estimated level). Deposits are exclusively demand deposits. The present average deposit per household is FBu 5,000, which is considerably higher than the amounts mobilized by the CADEBU compulsory savings system (which is expected to be phased out progressively as the COOPECs develop). The system is currently moving into a critical phase of its development, as the first 10 COOPECs have just begun lending activities. At end-1986, loans amounted to FBu 7.2 million divided among 152 borrowers (109 of them farmers and 10 civil servants).[4] At the same time, future expansion of the system will be more geographically dispersed, thus limiting control by, and assistance from, the central COOPEC office. The capacity of the system to manage a sound portfolio and to continue expanding over the next couple of years will be a critical test for the future viability of the system.

COOPEC Lending and SSEs

2.220 COOPEC lending rates range from 11 percent to 14 percent, according to the use, which is roughly in line with equivalent bank loan rates. While the COOPECs' lending activities are not oriented towards industry as such and are relatively short-term (24 to 36 months at most), they are directed towards COOPEC members' productive activities such as agriculture, artisanat, housing and other social credits. It may be expec-

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4/ It was decided at the outset that, in order to facilitate the training procedure, each COOPEC should start operations by only taking deposits, and that lending operations would be introduced later, after further training.

ted that the COOPECs' range of lending operations will develop with the needs of their members, eventually including local small-scale enterprises. In addition, a portion of deposits will not be lent, but kept in reserve by the central office for the system's needs, with part being placed at term. Some of these funds could be channelled to help meet SSE financing needs if there were sufficient demand, or if the investments to be financed could enhance the development of COOPEC members' productive activities, e.g., marketing or processing/transformation of crops; production of agricultural implements, etc.

2.221 At present, the COOPEC system appears to be an attractive and appropriate vehicle to generate domestic resource mobilization. To ensure its success, there is a considerable need for technical assistance in operating and expanding the system over the years to come, with the training of Burundese managers being a principal focus of the assistance. Such assistance deserves priority if foreign aid is available.

Summary of Recommendations

2.222 It is clear that Burundi's financial system suffers from important inefficiencies and would benefit from adjustments at both the institutional and policy level. Priority actions as mentioned earlier include:

- the present interest rate structure should be revised with a view to letting the financial institutions and market forces freely determine deposit and lending rates. As a minimum, rates on non-rediscountable credit and on demand deposits should be deregulated and the other rates linked to a central rediscount rate. This would enable the central bank to change the whole scale rapidly by moving up or down the central rediscount rate.

- BRB advances to Government should be merged, with a maximum ceiling consistent with the financial program of the Government. The rates could be determined by reference to the central rediscount rate or better to a market-oriented Treasury Bill rate.

- the present system of issuing and negotiating interest rates on Government paper should be dismantled and replaced by an open auction system. Treasury bills and investment bonds should be made available to the public in general.

- the prior authorization system is cumbersome, slow, and open to arbitrary judgements and should be dismantled and replaced by a system of reserve requirements, straight or marginal, as the need arises.

- the procedure of rediscountable credit should be simplified and criteria prepared to determine rediscountable credits, leaving the responsibility for that classification to the financial institution. Only doubtful cases would be submitted to BRB.

- the liquid assets requirement has been set too high and should be lowered. Banks should be offered short term investment instruments (Treasury Bills).

- the current system of guarantees included under the revised Code Foncier, in effect since January 1987, whereby the Government has a prior claim on all guaranteed property, should be revised.

- the authorities should reaffirm the freedom of choice of the public enterprises sector to make their deposits wherever they want in order to disengage the central bank from dealing with those enterprises to avoid possible conflict of interest.

- the role of COOPECs should be strengthened through provision of training and technical assistance and studying the mechanisms required for their accreditation as financial institutions.

2.223. Moreover, within the context of the current policy of favoring the "Burundization" of employment, and the partial withdrawal of the foreign shareholders from the commercial banks, attention should be given to the serious consequences that would arise from an abrupt cut of the links with banks' former parent companies and replacement of foreign staff by Burundi nationals. A serious effort should be made in the training field as a prelude to a nationalization of staff. Equally important are the support services provided until now by the foreign parent companies, especially in the inspection and audit fields. Withdrawal of these services could affect the efficiency and credibility of the banking system as both accounting and auditing skills in Burundi are limited.

CHAPTER III - MEDIUM TERM PROSPECTS

3.1 Burundi's potential for meeting its long-term goal of sustained growth with equity will depend on the continuation of the policies and measures initiated last year in the context of the Government's adjustment program as well as on the ability to reduce population growth. These policies, aimed at increasing per capita income and consumption, address the need to gradually change a number of structural features of Burundi's economy in order to make growth sustainable and more equitably shared. In carrying out this process of economic restructuring, Burundi faces an uncertain external environment: the prospects for continued or increased external concessional flows are uncertain and so are the prospects for the world market for coffee, which will continue to have the dominant role in the country's exports for a long time. In this context, and taking into account Burundi's limited scope for increasing borrowing either from commercial or concessional sources, Government's adjustment efforts will need to focus on: expanding and diversifying both the market and product composition of exports; increasing domestic savings efforts; and following prudent macroeconomic policies which need to be systematically adjusted to changes in the external conditions. Growth with equity will also require reducing population growth and a considerable strengthening of Burundi's human resource base. In order to bring out these issues more clearly and their implications for macroeconomic management, this chapter explores Burundi's economic prospects over the next ten years.

A. Policies for Sustained Growth: An Agenda

Trade policies

3.2 As discussed in Chapter II, the continuation of an active trade policy is necessary to improve Burundi's balance of payments prospects. Over the short-run, the Government will need to continue its commitment to an adequate and flexible exchange rate policy and to improvements in the export incentives to enhance the competitiveness of Burundi's exports. Over the long run, a more efficient and export-oriented industrial structure will require further steps to reform the level of effective protection. The system of export incentives, even with partial drawbacks still leaves production for the domestic market more profitable than for export. (See Chapter II, section on export promotion). Measures are required to improve the institutional support to existing and potential exporters. To support strong export growth over the long-run, the Government will have to continue its import liberalization policy, and tariff structure reform to reduce the level and dispersion of effective protection rates. In some cases, rehabilitation programs to assist industries to adjust to the shock of increased foreign and domestic competition may be necessary.

3.3 Exchange rate policies should aim at maintaining or improving the competitiveness of Burundi's exports and hence must avoid overvaluation of the Burundi franc. Allowing the exchange rate to remain overvalued, even for brief periods, can lead to loss of export markets which are then difficult to recapture. More important, wide fluctuations in real

effective exchange rates increase uncertainly for exporters and adversely affect their ability to make long-term decisions over export capacity and promotional strategies. While indices of real effective exchange rates should be used as a guide, the Government's exchange rate policies should take into account the objective of maintaining an adequate external financial position. Thus, actual export performance, especially for non-traditional exports, and the level of foreign exchange reserves should determine the need for, and the extent of, exchange rate adjustments. These are particularly important in the immediate future in view of the decline in coffee prices.

Liberalization

3.4 While important steps have already been taken to deregulate the economy, notably the elimination of most price controls, and trade liberalization, Government still exercises important controls on private initiative. To increase private sector confidence and open up new investment and productive activities, the Government should expand the earlier measures by means of (i) allowing the private sector to participate in the processing and marketing of main export crops (coffee, cotton and tea) and of agricultural inputs; (ii) progressive liberalization of commercial bank activities and of the financial sector as a whole; (iii) gradual liberalization of the labor market; (iv) remove restrictions to population movement to urban centers; and (v) eliminate regulations on small trade. Moreover, important measures are to be taken to attract foreign investment, and to dilute the adverse effects that the past policies, aimed at increasing the participation and control of Burundian nationals in the economy, had on foreign investment incentives. Clear guidelines should be provided to foreigners intending to invest in Burundi. These should be free from direct intervention in recruiting their own personnel, composition of management, and hiring policies. The past policy limiting working permits for foreign nationals (even when they do not compete with Burundi nationals) had important consequences on the effective management of foreign and mixed enterprises. The new Government is aware of the importance of promoting foreign direct investment and a more favorable policy concerning working permits has already been adopted.

Domestic investment

3.5 As mentioned before, the public sector has had the major role in the formation of fix capital. For the future, the level of public investment will have to be compatible with the need to maintain the necessary financial equilibria, both domestic and external. In terms of structure, while investment in agriculture is of clear priority, there is a need to extend the coverage in essential physical and social infrastructure and to ensure the necessary replacement and maintenance of the country's capital assets. However, increases in public investment levels will need to keep in line with the capacity to raise public savings and the effects of measures to improve domestic resource mobilization.

3.6 Both public and private savings rates are low in Burundi compared with the investment rate needed to achieve the objective of a 4-4.5 percent annual real GDP growth, without jeopardizing the country's creditworthiness. Despite an increase in public savings in 1986, the

estimated short-fall in budget revenues in 1987 induced by the decline in coffee prices, is likely to lead to a reduction in public savings from 3 percent of GDP in 1986 to 0.2 percent in 1987. Given the poor prospects for coffee prices in the medium-term, there is no clear tendency for them to raise in the near future, in the absence of adjustment and corrective measures. As indicated before, although the recent reform of indirect taxation through the introduction of a broad-based transaction tax may result in increased public savings, greater reliance on user charges, and increased self-financing of investments by public enterprises will also be required. Moreover, further action on the exchange rate front may be needed in order to ensure an adequate remuneration for export crop producers while maintaining an adequate financial situation in the sectors. An evaluation of the coffee pricing system is also necessary, as mentioned before. With respect to private savings, government policies need to focus on: increasing the efficiency of the financial system; establishment of a capital market; and encouraging rural savings. Given the low monetarization of the economy, these measures will have an impact only in the medium- and long-run.

Public Investment Program, 1987-89[1]

3.7. The public investment program (PIP) for 1987-89 described below was prepared in September 1986, preceding the preparation for the 1987 budget. It corresponds to a "core program" of priority projects whose level is compatible with the availability of resources and the macroeconomic framework. The dominant feature of the PIP is the increased importance given to agriculture (34 percent of the program, compared with the past 20-22 percent); and the continued high share of road investments (21 percent). As mentioned before, the trade-off between new investments and budgetary allocations for maintenance and rehabilitation should be taken into consideration. The share of social sectors is quite small (less than 5 percent for education and less than 2 percent for health) which reflects the fact that most of the construction costs financed by local authorities and individuals (including contributions in kind) do not appear in this list. The decline in the size of the program in 1989 reflects the completion of major projects in 1988, and the fact that important projects under preparation have been omitted at this time due to lack of ensured financing. (The core program has been defined as those priority projects for which financing is assured.) It will be, however, important to ensure an adequate pipeline of new projects which can ensure the achievement of the 4-4.5 percent GDP growth in the next decade.

3.8 The program has been reviewed by the World Bank and the IMF. Its overall size is in line with expected resource availabilities, both domestic and foreign. The budget contribution (12 percent of the total program) amounts to an average of FBU 2 billion which is in line with the expected recurrent balance, given prudent financial policies. No domestic borrowing would be needed to finance government's contribution to the PIP during this period. Foreign aid is projected to finance 85 percent of the program, with an annual average of less than US$100 million, which is in

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1/The public investment program for 1988-90 is being revised to take into consideration the priorities of the new Government. The present section is based on information collected by the main mission of December 1986.

line with the projections prepared for the balance of payments, as discussed below. The Government has initiated the preparation of a comprehensive public expenditure program which is expected to play an important role in the preparation of the 1988 budget, allowing the assessment of the PIP in terms of recurrent costs of ongoing and new projects. It will also provide a basis for the rationalization of recurrent outlays, civil service reforms, reduced redundancies, etc.

3.9 The composition of the program has also been reviewed and on that basis, most projects are well justified. An important exception is the SOSUMO project, a controversial project whose economic justification seems to be uncertain (see para.). At the time of project appraisal in 1981, the economic rate of return was estimated at 14 percent. Since the price of sugar declined substantially (from $0.37/kg in 1981 to US$0.09/kg in 1985), the ERR has declined dramatically. The Government, however, gives high priority to the project, viewed as a main instrument to develop the remote region of Mosso. To avoid potential problems in the future, the GOB is committed to avoid subsidies to the sugar produced by SOSUMO and to gradually submit the enterprise to the same environment of the remaining industries.

Table 3.1. PUBLIC INVESTMENT PROGRAM (1987-89)
(FBu million, current prices)

	1987	1988	1989	1987-89			
				Local	Foreign	Total	(%)
Agriculture	5129	6289	4895	3133	13181	16314	33.5
Industry	2161	2394	196	945	3806	4751	9.8
Energy/Water	3506	4009	2177	583	9109	9692	19.9
Transport,telecom.	818	665	534	202	1815	2017	4.1
Roads	2891	3789	3687	585	9801	10386	21.3
Housing	640	370	393	395	1007	1402	2.9
Education	1007	647	635	351	1939	2290	4.7
Health	162	412	323	154	743	897	1.8
Other	543	220	200	963	-	963	2.0
Total	16855	18795	13041	7292	41399	48691	100.0
Financed by:							
Government budget	2557	1847	1481	5585	-	5585	12.1
Local participation	1021	306	80	1407	-	1407	2.9
Foreign aid	13277	16643	13041	-	41399	41399	85.0

Note: Local funds comprise budget funds, contributions of local communities and funds of public enterprises used for investment.

Sources: Government and Staff estimates.

3.10 The 1987-89 PIP includes 163 projects in total of FBu 103 billion (US$840 million) of which FBu 48.7 billion (US$396 million) are expected to be implemented in 1987-89. The average project size is small: FBU 630 million, or US$5 million. There are 7 projects larger than US$20 million and 12 between US$10 and 20 million. In total, 19 projects of the program (12 percent) account for 60 percent of the total program. The number of new projects is about the same as that of ongoing ones. Out of 163 projects, 80 are new projects, many of which are an extension of ongoing

projects or system improvements of current works. During the three-year period, there will be 68 projects which will be completed.

1. Agriculture. Of the 56 projects, 22 are new projects. The most important being Muyinga (IDA), Imbo Nord, Buragana, Kirundo, Forestry in Mosso, Murukarumu, which account for 83 percent of the new projects and 24 percent of the total program in agriculture. Buragana, financed by FAD, was initially conceived as a RDC; caution should be exercised so that this project does not become another RDC of the former structure which includes many non-agricultural activities and whose shortcomings the Government has already recognized. There will be three important project completions during 1987-89: Kiribira II, extension of cotton, and plantation of SOSUMO.

2. Energy. Of 16 projects included, 6 represent 80 percent of the total cost. The most important is the final construction of Rwegura, which has already come on stream. The second most important is Ruzizi II, the regional hydro-electric project, financed by FED and IDA, which is expected to be completed in 1989. Other projects relate to infrastructure connecting these two projects to consumer networks, and some small projects to develop small hydro plants in the interior of the country.

3. Water. The PIP includes a major water supply project (US$27 million, financed by FAD, KFW and France) to serve Bujumbura. The project is expected to be completed in 1988. The second most important project is the IDA-financed rural water supply project which is to start shortly. New projects comprise a US$4 million project to improve small water sources to begin in 1989 with financing from UN related agencies and two small projects financed by domestic resources to improve water connections in secondary centers.

4. Industry. There are seven projects, all ongoing. The most important in SOSUMO, whose total cost in infrastructure and mill (US$40 million, excluding sugar plantation) accounts for 85 percent of the total public investment in industry and 5 percent of the total program (7 percent including the sugar plantation). The second most important industrial project is the extension/rehabilitation of COGERCO (US$5 million) financed by CCCE (France), planned for completion in 1989. In 1986, two important projects were completed: (a) investment in the extension of the textile company (COTEBU) to enable the production of synthetic and mixed textiles; and (b) and the construction of a tea factory in Ijenda were completed.

5. Transport and telecommunications. The major project is that financed by IDA, Italy, Netherlands, and France to upgrade ONATEL infrastructure and improve postal services.

6. Roads. The road sector continues to have an important share in total PIP. It is the second most important sector after agriculture, accounting for 16 percent of the total program and 21.3 percent of the costs to be implemented in 1987-89. Out of 11 projects, there are only 2 new projects: rehabilitation of National Roads 1 and 2, financed by FED. Of the ongoing projects, the most important are

those of Rugombo-Kayanza (US$38 million), the Fourth Road Project financed by IDA (US$23 million), and Nyanza-Lac Butembera (US$13 million, financed by Kuwait, Saudi and OPEC).

7. Housing. The program is very small. Three projects have been completed or are to be completed shortly : ASECO and DUB I (both financed by IDA), and Musaga 2 (US$ 4 million) to facilitate housing in the poor areas of Bujumbura. In addition, the current government SIP (Societe Imobiliere de Promotion de l'Habitat) project is building houses for employees of public enterprises. The only significant new project is the planned DUB II, financed by IDA.

8. Education. The program is dominated by two projects financed by IDA and another financed by ADB. Small contributions are allocated to financing equipment for the university and accommodations for university students.

9. Health. The PIP includes 7 projects: 3 regional hospitals to be completed in 1988 (US$ 9 million in total); a small public health laboratory; a FENU-financed health center, an institute to train paramedical personnel in Bujumbura, and small equipment for health centers financed by the budget. The forthcoming health project financed by IDA was not included at the time of the preparation of the PIP. It is expected to begin in 1988.

10. Social Investments. The program includes 13 small projects financed solely by the central budget, and includes construction of some offices for customs, five centers of adult education, and an annual allocation of US$1.6 million for military expenditures.

3.11 Project Evaluation and Monitoring. While most of the major projects have been subject to project evaluation, the Government has recognized the need to standardize criteria for project appraisal and improve the capacity of the administration to pursue its own analyses specially in the case of smaller projects. The first steps to improve monitoring of project implementation were also taken. The overall process of improving the planning system is expected to accelerate under the planned IDA-financed Economic Management and Public Enterprise project. Particular attention should be given to:

(a) the information flow between line ministries originating the basic information on project implementation and new project proposals and the Ministry of Planning, in charge of coordinating the proposals of each line ministry, and proposing a final program compatible with the resources availability and Government priorities. Often, the investment programs of line ministries differ from the final approved investment program (voted by the National Assembly) and lack information on sources of financing. Feedback between the MINPLAN and the line ministries after the final program is approved seems to be necessary;

(b) establishment of a regular process of updating project files (fiches de projet) taking into account implementation of ongoing projects and new proposed projects. The process is time-consuming and could be improved with adequate computer support and coordination between ministries

implementing agencies and foreign donors.

(c) coordination with major donors on the expected financial flows and implementation schedule. Sometimes, donors do not agree with the assumptions retained by the MINPLAN for project implementation, total amount of financing available.

(d) systematic consideration of technical assistance projects, which in many cases correspond to services of consultants financed by foreign donors;

(e) systematic consideration of recurrent expenditures associated with investment projects, to be included in the three-year public expenditure program.

B. Growth with Equity: Reducing Population Growth and Strengthening the Social Base

3.12 Meeting the Government's objective of equitable growth will require a strong and sustained effort to limit Burundi's high population growth and, at the same time, to improve the coverage of basic social services. While there is no single policy intervention which can cause the fertility decline that would be required to attain even a modest reduction in population growth, family planning programs could help as it has been the case in other countries. However, family planning programs are only effective if operated in a receptive environment and when complementary activities to improve education and health are carried out. Efforts to mobilize community support and to strengthen the status and welfare of women will be particularly important.

C. The Base Case

3.13 Economic growth. The base case assumes a considerable strengthening of the structural adjustment process initiated in mid-1986. The key elements of the structural adjustment process assumed in the base case are :(i) trade policy reforms conducive to high export growth, especially in manufacturing and to efficient import substitution in industry and energy; (ii) increase in investment levels to absorb employment and contribute to accelerated growth; (iii) improved domestic resource mobilization and increased participation of private sector in investment and production of the modern sector; and (iv) continued deregulation to encourage growth in private investment and productivity. It is further assumed that the Government will aim at improving per capita income by 1-1.5 percent per year in real terms and at reducing the current support to the balance of payments.

3.14 Past and projected growth rates by major expenditure category are presented in Table 3.2. Under the "base scenario", in the absence of weather adversities, agriculture would grow at 3.2 percent a year, during 1987-90 reflecting continuing efforts of farmers to adapt to demographic growth. This rate could be higher if adequate policies are put in place to promote research and production of high-yield varieties, strengthen research and extension services, and increase utilization of pesticides and

fertilizers. This, together with a more active policy to promote non-farm employment, would produce a growth rate of about 3.6 percent in 1991-96. Industrial value added can be expected to grow rapidly -- over 7.0 percent in 1987-90 mainly through improved capacity utilization, as a result of improved foreign exchange allocation, possibility to sell to local markets and investment in new capacity (the latter will probably show its effects on the second period of 1991-96). The increase in capacity utilization will come about through the rationalization of production (e.g., reducing unit costs and import dependence) and management, particularly in response to the new incentive policies strengthening the market and price mechanism.

3.15 Given the production potential of the major economic sectors and provided that the support of international donor community towards Burundi's efforts to restructure its economy continues, GDP growth of 4.2 percent a year (at factor cost) during 1987-91 seems to be attainable. For the second phase, growth could reach 4.5 percent per year if the financing gap, both domestic and external, discussed later, could be filled.

Table 3.2 HISTORICAL AND PROJECTED GROWTH RATES, BASE CASE
(percent)

	Actual		Projected	
	1976-81	1981-86	1987-91	1991-96
Real growth rates				
GDP (market prices)	4.1	-0.9	4.3	4.5
GDP (factor cost)	6.6	0.5	4.2	4.5
Agriculture	6.6	-0.9	3.2	3.6
Industry	6.2	4.4	7.1	7.5
Consumption	2.7	-1.8	4.3	3.8
Fixed investment	-1.6	7.3	6.5	6.6
Merchandise exports	9.6	5.4	7.4	9.2
of which: coffee	6.1	5.8	3.6	3.6
non-coffee	17.4	2.6	19.5	12.9
Merchandise imports	-1.5	6.0	5.3	4.8
Share of GDP (period average)				
Investment a/	14.7	16.4	16.9	18.0
Financed by:				
Gross national savings	7.8	5.6	7.1	8.1
Foreign savings	7.0	10.8	9.8	9.9

a/ Includes change in stocks.

Source: Mission estimates.

Investment and Savings.

3.16 To increase GDP by 4 percent a year on a sustained basis would require both an increase in the investment/GDP ratio to about 18-20 percent [2] and higher productivity of new investment, which would be reflected in a decline in the past ICOR levels (5-6). Public investment as a proportion of GDP is projected at 10 percent, with private investment rising from 2.4 percent in 1986 to 7 percent by 1990. The increase in productivity of new investment is expected to follow as a result of the change in the incentive structure, increased capacity utilization and more efficient choice of technologies adapted to Burundi's factors endowment. On the savings front, if foreign savings were to decline by 1990 to about 10 percent of GDP, national savings would need to reach 8 percent, compared with the average 5.6 percent during 1980-86. (Domestic savings, 3.7 percent; transfers and factor income, 1.9 percent). Such effort would need to come both from increased public savings and from improved resource mobilization in the private sector. However, the possibility to increase private domestic savings in the short-run is limited by the low level of consumption; the outlook for increased public savings in adversely affected by the low revenues expected from coffee, even if the Government adopts a strict fiscal policy of reduced growth in recurrent expenditures. In these circumstances, Burundi will remain dependent on foreign savings , at least during the next 5-year period, to finance the investment necessary to reach the growth objective. .

Balance of Payments

3.17 In the short- and medium-run, coffee exports will continue to be the major source of Burundi's foreign exchange earnings. With the progress of the planting program, exports of coffee are expected to rise from 28,300 tons in 1986 to 32,000 tons in 1990 (assuming that this is in line with the new ICA quotas), a growth averaging about 3.1 percent per year as in the last 10 years. The crucial determinant of Burundi's future foreign exchange earnings would be the world coffee price. According to the latest (September 1987) World Bank forecasts, world coffee prices are expected to recover by 3 percent per year in real terms, between 1987 and 1990. They will, however, remain much below the level of the past decade. The prospects for other agricultural exports are favorable, except for tea, whose world market price has declined by half between 1984 and 1987. Cotton exports are projected at growing by 6 percent per year; other agricultural exports (hides, some vegetables and fruits, quinine) are projected at growing (from a low base in 1986) at about 11-12 percent per annum in real terms, reflecting a response to continuing improvements in economic policies.

Table 3.3: PRICE INCREASES OF COFFEE COMPARED TO MANUFACTURED GOODS, 1984-96
(in percentage)

	Actual			Est.	Projection		
	1984	1985	1986	1987	1988	1989-90	1990-96
Coffee (USc/kg)	9.7	0.9	33.6	-40.6	11.8	3.6	2.8
MUV index	-1.7	0.9	18.3	5.8	5.6	3.0	2.6

2/Assuming an ICOR of 4.5-5.

3.18 The next biggest impetus to exports (after coffee) would come from increased manufactured exports. These are projected to increase at about 20 percent per year in the base case, which reflects the very low basis (manufacturing exports represent less than 8 percent of total exports) and the potential for existing enterprises to expand sales to neighboring countries, as demonstrated already in 1986, when manufactured exports increased by 50 percent. The review of Burundian export potential in African countries (as discussed in Chapter II) indicates that such a potential does exist in such industries as textiles, glasses, construction materials, and agro-industry products. In all of these cases, present utilization capacity is below 50 percent (Statistical Appendix table 8.1). Provided that adequate support and incentives are in place (including the maintenance of an adequate exchange rate), it is expected that those enterprises would increase output for export, specially in the context of the new economic environment of reduced profit margins and increased competition in the domestic market. The action program discussed earlier would encourage new investments in export oriented activities whose effects on increased exports would be felt later in the projection period.

3.19 Import requirements. The overall import elasticity is projected to decline from about 1.5 during 1978-83 [3] to 1.2-1.4 during the projection period. The tariff reform implemented by the Government has lead to a more neutral system of incentives and to the development of efficient import-substitution industries. There is a good possibility of reducing imports of consumer goods, given the country's small industrial base and the good prospects for small industries to be developed to meet demands of the domestic market. Moreover, the adoption of a flexible exchange rate policy would induce lower growth of these imports. One would also expect that imports of construction materials would become less important as they can be replaced by domestic materials. The possibility of reducing dependence on oil is limited, but it was assumed that the elasticity of oil imports with respect to GDP will decline from 1.2 in the past to 1 percent in the next years. As for raw materials, considering that the relative advantage of Burundi lies in its relatively fertile soil, one expects that new industrial development will arise from increased processing of agricultural raw materials. Thus, the elasticity of raw materials' imports with respect to industrial growth is assumed to gradually decline from 1.3 to less than 1 by the end of the decade.

D. Alternative Scenario

3.20 The base case described above represents a feasible but nonetheless ambitious long-term scenario. An alternative scenario I explores the consequences on the growth objective of a less active policy program to implement the reforms reviewed before, in particular those concerning exchange rate policy, budgetary policies, incentives to exports, and private investment. In the absence of measures to correct the impact of the estimated fall in coffee international prices on the balance of

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3/Import elasticities for 1984-1986 are not significant due to restrictions imposed on imports and wide fluctuations in GDP.

payments, and to promote an aggressive policy of export promotion, the current account deficit would reach 17 percent of GDP in 1990, [4] instead of 13 percent in the Base Case. Export growth projected at about 7 percent a year in the base case would fall to about 3 percent due to much lower expansion of manufacturing and non-traditional agricultural exports. In this case, the needs for additional borrowing could only be met through commercial borrowing which would jeopardize the creditworthiness of the country, leading to quite high debt service ratios. Assuming that the Government will pursue a prudent external borrowing policy, this alternative would imply lower imports, a reduction in investment growth and lower economic growth. Given import growth at about 2.8 percent which would be consistent with lower exports, GDP growth rates would likely decline to 3 percent during the projection period.

3.21. Moreover, in absence of incentives to promote private investment, the required investment to promote faster growth would not be met: as a proportion of GDP, public investment would decline from the 13.6 percent level in 1986 to about 10-11 percent in the next years. If private investment growth falls much below the 9 percent rate projected in the base case (the alternative case assumes a 2 percent annual growth), growth in the modern productive sector would be insufficient to absorb the projected new entrants into the labor force and to enable an overall growth rate of more than 3 percent. The effect of some sectoral policies, notably in the agricultural sector, would be felt with a lag. However, in the absence of effective measures to increase agriculture productivity levels, agricultural sector growth could at best reach 3 percent, and it would be difficult for Burundi to maintain the past self-sufficiency in main foodstuffs. This would require an increase in food imports, hence further pressures on the balance of payments.

Table 3.4 COMPONENTS OF ALTERNATIVE GROWTH SCENARIOS, 1987-1996

	Base Case		Lower Export Growth	
Growth Rates:				
GDP (factor cost)	4.4		3.0	
Fixed investment	6.5		2.2	
National savings	6.4		2.5	
Exports (G&NFS)	8.0		4.0	
Imports (G&NFS)	5.4		2.8	
Selected Ratios	1990	1996	1990	1996
Current balance/GDP	-13.4	-11.2	-15.4	-13.2
Debt Service ratio	30.4	23.1	33.4	30.1

Source: Mission estimates.

E. Foreign Aid Requirements and Borrowing Strategy

Medium-term Financing Requirements, 1987-91

3.22 Balance of payments projections for the 1987-91 period are presented in table 3.5. Based on the above assumptions for exports and

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4/Equivalent to 8.7 percent in terms of constant effective exchange rate with the basis of 1982

imports growth, the current account deficit (including public current transfers) is projected to increase from US$150 million in 1987 to US$203 million in 1991. Over the five-year period, the cumulative current account deficit would be about US$915 million, of which $91 million comprise interest payment on medium- and long-term debt (table 3.6). Amortization is projected at $140 million. A projected reserve build up of US$78 million would enable an average reserve coverage of about 4 months (net reserves). Total external capital requirements during the period would be $1.13 billion, which would have to be met from disbursements of public medium and long-term (MLT) loans, official capital grants, and private direct investment. About US$350 million will be available from disbursements of previously contracted debt (up to mid-1987), including US$42 million from SAL I and SAF; US$230 million from capital grants (assuming that they remain constant in real terms); US$25 million from direct investment (assuming aggressive policies to attract such resources), so the remaining $525 million would need to be met from new commitments.

Table 3.5: BASE CASE BALANCE OF PAYMENTS PROJECTIONS, 1986-96
(million current US$)

	1986	1987	1988	1989	1990	1991	1996
Exports f.o.b	133	101	112	125	138	156	264
(coffee)	(114)	(69)	(76)	(81)	(84)	(93)	(136)
Imports c.i.f	203	224	256	284	310	339	460
Services (net)	-83	-82	-90	-92	-95	-101	-122
(Interest)	(14)	(18)	(18)	(18)	(18)	(19)	(25)
Current transfers	66	65	67	74	78	81	95
Current Account	-78	-150	-166	-177	-190	-208	-233
(excl. public transfers)	(-154)	(-215)	(-240)	(-260)	(-274)	(-288)	(-299)
Direct Investment	2	2	4	5	7	9	18
Capital grants	40	42	44	45	47	49	60
MLT Loans (net)	80	113	120	124	112	109	144
Disbursements	99	139	148	152	140	140	189
Repayments	-19	-26	-28	-28	-28	-30	-45
Other capital n.e.	4	4					
Overall balance	39	7	1	-2	-24	-36	-11
Financing gap			44	18	36	37	12
Memorandum items:							
Net reserves as months of imports	2.5	2.2	4.0	4.0	4.0	4.0	4.0
Debt Service ratio	23.2	38.5	36.2	33.1	30.4	26.9	25.1
Coffee exports							
Volume ('000 tons)	28	29	30	31	32	34	40
Price (US$/kg)	4.02	2.37	2.52	2.62	2.67	2.78	3.26
Current Account/GDP (%)	5.6	11.5	12.4	13.5	13.4	13.1	11.5
(adjusted) a/	6.2	8.9	8.5	8.8	8.7	8.2	7.5

a/ In terms of constant effective exchange rate using 1982 as the base year.

Source: Mission estimates.

Table 3.6: SUMMARY OF EXTERNAL CAPITAL REQUIREMENTS AND SOURCES
1987-91
(million US dollars)

	1987-91
Capital Requirements	1128.9
Current account deficit (excl.interest) a/	822.4
Interest	91.0
Amortization	137.5
Increase in reserves	78.0
Sources (medium and long-term capital)	1128.9
Direct investment	25.6
Official Assistance	
Capital grants	227.4
M&LT loans disbursements: existing commitments	354.2
Bilateral Sources	101.8
Multilateral Sources	247.3
Private loans	5.1
Additional aid requirements	521.7
Disbursements from expected new commitments	382.8
Bilateral Sources	126.5
Multilateral Sources	256.3
Financing gap	138.9

a/ Includes current transfers.

Source: Staff estimates

External Borrowing Strategy

3.23 As noted above, Burundi will require about $520 million in disbursements from new loan commitments of official assistance over the period 1987-91. To generate this level of disbursements and accommodate its future debt service requirements Burundi will need total new loan commitments of about $770 million or about $150 million a year, which is higher than the average level in the past. Of this, US$ 25 million are balance of payments support programs and the remaining US$125 million for project financing. Donor assistance to Burundi should continue to support the development priorities of the Government which include increased allocation to the agricultural sector, combined with an expanded role for the private sector. Support will also be required to support the Government structural adjustment program. It is expected that by 1996, Burundi's needs for exceptional balance of payments support would cease. Given the already high debt service (above 35 percent of exports of goods and non-factor services), commercial borrowing should be avoided. While the country's debt servicing capacity was not worse than comparable countries until recently its weak export basis and high fluctuations in coffee market call for continued prudent external borrowing policies and from the support of the international community to the Government's program of structural adjustment.

DEMOGRAPHIC SITUATION, TRENDS AND PROJECTIONS

1. The most recent national sources of demographic data on Burundi are the 1970/71 Demographic Survey, the 1979 Census, and the Post-Censal retrospective enquiry. While a number of localized KAP (Knowledge, Attitude, and Practice) surveys have been carried out in recent years, no additional national demographic data will become available until the Health and Demographic Survey (1987) and the next Census (1989) are carried out, tabulated and analysed. Hence, the assessment below is largely based on existing sources of information and draws on previous work carried out by the Bank. [1]

A. Demographic Situation and Trends

Determinants of Population Growth

2. Mortality levels in Burundi are still high by world standards but within the ranges of other countries in sub-Saharan Africa. Mortality declined rapidly in the 1950s and early 1960s and more slowly since. The infant mortality rate declined from 160 in the mid 1950s to 141 in the mid and late 60s to about 133 per 1,000 in the late 70s; the proportion of children dying in their first year of life declined from 27 percent to 22 percent during 1955-80. Life expectancy is currently estimated at 47 years and the Crude Death Rate is about 19 per 1,000. No information is available on regional differentials in mortality.

3. There is only scanty information concerning the determinants of infant and child mortality in Burundi and virtually nothing is known concerning the relative importance of different factors and the interrelationships between them. A number of surveys elsewhere and in Burundi have illustrated the importance of maternal factors (short birth interval, high parity). Data from the 1970 Demographic Survey showed that the probability of surviving the first year of life improved with the size of the birth interval. A smaller survey illustrated that deaths occuring to women (40-49) with birth intervals of about 2 years were at least three times higher than to women with 3-year intervals. [2] The proposed emphasis on child spacing and targetted interventions to high-risk women should help bring about a reduction in infant mortality. The other factors which contribute to infant mortality relate to the generally poor socio-economic conditions, including environmental contamination, poor health status, limited use of health facilities, and inadequate nutrition.

4. The level of fertility (estimated Total Fertility Rate of 6.5 children per woman) is comparable to that in other sub-Saharan African

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1/Burundi: Population and Health Sector Review, Working document prepared by the Population, Health and Nutrition Department, World Bank, July 1983.

2/J.P.Robatel/Alii, Les problemes de population au Burundi, Fribourg, 1977.

countries, though not as high as in some neighboring populations (e.g., Rwanda 8.3, Kenya 8.0, Malawi 7.8).[3] The pattern of fertility is characterized by relatively low fertility in the younger age groups, which reflects the relatively high age at marriage (21 years in 1979) and a peak at ages 25-29, with relatively high fertility in the later childbearing years.

5. Out of the proximate determinants of fertility,[4] the reliance on late marriage and the length of post-partum amenorrhoea (estimated at about 12 months) due to intensive and prolonged lactation, are the most important "fertility inhibiting features". The age at marriage, 21 years, is similar to rates prevailing in urban areas of West Africa but higher than those in neighboring countries of Central, Eastern and Southern Africa, where they range between 18 and 19.6. Burundi is unique in the African context (along with Rwanda), in having developed a late marriage pattern at a time when literacy levels were still very low. One source estimates that the effect of prolonged celibacy is of a similar magnitude as that of birth spacing through intensive and prolonged lactation.[5]

6. The other determinants have "fertility maximizing features": (i) universal marriage (less than 2 percent of women are still single by the age of 50); (ii) absence of a postpartum taboo; (iii) a very low rate of polygamy (1-2 percent); (iv) one of the lowest sterility levels in Sub-Saharan Africa; (iii) very low use of modern contraception; and (iv) a relatively high family size preference.

7. International migration has historically been an important factor alleviating population growth. In the past, Burundians were either attracted by economic opportunities in the plantations and mines of Uganda, Tanzania, and Zaire or compelled to emigrate by political unrest. In recent years the importance of international migration has declined, as economic difficulties in Uganda and Tanzania emerged. Some 200,000 to 250,000 Burundians are now abroad, with the majority being in Tanzania.

3/The Total Fertility Rate is the average number of children that would be born alive to a woman during her lifetime if she were to pass through all her childbearing years conforming to the age-specific-fertility rates of a given year.

4/The proximate determinants of fertility have been categorized by Bongaarts in terms of the supply of and demand for children. The supply of children is determined by: (i) formation and dissolution of sexual unions and overall exposure (age at marriage, non-marital fertility, divorce rate); and (ii) natural marital fertility factors (post partum infecundability, sterility, spontaneous abortion). The demand for children is influenced by: (a) family size preference, and (b) contraceptive use.

5/Lesthaeghe, R., Fertility and Its Proximate Determinants in Sub-Saharan Africa: The Record of the 1960s and 1970s, Free University, Brussells.

Total Size and Rate of Growth

8. The total population of Burundi was estimated at 3.35 million in 1970 and at 4.029 million in 1979 (Census), an implied rate of growth of 2.0 percent per annum. The rate of population growth is estimated to have increased during 1979-84 to 2.7 percent, which can be largely explained by the declining importance of international migration. The current rate of population growth, 2.8 percent (1980-85), is moderately high by African standards but substantially below the 3.5-4.0 percent reached in some countries (Rwanda, Tanzania, Botswana, Zimbabwe, Kenya).

Age and Sex Structure

9. As is common in other developing countries, Burundi's age structure is relatively young, with 42 percent of the population under 15 years and 4 percent over 65 years (1979). The median age, which divides the population into two equal groups, was estimated at 17 years in 1979. The dependency ratio, defined as the ratio of persons in the dependent ages (less than 15 and over 64) to the economically productive ages (15-64) of the population, has been placed at about 90 (1979). The sex ratio of the population, the number of males per 100 females, was estimated at 95 in 1979. This sex ratio, which is not atypical for African societies, is most likely due to sex-selective migration and the overall female mortality advantage.

Distribution, Urbanization and Migration[6]

10. Burundi is the second most densely populated country in Sub-Saharan Africa (after Rwanda), with an average population density of about 180 per sq. km.; half of the (natural, geographic) regions have substantially higher densities. The highest population densities are found in the Central Highlands (Buyenzy, 333 and Kirimiro, 278), which benefit from good climatic, agricultural and health conditions, followed by Imbo (214), Mumirwa (205), Bwere (183). The Imbo region, which includes the city of Bujumbura, has attracted migrants to the paysannats and resettlement schemes in the Ruzizi river plain, inspite of relatively poor health conditions (e.g., high prevalence of malaria). The Bujumbura metropolitan area (168,368 inhabitants), which represents only 4 percent of the total population (1979), remains the principal pole of urbanization. The development of secondary towns and villages has been limited (see Chapter II). Population densities below the national average are found in the eastern (Mosso, Buyogoma) and southern most regions (Buragane), where they range from 58 to 90 per sq. km.

11 Internal migration flows have historically been from the densely populated central highlands towards the Imbo plain and the city of Bujumbura, areas with relatively fast growing economic opportunities. Information concerning the volume and nature of migration remains rather inadequate. Recognition of this led the Ministries of Interior and Planning to carry out a survey in 1986; after processing of the results, this survey should provide more information concerning the volume of migration, which is generally believed to have expanded in recent years.

6/Information on population density is presented by natural regions to make it consistent with the presentation and analysis in the agriculture sector.

B. Population Projections

Methodology and Assumptions

12. Three scenarios were constructed, all using the same mortality assumption. This is calculated according to the Bank's methodology, which relates the annual increment in female life expectancy to female primary-school enrollment. It is assumed that life expectancy would increase from 46.8 years in 1980/85 to 60.7 by 2010/15 per quinquennial period. The rate of change in life expectancy is assumed to increase until a life expectancy of about 58 years and to decrease thereafter. International migration is assumed to be zero, since it is believed that outflows have recently dwindled to very low levels, and opportunities in the future will be limited.

13. Three variants of fertility, given in the form of the TFR and age-specific fertility rates, are used. The first variant assumes a continuation of the current fertility level of 6.5 and is intended to provide a benchmark against which to measure the effects of fertility decline; the second variant, 'gradually declining fertility', is based on the assumption that the TFR drops to 4.2 by 2010/15 and reaches replacement level (2.1) by 2035 (the standard Bank assumption for Sub-Saharan Africa), a decline related to improving socio-economic conditions and some modest policy and program efforts by Government; and the accelerated decline variant reflects the maximum likely outcome of the introduction of a strong family planning program, with the TFR decreasing to less than half its current level by 2010/15 (3.1) and reaching replacement level 10 years earlier than under the second variant (2025).

14. Corresponding trends in the contraceptive prevalence rate (CPR) for the family planning scenario were estimated using the Bongaarts model.[7] The current CPR of about one percent would need to increase to 5 percent and 14 percent by 1985/90 and 1990/95, respectively, in order to reach a TFR of 6.2 and 5.7, by these years (see tables attached). Assuming that the age at marriage does not increase further, a decline in breast feeding, as is being observed in urban areas, is likely to put an upward pressure on fertility and require even higher CPRs than projected here. The implied number of users are about 66,000 (1985/90) and 206,000 (1990/95),

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7/The simplified version of the Bongaarts model was used for these simulations. This model quantifies the relationship between fertility and its proximate determinants (marriage pattern, contraceptive prevalence and effectiveness, induced abortion , postpartum infecundability and fecundity). It is based on the following assumptions: (i) no change in fecundity; (ii) induced abortion is absent; and (iii) increases in the age at marriage will be offset by declining importance of breast feeding; hence the proportional reduction in fertility will be mainly influenced by contraceptive prevalence and effectiveness. For a more detailed description of the model see Bongaarts, "A Simple Method for Estimating the Contraceptive Prevalence Required to Reach a Fertility Target", Studies in Family Planning, July/August 1984.

respectively, compared to some 10,000-13,000 currently.[8] This projected medium-term trend in the CPR, while being quite optimistic, could be attained in Burundi with strong political and financial commitment.

Total Size and Rate of Growth

15 The three scenarios provide fairly similar results concerning the size of the total population by 2000, with the impact of the family planning program starting to become apparent only by 2015. By the turn of the current century, Burundi's population, of 4.7 million (1985), is projected to reach between 7.0 and 7.5 million, an increase of about 50-60 percent. With the introduction of family planning the population would reach only 9.3 million by 2015, versus 11 million under the gradual fertility decline scenario. By 2010/15 the potential to double once again would be 20 years under the first scenario versus 39 years under the family planning scenario. The most marked difference between the scenarios would be felt only in the long run; for example, in 2040 the population would be 3.4 higher than the 1985 base under the medium scenario but only 2.7 higher under the family planning scenario.

PROJECTED SIZE AND GROWTH OF THE POPULATION

	Total Population (million)		Avg. Annual Rate of Population Growth (%)		Doubling Time at 2010-15 Rates
	2000	2015	1995-2000	2010-15	
Constant fertility	7.440	12.153	3.05	3.42	20
Gradual decline	7.385	10.786	2.90	2.32	30
Accelerated decline	6.973	9.290	2.86	2.33	39

16. Under the medium variant, the rate of growth is projected to average about 3.0 percent through the end of the century and gradually decline thereafter to about 2.3 percent in 2010/15. The third variant projects the rate of growth to decline steadily, from 2.9 percent (1985/90) to 1.8 percent (2010/15).

Age Structure

17. The dependency ratio is projected to continue increasing in the medium run with improvements in life expectancy and in the absence of counterbalancing changes in fertility; under the medium scenario, it is expected to start declining in 2000 and to drop to 73 by 2015; and under the family planning scenario, it begins declining earlier, 1995, and drops even further, to 59 by 2015. This projected decline is due to: (i) a decrease in the numerator (population less than 15 and over 64), reflecting mainly the effect of the fertility decline; and (ii) an increase in the denominator

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8/The implied number of acceptors will have to be even higher given that some women are expected to drop out. The lack of information on discontinuation rates did not permit an estimation of acceptors.

PROJECTED POPULATION AGE STRUCTURE

	Percentage of Population under 15 yrs.			Dependency Ratio		
	1990	2000	2015	1990	2000	2015
Constant fertility	45.2	45.9	45.6	93	95	93
Gradual decline	45.2	45.5	39.2	93	94	73
Accelerated decline	44.8	42.2	33.6	92	83	59

(population of 15-64 years of age), as the cohorts experiencing improved life expectancy at the beginning of the projection period begin passing into the working-age groups. The change in the age structure of the population is primarily from the projected decline in fertility. This can be seen clearly under the first variant, where fertility is projected to remain constant, while mortality declines, and the population remains youthful, with 46 percent under 15 years by 2015. Under the family planning scenario, the proportion of the population less than 15 years would decline from about 45 percent to 34 percent, while the working population would increase from 52 to 63 percent during 1990/2015.

Table 1: BURUNDI - DEMOGRAPHIC PROJECTIONS, 1985-2015

	1980	1985	1990	1995	2000	2005	2010	2015
A. ASSUMPTIONS								
MORTALITY:								
Life Expectation at Birth (both sexes)		46.8	49.0	51.3	53.6	56.0	58.3	60.7
FERTILITY (total fertility rate 1/):								
1. Constant fertility		6.50	6.50	6.50	6.50	6.50	6.50	6.50
2. Gradual fertility decline		6.50	6.50	6.50	6.23	5.84	5.00	4.17
3. Accelerated fertility decline		6.50	6.24	5.65	4.98	4.21	3.54	3.10
B. SIZE AND GROWTH OF THE TOTAL POPULATION								
B1. TOTAL POPULATION (millions)								
1. Constant fertility	4.105	4.718	5.485	6.388	7.440	8.700	10.244	12.158
2. Gradual fertility decline	4.105	4.718	5.485	6.388	7.385	8.455	9.801	11.028
3. Accelerated fertility decline	4.105	4.718	5.442	6.205	6.973	7.736	8.685	9.514
		1980-85	1985-90	1990-95	1995-2000	2000-05	2005-10	2010-15
B2. AVERAGE ANNUAL GROWTH RATE (percent)								
1. Constant fertility		2.78	3.01	3.05	3.05	3.13	3.27	3.42
2. Gradual fertility decline		2.78	3.01	3.05	2.90	2.71	2.55	2.32
3. Accelerated fertility decline		2.78	2.86	2.62	2.33	2.08	1.89	1.77
C. VITAL RATES								
C1. CRUDE BIRTH RATE (per 1000)								
1. Constant fertility		47.0	47.4	45.8	43.9	43.2	43.3	43.6
2. Gradual fertility decline		47.0	47.4	45.8	42.3	38.6	35.6	32.1
3. Accelerated fertility decline		47.0	45.7	41.0	36.1	31.8	28.7	26.6
C2. CRUDE DEATH RATE (per 1000)								
1. Constant fertility		19.2	17.3	15.3	13.4	11.9	10.6	9.4
2. Gradual fertility decline		19.2	17.3	15.3	13.3	11.5	10.1	8.8
3. Accelerated fertility decline		19.2	17.1	14.7	12.7	11.0	9.8	8.9
C3. RATE OF NATURAL INCREASE (%)								
1. Constant fertility		2.78	3.01	3.05	3.05	3.13	3.27	3.42
2. Gradual fertility decline		2.78	3.01	3.05	2.90	2.71	2.55	2.33
3. Accelerated fertility decline		2.78	2.86	2.62	2.34	2.08	1.89	1.77

1/ The average number of children that would be born alive to a woman during her lifetime if she were to pass through all her childbearing years conforming to the age-specific-fertility rates of a given year.

Table .2: BURUNDI - DEMOGRAPHIC PROJECTIONS, 1985-2015

	1980	1985	1990	1995	2000	2005	2010	2015
			(in percentage)					
A. DISTRIBUTION BY AGE OF THE POPULATION								
A1. POPULATION UNDER 15 YEARS								
1. Constant fertility	42.59	43.46	45.18	46.09	45.87	45.84	45.21	45.00
2. Gradual fertility decline	42.59	43.46	45.18	46.09	45.47	43.75	41.55	39.18
3. Accelerated fertility decline	42.59	43.46	44.75	44.5	42.25	39.02	35.97	33.55
A2. POPULATION AGED 15-64 YEARS								
1. Constant fertility	53.34	53.01	51.75	51.02	51.23	51.81	52.06	51.74
2. Gradual fertility decline	53.34	53.01	51.75	51.02	51.62	53.32	55.54	57.81
3. Accelerated fertility decline	53.34	53.01	52.15	52.52	54.66	57.78	60.74	62.98
A3. POPULATION AGED 65 YEARS AND OVER								
1. Constant fertility	4.07	3.53	3.08	2.90	2.90	2.85	2.73	2.67
2. Gradual fertility decline	4.07	3.53	3.08	2.90	2.92	2.93	2.91	3.01
3. Accelerated fertility decline	4.07	3.53	3.10	2.98	3.09	3.21	3.29	3.49
B. DEPENDENCY RATIO 1/								
1. Constant fertility	88	89	93	96	95	93	92	93
2. Gradual fertility decline	88	89	93	96	94	88	80	73
3. Accelerated fertility decline	88	89	92	90	83	73	65	59
C. WORKING AGE POPULATION			(in millions)					
C1. MALE POPULATION AGED 15-64								
1. Constant fertility		1.203	1.376	1.585	1.864	2.215	2.632	3.109
2. Gradual fertility decline		1.203	1.376	1.585	1.864	2.215	2.632	3.083
3. Accelerated fertility decline		1.203	1.376	1.585	1.864	2.196	2.547	2.890
C2. FEMALE POPULATION AGED 15-64								
1. Constant fertility		1.298	1.462	1.674	1.948	2.293	2.702	3.179
2. Gradual fertility decline		1.298	1.462	1.674	1.948	2.293	2.702	3.153
3. Accelerated fertility decline		1.298	1.462	1.674	1.948	2.274	2.617	2.960
C3. TOTAL POPULATION AGED 15-64								
1. Constant fertility		2.501	2.838	3.259	3.812	4.508	5.334	6.288
2. Gradual fertility decline		2.501	2.838	3.259	3.812	4.508	5.334	6.236
3. Accelerated fertility decline		2.501	2.838	3.259	3.812	4.47	5.164	5.85
			1985-90	1990-95	1995-2000	2000-05	2005-10	2010-15
C4. AVERAGE ANNUAL NEW ENTRANTS LABOR FORCE			(in thousands)					
1. Constant fertility			67.4	84.2	110.6	139.2	165.2	190.8
2. Gradual fertility decline			67.4	84.2	110.6	139.2	165.2	180.4
3. Accelerated fertility decline			67.4	84.2	110.6	131.6	138.8	137.2

1/ The ratio of persons aged 0-14 years plus persons aged 65 years and over to persons aged 15-64 years.

Note: Percentages may not add exactly to 100, due to rounding errors.

Table .3: BURUNDI - DEMOGRAPHIC PROJECTIONS, 1985-2015
(in millions)

	1980	1985	1990	1995	2000	2005	2010	2015
A.MCH POPULATION (Women 15-49 and children 0-5)								
1. Constant fertility	1.808	2.129	2.471	2.840	3.284	3.842	4.522	5.357
2. Gradual fertility decline	1.808	2.129	2.471	2.840	3.229	3.681	4.066	4.491
3. Accelerated fertility decline	1.808	2.129	2.429	2.683	2.954	3.239	3.511	3.794
B.PRIMARY SCHOOL-AGE POPULATION 7-12								
1. Constant fertility	0.622	0.703	0.855	1.056	1.239	1.420	1.643	1.958
2. Gradual fertility decline	0.622	0.703	0.855	1.056	1.239	1.399	1.618	1.622
3. Accelerated fertility decline	0.622	0.703	0.855	1.040	1.143	1.179	1.196	1.208
C.SECONDARY SCHOOL AGE POPULATION 18-19								
1. Constant fertility	0.687	0.691	0.760	0.917	1.138	1.356	1.564	1.804
2. Gradual fertility decline	0.687	0.691	0.760	0.917	1.138	1.356	1.553	1.701
3. Accelerated fertility decline	0.687	0.691	0.760	0.917	1.130	1.280	1.342	1.369

ANNEX II: EXPORT PROMOTION

TECHNICAL NOTE ON COMPETITIVENESS

1. Data Limitations

The data presented in the following paragraphs are based on the following sources, unless otherwise specified: (a) Burundi's exports: Banque de la Republique du Burundi (BRB); (b) Rwanda's Exports: Banque Nationale du Rwanda; (c) Kenya's exports and imports: Kenya's Trade Statistics, 1984. Published 1984 trade statistics for other East African countries were not available.

These data sources are not directly compatible and contain omissions. There are also some several minor inconsistencies between different sources of data for Burundi. Rwanda's data are incomplete and not fully disaggregated. Furthermore, some difficulty was experienced in accurately converting Burundi's Brussels Trade Nomenclature (BTN) classifications into Standard International Trade Classification (SITC) categories. This conversion was undertaken to allow for the computation of the export similarity indices between Burundi and Kenya whose trade data are described in SITC categories. Furthermore, exports of refined oil were ignored since these are on the whole re-exports. In this context, the accuracy of the data and therefore the trade indicators calculated should be regarded mainly as indicative.

Although the value added data produced in Table 4 are derived from a UNIDO database, the statistics are given in current prices and not factor cost. This limits the usefulness of the statistics for identifying Burundi's comparative advantage vis-a-vis regional competitors since the values given include policy-induced price distortions such as taxes, tariffs and subsidies.

It is evident from the difficulties encountered that a major data collection exercise is required to produce an accurate compatible data base which would enable more comprehensive analysis.

2. International Competitiveness

2.1 Introduction

There is no unique approach to the ex ante measurement of a country's comparative advantage and, by definition, its competitiveness vis-a-vis specific commodities and countries. Preliminary measurement of Burundi's competitiveness in regional markets with respect to other East African producers has therefore been undertaken based upon three approaches: (i) the computation of export similarity indices; (ii) export market share indices; and (iii) an inter-country comparison of labor productivity and costs.

2.2 Export Similarity Indices

A number of issues in international trade and competitiveness can be examined by the use of an index measuring the similarity of the exports of any two countries to a third market. The measure is defined as follows:

ES = minimum (X(ac); X(bc)).100

where: a,b are two exporting countries, c is the importing market
Xac = share of an individual commodity in a's exports to c
Xbc = share of the same commodity in b's exports to c

If there is total similarity, the index will take on a value of 100. If there is total dissimilarity in the commodity pattern of a and b's exports to a third market, the index will be zero. (Note that the exports of each country are scaled or expressed as proportions of its total exports to a particular market, and as a result, the index compares only patterns of trade across product categories and not absolute levels. This is a useful characteristic which makes comparison between countries of both similar and different size and industrialization possible.)

Table A1 summarizes export similarity indices between Burundi and Rwanda and between Burundi and Kenya, respectively, in East African markets and indicates Burundi's ex post competitiveness. It indicates that even at the highly aggregated single digit SITC level, Burundi's and Rwanda's exports to Tanzania and Uganda are totally dissimilar and very dissimilar to Zaire. This implies that based upon existing trade, Burundi and Rwanda are not competitors in these East African markets. The degree of similarity of Burundi's and Rwanda's exports to Zaire disappears at the less aggregate 5 digit SITC level.

There is a much greater degree of similarity and therefore of competition between Kenya and Burundi in East African markets. At the 1 digit level Kenya and Burundi's export similarity reaches almost 50% in Rwanda and Zaire. The degree of competition also appears significant in Uganda but less so in Zambia and Zaire. However, the degree of similarity and therefore competition becomes greatly reduced as indices are calculated at more disaggregated 5 digit SITC levels.

Ideally we would have wished that export similarity indices were calculated between Burundi and each of the East African countries for the East African and EEC markets. This would identify Burundi's ex-post competitors and suggest which country's trade data should be studied to identify new potential markets for Burundi's exports. Based on Table A1, analysis should be made of the other markets Kenya exports to, in order to determine whether Burundi could also export to those markets. For example, to which other markets does Kenya export cotton fabric?

Table 2 shows export similarity indices, including and excluding tea and coffee at SITC Digit 6 levels, for several East African producers to the Kenyan market. Burundi currently only exports tea which is also the main export for Malawi, Rwanda, Uganda and Zaire. These countries are, therefore, all close competitors with each other when tea and coffee are included but not when it is excluded.

2.3 Export Market Share

The export similarity indices are calculated in relative and so ignore the magnitude of the exports of comparative countries. Export market share indices overcome this by calculating the share of a country's exports in the total exports of a group of countries for each commodity in a particular market.

Table A3 describes Burundi's export market share of Burundian, Kenyan and Rwandan exports to Tanzania, Uganda and Zaire. The greater the market share, the greater is Burundi's competitive edge. If Burundi's share for a particular commodity exceeds its share in total exports from Burundi, Kenya and Rwanda then this can be interpreted as an indication that Burundi has a comparative advantage.

The results in Table A3 imply that Burundi has an ex-post comparative advantage in beer, inorganic chemicals, cotton fabrics and non-metallic mineral manufactures in the Zaire market compared with Kenya and Rwanda, and that Burundi has a comparative advantage in boats and tea in the Tanzania market and cotton fabric in the Ugandan market compared to Kenya and Rwanda. These results should again be qualified with respect to the accuracy of the data.

2.4 Productivity and Wage Cost

The classic test of comparative advantage tests the hypothesis that a country will have a comparative advantage over another country in those goods for which the ratio of its output per worker to that of the other exceeds the ratio of its money wage rate to that of the other country. This hypothesis can be approximately tested by comparing the value added per unit of labor cost between different countries for different industries. Table A4 gives the value added per unit of labor cost for Burundi (1983), Kenya (1982), Mauritius (1985), Tanzania (1981), and Zimbabwe (1982) for 3 digit ISIC industrial categories. The country with the highest value added per unit labor cost for each industry would e the country with the comparative advantage in that industry compared to the others. However, the data are for differing years at current prices; they cannot be used directly for comparisons because the values given include the effect of price distortions caused by taxes, tariffs, subsidies and other government policies. Value added data calculated at factor cost would be more appropriate. Taking this into consideration casts some doubt on the result of Table A4 that Tanzania has the highest value added per unit of labor cost in 16 out of the 22 categories. The implication that Burundi has a comparative advantage in textiles does, however, seem consistent with earlier results from the analysis on export market share.

Table 1: EXPORT SIMILARITY INDICES WITH BURUNDI

Target Market	Export Competing Countries: Rwanda 1 digit	Rwanda 5 digit	Kenya 1 digit	Kenya 5 digit
Rwanda	--	--	49.98%	4.45%
Tanzania	0.00%	0.00%	12.20%	0.00%
Uganda	0.00%	0.00%	30.00%	0.00%
Zaire	1.16%	0.00%	47.80%	2.64%
Zambia	0.00%	0.00%	15.00%	0.00%

Table 2: EXPORT SIMILARITY INDICES OF EAST AFRICAN EXPORTS OT KENYA
(six digit SITC)

	Burundi	Malawi	Rwanda	Tanzania	Uganda	Zambia	Zaire
A. Total Trade to Kenya							
Burundi	--	--	--	--	--	--	--
Malawi	82.83%	--	--	--	--	--	--
Rwanda	99.99%	82.83%	--	--	--	--	--
Tanzania	0.72%	0.72%	0.72%	--	--	--	--
Uganda	91.72%	82.83%	91.72%	0.00%	--	--	--
Zambia	0.32%	0.48%	0.32%	0.51%	0.59%	--	--
Zaire	99.99%	82.83%	99.99%	0.72%	91.72%	0.32%	--
B. Total Trade to Kenya less coffee and tea							
Burundi	--	--	--	--	--	--	--
Malawi	0.00%	--	--	--	--	--	--
Rwanda	0.00%	0.00%	--	--	--	--	--
Tanzania	0.00%	0.00%	0.00%	--	--	--	--
Uganda	0.00%	0.00%	0.00%	0.00%	--	--	--
Zambia	0.00%	0.16%	0.00%	0.19%	0.75%	--	--
Zaire	0.00%	0.00%	47.17%	0.00%	0.00%	0.00%	--

Table 8: EXPORT MARKET SHARE FOR BURUNDI/KENYA/RWANDA IN SELECTED MARKETS - 1984

Market: Tanzania				
Exporter:	Burundi	Kenya	Rwanda	Total
001 Live animals	25.00%	75.00%	0.00%	100.00%
046 Wheat flour	0.00%	100.00%	0.00%	100.00%
048 Cereal products	0.00%	100.00%	0.00%	100.00%
074 Tea	99.59%	0.41%	0.00%	100.00%
112 Beer,wine,spirits	0.00%	0.00%	100.00%	100.00%
793 Ships & boats	100.00%	0.00%	0.00%	100.00%

Market: Uganda				
Exporter:	Burundi	Kenya	Rwanda	Total
628 Rubber products	57.72%	42.28%	0.00%	100.00%
625 Cotton products	98.85%	1.15%	0.00%	100.00%
658 Other textiles	0.00%	100.00%	0.00%	100.00%
661 Building materials	0.00%	100.00%	0.62%	100.00%
665 Bottles & jars	0.00%	100.00%	0.00%	100.00%
679 Iron & steel castin	0.00%	100.00%	0.00%	100.00%
691 Other metal product	0.00%	100.00%	0.00%	100.00%

Market: Zaire				
Exporter:	Burundi	Kenya	Rwanda	Total
001 Live animals	0.00%	100.00%	0.00%	100.00%
046 Wheat flour	99.37%	0.63%	0.00%	100.00%
048 Cereal products	16.79%	83.21%	0.00%	100.00%
074 Tea	0.00%	100.00%	0.00%	100.00%
112 Beer,wine,spirits	99.83%	0.17%	0.00%	100.00%
522 Inorganic chemicals	53.09%	46.91%	0.00%	100.00%
628 Rubber products	0.00%	100.00%	0.00%	100.00%
625 Cotton products	100.00%	0.00%	0.00%	100.00%
658 Other textiles	0.46%	99.54%	0.00%	100.00%
661 Building materials	0.00%	100.00%	0.00%	100.00%
665 Bottles & jars	81.70%	18.30%	0.00%	100.00%
679 Iron & steel castin	16.37%	83.63%	0.00%	100.00%
691 Other metal product	27.49%	72.51%	0.00%	100.00%
821 Furniture	21.10%	78.90%	0.00%	100.00%

Table 4: VALUE ADDED PER UNIT OF LABOUR COST FOR COMPARATIVE AFRICAN COUNTRIES
(by 3 digit ISIC categories in thousands US$, current prices)

ISIC No.	Description	Burundi (1983)	Kenya (1982)	Mauritius (1983)	Tanzania (1981)	Zimbabwe (1982)
311	Food Products	--	2.42	1.68	3.41	2.20
321	Textiles	3.14	1.92	3.00	2.60	2.09
322	Wearing Apparel	3.14	1.69	1.88	4.50	1.76
323	Leather & Fur Goods	3.14	1.67	2.31	7.67	1.90
324	Footwear	3.14	4.00	3.21	3.43	2.23
331	Wood & Cork Products	--	1.50	2.00	2.50	1.86
332	Furniture	--	2.14	1.57	4.00	2.13
341	Paper	--	3.30	3.57	3.11	1.86
342	Printing & Publishing	1.30	1.39	1.64	3.00	1.82
351	Industrial Chemicals	2.28	2.33	--	3.78	2.66
352	Other Chemicals	2.84	2.03	--	3.85	2.92
355	Rubber Products	--	2.53	2.75	3.89	2.41
356	Plastic Products	1.56	2.05	2.43	5.43	2.55
361	Pottery & China	--	1.39	2.08	--	2.32
362	Glass	--	1.67	2.25	3.73	2.29
369	Other Non-Metal Mineral Products	2.50	2.18	2.87	3.50	2.28
371	Iron& Steel	--	--	3.28	--	1.31
381	Metal Products	2.04	1.56	3.28	3.87	1.94
382	Non-Electrical Machin	--	1.74	--	4.36	2.72
383	Electrical Machinery	2.02	2.00	2.65	2.93	2.31
384	Transport Equipment	--	1.42	2.33	5.71	1.86
385	Prof Scientific Equip	--	--	2.82	--	2.05

Source: Derived from Statistics in 'Africa in Figures', UNIDO (PPD2 /V86 59878

Table 5: BURUNDI EXPORTS (Jan. - Sept. 1986)
By Country of Destination

Country of Destination	Value (000s FBu)	%
West Germany	7379	0.46
Finland	182	0.01
France	6235	0.39
Italy	71182	4.43
Netherlands	5681	0.35
United Kingdom	129931	8.08
Sweden	132	0.01
Belgium	1374	0.09
EC Other	1376	0.09
Singapore	36004	2.24
Zimbabwe	8156	0.51
Sudan	7676	0.48
Uganda	352641	21.94
Kenya	92894	5.78
Tanzania	14189	0.88
Chad	3400	0.21
USA	2019	0.13
Zaire	204467	12.72
Rwanda	528007	32.85
Others	134446	8.36
TOTAL	1607371	100.00

Table 8: BURUNDI EXPORTS: MARKET DISTRIBUTION

SITC GROUP	RWANDA	TANZANIA	UGANDA	ZAIRE	KENYA	AFRICA	EEC	OTHERS	TOTAL	%
Food and Live Animals	--	--	--	--	232.7	111.7	6817.9	4747.4	11909.7	89.7
Beverages and Tobacco	--	0.3	11.5	6.6	--	27.8	--	1.2	47.4	0.4
Crude Materials, inedible except fuels	--	--	--	42.4	--	--	108.8	454.9	606.1	4.6
Minerals, fuels, lubricants, and related materials	--	--	--	--	--	--	--	--	--	--
Animals and Vegetable oils and fats	--	--	--	--	--	--	--	--	--	--
Chemicals	--	15.8	0.5	--	--	--	--	0.7	17.0	0.1
Manufactured Goods	372.2	129.6	33.6	122.4	--	--	--	17.5	675.3	5.1
Machinery and Transport Equipment	--	--	--	--	--	--	--	--	--	--
Miscellaneous	--	--	--	--	--	--	--	--	--	--
Commodities nes	9.4	--	3.0	1.9	--	--	3.6	7.0	24.9	0.2
TOTAL	381.6	145.7	48.6	173.3	232.7	139.5	6930.3	5228.7	13280.4	100.0
%	2.9	1.1	0.4	1.3	1.8	1.1	52.2	39.4	100.0	

Source: BRB Rapport Annuel, 1985.

Table 7: COMPARISON OF KENYA IMPORTS FROM ZEP COUNTRIES WITH BURUNDI'S TOTAL EXPORTS TO ALL OTHER COUNTRIES BY SITC (3 digit)

SITC No	Burundi Exports ($000s)	Kenyan Imports ($000s)	Import Source: Malawi	Rwanda	Tanzania	Uganda	Zaire	Zambia	Total
001	2.0	20.4	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
057	0.0	1.8	0.00%	0.00%	11.54%	88.46%	0.00%	0.00%	100.00%
247	0.0	1.7	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
248	0.0	6.7	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
263	356.2	2816.0	0.00%	0.00%	99.99%	0.01%	0.00%	0.00%	100.00%
288	0.0	2.5	0.00%	0.00%	23.94%	76.06%	0.00%	0.00%	100.00%
291	3655.0	201.1	0.00%	0.00%	99.79%	0.21%	0.00%	0.00%	100.00%
523	0.0	42.9	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
541	55.1	8.9	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
554	76.9	17.3	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
591	0.0	0.2	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
625	0.0	10.4	0.00%	0.00%	47.98%	0.00%	0.00%	52.02%	100.00%
641	0.0	238.2	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
642	25.0	0.1	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
661	205.5	0.1	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
663	13.4	0.4	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
665	1651.8	0.4	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
666	0.0	0.1	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
678	0.0	10.4	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
684	0.0	1219.4	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
686	0.0	2035.3	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
692	0.0	2.9	0.00%	0.00%	0.00%	76.35%	0.00%	23.65%	100.00%
693	0.0	3.2	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
695	0.0	13.0	7.73%	0.00%	0.00%	0.00%	0.00%	92.27%	100.00%
713	0.0	3.0	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
716	0.0	3.2	0.00%	0.00%	0.00%	67.62%	0.00%	32.38%	100.00%
722	4.0	12.8	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
728	0.0	168.3	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
736	0.0	8.8	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
741	0.0	0.8	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
742	0.0	8.9	32.92%	0.00%	0.00%	0.00%	0.00%	67.08%	100.00%
743	0.0	27.1	0.00%	0.00%	0.00%	18.34%	0.00%	81.66%	100.00%
745	0.0	4.7	15.51%	0.00%	0.00%	0.00%	0.00%	84.49%	100.00%
749	0.0	15.0	0.00%	0.00%	0.00%	10.08%	0.00%	89.92%	100.00%
751	0.0	0.9	0.00%	0.00%	23.74%	0.00%	0.00%	76.26%	100.00%
752	0.0	2.7	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
759	0.0	3.7	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
764	0.0	2.5	0.00%	0.00%	50.13%	49.87%	0.00%	0.00%	100.00%
771	0.0	10.2	0.00%	0.00%	0.00%	0.41%	0.00%	99.59%	100.00%
773	0.0	10.2	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
774	0.0	0.1	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
775	0.0	1.6	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
778	0.0	11.4	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
781	0.0	14.7	0.00%	0.00%	16.17%	69.05%	0.00%	14.78%	100.00%
782	0.0	48.3	0.00%	0.00%	10.75%	0.00%	0.00%	89.25%	100.00%
784	0.0	4.3	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
786	0.0	6.1	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
792	0.0	15.2	0.00%	0.00%	0.00%	90.32%	0.00%	9.68%	100.00%
821	0.0	1.2	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
874	0.0	2.7	0.00%	0.00%	0.00%	16.57%	0.00%	83.43%	100.00%
883	0.0	0.6	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
892	0.0	7.7	26.26%	0.00%	43.16%	0.00%	6.00%	30.58%	100.00%
894	0.0	0.8	0.00%	62.50%	0.00%	0.00%	37.50%	0.00%	100.00%
898	0.0	0.7	0.00%	0.00%	3.05%	30.52%	0.00%	66.43%	100.00%
TOTAL	6044.9	6851.4							

Note: this table assumes an average exchange rate for 1984 of: US$1 = 14.4139 Kenyan Shillings
= 119.71 Burundian Francs

Table 8: FBu EXCHANGE RATES - EXCHANGE-WEIGHTED AVERAGES 1AGES 1/

	$ Rate 1986 end-March	$ Rate 1987 Feb 10	Burundi Francs per unit 3/31/86	Burundi Francs per unit 2/10/87	% apprec- iation of FBu since 3/86	Weights /100
Burundi	107.88	118.88	1.000	1.000		
Kenya	16.49	16.03	6.543	7.415	-11.80	11.85
Rwanda	90.00	81.19	1.199	1.464	-18.10	25.48
Tanzania	4.00	53.19	6.725	2.235	200.90	1.82
Uganda	1470.00	1399.10	0.073	0.085	-13.60	33.55
Zaire	56.00	84.47	1.926	1.407	36.90	26.26
Zimbabwe	1.64	1.64	65.785	72.705	-9.50	1.05
Total						100.00
Trade-weighted average (East Africa)						
Belgium	47.48	37.20	2.272	3.196	-28.90	6.02
Italy	1580.80	1278.00	0.068	0.093	-26.60	31.20
UK	0.67	0.65	160.234	182.540	-12.20	56.94
West Germany	2.32	1.80	46.550	66.155	-29.60	3.23
France	7.13	6.00	15.125	19.826	-23.70	2.61
Total						100.00
Trade-weighted average (Europe)					(-18.60)	
Malawi	1.81	2.35	59.441	50.499	17.70	
Zambia	6.85	9.17	15.750	12.970	21.40	

1/ Weights based on export levels Jan - Sept 1986

SOME TRADE PROMOTION ISSUES

A. DUTY DRAWBACK SCHEME

The introduction of a revised duty drawback scheme should be the subject of a separate study to ensure that recommendations are appropriate to the legal, administrative and organisational capabilities in Burundi. The observations contained in this note should be regarded only as indicative of what may be possible.

The Need For Revision

The objective of a duty drawback system is to ensure that Burundian exporters have access to imported inputs at international prices and thereby enable them to compete more effectively on export markets. Following the introduction of Burundi's new tariff schedule, which levied higher tariffs on imported industrial inputs, an efficient means of rebating these tariffs to exporters is now especially important. Mission discussions with both the private sector producers and the government officials concerned with the administration of the existing drawback scheme indicated that there was substantial confusion as to just how the scheme was intended to work, who was eligible for rebates and how claims were intended to be made. At present there is no fixed formula for rebate nor any clear guidelines on how to verify and process claims.

Basic Principles

The basic principles underlying the introduction and operation of a duty drawback scheme are no different fom other policy reforms implemented as part of Burundi's structural adjustment program. These concern the need for:

1. transparency - all parties should be able to have a clear understanding of the operational procedures and the extent of recipients' benefit entitlements;

2. automaticity - the degree of administrative discretion in the processing should be minimized;

3. efficiency - the scheme should be simple to implement and appropriate to the country's requirements.

Alternative Approaches

Essentially, there are three basic approaches to a drawback system:

(i) Duty Exemption whereby imported inputs used for the production of exports can be temporarily imported with a waiver of the duties normally payable. While this is a very simple and efficient element

and does not tie up exporters' financial resources, it can pose difficult problems in trying to establish ex ante the proportion of production that will eventually be exported. It is best suited to companies exporting their entire output.

(ii) Individual Drawback: This is perhaps the most widely used model whereby all importers are required to pay duty upon clearance of goods through customs. The duties are then rebated at the time of export according to the proportion of imported goods used in the production of the export. This does present substantial financial and administrative costs to the exporter, and it becomes difficult to operate when there are many stages of local value added in processing.

(iii) Fixed Drawback An attempt to overcome some of the administrative complexities of the individual drawback scheme is the fixed drawback scheme. Under this system an average input/output schedule is constructed for each product in each industry, and rebates are paid automatically according to the fixed schedule irrespective of individual company cost profiles. Thus either over or underpayment is the norm.

Beneficiaries

As economies become more developed, the identity of the beneficiaries of the rebate becomes important. For instance, who is economically most entitled to the rebate when a domestic manufacturer purchases imported inputs from a trading house but sells his exports through another trading house? And who should get the rebate when a manufacturer sells products which have used imported inputs to a second manufacturer who uses them to produce exports? At this stage of Burundi's development, these questions are marginal, although any system established now should be flexible enough to accommodate these problems.

Method Of Payment

The method of payment can also be an important constituent of the duty drawback scheme. In considering the method of payment, account must be taken of the government's need to be guaranteed the initial payment and the importers' need to avoid excessive payments and the tying up of large cash balances. Several alternative systems have been introduced around the world which have utilized, for example, tax credits, bank guarantees, deposited holding accounts etc. All have different costs and benefits associated with them.

Coverage

It is also important to clarify the coverage of the duty drawback scheme. Essentially, the principle should be to rebate all indirect taxes that may be levied on inputs into export products and on the sales of export products. Any drawback scheme contemplated for Burundi should have this concept embodied in it from the start, in order to avoid confusion should new taxes be introduced subsequent to the drawback scheme.

Input Coefficient Schedules (ICS)

An important feature of a drawback system is the estimation of accurate input/output coefficients for each export product vis-à-vis its imported inputs. Such a schedule ensures complete transparency of each transaction and provides an agreed basis for the computation of rebates. In most systems in operation, the requirement is for a detailed physical quantity and cost coefficient for each imported input in each export product so that the appropriate duty rate can be applied to each input. For Burundi, only a single cost estimate would be required corresponding to the total import cost. (This would be supported by the physical coefficients in the first instance as all imported raw materials and intermediate goods have a common tariff rate.)

Proposals For Burundi

There are several features of the export sector in Burundi which might influence the type of drawback system introduced.

1. At present, the industrial structure is quite simple with very little inter-industry linkages. Thus, the problems associated with demand for rebates on indirect imports are small. They nonetheless exist. Rudipaints and Robbialac, for instance, both sell paints made from imported constituents to export industries such as Verrundi. The only satisfactory system of overcoming this problem of rebating duties on indirect exports is to operate a system of domestic letters of credit whereby the company exporting the final product opens a letter of credit in favor of the supplying company for the amount of their products used in the manufacture of the final export goods. Rebates are then negotiated by the supplier on the value of the letter of credit which represents the amount of the intermediate good finally exported.

   The operation of a domestic letter of credit system is not recommended yet, on the grounds that it would complicate the introduction of the new drawback system; in addition, given the degree of inter-industry linkages, its cost of administration would perhaps exceed its benefits in terms of increased exports.

2. The tariff system now has standard rates for all raw materials and intermediate goods. This will in effect avoid the need to calculate individual coefficients for exports, which are often required in countries where there are a great many rates of duty. Thus, the ICS can be based on total imported costs per unit of output.

3. There are comparatively few companies in Burundi -- too few to enable the estimation, at least at this stage, of individual company/product ICS rather than aggregated industry wide ICS.

Semi-Fixed Drawback Scheme

The mission's initial recommendation, which must be subject to more detailed investiageion and scrutiny, is to introduce a semi-fixed drawback scheme under which an ICS would be agreed with each company for each relevant export product. Instead of a list of individual physical input coefficients, the ICS would comprise a single imported cost element per unit of output, and it would be against this value that duties rebates would be calculated by applying the current rate of duty at the time of export. Rebates should be based on the rate of duty current at the time of export rather than the rate at the time of import. While this is likely to overestimate duty rebates, it would be simple to apply and would save in terms of administrative costs on the part of the exporter and government.

An essential feature of this system would be the need to regularly update the cost component. This should be undetaken at least every 18 months or more frequently at the instigation of the exporter in response to sudden price changes.

To avoid delays in payments and reduce adm[illegible]rative meanderings we would recommend that the rebate system is not op[illegible] on the basis of cash payments but on negotiable tax credits. Do[illegible]aring a fixed value can be used to offset any government tax [illegible] trans[illegible]tion taxes, turnover taxes, import duties etc. [illegible]s way a[illegible]erti[illegible]icates can be issued without direct recourse to the Treasury. Experien[illegible]as shown that in times of financial stringency exporters are penalized less under a tax credit system than under cash rebate systems.

At a future date, the system could easily be extended to incorporate indirect exports via domestic letters of credit.

Institutional Structure

The overall responsibility for the administration of the drawback scheme would be with the Ministry of Commerce and Industry, specifically with the Director responsible for Government Receipts. In accordance with the principles of transparency, we would recommend that a small advisory/coordinating committee be established, chaired by the Director responsible for Government Receipts and comprising representatives of the private sector as well as representatives of other interested government departments. The function of the committee would be to assist the Director establish guidelines and procedures, coordinate the different bodies involved and review appeals and complaints as they arise, as well as to deal with the inevitable oversights that accompany the introduction of new policies.

The day to day running of the scheme should be with the Director's departmental staff who would specifically be responsible for:

- evaluating and agreeing ICS's
- processing applications
- issuing tax credits
- monitoring ICS's and price changes
- auditing on a periodic basis ICS's.

A staff of perhaps 3-4 people would be needed.

It is very important that the introduction of a revised duty drawback system is undertaken as soon as possible. Technical assistance may be required to assist the Government in implementing the scheme devising appropriate operating procedures, estimating the ICS and in providing more general training of the unit's staff. We would envisage between 4-8 man months of technical assistance for this purpose

PREFERENTIAL TAXATION OF EXPORTERS

Introduction

Even after the current policy reforms have been implemented and a new policy drawback scheme introduced, the policy environment will still significantly favor import-substitution industries relative to export industries. To move towards a more neutral policy environment, positive incentives must be given to those companies which export. A significant contribution to achieving this goal could be obtained from the introduction of a two-tier system of company taxation which favored exporting companies by taxing their profits at a lower rate in proportion to the amount they exported. Details of such a scheme are given below.

Principles

The formulation of the recommendations that follow has been guided by two important considerations: first, company tax should be set at a level which both permits an acceptable inflow into the public treasury as well as enabling the private sector to retain enough earnings for the initial investment to be worthwhile. Second, it is vitally important that the taxation system is such that it can be used to direct incentives towards desired sectors - in the case of Burundi, this will primarily be the export sector.

Two-Tier Taxation System

Under a two-tier tax system, exporting companies pay a profits tax rate much reduced in comparison to the rate applying to non-exporting companies. At the heart of this scheme are two proposals:

(a) maintain the existing permanent rate of profits tax; and

(b) grant substantial or total exemption from this in relation and in direct proportion to one simple criterion: the proportion of a company's sales made to export markets.

It would clearly be for the Burundi Government to set the two appropriate tax rates; the important aspect to be borne in mind is that the current level of 45% should be maintained for the higher rate and for the lower rate, it should be reduced to a less penal level in order to encourage industries to expand export output.

In order to illustrate the way in which this system would work, the following examples were prepared:

Tax Regime Scheme	Basic corporation tax rate - 45% Tax rate of profits from exports - 5%
Company Illustration	Annual value of ex-factory rates FBu 50 million Gross profit margin 20%
Example 1:	Sales are 90% in export markets: 10% domestic
Example 2:	Sales are 50% in export markets: 50% domestic
Example 3:	Sales are 10% in export markets: 90% domestic

Hypothetical Tax Regime

	Value (FBu mn) Profits	Tax	% Tax Rate
Example 1:			
- local sales	1.0	0.4	45
- export sales	9.0	0.45	5
Total	10.0	0.85	8.5
Example 2			
- local sales	5.0	2.25	45
- export sales	5.0	0.25	5
Total	10.0	2.5	25
Example 3			
- local sales	9.0	4.05	45
- export sales	1.0	0.05	5
Total	10.0	4.1	41

Thus, a company selling entirely in export markets would pay 5% tax. The company shown here, selling 10% of its output domestically, would have an average tax rate of 8.5%.

The type of company illustrated in Example 3 -- the more typical of those in Burundi, able to pick up occasional export orders, but essentially based upon the domestic market -- would pay 41% tax. The important aspect is that the company would perceive that the basic tax rate is not penal, that there is a built-in incentive to maximize export sales, and that the government revenue is not significantly reduced as domestic sales (which most Burundian companies rely at present) are taxed at the standard rate. Only that proportion of profits attributed to sales in export markets is taxed at the lower rate.

It is clear that the choice of tax rates will be largely governed by two factors:

1. the effect on export incentives; and
2. the effect on the government's revenue.

Initial discussions of the mission preliminary recommendations held in Bujumbura with representatives of the Ministry of Commerce and Industry suggest that a 45%:5% structure would be acceptable on grounds of the second criteria. These rates are recommended, as there would not be a detrimental effect on export incentives. The proposed 5% should be seen as the absolute maximum level of taxation on the proportion of profits deemed to be arising from export earnings. Higher rates will have a significantly less incentive effect, particularly on future foreign investors who may be comparing Burundi with locations offering virtually no taxation at all.

Evaluation

This scheme has a number of benefits. First, it is eminently straightforward and easy both to understand and administer. Second, it gives tax incentives only to exporters, and therefore helps redress the anti-export bias policy. Third, it maintains the integrity of Government revenue, and fourth, it encourages companies to make money and declare profits.

In terms of accountability, the system has an additional benefit in that the proportion of export receipts from total receipts is easily verifiable from records at the Banque de la République du Burundi. To ensure that receipts can be attributed to any one particular year, it may be necessary, however, to improve the accounting system at the Banque de la République du Burundi to uniquely associate revenues with invoices, thereby enabling foreign receipts to be apportioned between years.

However, there is a need to weigh these advantages against the feature that profit rates are not usually identical on export sales and domestic sales so that the proportion of profits attributed to exports may not necessarily be the level of profits earned by exports. However, the advantage of simplicity of operation outweighs this aspect.

An adviser should be appointed to the Ministry of Commerce and Industry for approximately six months to assist in the implementation of these proposals.

This system, which incorporates a continuously variable tax scale and which maintains an incentive to export at the margin, regardless of the relative importance of exports, would constitute a highly-effective inducement to the export sector, would stimulate industrial investment, and would be administratively easy to implement.

ISSUES IN THE ENERGY SECTOR

(AN UPDATE)

1. The main issues in the sector are included in the main report (Chapter II). The following paragraphs develop some of those issues and update information on the sector contained in the last energy assessment report. [1]

I. WOODFUEL

Demand

2.1 Woodfuels are thought to satisfy at least 70% of final energy demand. Based on per capita wood consumption in comparable African countries of 0.25 m3/year to 1.0 m3/year, Burundian demand could range from 1.5 million m3 to 5 million m3 per year. Because of the current shortage of supply, consumption is is probably at the lower end of that range.

2.2 Household cooking accounts for the bulk of demand. Rural households (over 90% of the total) gather wood free-of-charge and burn it in traditional three-stone fireplaces. About 160,000 m3/year of wood is commercially marketed, mostly to rural industries and institutions. Charcoal is the principal urban household fuel, particularly in Bujumbura, where nearly 90% of households use it. Although Bujumbura houses only 5% of the population, it accounts for some 15% of woodfuel consumption, due to the loss in charcoal conversion. Urban cooking is mainly on a portable, single-wall metal stove (imbabura); while more efficient than an open fire, it still suffers from high energy losses.

Supply

2.3 Total forest cover is about 130,000 ha, of which 70,000 ha are plantations and 60,000 ha natural forests, 40,000 ha of which are dense montane forest and 20,000 ha open savannah forest. The mean annual increment is low, ranging from 1 m3/ha/year in the natural forest to 20 m3/ha/year in the best-managed and most fertile plantations. Total sustainable forest yield, believed to be about 400,000 m3 p.a., is about 25% of the more conservative consumption estimates. The result is a progressive decline in the remaining wood stock and increasing use of fuelwood substitutes, particularly crop residues. Both developments threaten environmental damage and agricultural productivity.

2.4 Most charcoal is produced and marketed by small-scale entrepreneurs employing traditional (earth kiln) production techniques. These are highly inefficient, with an average yield of only 10%. To protect the environment, the Government restricts charcoal production in many areas, contributing to periodic shortages.

2.5 The Government's long-term objective is the restitution of tree cover on 20% of the land area, equivalent to 500,000 ha of forest,

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1/ UNDP/IBRD, Energy Assessment in Burundi, March 1982.

woodland, and single trees. Its strategy is to protect and manage the remaining 40,000 ha of dense montane natural forest, establish 300,000 ha of new plantations, and create the balance through an aggressive farm-forestry program.

2.6 Since 1978, a relatively ambitious program of public afforestation has been initiated. During the period 1978 to 1984, a total of 19,000 ha of new plantations were established with external financing and 21,900 ha with domestic resources. While these projects have been implemented effectively, their scale is modest relative to the demand/supply imbalance and the Government's ultimate objective. Their impact on supply has also been blunted by the lack of trained field staff and weak institutions in the forestry sector which have depressed plantation yields.

Pricing

2.7 There is no systematic wood pricing policy. By tradition, farmers have the right to cut trees on "private" land without payment. In principle, cutting in natural forests and government and communal plantations is strictly regulated. Either a permit fee or communal tax is payable. Cutting permits range from BuF 1,800 to 2,500 per lot of 10-15 trees, which is well below the cost of regeneration. Moreover, enforcement of the fee system is limited and illegal cutting is widespread. Charcoalers pay a production fee based on the number of bags produced, not the quantity of wood used. Hence, it provides no incentive to adopt more efficient production methods. In 1982, the fee was BuF 30 per bag, about 10% of the retail price.

Institutions and Public Policy

2.8 The Forestry Department, one of four within the Directorate General of Agriculture, Ministry of Agriculture and Livestock, is responsible for coordinating all forestry activities. It is small (100 staff), and its field organization weak. There is no professional forester, few skilled extension workers and little forest research.

2.9 Despite its limited resources, the Government recently produced a Forestry Policy Paper which provides a good overview of the key issues and outlines a well focussed program of action. It emphasizes the need to: (a) accelerate reforestation, principally by stimulating private enterprise through the provision of adequate inputs and incentives; (b) make better use of public forestry resources, particularly by improving conservation extension and field services; and (c) disseminate more efficient charcoal production techniques and charcoal stoves to conserve on wood use. The challenge is to implement that policy.

Reforestation

2.10 Reforestation has been the principal thrust of past efforts to improve the wood energy demand/supply balance. While public reforestation efforts must be sustained at their recent past level of 6,000 ha per year, shortages of suitable plantation land, public revenue, and trained manpower preclude a further major expansion. One option for overcoming the land

supply constraint is to utilize poor mountain ridge land that has little or no agricultural potential. Although the mean annual increment from this land will be low, it has zero opportunity cost and there would be environmental as well as woodfuel supply benefits from its use. There might well be sufficient to make afforestation economically viable. With limited manpower and a tradition of free wood gathering, the imposition and enforcement of full cost recovery on public forestry is not feasible. Where wood fees can be collected, illegal cutting can be controlled, and the market will sustain higher charges, they should be imposed. Possibilities include: (a) higher stumpage fees for organized cutting, based on the economic cost of wood; (b) increased charcoal fees, collected on the roads into Bujumbura and other towns or from wholesalers; and (c) full-cost pricing of commercial seedling sales.

2.11 Accelerated private tree planting is essential to supplement constrained public investment. The principal options are to encourage small farmer cash cropping of trees and private leasing of underutilized forest lands. Although private sector costs should be less than those in the public sector, input subsidization of non-commercial planting will be necessary to produce an effective supply response on the scale required. The availability of advice on and demonstration of agroforestry techniques are necessary concomitants of this effort.

Management and Extension Services

2.12 The Forest Department's qualified managers, professional foresters, and extension workers are few and relatively unskilled. These weaknesses are a major cause of low forest yields and, if allowed to persist, will blunt the impact of reforestation programs. Returns to improved management and extension are probably higher than to increased tree planting. They can also be realized sooner. For example, raising the yield on all plantations to the very achievable figure of 10 m3/ha/year would more than triple plantation supply to 0.7 million m3/year, nearly half the low estimate of wood energy consumption.

2.13 The IDA Forestry II project, launched in 1986, will establish 7,000 ha of new plantations, expand tree nurseries, and promote agroforestry. It is also heavily focussed on training of forest management, supervisors, and extension workers. Future lending by interested donors should continue to focus heavily on promoting private initiative and strengthening agroforestry extension services.

Charcoal Production

2.14 Although charcoal production by the traditional earthen kiln method is grossly inefficient, yielding only about 10% on a wood weight basis, little effort has been made to introduce more advanced techniques. This is a serious waste of wood resources, as Burundi's urban population relies primarily on charcoal to meet its household energy needs.

2.15 Field tests in Burundi have shown that the use of improved traditional production methods, such as the "casamance" kiln" can roughly double average wood yields. This technique uses the traditional type of kiln, but with better wood stacking and closer supervision of the process.

The only investment is the addition of an inexpensive metal chimney made from an old oil drum.

2.16 A program to train traditional charcoalers in improved production techniques such as the "casamance" method should be initiated. It should be complemented by the introduction of charcoal licenses issued only to charcoalers who have been trained in the improved production methods. Licenses would be required of all charcoalers operating in public forest areas.

Cook Stoves

2.17 A major effort to introduce more efficient charcoal cook stoves in Bujumbura was launched in 1985 under the IDA's Urban Development Project. Several alternative stove models have been consumer tested and the best-performing model identified. The next steps should be to establish bulk production by local artisans and organize a mass-marketing campaign. Unfortunately, progress in these areas has been slow. Although more than a thousand stoves have been manufactured, production is far below target levels. Lack of local funds to procure materials and pay stove makers is one cause.

2.18 In contrast to the work on urban stoves, there has been little progress on introducing improved woodstoves for rural areas in Burundi. This is because: (a) the rural population is not accustomed to cooking with stoves; (b) there is no well-established artisanal production and dissemination system for stoves in rural areas; and (c) since they do not purchase fuelwood, rural families do not have a strong incentive to use fuel-efficient stoves. Given that people in rural areas make up about 95% of the country's total population and account for about 85% of woodfuel consumption, there is a strong a priori case for pursuing fuelwood conservation there.

2.19 However, a sound approach to introducing improved rural stoves must be determined before embarking on a pre-determined course of action for large-scale dissemination. This preliminary work should include: (a) review of current cooking practices and kitchen technology; (b) analysis of existing and potential incentives to use an improved stove; (c) design of a stove which will be fuel-efficient and acceptable to the rural population; (d) survey of a stove-user control group to gauge technical performance and consumer reaction; and (e) review of possible production and dissemination mechanisms. Only on the basis of these efforts, it should be possible to reach a conclusion on the feasibility of a rural stove program. In the meantime, efforts should be concentrated on the higher-return improved urban stove program.

II. PETROLEUM

Demand

3.1 Imports of petroleum products into Burundi totalled 49,000 tons of oil equivalent (toe) in 1985, 39% higher than in 1980. They accounted for 16.5% of total merchandise imports (c.i.f. basis), compared to 15.7% in 1980. Increased use of petroleum fuels for mechanized transport and

machinery is an inevitable consequence of Burundi's economic development. Combined with the limited opportunities for inter-fuel substitution, it implies a continuously rising demand for petroleum products. The challenge to policy makers is to reduce the cost of those imports and increase the efficiency with which they are used.

3.2 The product mix of Burundi's oil consumption is heavily weighted towards gasoline and gas oil which, in 1985, accounted for over 80% of the total. The relative significance of these two fuels has changed sharply since 1980, with gas oil replacing gasoline as the major fuel (Table 1).

Table 1: PRODUCT MIX OF OIL IMPORTS, 1980-85
(in percentage)

Product/year	1980	1985
Gasoline	52.8	36.8
Gas oil	37.3	44.8
Fuel oil	7.2	12.1
Kerosene	2.6	6.3
Total	100.0	100.0

Source : Bank of the Republic of Burundi

3.3 Information on petroleum prices in 1985 is available only for gasoline, which was priced at FBu 100/liter (US$0.83/liter) for both premium and regular grades. This is 25% higher than the May 1983 price and about 38% above the economic cost of supply in 1983, since when world petroleum prices and the cost of trans-shipment to Burundi have both fallen. Gas oil and kerosene traditionally have been priced above economic cost also, but by a smaller margin than gasoline. In May 1983, this margin was about 22% for gas oil and 13% for kerosene. It is assumed that the same pricing system still applies, with the result that consumer fuel choice is biased towards gas oil and kerosene, relative to gasoline. This may account for the more rapid growth in demand for gas oil and kerosene. It should be noted, that marketing company overhead costs and profit margins fixed at FBu 2 and FBu 2.5 respectively have not been adjusted since late 1960s. A review of pricing policy should be undertaken.

Supply

3.4 Petroleum demand is met entirely from imports of refined products, the cost of which averaged US$94 per barrel c.i.f. Bujumbura in 1985. In part, this high cost is a result of Burundi's landlocked position and small market, which raise the cost of transport and reduce buying leverage. However, it also reflects a lack of expertise in the purchase and transport of petroleum products.

3.5 No indigenous hydrocarbon deposits have been discovered in Burundi, although the results of gravity and airmag surveys in the early

1980s showed some potential. Technical assistance was provided to help the Government define an exploration promotion strategy, which resulted in one international oil company (Amoco) signing a petroleum exploration agreement in late 1984. Exploration activity began in 1985 and has concentrated on Lake Tanganyika and the Ruzizi plain. It has consisted of both geological and geophysical surveys, although the extent of exploratory drilling is not known. In part, this is because the government lacks geological expertise, and hence the ability to monitor and assess progress with the exploration program.

3.6 In view of the region's limited geological potential and the small size of the regional market for petroleum products, the probability of a hydrocarbon find worthy of commercial development is remote. Burundi's major problem in the petroleum subsector will, therefore, remain the high cost and suspect reliability of petroleum supply.

3.7 The Energy Assessment report proposed a three-pronged strategy to deal with these twin problems, consisting of: (a) efforts to identify lower-cost sources of petroleum supply and a cheaper and more reliable transport route; (b) preparation of contingency plans for dealing with a possible interruption of supply; and (c) improved efficiency in the use of oil and exploitation of opportunities to substitute lower-cost domestic or imported fuels.

Petroleum Purchase and Transportation

3.8 Until mid-1978, the sole source of petroleum supply was Tanzania's Dar-es-Salaam refinery, from which supplies were shipped by rail to Kigoma and barge to Bujumbura (the"southern route"). When capacity on this route declined in 1978, supplies were purchased from Kenya's Mombassa refinery and shipped via pipeline to Nairobi and truck through Uganda and Rwanda (the "northern route").

3.9 At the time of the Energy Assessment [2] in 1980, the average cost of petroleum product imports was about US$100 per barrel. According to the Assessment, these costs could be reduced by about one-third by: (a) purchasing supplies in the open market rather than from the Mombassa refinery; and (b) switching imports from the northern to the southern route. By the time of a detailed evaluation of supply options funded by the Energy Sector Management Assistance Program (ESMAP) in 1983, import costs had been reduced to US$85 per barrel. Forty percent of the decline was due to direct purchasing of about half the supplies from the Middle East and 60% from reduced transport charges. Transportation was still exclusively by the northern route.

3.10 The evaluation suggested that the least cost supply option was to purchase all finished products directly on the Middle East open market, unload them at Dar-es-Salaam and transport them by rail to Kigoma and from there by barge to Bujumbura. This approach would reduce costs by about 27% relative to purchase from the Mombassa refinery and transport via Uganda and 11% relative to purchase on the Middle East market and transport via that route. However, the unreliability of the Tanzania railroad was a

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2/ Op. cit.

major deterrent to sole reliance on this option. It was therefore recommended to continue importing via Uganda, but experiment with shipments through Tanzania to test the reliability and cost of this route.

3.11 It is not known whether this test was run and, if so, what results were achieved. However, all petroleum supplies in 1985 were still imported via the northern route, implying that serious doubts persist as to the speed and reliability of the southern route. Recent improvements in that route, which have reduced average transit times from a peak of four to five months to 30 to 50 days, suggest that the recommended experiment should be tried.

3.12 In addition to lacking expertise in petroleum purchasing and transportation, Burundi is ill-equipped to supervise the operation of the two petroleum companies directly responsible for importing and distribution. This is necessary to ensure that savings in import costs are passed on to consumers, not retained by the companies, that their operations are managed efficiently, and that petroleum prices reflect economic costs of supply. The ESMAP supply options study recommended: (a) the formation of a Hydrocarbons Unit in the Ministry of Public Works, Energy and Mines to be responsible for these tasks; and (b) the secondment to the unit of a petroleum procurement and marketing adviser to advise on negotiations for lower-cost import arrangements and appropriate price structures and to train Burundian counterparts in these tasks. The Hydrocarbons Unit has since been established and funding provided for the adviser under the IDA Power Transmission and Distribution Project.

Stockpiling/Contingency Planning

3.13 Following severe petroleum supply interruptions in 1979, due to the war in Uganda, construction was begun of a new 20 million liter (126,000 barrel) oil storage facility at Gitega to supplement the existing 12.5 million liter (78,000 barrel) facility at Bujumbura. While agreeing that Burundi should maintain a stock of critical petroleum products, the Energy Assessment suggested that the decision as to how much stock to carry should be based on explicit estimates of the cost of stock holding and the savings from avoiding air freight charges in the event of disruption to land transport. Rough estimates of the associated costs and benefits showed that a substantial addition to the traditional three-month stock was justified only if the probability of a three-month supply blockade in the next six months was 15% or greater--a relatively pessimistic scenario. In the event, petroleum stocks at end-1985 were only 5.6 million liters, less than two months' consumption, all of which were held at the Bujumbura facility. Burundi has, appropriately, not engaged on a major build-up of petroleum stock.

3.14 A second and related recommendation was that steps be taken to prepare a contingency plan for the use of petroleum stocks in the event of a serious supply interruption. This would ensure that the most effective use was made of existing stocks in such an event. A necessary first step was to identify the major consumers of petroleum, a process that was started. How far this work has progressed and whether a contingency plan has been prepared is not known.

Substitution

3.15 The scope for substitution of petroleum by alternative fuels in Burundi is limited both by technical factors and the cost of substitutes. There are no technically feasible substitutes for petroleum as a vehicle fuel, its major use. The potential petroleum substitutes for industrial process-heating purposes are electricity, coal, and peat. Unfortunately, the high ash content of Burundi peat makes it unsuitable for use in fixed-bed boilers. The alternative of fluidized- bed boilers is more costly and the technology unproven in Burundian conditions. Electric boilers are probably not an economic option for base load use. At the current medium-voltage tariff of FBu 11.0/kWh (USc9.6/kWh), the amount of electricity equivalent in heating value to a litre of gas oil, which wholesales for about US$0.80, costs US$1.30. Electricity would have to be priced at BuF6.8/kWh to compete with diesel and less to displace it. The only feasible option is use of low cost off-peak electricity that otherwise might be wasted due to limited hydro storage capacity.

3.16 Solar water heating may have substitution potential, but this has yet to be demonstrated. Its evaluation at some of the major users of imported energy such as the brewery and textile plant, should be a priority task of the Centre de Recherche des Utilisations des Energies Alternatives (CRUEA). Coal from Zaire was a further option, but it is not clear that this remains viable.

Conservation

3.17 Although the scope for cost-effective conservation of petroleum fuels has not been explored systematically, the potential is probably limited, due to the already high cost of fuels and high proportion of petroleum use in vehicles and small stationary engines. Although technical assistance in this area would realize some benefits, the probable modest value of the savings suggests this is not a high priority.

III. ELECTRIC POWER

Generation

4.1 Burundi's mountainous terrain and abundant rainfall result in significant potential for the generation of hydroelectricity, estimated at 285 MW in total. However, most sites are small and scattered, resulting in high cost per unit of power supplied. The least-cost major potential hydro resource is the Ruzizi River, which flows between Lakes Kivu and Tanganyika. Until 1982, the 28.2 MW Ruzizi hydro plant, located on the Ruzizi at its outlet from Lake Kivu on the Rwanda/Zaire border, was the principal source of power supply to Burundi. In the past four years, Burundi has commissioned two of its own hydro plants at Mugere (8MW) and Rwegura (18 MW) to complement its previously limited indigenous diesel and small hydro capacity.

4.2 A single power utility, Regie de Distribution d'Eau et d'Electricite (REGIDESO), is responsible for the bulk of domestic power generation, transmission and distribution. Rural electrification is the

responsibility of the Departement de l'Hydraulic de l'Electrification Rurale (DHER) under the Ministry of Rural Development. The Ruzizi generating plant and the transmission line to Bujumbura are owned and operated by Societe Nationale d'Electricite (SNEL) of Zaire. Burundi is a shareholder of the Societe Internationale d'Electricite des Pays de Grands Lacs (SINELAC), which is constructing the Ruzizi II hydroelectric project.

4.3 Total installed power capacity in Burundi is 37.8 MW, of which 29.7 MW (79%) is hydro and the remaining 8.1 MW (21%) diesel. In addition, Burundi has the right to 2.5 GWh per month of energy from Ruzizi I station, 1.02 GWh of which is free, the balance at a nominal tariff payable in local currency. Amounts above 2.5 GWh/month are sold by SNEL on an interruptible basis for a (low) tariff of 1.83 Buf/kWh. To satisfy expected future growth in power demand, Burundi is participating in development of the 26.6 MW Ruzizi II generating station on the Rwanda/Zaire border. Commissioning is planned for early 1989 and addition of a third 13.3 MW unit for about 1992, depending on load growth.

4.4 In 1985, indigenous hydro supplied 46.6 GWh (51%) of total power sent out, imported hydro 42.4 GWh (46%) and private generation (a mix of diesel and small hydro) 3.0 GWh (3%). Since then, commissioning of the 18MW Rwegura hydro plant in 1986 has sharply reduced power imports. However, Burundi's decision to build Rwegura, in order to increase strategic control over its power supply, rather than accept a larger supply from the least-cost source (Ruzizi II), will mean higher power costs. These will be financed either by consumers, through higher tariffs, or from budget subsidies, or a combination of the two.

Transmission and Distribution

4.5 The transmission system is small, but has expanded rapidly in the past two years in an effort to increase access to power supply. Prior to 1985, it consisted solely of a 70 kV line from Ruzizi to Bujumbura, a 35 kV line from Mugere to the capital and short 30 kV lines connecting the towns of Gitega, Bururi, and Muramvya to small neighboring hydro stations. In the past two years, a 110 kV line has been opened from Rwegura to Bujumbura and the substations around the capital linked by a 30kV subtransmission ring. A 30 kV line is under construction from Rwegura to Ngozi via Kayanza, and a second line from Bujumbura to Ijenda and Tora, financed by FED. KFW and EIB are jointly funding a 30 kV link between Rumonge and Bururi. Planned additions to the transmission system under the ongoing IDA project consist of: (a) a 110 kV transmission line from the new Ruzizi II station to Bubanza, where it will link with the existing Rwegura-Bujumbura 110 kV line; (b) 30 kV subtransmission lines from Cibitoke to Rugumbo and Mparambo and from Bubanza to Mpanda and Muzinda; and (c) associated substations, with provision for further potential extensions to the transmission system.

4.6 At present, the distribution system is heavily concentrated in Bujumbura and totals some 400 km. Only 2% of the population has access to electricity, 90% of whom are located in the capital. This low penetration is a function of the limited number of economically viable electricity markets in a predominantly rural, low-income country. Nevertheless, considerable new investment in the distribution system is underway. The

IDA project will finance 13.6 km of new 10 kV and 106.4 km of new 400 kV lines in six low income districts of Bujumbura, with the objective of connecting 3,300 new consumers. Twenty-one and one half kilometers of low voltage lines will also be constructed to connect 420 consumers in seven regional towns northwest of the capital. EIB is funding the electrification of Teza and Bukeye and, with KFW, of the Bururi and Rumonge areas.

Isolated Power Systems

4.7 DHER, established in 1979, has commissioned seven isolated mini-hydro generating stations, ranging from 0.025 to 0.24 MW, two 0.09 diesel stations and 43.5 km of subtransmission and distribution lines. Three other mini-hydro stations and a further 63.5 km of transmission and subtransmission lines are under construction or firmly planned.

4.8 Once complete, DHER facilities are handed over to the users, who are then responsible for operation, maintenance, and debt repayment. As they often lack the necessary resources and skills, this results in inadequate maintenance and problems with the purchase of spare parts. Coordination of DHER's planning with that of REGIDESO is also weak. While a possible option might be for REGIDESO to take over responsibility for isolated systems, this should be carefully evaluated given the poor financial situation and management capacity of that enterprise. Provided that these problems are solved, this alternative would improve system maintenance and repair and promote coordination of these investments with electrification of the country as a whole. In the short-term, REGIDESO capacity to manage these responsibilities is quite inadequate, and coordination should be provided by the Ministry of Energy and Mines.

Load Growth and System Development

4.9 Under the IDA Power Transmission and Distribution project, power sales were forecast to reach 69 GWh in 1985. Actual sales in 1985 were 75.6 GWh (Table A3.2). The sharp increase was due largely to demand from a new glass bottle plant. Whether this above-forecast growth is sustained will depend largely on the pace of future growth of industrial demand.

Table A3.2 ELECTRICITY SALES ON THE INTERCONNECTED SYSTEM
1983 AND 1985 (GWh)

Year	Domestic	Industry	Public and Private Services Own Use	Total
1983	20.4	25.8	12.1	57.8
1985	19.8	41.8	14.2	75.8

Source: REGIDESO

4.10 Assessment of the adequacy of existing and planned power capacity, relative to Burundi's future needs, requires review of demand and supply on the interconnected power system serving Burundi, Rwanda and the Kivu province of Zaire. On the supply side, it is assumed that Ruzizi II is commissioned in January 1989 and achieves 60% of its potential power output in that year. Rehabilitation of Ruzizi I will begin in late 1987, resulting in a loss of 25% of its potential output in 1988 and 1989. Based on an assumed average annual demand increase of 10% on the interconnected system and 11.3% in Burundi over the 1986-95 period, and assuming no other major capacity investments, Burundi will have an over-supply of electric power from 1989 until 1994 (Table A3.3).

4.11 Planning has begun in order to identify the least-cost option for meeting the forecast shortfall of energy in 1984, and should be based on the synthesis of national investment plans for Zaire, Rwanda, and Burundi. The plan for Zaire is nearly complete, the other two are being started in 1987. Coordination and synthesis of the national plans should be the responsibility in 1988 of EGL (Energie des Pays des Grands Lacs), a joint energy planning organization formed by the three countries. A request has been received from the governments of these countries for ESMAP assistance to assess the future role and work program of EGL in this and other regional planning and policy issues. Such assistance is under consideration.

Table A3.3: FORECAST OF SUPPLY OF AND DEMAND FOR ELECTRICAL ENERGY ON THE INTERCONNECTED SYSTEM, 1986-95 (GWh)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Demand										
Zaire (Kivu)	53	59	68	72	78	85	93	101	110	120
Rwanda	110	120	130	141	153	165	178	192	207	224
Burundi	97	108	120	136	149	166	184	205	228	256
Total	260	287	318	349	380	416	455	498	545	600
Supply	282	346	318	402	486	486	486	516	546	546
Surplus/ (Deficit)	12	57	70	153	106	70	31	18	(1)	(54)

Source: World Bank estimates.

4.12 The ability of REGIDESO to absorb the surplus energy available through 1993 will be constrained by the viability of additional demand beyond that to be served by the planned transmission and distribution extensions. That in turn will be affected by REGIDESO's connection charges and term payment provisions. In 1985, these charges averaged FBu 60,000 (US$526) per customer and a minimum household income of FBu 26,000/month (US$228) was considered necessary to finance them, on a term-payment basis. This excluded 90% of the households in the low income areas of Bujumbura. It was estimated that halving the connection fee to FBu 30,000 would increase the proportion of potential household consumers to about 30%. REGIDESO has since introduced a term payment system for connection charges but has maintained the level of the fees. Action on this front is however needed. Electricite de France is currently studying the options for doing so.

Tariffs

4.13 As stated in paragraph 3.14, the LRMC of power on the inter-connected system was estimated in 1985 to be FBu12.1/kWh at the medium voltage level and FBu18.6/kWh at the low voltage level. Medium voltage tariffs were then FBu8.0/kWh and low voltage tariffs FBu10.6/kWh, equivalent to 65% and 60% of LRMC respectively. In July 1986, they were raised to FBu 11.0/kWh (medium voltage) and FBu12.0/kWh (low voltage). In aggregate, this increase did little more than compensate for inflation, and low voltage tariffs as a proportion of LRMC actually declined. A refined estimate of LRMC will be prepared by the Least-cost Power Expansion Plan. It is recommended that average tariffs be raised progressively to at least 80% of this LRMC by 1992.

4.14 Despite rising tariffs, revenues from the sale of electricity failed to cover REGIDESO's operating costs in either 1984 or 1985. Interest charges doubled between the two years, mainly due to the Rwegura project, and debt service arrears to the Government and international organizations totalled over BuF300 million in 1985. In future years, payments on the BuF3.5 billion Mugere project could be an added financial burden depending on whether the related liability is passed on to REGIDESO by the Government in the form of debt or capital contribution. A prompt decision is needed on this issue to clarify REGIDESO's financial soundness and make appropriate financial planning decisions.

4.15 A program of financial reform actions to restructure REGIDESO's balance sheet has been under discussion since 1984. Such a program would include: (a) offset of Government arrears for water and electricity consumption and REGIDESO debt service due to Government; (b) debt relief for the Rwegura hydroplant; (c) clarification of the liabilities to be borne by REGIDESO for the Mugere hydroplant; and (d) adoption of a sound methodology to write off uncollectable bills and dead stock. These actions are the first steps to put REGIDESO on the path of financial soundness and need to be given immediate attention by the Government and the entity.

IV. PEAT

5.1 Burundi has large reserves of peat, estimated at 57 million tons. They are located in three areas: the highland bogs in the south (1 million tons), the Nyamuswaga area near Ngozi (4 million tons) and the Akanyaru valley (52 million tons). The highland bogs, which drain naturally by gravity, are suitable for semi-automatic sod production. No production trials have been instituted at the Nyamuswaga bog. Although the Akanyaru valley reserves are considerable, they do not drain naturally and would require costly hydraulic mining. Their exploitation could also have serious environmental consequences and should not be considered unless a potential market is identified.

5.2 ONATOUR, a state-owned organization, is responsible for peat production and marketing. Commercial production, which began in 1977, is now concentrated in two bogs in the highland area and totalled 15,000 tonnes in 1986. Consumption was about 12,000 tonnes. The army accounted for 90%, and two prisons, several

bakeries, and other small customers for the balance.

5.3 Uncertainty as to the economic potential of peat as an energy source, coupled with high production and marketing costs, have prevented the growth of peat production and consumption beyond its current level. An ESMAP report, issued in 1985, sought to define the potential and outline a strategy to reduce production cost. The report concluded that increased output and higher efficiency could halve the then 9.35 BuF/kg cost of supply. At this lower cost, and compared to 1985 petroleum prices, 28,000 tons of peat could be competitive with petroleum fuels for industrial process heating, assuming it was burnt in fixed-bed boilers. Substitution for charcoal in household cooking might also be economic, but was not viable financially at then prevailing charcoal prices.

5.4 Two criteria had to be satisfied in order to realize this potential. First, ONATOUR had to reduce overheads and increase production to spread fixed costs over a larger output. Second, the peat had to be chemically tested to establish its combustion characteristics and suitability for use in fixed-bed boilers.

5.5 By the first quarter of 1986, ONATOUR had marginally raised output and reduced overhead costs. Although this represented only a fraction of the targeted improvement of 50%, permitted a price cut from FBu 9/kg to FBu 8/kg. Peat sample firing tests in 1986 showed that, because of the peat's high and variable ash content, costly and technically complex fluidized-bed boilers, rather than fixed-bed boilers, are necessary for successful industrial combustion. The capital cost of these boilers is typically three or four times that of a conventional fixed-bed boiler. In addition, oil prices have fallen sharply since 1985, reducing the potential competitiveness of peat. The combined effect of higher capital costs and lower substitution benefits is that peat substitution projects that promised a pay back of one to two years in 1985 showed a payback of four to seven years in early 1987. Furthermore, as the fluidized-bed technology is relatively new and complex, it is unlikely to prove reliable in Burundian conditions. Until both the reliability of fluidized-bed boilers is proven and the economic and financial cost of oil again substantially exceeds that of peat, a major increase in the industrial use of peat is unfeasible.

5.6 Aside from limited additional demand from the artisanal sector, the only further option for using peat is as a charcoal substitute in household cooking. To reduce smoke and smell and improve combustion, the peat would have to be carbonized. This has been done successfully in Senegal and on a small scale in Burundi. Preliminary analysis suggests that charpeat might be retailed for as little as FBu 20/kg (FBu 1.0/MJ) in Bujumbura, compared with FBu 40/kg (FBu 1.63/MJ) for charcoal. An ESMAP project has been proposed to evaluate both the economic and sociological feasibility of its production and marketing.

V. RENEWABLE ENERGY

6.1 With the exception of solar water heating, windspeeds, and crop drying, potential for non-biogas renewable energy appears to be limited.

Windspeeds are generally inadequate for power generation (although further research should provide more conclusive data), and geothermal reconnaissance has shown that this potential is also limited. Biogas is currently being researched by Germany, Belguim, and China. In addition, Germany is financing a Special Energy Program which will provide a broader data base upon which to evaluate the feasibility of different renewable energy possibilities in Burundi. Efforts should be concentrated in a few of the more promising areas and on areas where renewable energy might be able to substitute for imported petroleum fuels, such as solar water heating and crop drying.

BURUNDI: STATISTICAL APPENDIX

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TABLE 1.1. BURUNDI: POPULATION BY PROVINCE, 1979-84

Province	Census 1979	Estimates 1984	Growth Rate 1979-84	1984 Estimates				
				Males	Percent	Females	Percent	Total
Bubanza	154,893	179,458	3.0	89,564	49.9	89,894	50.1	179,458
Bujumbura	460,945	529,859	3.0	273,959	51.7	255,909	48.3	529,859
Bururi	313,016	346,522	2.4	166,214	48.5	178,308	51.5	346,522
Cankuzo	107,550	119,207	2.4	58,197	48.8	61,010	51.2	119,207
Cibitoke	179,053	210,330	3.7	104,535	49.7	105,795	50.3	210,330
Gitega	471,020	521,621	2.4	247,889	47.5	273,732	52.5	521,621
Karuzi	210,589	237,328	2.0	112,973	47.6	124,355	52.4	237,328
Kayanza	383,085	417,710	2.0	200,533	48.0	217,177	52.0	417,710
Kirundo	269,181	327,945	2.9	154,983	47.3	172,962	52.7	327,945
Makamba	120,097	139,578	3.4	67,871	48.6	71,707	51.4	139,578
Muramvya	377,242	410,990	2.0	198,510	48.3	212,480	51.7	410,990
Muyinga	257,259	289,322	2.7	136,992	47.3	152,330	52.7	289,322
Ngozi	394,351	439,330	2.5	210,544	47.9	228,786	52.1	439,330
Rutana	141,357	162,069	3.2	77,402	47.8	84,666	52.2	162,068
Ruyigi	167,982	189,307	2.0	90,464	47.8	98,843	52.2	189,307
TOTAL	4,020,420	4,520,576	2.7	2,192,021	48.5	2,329,681	51.5	4,521,302

Source: 1979 Census and Post-Census estimates, Ministry of Interior.

TABLE 1.2. BURUNDI: POPULATION BY AGE AND SEX, 1984

Age Group	Males	Percent of Total Population	Females	Percent of Total Population	Total
0-4	416,848	9.2	412,109	9.1	828,957
5-9	308,819	6.8	315,464	7.0	624,283
10-14	260,640	5.8	265,243	5.9	525,883
15-19	228,297	5.1	229,810	5.1	458,107
20-24	225,434	5.0	236,346	5.2	461,780
25-29	185,471	4.1	198,298	4.4	383,769
30-34	130,118	2.9	139,772	3.1	269,890
35-39	91,879	2.0	105,893	2.3	197,772
40-44	73,121	1.6	89,804	2.0	162,925
45-49	62,155	1.4	81,339	1.8	143,494
50-54	54,072	1.2	65,965	1.5	120,037
55-59	42,739	0.9	56,148	1.2	98,887
60-64	34,117	0.8	41,700	0.9	75,817
65-69	30,833	0.7	39,553	0.9	70,386
70-74	20,192	0.4	22,832	0.5	43,024
75 +	27,884	0.6	27,677	0.6	55,561
TOTAL	2,192,619	48.5	2,327,953	51.5	4,520,572

Source: 1979 Census and Post-Census estimates, Ministry of Interior.

TABLE 1.8. BURUNDI: AGE-SEX SPECIFIC LABOR FORCE PARTICIPATION RATES, 1981 1/

Age Group	Males	Females	Total
10-14	43.8	54.2	48.9
15-19	89.0	95.7	91.8
20-24	97.0	99.3	98.1
25-29	99.3	99.4	99.3
30-34	99.8	99.4	99.6
35-39	99.8	99.6	99.7
40-44	99.2	99.9	99.5
45-49	98.4	99.2	98.7
50-54	97.7	98.1	97.8
55-59	96.0	91.3	93.4
60-64	84.2	78.9	81.3
65-69	81.6	75.7	78.6
70-74	72.7	63.7	68.2
75 +	72.8	63.7	65.7

1/ Economically active population as a percentage of total population.

Source: Post-Census Survey.

TABLE 1.4. BURUNDI: POPULATION AND EMPLOYMENT, 1979-85

ITEM	1979	1980	1981	1982	1983	1984	1985
A. Population and Employment (in thousands)							
Total population	4022	4130	4241	4355	4472	4520	4642
Working age population	2105	2162	2220	2280	2341	2366	2429
Active population	2085	2141	2198	2258	2315	2339	2401
Modern sector employment	106	116	123	129	132	133	137
Of which Permanent	51	54	58	58	61	57	59
Non-Permanent	55	62	65	70	71	76	78
Informal sector employment	280	288	296	304	312	320	327
B. Modern Sector Employment							
Primary (Agriculture)	--	--	8786	9812	9394	8432	--
Secondary	--	--	15460	13858	14916	12831	--
Mining	--	--	690	1274	528	538	--
Manufacturing	--	--	4680	4953	5383	4945	--
of which food and beverage	--	--	1744	1689	1981	1760	--
Electricity, gas and water	--	--	2257	897	1051	1019	--
Construction	--	--	7833	6734	7954	6329	--
Tertiary	--	--	33471	34676	36208	35909	--
Commerce, restaurants, hotels	--	--	3970	4030	4047	3861	--
of which commerce	--	--	3482	3589	3518	3179	--
Transport, communic. & wareh.	--	--	2783	2656	2854	3409	--
Banking and insurance	--	--	1386	1505	1545	1469	--
of which banking	--	--	1114	1226	1253	1162	--
Government services	--	--	22851	23829	25376	24	--
Other services	--	--	2481	2656	2386	2246	--
TOTAL	--	53818	57717	58346	60518	57172	58851
of which: Public Enterprise	--	21395	21701	22796	22364	21638	22322
Parapub. sector	--	--	--	15559	17002	17952	--
Private sector	--	--	--	20001	21152	17582	--

Source: SNES.

TABLE 1.5. BURUNDI: MINIMUM SALARY BY LEVEL OF SKILL, 1985

	Minimun per day		Salary per month		Housing allowance per month	
	FBu	US$ 2/	FBu	US$ 2/	FBu	US$ 2/
A. Bujumbura and Gitega						
Unskilled - Normal	140	1.1	3,500	28.2	600	4.8
Heavy	154	1.2	3,850	31.0	600	4.8
Specialized	170	1.4	4,250	34.3	600	4.8
Semi-skilled - Normal	240	1.9	6,000	48.4	1,000	8.1
Heavy	276	2.2	6,900	55.6	1,000	8.1
Specialized	294	2.4	7,350	59.3	1,000	8.1
Skilled - Normal	351	2.8	8,775	70.8	1,350	10.9
Heavy	403	3.3	10,075	81.3	1,350	10.9
Highly skilled	--	--	5,625	45.4	1,875	15.1
Semi-Professionals (Agents de Maitrise)	--	--	21,600	174.2	7,200	58.1
Professionals	--	--	30,000	241.9	12,000	96.8
B. All Other Areas (rural) 3/	88	--	--	--	--	--

Source: Ordonnance Ministerielle of May 5, 1982.
1/ In addition, there is a monthly family allowance of Buf 300 (US$ 2.5) for a wife/husband and FBu 150 (US$ 1.8) for each child.
2/ US$ 1 = FBu 124.0

TABLE 1.6. ALLOWANCES OF PUBLIC EMPLOYEES, 1985

ITEM	FBu/month
A. Occupational Allowances	
1. Central Administration	
General Directors	10,000
Department Directors	7,500
Assistant Directors	5,000
Division Chiefs	3,000
Service Chiefs	1,500
2. Local Administration	
Communal Administrators	9,000
Provincial Service Chiefs Level I	5,000
Provincial Service Chiefs Level II	3,000
B. Coordination and Control Allowances	
1. Central Administration	
General Controllers	10,000
Controllers Level I	7,500
Controllers Level II	5,000
Controllers Level III	3,000
Controllers Level IV	1,500
2. Local Administration	
Advisor to the Governor	7,500
Controllers Level II	5,000
Controllers Level III	3,000
Controllers Level IV	1,500
C. Encouragement Allowances	
High-Level Technical Staff	7,000
Middle-Level Technical Staff	3,000
D. Protocole Allowances	
Protocole Chief	15,000
Deputy Protocole Chief	15,000

Source: Reorganisation des Carrieres des Fonctionaires de l'Etat, July 1985.

Table 2.1 BURUNDI: GROSS DOMESTIC PRODUCT BY INDUSTRIAL ORIGIN, 1977-1986, AT CURRENT PRICES
(In millions of Burundi Francs)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
PRIMARY SECTOR	27389	29638	37911	47655	50709	47978	53834	64592	77657	82057
(Non-Commercialized)	20335	20954	26979	36860	35263	35940	38661	48705	52470	61973
Food crops	20925	21149	27480	38284	36879	36940	39680	51309	63182	66376
Export crops	2129	3476	4335	2951	6660	3336	5806	4737	5599	6405
Livestock	2600	2991	3737	3620	4146	4525	4991	5154	5384	5468
Fishing	98	127	132	170	317	301	285	217	219	231
Forestry	1637	1895	2227	2630	2706	2875	3073	3174	3273	3578
SECONDARY SECTOR	6003	6957	10364	9661	11090	13036	14577	14867	16408	18527
(Non-Commercialized)	870	1333	1729	2552	2912	2949	3164	3199	3767	4026
Modern Manufacturing	1634	1794	2841	2781	2839	3965	4507	5360	5608	6502
agro-industries	124	176	210	346	172	146	310	924	701	778
food processing	436	638	968	894	1008	1749	1762	1833	1961	2425
textile	350	358	475	460	419	510	699	642	767	864
other	724	622	1188	1080	1239	1560	1735	1961	2179	2436
Artisan Manufacturing	2250	2639	3712	2915	3539	3554	3900	3898	4562	5127
Mining and Energy	65	108	163	234	387	508	620	444	639	599
Modern Construction	927	1073	2271	2321	2866	3503	3991	3557	3908	4410
Trad. Construction	1128	1343	1377	1410	1460	1505	1560	1610	1691	1889
TERTIARY SECTOR	9808	11320	14263	19239	20898	23351	25629	27958	32130	34813
Transport and Comm.	1029	1114	1570	1677	1595	2029	2440	2618	2994	3255
Modern Commerce	2180	2225	2778	4083	3991	4723	5511	4511	6773	7090
Traditional Commerce	1706	1816	2578	2776	3051	3305	3702	4682	3977	4248
Public Admnistration	1996	2651	3397	8741	10095	11340	11921	14054	16134	17856
Other Services	2897	3514	3940	1962	2166	1954	2055	2093	2252	2364
GDP AT FACTOR COST	43200	47915	62538	76555	82698	84364	94039	107418	126195	135397
Indirect taxes (net sub)	6379	6106	7888	6220	4518	6826	6618	10752	12597	13409
GDP AT MARKET PRICES	49578	54021	70426	82775	87215	91190	100658	118170	138792	148806
Traditional sector	32133	35388	45536	54792	58683	56263	62895	74729	87856	92215
Modern sector	17445	18633	24890	27983	28532	34927	37763	43441	50936	55518
Commercialized	28373	31735	41718	43826	48741	52301	58832	66266	76182	81734
Non-commercialized	21205	22287	28708	38949	38473	38889	41825	51904	62610	67072
Memorandum Items:				(In Percentage of GDP)						
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GDP at factor cost	87.1	88.7	88.8	92.5	94.8	92.5	93.4	90.9	90.9	91.0
Agriculture	55.2	54.9	53.8	57.6	58.1	52.6	53.5	54.7	56.0	55.1
Foodcrops	42.2	39.1	39.0	46.3	42.3	40.5	39.4	42.4	45.5	50.8
Cash crops	4.3	6.4	6.2	3.6	7.6	3.7	5.8	4.0	4.0	4.3
Secondary	12.1	12.9	14.7	11.7	12.7	14.3	14.5	12.6	11.8	12.5
Modern Manufacturing	3.3	3.3	4.0	3.4	3.3	4.3	4.5	4.5	4.0	4.4
Artisan Manufacturing	4.5	4.9	5.3	3.5	4.1	3.9	3.9	3.3	2.8	3.1
Modern Construction	1.9	2.0	3.2	2.8	3.3	3.8	4.0	3.0	2.8	3.0
Trad. Construction	2.3	2.5	2.0	1.7	1.7	1.7	1.5	1.4	1.2	1.3
Mining and energy	0.1	0.2	0.2	0.3	0.4	0.6	0.6	0.4	0.5	0.4
Terciary	19.8	21.0	20.3	23.2	24.0	25.6	25.5	23.7	23.1	23.4
Transport&Comm.	2.1	2.1	2.2	2.0	1.8	2.2	2.4	2.2	2.2	2.2
Modern Commerce	4.4	4.1	3.9	4.9	4.6	5.2	5.5	3.8	4.9	4.8
Traditional Commerce	3.4	3.4	3.7	3.4	3.5	3.6	3.7	4.0	2.9	2.9
Public Admnist	4.0	4.9	4.8	10.6	11.6	12.4	11.8	11.9	11.6	12.0
Other	5.8	6.5	5.6	2.4	2.5	2.1	2.0	1.8	1.6	1.6
Commercialized	57.2	58.7	59.2	52.9	55.9	57.4	58.4	56.1	54.9	54.9
Non-commercialized	42.8	41.3	40.8	47.1	44.1	42.6	41.6	43.9	45.1	45.1
Traditional	64.8	65.5	64.7	66.2	67.3	61.7	62.5	63.2	63.3	62.0
Modern	35.2	34.5	35.3	33.8	32.7	38.3	37.5	36.8	36.7	38.0

Source: Ministry of Planning, IBRD staff estimates.

Table 2.2 BURUNDI: GROSS DOMESTIC PRODUCT BY INDUSTRIAL ORIGIN, 1977-1986, AT CONSTANT 1970 PRICES
(In millions of Burundi Francs)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
PRIMARY SECTOR	15657	15237	15463	15733	18471	16673	17325	16429	17743	18312
Food crops	12752	11977	11913	12312	13251	13056	12880	12578	13246	13683
Export crops	936	1265	1516	1329	3078	1432	2277	1672	2242	2292
Livestock	1125	1142	1159	1200	1234	1258	1238	1238	1263	1301
Fishing	42	33	36	35	32	32	32	31	33	34
Forestry	802	820	839	857	876	895	918	910	959	1002
SECONDARY SECTOR	2991	3336	3358	3713	3999	4021	4217	4518	4746	4907
Modern Manufacturing	772	873	925	1039	1314	1305	1435	1664	1944	1960
agro-industries	65	77	76	70	120	-45	110	230	237	243
food processing	271	311	334	398	473	540	511	578	602	546
textile	172	201	185	198	273	320	345	360	519	546
other	263	284	330	373	448	490	469	496	586	625
Artisan Manufacturing	1034	1058	1084	1110	1137	1075	1103	1132	1161	1191
Mining and Energy	42	47	61	78	82	91	102	135	153	158
Modern Construction	755	956	872	1055	1020	1100	1115	1113	1002	1101
Trad. Construction	389	402	416	431	446	450	462	474	486	499
TERTIARY SECTOR	4493	4772	4963	5315	5840	6107	5992	6310	6382	6603
Transport and Comm.	427	489	600	563	600	724	692	760	778	804
Modern Commerce	811	892	1027	1039	1137	1150	1059	1234	1223	1265
Traditional Commerce	820	832	855	873	893	912	936	960	985	1019
Public Admnistration	1014	1087	1097	1369	1549	1727	1658	1660	1685	1743
Other Services	1421	1473	1384	1471	1661	1594	1647	1696	1711	1771
GDP AT FACTOR COST	23141	23345	23784	24761	28310	26801	27534	27257	28871	29822
Ind. taxes (net of subs.)	3417	2921	3000	2903	2214	2820	2419	3581	3276	3789
GDP AT MARKET PRICES	26558	26266	26784	27664	30524	29621	29953	30838	32147	33611
Non-commercialized	14035	13906	14805	14296	16515	16305	16775	17861	18550	19626
Commercialized	12523	12361	11979	13369	14009	13316	13177	12977	13596	14088
Traditional	18131	18296	18121	19434	21993	19105	19729	18982	20345	20975
Modern	8427	7970	8662	8231	8531	10517	10223	11856	11802	12739
Memorandum Items			**Annual Growth (%)**							
GDP at market prices		-1.1	2.0	3.3	10.3	-3.0	1.1	3.0	4.2	4.6
GDP at factor cost		0.9	1.9	4.1	14.3	-5.3	2.7	-1.0	5.9	3.3
Agriculture		-2.7	1.5	1.7	17.4	-9.7	3.9	-5.2	8.0	3.2
Foodcrops		-6.1	-0.5	3.3	7.6	-1.5	-1.5	-2.2	5.3	3.3
Cash crops		35.2	19.8	-12.3	131.6	-53.5	59.0	-26.6	34.1	2.2
Secondary		11.5	0.7	10.6	7.7	0.6	4.9	7.1	5.0	3.4
Modern Manufacturing		13.1	6.0	12.3	26.5	-0.7	10.0	16.0	16.8	0.8
Artisan Manufacturing		2.3	2.5	2.4	2.4	-5.5	2.6	2.6	2.6	2.6
Modern Construction		26.6	-8.8	21.0	-3.3	7.8	1.4	-0.2	-10.0	9.9
Trad. Construction		3.4	3.5	3.6	3.5	0.9	2.7	2.6	2.5	2.7
Mining and energy		12.4	29.8	27.9	5.1	11.0	12.1	32.4	13.3	2.0
Terciary		6.2	4.0	7.1	9.9	4.6	-1.9	5.3	1.1	3.5
Transport&Comm.		14.5	22.7	-6.2	6.6	20.7	-4.4	9.8	2.4	3.3
Modern Commerce		10.0	15.1	1.2	9.4	1.1	-7.9	16.5	-0.9	3.4
Traditional Commerce		1.5	2.8	2.1	2.3	2.1	2.6	2.6	2.6	3.5
Public Admniat		7.2	7.9	24.8	13.1	11.5	-4.0	0.1	1.5	3.4
Other		3.7	5.0	6.3	12.9	-4.0	3.3	3.0	0.9	3.5
Commercialized		-0.9	6.5	-3.4	15.5	-1.3	2.9	6.5	3.9	5.8
Non-commercialized		-1.3	-3.1	11.6	4.8	-4.9	-1.0	-1.5	4.8	3.6
Traditional		0.9	-1.0	7.2	13.2	-13.1	3.3	-3.8	7.2	3.1
Modern		-5.4	8.7	-5.0	3.6	23.3	-2.8	16.0	-0.5	7.9

Source: Ministry of Planning, IBRD staff estimates.

Table 2.3 BURUNDI: NATIONAL ACCOUNTS SUMMARY, 1978-86, AT CURRENT PRICES
(In millions of FBu)

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986
GDP at market prices	54021	70426	82775	87215	91190	100658	118170	138791	148806
Resource Gap	4394	7441	11211	9978	13997	14786	16236	12331	5814
Imports	11055	17426	18503	17872	23233	23776	29675	26917	27834
Exports	6661	9985	7292	7894	9236	8990	13439	14586	22020
Total Expenditures	58415	77867	93986	97193	105187	115444	134406	151122	154620
Consumption	50706	67362	82493	82361	92003	92467	112696	131884	138644
Public	7576	9049	10877	13978	13689	13342	15359	17642	21197
Private	43130	52205	71615	68383	78314	79125	97337	114242	117447
Investment	7709	10505	11493	14832	13184	22977	21710	19238	15976
Fixed Investment	7709	10505	11493	11831	13800	19440	20785	19854	19181
Public	7046	9815	10569	10408	12542	16940	17599	16481	15628
Adminst	3699	5738	5650	6689	7093	10865	10087	8031	7013
PE	3347	3877	4919	3718	5448	6075	7512	8450	8615
Private	663	690	924	1423	1258	2500	3186	3372	3553
Change in stocks	0	0	0	3001	-616	3537	925	-616	-3205
Domestic Savings	3315	3064	283	4854	-813	8191	5474	6907	10162
Net factor Income	-1301	-914	-635	-1813	-2355	-2453	-3224	-3947	-5985
Current transfers	2939	3091	4241	5730	5003	4795	5312	5585	7566
National Savings	4952	5240	3889	8771	1834	10533	7562	8545	11743
Private savings	2817	3304	1293	6770	-280	9422	5970	6583	7011
Public savings	2136	1936	2596	2000	2114	1111	1592	1962	4732
Grants	1888	2289	3164	3464	3613	3714	4769	4800	4545
National savings w/grants	6840	7529	7053	12235	5447	14247	12331	13344	16288
of which:									
Public savings(w/grants)	4024	4225	5760	5464	5727	4825	6361	6762	9277
Memorandum items:				**As percentage GDP**					
Investment	14.3	14.9	13.9	17.0	14.5	22.8	18.4	13.9	10.7
Fixed Investment	14.3	14.9	13.9	13.6	15.1	19.3	17.6	14.3	12.9
Public Investment	13.0	13.7	12.8	11.9	13.8	16.8	14.9	11.9	10.5
Private Investment	1.2	1.3	1.1	1.6	1.4	2.5	2.7	2.4	2.4
Pub. Inv/Priv. Inv	10.6	10.8	11.4	7.3	10.0	6.8	5.5	4.9	4.4
Gross Domestic Savings	6.1	4.4	0.3	5.6	-0.9	8.1	4.6	5.0	6.8
Gross National Savings	9.2	7.4	4.7	10.1	2.0	10.5	6.4	6.2	7.9
Private Savings	5.2	4.7	1.6	7.8	-0.3	9.4	5.1	4.7	4.7
Public savings	4.0	2.7	3.1	2.3	2.3	1.1	1.3	1.4	3.2
GNS(+grants)	12.7	10.7	8.5	14.0	6.0	14.2	10.4	9.6	10.9
Public Savings (w/grants)	7.4	6.0	7.0	6.3	6.3	4.8	5.4	4.9	6.2
Marginal nat. savings ratio (%)		1.7	-10.7	149.7	-202.1	92.9	17.7	4.6	40.1
Imports (g,nfs)	20.5	24.7	22.4	20.5	25.5	23.6	25.1	19.4	18.7
Exports (g,nfs)	12.3	14.2	8.8	9.1	10.1	8.9	11.4	10.5	14.8
Resource gap	8.1	10.6	13.5	11.4	15.3	14.7	13.7	8.9	3.9
Consumption	93.9	95.6	99.7	94.4	100.9	91.9	95.4	95.0	93.2
Public	14.0	12.8	13.1	16.0	15.0	13.3	13.0	12.7	14.2
Private	79.8	74.1	86.5	78.4	85.9	78.6	82.4	82.3	78.9
Population ('000)	3951	4022	4114	4224	4338	4454	4573	4696	4832
GNP per capita (US$)	148	192	222	225	228	237	210	238	259

Source: Ministry of Planning.

Table 2.4 BURUNDI: NATIONAL ACCOUNTS SUMMARY, 1978-86, AT CONSTANT 1970 PRICES
(In millions of FBu)

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986
GDP at market prices	26266	26784	27664	30524	29621	29953	30838	32147	33611
Terms of trade effect	-125	-138	-425	-1637	-1709	-1014	-1086	-1459	-862
Gross Domestic Income	26141	26646	27239	28887	27912	28939	29752	30688	32749
Resource Gap	1646	2109	2323	737	1452	2576	2324	1188	1300
Imports	4456	5262	4535	4253	5246	5772	6232	5533	5519
Capacity to import	2685	3015	1787	1879	2085	2182	2822	2886	3357
Exports	2810	3153	2212	3516	3794	3196	3908	4345	4219
Total Expenditure	27912	28893	29987	31261	31073	32529	33162	33335	34911
Consumption	24508	25411	26658	26679	27727	26241	28312	29188	29972
Public	3105	2923	2875	3242	3368	3282	3236	3301	3782
Private	21403	22506	23783	23436	24358	22958	25076	25887	26323
Investment	3404	3482	3329	4582	3346	6288	4850	4147	4939
Fixed Investment	3404	3482	3330	3245	3599	5035	4737	4309	4826
Public	3339	3326	3079	2855	3271	4387	4011	3577	3939
Private	64	156	251	390	328	648	726	732	887
Change in stocks	0	0	0	1337	-253	1253	114	-163	293
Domestic Savings	1633	1235	582	2208	186	2698	1440	1500	2777
Net factor income	-612	-839	-195	-572	-691	-693	-789	-918	-1043
Current transfers	1383	1147	1302	1808	1468	1354	1300	1299	1398
National Savings	2404	2043	1689	3444	963	3359	1951	1881	3132
Private	1021	718	828	643	624	313	389	434	1041
Public	1383	1325	861	2801	339	3046	1562	1447	2091
+ grants	863	850	940	1398	1060	1049	1168	1117	1234
National Savings w/grants	3267	2893	2629	4842	2023	4408	3119	2998	4366
DEFLATORS (1970 = 100)									
GDP fc	205.7	262.9	299.2	285.7	307.9	336.1	383.2	431.7	442.7
Imports (G&NFS)	248.1	331.2	408.0	420.2	442.9	411.9	476.2	486.5	504.3
Exports (G&NFS)	237.0	316.7	329.7	224.5	243.4	281.3	310.2	343.8	425.3
Tot ! expenditure	209.3	269.5	313.4	310.9	338.5	354.9	409.3	452.3	454.6
Gov 'e consumption	244.0	309.6	378.3	431.2	406.4	406.5	474.6	534.4	563.5
Private consumption	201.5	232.0	301.1	291.8	321.5	344.7	393.4	439.9	461.7
Fixed investment	226.5	301.7	345.2	364.5	383.4	386.1	438.8	460.7	484.9
Change in stocks				224	243	282	811	378	-1094
Index (1970=100)									
Agric. producer prices	176.6	230.7	307.4	276.0	283.9	308.3	354.9	372.9	416.6
Public wages	244.0	309.6	380.0	409.8	429.1	429.1	429.1	429.1	440.0
Terms of trade	95.5	96.2	80.8	53.4	55.0	68.3	72.2	66.4	79.6
World inflation	262.9	283.4	317.8	302.5	296.1	306.6	316.3	314.7	354.2

Source: Ministry of Planning.

Table 2.5 BURUNDI: GROSS FIXED CAPITAL FORMATION BY SECTOR, 1978-86
(In millions of Burundi Francs)

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total Fixed Investment	7709	10505	11493	11831	13800	19440	20784	19854	19181
Rural sector	1568	1713	1681	1801	2769	2296	2674	3784	3937
Mining & Energy	1265	1396	1336	1409	1590	1957	3961	5101	4377
Industry	546	998	1452	945	682	2900	2471	1959	2810
Roads and airport	606	1463	2238	2357	2787	5238	3601	2516	2707
Transport &telecom	732	853	729	388	451	427	334	766	881
Housing	517	623	1556	1278	1437	1767	888	1257	1269
Tourism	340	318	109	89	20	53	49	0	5
Commerce and Banks	210	115	404	560	1117	865	1239	427	441
Infrastruct. Admin.&Social	1925	3027	1988	3005	2957	3938	5567	4044	2754
By Agent									
Admnistration	3699	5738	5650	6689	7093	10865	10087	8031	7013
Public Enterprises	3347	3871	4919	3718	5448	6075	7512	8450	8615
Private Enterprises	233	398	311	800	724	1940	2569	3025	3330
Non-profit organizations	400	450	105	155	154	161	178	28	31
Households	30	50	509	468	380	399	439	320	192
Total	7709	10505	11494	11831	13800	19440	20784	19854	19181
By source of financing									
Development Budget (BEI)	2833	3236	3534	3807	3883	3220	3459	3260	3390
Capital grants	1888	2289	3164	3464	3613	3714	4769	4800	4545
Loans	1809	3749	2737	2329	3666	10294	9852	6750	9157
Commercial loans and other	1179	1231	2059	2231	2538	2212	2705	5044	2089
In Percentage of Total									
Rural sector	20.3	16.3	14.6	15.2	20.1	11.8	12.9	19.1	20.5
Mining & Energy	16.4	13.3	11.6	11.9	11.5	10.1	19.1	25.7	22.8
Industry	7.1	9.5	12.6	8.0	4.9	14.9	11.9	9.9	14.6
Roads and airport	7.9	13.9	19.5	19.9	20.2	26.9	17.3	12.7	14.1
Transport &telecom	9.5	8.1	6.3	3.3	3.3	2.2	1.6	3.9	4.6
Housing	6.7	5.9	13.5	10.8	10.4	9.1	4.3	6.3	6.6
Tourism	4.4	3.0	0.9	0.8	0.1	0.3	0.2	0.0	0.0
Commerce and Banks	2.7	1.1	3.5	4.7	8.1	4.5	6.0	2.2	2.3
Infrastruct. Admin.&Social	25.0	28.8	17.3	25.4	21.4	20.3	26.8	20.4	14.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
By agent									
Admnistration	48.0	54.6	49.2	56.5	51.4	55.9	48.5	40.5	36.6
Public Enterprises	43.4	36.9	42.8	31.4	39.5	31.3	36.1	42.6	44.9
Private Enterprises	3.0	3.8	2.7	6.8	5.2	10.0	12.4	15.2	17.4
Non-profit organizations	5.2	4.3	0.9	1.3	1.1	0.8	0.9	0.1	0.2
Households	0.4	0.5	4.4	4.0	2.8	2.1	2.1	1.8	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
By financing source									
Development Budget (BEI)	36.7	30.8	30.7	32.2	28.1	16.6	16.6	16.4	17.7
Capital grants	24.5	21.8	27.5	29.3	26.2	19.1	22.9	24.2	23.7
Loans	23.5	35.7	23.8	19.7	26.6	53.0	47.4	34.0	47.7
Commercial loans and other	15.3	11.7	17.9	18.9	19.1	11.4	13.0	25.4	10.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Planning.

Table 3.1 BURUNDI: BALANCE OF PAYMENTS, 1978-1986, IN BURUNDI FRANCS
(In millions of FBu, at current prices)

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986
Exports (g,nfs)	6660.6	9984.8	7291.9	7894.8	9235.8	8989.5	12124.5	14938.4	17944.0
Merchandise (fob)	6259.1	9387.5	5970.2	6744.8	7900.6	7493.7	10516.0	13814.0	15230.0
Non-factor services	401.5	597.3	1321.7	1150.0	1335.2	1495.8	1608.5	1124.4	2714.0
Imports (g,nfs)	11054.7	17426.4	18502.7	17871.9	23232.8	23775.7	29675.7	26916.0	27834.0
Merchandise (cif)	8842.5	13720.5	15109.3	14509.4	19280.0	17074.9	22383.0	22754.0	23195.0
Non-factor services	2212.2	3705.9	3393.4	3362.5	3952.8	6700.8	7292.7	4162.0	4639.0
Resource Balance	-4394.1	-7441.6	-11210.8	-9977.6	-13997.0	-14786.2	-17551.2	-11977.6	-9830.0
Net factor Income	-1301.4	-914.8	-634.5	-1913.1	-2355.4	-2452.6	-3223.9	-3947.2	-5985.0
Labor	-1528.7	-1287.7	-1443.2	-2146.0	-2247.5	-2070.3	-2244.3	-2518.1	-4223.0
Capital	227.3	373.4	808.7	232.9	-107.9	-382.3	-979.6	-1434.1	-1762.0
Interest received	429.0	622.3	985.6	836.8	499.1	175.7	181.6	177.8	228.0
Interest paid	201.7	248.9	176.9	503.9	607.0	558.0	1161.2	1611.9	1990.0
(M&LT interest)	74.5	130.5	163.4	486.3	586.8	542.7	1157.6	1605.0	1983.0
Net Current Transfers	2938.7	3699.5	4241.1	5729.5	5902.6	4794.5	5312.1	5585.2	7566.0
Private	532.8	184.1	275.7	556.9	666.6	555.3	748.0	936.8	521.0
Public	2405.9	2906.4	3965.4	5172.6	4336.6	4239.2	4564.1	4648.4	7045.0
Current Account Balance	-2756.8	-5265.4	-7604.2	-6661.2	-11349.8	-12444.3	-15463.6	-10339.6	-8369.6
(incl.capital grants)	-868.6	-2976.4	-4440.7	-2597.1	-7736.9	-8730.1	-10694.3	-5539.9	-3764.6
Capital Account									
Direct Investment			95.5	54.4	131.1	41.5	106.1	189.6	174.0
Official Capital Grants	1988.2	2289.6	3163.5	3464.1	3612.9	3714.2	4768.7	4799.7	4545.6
M&LT Loans (net)	1577.6	3501.7	2752.3	2004.3	3666.3	10293.8	9709.4	6376.6	9157.6
Disbursement	1809.3	3748.6	3187.5	2374.9	4067.6	10972.9	10797.6	8735.6	11341.6
Repayments	232.3	246.9	435.2	370.6	400.7	679.1	1087.6	1959.6	2184.6
Net Short-term Capital	-2212.2	-386.4	1148.1	1115.1	1300.5	1900.2	234.6	261.6	-137.6
Cap. flows n.e./Errors & Omi	-8.2	-479.7	-89.4	-3362.6	-549.4	-2158.5	427.8	-329.1	-1013.6
Change in Net Reserves	-1507.6	-340.6	-534.2	-2786.1	-3188.4	1346.9	-461.6	1096.6	4554.6
Memorandum Items									
Gross reserves (end-year)	8003.6	8823.6	9423.6	6138.6	2982.5	3167.6	2537.6	3403.7	7731.3
Import equivalent	6.7	6.6	6.1	4.2	1.1	1.6	1.0	1.5	3.3
Net reserves (end-year)	6231.3	5890.5	5350.3	4465.9	1278.0	2626.5	1852.8	2944.8	5721.4
Import equivalent	6.8	4.1	3.5	3.0	0.7	1.3	0.7	1.3	2.5
Debt service/exports (g,nfs)	4.6	3.0	8.2	10.9	10.7	12.5	18.5	23.9	23.2
Debt Service/GDP	0.6	0.5	0.7	1.0	1.1	1.1	1.9	2.6	2.8
Current account/GDP	-5.1	-7.5	-9.2	-6.9	-12.4	-12.4	-13.1	-7.4	-5.6
Current account(w/grants)/GDP	-1.6	-4.2	-5.4	-3.0	-8.5	-8.7	-9.0	-4.0	-2.5

Table 8.2 BURUNDI: BALANCE OF PAYMENTS, 1978-1986, IN US DOLLARS
(In millions of US dollars, at current prices)

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986
Exports (g,nfs)	74.0	110.9	81.0	87.7	102.6	96.7	101.3	123.8	157.1
Merchandise (fob)	69.5	104.3	66.3	74.9	87.8	80.6	87.8	114.4	133.4
Non-factor services	4.5	6.6	14.7	12.8	14.8	16.1	13.4	9.3	23.8
Imports (g,nfs)	122.8	193.6	205.6	198.6	259.1	255.7	247.9	223.0	243.7
Merchandise (cif)	98.3	152.5	167.9	161.2	214.2	183.6	187.0	188.5	203.1
Non-factor services	24.6	41.2	37.7	37.4	43.9	72.1	60.9	34.5	40.6
Resource Balance	-48.8	-82.7	-124.6	-110.9	-155.5	-159.0	-146.6	-99.2	-86.6
Net factor Income	-14.5	-10.2	-7.1	-20.1	-26.2	-26.4	-26.9	-32.7	-52.4
Labor	-17.0	-14.3	-16.0	-23.8	-25.0	-22.3	-18.7	-20.8	-37.0
Capital	2.5	4.1	9.0	3.7	-1.2	-4.1	-8.2	-11.9	-15.4
Interest received	4.8	6.9	11.0	9.3	5.5	1.9	1.5	1.5	2.0
Interest paid	2.2	2.8	2.0	5.6	6.7	6.0	9.7	13.4	17.4
(MALT interest)	0.8	1.5	1.8	5.4	6.5	5.8	9.7	13.3	17.4
Net Current Transfers	32.7	34.3	47.1	63.7	55.6	51.6	44.4	46.3	66.3
Private	5.9	2.0	3.1	6.2	7.4	6.0	6.2	7.8	4.6
Public	26.7	32.3	44.1	57.5	48.2	45.6	38.1	38.5	61.7
Current Account Balance	-30.6	-58.5	-84.5	-67.3	-126.1	-133.8	-129.2	-85.7	-72.8
(incl. capital grants)	-9.7	-33.1	-49.3	-28.9	-86.0	-93.9	-89.3	-45.9	-33.0
Direct Investment	0.0	0.0	1.1	0.6	1.5	0.4	0.9	1.6	1.5
Official Capital Grants	21.0	25.4	35.2	38.5	49.1	39.9	39.8	39.8	39.8
MALT Loans (net)	17.5	38.9	30.6	22.3	49.7	110.7	81.1	56.1	80.2
Disbursement	20.1	41.7	35.4	26.4	45.2	116.9	90.2	72.4	99.3
Repayments	2.6	2.7	4.8	4.1	4.5	6.2	9.1	16.2	19.1
Net Short-term Capital	-24.6	-4.3	12.8	12.4	14.5	20.4	2.0	2.3	-1.2
Cap. flows n.e./Errors & Omni	0.0	-5.3	-1.0	-37.4	-6.1	-23.2	3.6	-2.7	-8.9
Change in Net Reserves	-16.7	-3.6	-5.9	-31.0	-35.4	14.5	-1.8	11.4	38.7
Memorandum Items:									
Gross reserves (end-year)	88.9	108.9	104.7	68.2	23.1	34.0	21.2	28.2	67.7
Import equivalent	8.7	6.6	6.1	4.1	1.1	1.6	1.0	1.5	3.3
Net reserves (end-year)	69.2	65.5	59.5	49.6	14.2	28.2	15.5	24.4	59.1
Import equivalent	6.8	4.1	3.5	3.0	0.7	1.3	0.7	1.3	2.5
Debt service/exports (g.nfs)	4.8	3.8	9.2	10.9	10.7	12.5	18.5	23.9	23.2
Debt Service/GDP	0.6	0.5	0.7	1.0	1.1	1.1	1.9	2.6	2.8
Current account/GDP	-5.1	-7.5	-9.2	-6.9	-12.4	-12.4	-13.1	-7.4	-6.6
Current acc.(inc.grants)/GDP	-1.6	-4.2	-5.4	-3.0	-8.5	-8.7	-9.0	-4.0	-2.5
Exchange Rate (FBu/US$)	90.0	90.0	90.0	90.0	90.0	93.0	119.7	120.7	114.2

Table 3.3 BURUNDI: VALUE OF EXPORTS BY COMMODITIES, 1977-86
(In millions of FBu)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
PRIMARY PRODUCTS	7961	6152	9298	5771	6744	7899	7291	11269	12730	14126
Coffee	7585	5360	8612	5234	5944	7081	6542	9930	11354	12981
Cotton	8	394	198	101	113	223	249	82	42	20
Tea	174	171	185	136	212	255	228	864	712	515
Animal Hides	45	87	94	53	35	9	69	82	116	151
Minerals	10	17	3	39	260	78				
Other primary	139	123	206	207	180	272	203	311	505	459
MANUFACTURED PRODUCTS:	63	93	55	102	171	259	195	540	716	1082
Beer and soft drinks	0	1	2	6	10	98	62	104	11	127
Asbestos products	32	38	36	66	51	47	60	40	25	39
Glass bottles								48	198	193
Cigarettes	0	0	0	0	72	48			8	14
Cotton cloth				1	19	30	22	248	420	428
Metal products	3	4	2	1	0	12	16	17	9	22
Other goods	28	40	15	28	19	27	36	84	45	259
Other Products and re-expo	40	31	85	68	111	100	129	19	16	23
Total recorded 1/	8064	6266	9438	5941	7027	8258	7615	11828	13462	15231
BOP Adjustment 2/	325	-7	-50	29	-282	-348	-121	-1312	352	-1
Total Exports, fob Kigoma	8389	6259	9388	5970	6744	7899	7494	10516	13814	15230
Memorandum Items:			Percentage of Total							
Primary Products	98.7	98.2	98.5	97.1	96.0	95.6	95.7	95.3	94.6	92.7
Coffee	94.1	85.5	91.3	88.1	84.6	85.5	85.9	84.0	84.3	85.2
Cotton	0.1	6.3	2.1	1.7	1.6	2.7	3.3	0.7	0.3	0.1
Tea	2.2	2.7	2.0	2.3	3.0	3.1	3.0	7.3	5.3	3.4
Other primary	2.4	3.6	3.2	5.0	6.8	4.3	3.6	3.3	4.6	4.0
Manufactured	0.8	1.3	0.6	1.7	2.4	3.1	2.6	4.6	5.3	7.1
Other	0.5	0.5	0.9	1.1	1.6	1.2	1.7	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Total recorded according to Customs information.
2/ Adjustment corresponding to differences between Customs and BOP data.

Sources: Bank of the Republic of Burundi, Ministry of Planning.

Table 3.4 BURUNDI: VOLUME AND UNIT VALUE OF EXPORTS BY COMMODITIES, 1977-86
(in metric tons)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
PRIMARY PRODUCTS	19383	29806	32130	21540	31420	35218	29991	33367	39693	33644
Coffee	16822	22696	27137	18510	27106	30461	24835	29001	34097	28281
Cotton	73	3634	1760	737	781	2063	1923	404	221	140
Tea	1390	1258	1545	1267	2237	2175	2101	3073	4067	3451
Animal Hides	363	431	363	181	245	192	649	425	588	669
Other primary	715	1787	1325	845	1051	327	483	464	720	1103
MANUFACTURED PRODUCTS	1272	1405	1220	1368	1289	2766	2064	4024	3759	8631
Beer and soft drinks	14	28	116	182	269	1798	948	2449	310	4944
Asbestos products	812	917	665	1080	829	699	840	513	303	564
Glass bottles								516	2238	1884
Cigarettes	0	0	0	0	92	59			11	19
Cotton cloth	0	0	0	1	48	47	58	314	421	391
Metal products	24	25	11	6	0	41	121	111	62	125
Oxygen	8	21	14	25	2?	24	19	10		4
Other	414	414	414	74	28	98	78	111	414	700
OTHER (incl. re-exports)	354	176	336	559	690	1443	2	3	1	1
TOTAL	20989	31387	33686	23467	33099	39427	32057	37394	43453	42276
UNIT PRICE VALUES				(In FBu/Kilogram)						
Coffee	450.9	236.2	317.4	282.8	219.3	231.8	268.4	342.4	333.0	459.0
Cotton	109.6	108.4	112.5	136.4	144.4	108.2	129.7	208.2	191.9	142.9
Tea	125.2	135.9	119.4	107.7	94.7	117.4	108.4	281.1	175.0	149.2
Animal hides	124.0	201.9	259.5	293.9	148.3	44.8	106.0	192.9	198.0	225.7
Other products	208.4	78.3	157.7	291.1	418.7	1070.6	419.5	669.4	701.4	416.1
Manufact.	49.5	59.1	45.0	74.9	132.8	98.7	94.6	134.2	190.6	125.4
ANNUAL PRICE VARIATIONS				(In percentage)						
Coffee		-47.6	34.4	-10.9	-22.4	5.7	15.8	30.0	-2.7	37.8
Cotton		-1.1	3.8	21.2	5.9	-25.1	19.9	56.7	-5.6	-25.5
Tea		8.6	-12.1	-9.8	-12.0	23.9	-7.7	159.4	-37.7	-14.7
Animal hides		62.8	28.6	13.3	-51.3	-69.7	136.7	82.0	2.6	14.0
Other products		-62.4	101.3	84.6	43.8	155.7	-60.8	59.6	4.8	-40.7
Index value	100.0	74.6	111.9	71.2	80.4	94.2	89.3	125.4	164.7	181.5
Index quantity	100.0	149.5	160.5	111.8	160.6	187.8	152.7	178.2	207.0	201.4
Index price	100.0	49.9	69.7	63.7	50.1	50.1	58.5	70.4	79.5	90.1

Sources: Bank of the Republic of Burundi and Ministry of Planning.

Table 3.5 BURUNDI: VALUE OF IMPORTS BY END USE, 1977-86
(In millions of Burundi Francs)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Consumer Goods	3121	4099	6013	6345	4940	7077	4796	7117	6465	7599
Nondurable	1277	1582	2302	2468	2382	3081	2300	3325	3437	3948
Foodstuffs	863	992	1604	1583	1674	2213	1388	2189	2058	1849
Pharmaceutical Products	193	290	237	350	269	302	422	532	736	1234
Other	221	300	461	530	439	566	490	605	643	865
Durable goods	1844	2517	3711	3882	2558	3956	2496	3792	3028	3651
Textiles	943	1180	1679	1933	876	1400	576	608	628	838
Vehicles	303	434	676	637	645	924	617	1126	904	1182
Other	598	903	1356	1312	1037	1672	1303	2057	1496	1631
Intermediate Goods	2119	2641	4126	5814	6646	7525	7073	9579	9297	9092
Inputs for:										
Agriculture	134	125	120	197	105	201	348	558	184	809
Food Processing	679	851	1231	1310	1207	1226	1117	1045	1761	1115
Textiles	62	75	72	126	38	84	68	57	98	112
Metallurgy	233	331	427	494	484	742	787	955	813	958
Construction Industry	235	295	540	653	1109	1135	1087	1748	1131	1218
Other Manufacturing	31	89	137	67	84	189	126	99	141	244
Chemical Products	61	74	127	160	135	295	187	307	437	535
Petroleum Products	509	600	1137	2223	2901	2713	2666	3930	3897	3055
Other	134	201	335	584	583	940	692	883	843	1046
Capital Goods	1438	2103	3581	2955	2924	4568	5205	5687	6991	6505
Machinery and Equipment	467	455	820	1147	830	1355	1703	1651	2830	2249
Spare Parts and Tools	230	260	380	455	277	568	766	1031	1094	806
Electrical Equipment	324	337	511	555	478	907	1157	1240	1168	1250
Commercial Vehic. and Sp	289	839	949	588	921	1313	989	1132	1098	1580
Other	128	212	921	210	418	425	591	633	801	620
Total Recorded 1/	6678	8843	13721	15114	14509	19280	17075	22383	22753	23196
BOP Adjustment 2/	188	-161	-70	-64	524				1	
Total Imports (cif)	6866	8682	13651	15050	15033	19280	17075	22383	22754	23196
Memorandum Item:				(as percentage of total)						
Consumer Goods	46.8	46.4	43.8	42.0	34.0	37.0	28.1	31.8	28.4	32.8
(food)	12.6	11.4	11.8	10.5	11.1	11.5	8.1	9.8	9.0	8.0
Intermediate goods	31.7	29.9	30.1	38.5	45.8	39.2	41.4	42.8	40.9	39.2
Petroleum	7.5	6.8	8.3	14.7	20.0	14.2	15.8	17.6	17.1	13.2
Capital Goods	21.5	23.8	26.1	19.6	20.2	23.8	30.5	25.4	30.7	28.0
Total	100.0	100.1	100.0	100.1	100.0	100.0	100.0	100.0	100.0	100.0

1/ Customs information.
2/ Adjustment between customs and BOP information.

Sources: Bank of the Republic of Burundi and Ministry of Planning

Table 3.6 BURUNDI: VOLUME OF PRINCIPAL IMPORTS, 1977-86
(in metric tons)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Consumer Goods	31691	33176	45936	41059	37495	54138	36744	46638	43102	57503
Food and Beverages	20436	21406	32466	27949	27465	39379	24860	32598	30926	43684
of which,										
Milk products	561	698	1757	1638	1498	2499	1488	3328	2632	1467
Sugar	3145	4067	8320	4246	7080	8333	5637	10084	12458	17013
Wheat flour	6084	9568	10603	12918	10587	8804	7276	5504	3341	3403
Salt	12592	11385	13167	14369	12487	18524	11089	9181	9931	19166
Other Consumer goods	11255	11770	13470	13110	10030	14759	11884	14040	12176	13819
Used Clothing	2897	3276	2587	2477	1300	3884	2330	3024	2818	2926
Shoes	951	214	350	279	278	400	221	127	126	118
Automobiles	521	543	685	643	1033	1229	934	1094	828	924
Intermediate Goods	75900	82948	91628	114477	119751	136530	143752	167093	156823	162712
of which:										
Fertilizer and pesticide	2254	2312	1486	3713	655	2137	4208	6991	2080	8333
Malt	6116	5897	6256	6883	8661	8025	6617	8941	9873	9277
Textiles	1287	1203	1807	2497	1008	539	302	220	215	98
Cement	23237	23934	26790	37883	42207	56602	52177	62844	58020	63414
Petroleum Products	22575	24826	28371	35525	37062	34999	39881	53906	48307	46538
Capital Goods	4400	5681	6431	5778	6662	10274	11326	11482	16860	11169
of which:										
Machinery and Equipment	787	692	962	1088	950	2345	1889	2164	3428	1783
Electrical Equipment	783	1027	1108	998	1890	1726	2145	1919	2133	1788
Trucks	779	1943	1839	1423	1486	1817	2034	1867	1993	2400
Other	2051	2019	2522	2279	2336	4386	5258	5532	9306	5198
Total	111991	121805	143995	161314	163908	260942	191822	225218	216785	231384
Annual Growth:										
Consumer goods		4.7	38.5	-10.6	-8.7	44.4	-32.1	26.9	-7.6	33.4
Intermediate goods		9.3	10.5	24.9	4.6	14.0	5.3	16.2	-6.1	3.8
Petroleum		10.0	14.3	25.2	4.3	-5.6	13.9	35.2	-10.4	-3.7
Capital Goods		29.1	13.2	-10.2	15.3	54.2	10.2	1.4	46.8	-33.8
Total		8.8	18.2	12.0	1.6	22.6	-4.5	17.4	-3.7	6.7
Index (1977=100)										
Value	100	126	199	219	219	281	249	326	331	338
Volume	100	109	129	144	146	179	171	201	194	207
Price	100	116	155	152	150	158	145	162	171	164
Annual change in index (%)										
Value		26.4	57.2	10.3	-0.1	28.3	-11.4	31.1	1.7	1.9
Volume		8.8	18.2	12.0	1.6	22.0	-4.5	17.4	-3.7	6.7
Price		16.3	33.0	-1.3	-1.7	4.6	-7.2	11.7	5.6	-4.5

Sources: Bank of the Republic of Burundi and Ministry of Planning.

Table 8.7 BURUNDI: SERVICE TRANSACTIONS AND CURRENT TRANSFERS, 1977-1986
(In millions of Burundi Francs)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Nonfactor service income (net)	-1378	-1811	-3109	-2072	-2213	-2616	-5207	-5642	-3038	-3491
Transportation and insurance	-111	-156	-645	-181	-168	-333	-426	-399	-495	-455
Receipts	31	51	43	67	37	28	24	36	87	53
Payments	142	206	688	248	204	361	450	435	582	508
Travel n.e.i.	-160	-285	-369	40	-559	-514	-511	-433	-404	-695
Receipts	63	14	35	479	83	108	18	20	68	54
Payments	223	299	403	439	642	622	529	453	472	749
Government n.e.i.	-188	-47	-224	-259	501	865	695	511	-294	385
Receipts	188	337	520	776	1030	1201	1452	1554	970	1042
Payments	376	383	744	1035	529	336	757	1043	1264	657
Other net services 1/	-918	-1324	-1871	-1672	-1988	-2634	-4965	-5322	-1845	-2726
Scholarships	112	218	186	333	204	382	453	290	342	692
Studies	841	1057	1602	1183	1264	1821	4536	4849	1330	1312
Other (net)	-39	48	82	156	520	431	-24	182	173	722
Factor Service Income	-1231	-1301	-914	-714	-1813	-2355	-2453	-3224	-3947	-5985
Receipts (capital)	236	429	622	986	837	499	176	182	178	228
Payments	1467	1730	1537	1699	2650	2855	2628	3406	4125	6213
To Capital	158	202	249	177	504	607	558	1161	1612	1990
Interest on public debt	77	75	131	168	489	587	543	1158	1605	1989
Gov + PE					160	228	385	911	1270	1467
Private					207	182	30	101	178	458
BRB					123	176	128	146	157	65
To Labor	1309	1529	1288	1522	2146	2248	2070	2244	2513	4223
in money	362	358	431	497	594	582	485	580	936	638
kind (expatriates)	947	1170	857	1026	1552	1665	1585	1665	1577	3585
Private Transfers	598	533	184	276	557	666	555	748	937	521
Receipts	788	855	951	850	1397	1204	1170	1216	1440	1223
Subsist. of Tec. Assist.	408	360	427	154	670	532	538	664	843	707
Religious Missions	380	495	524	696	727	672	633	551	598	516
Payments	190	322	767	575	840	538	615	468	504	702
Subsistence costs	119	215	499	451	743	430	564	376	408	541
Other	71	107	268	124	96	108	51	92	95	161
Public Transfers	2008	2406	2906	3965	5173	4337	4239	4564	4648	7044
Money	648	786	1218	1898	3016	1458	1694	1356	1609	2224
In Kind	1360	1620	1688	2070	2157	2879	2545	3208	3039	4820
Technical Assistance	947	1170	857	1025	1552	1665	1585	1665	1577	3585
Scholarships	125	218	186	333	204	381	453	290	342	692
Urgent Aid	288	231	645	712	401	832	507	1253	1120	543
Total Current Transfers	2606	2939	3091	4241	5730	5003	4795	5312	5585	7565
Capital Grants	1245	1888	2289	3064	3464	3613	3714	4769	4800	4545
Money	405	556	616	727	715	228	591	317	683	271
In Kind	840	1332	1673	2336	2749	3385	3123	4452	4117	4274

1/ Includes scholarships and payments of project related studies.

Sources: Ministry of Planning and BRB.

Table 3.8. BURUNDI: EXPORTS 1/ BY COUNTRY OF DESTINATION, 1977-1986, IN PERCENT

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
EEC COUNTRIES	49.0	36.3	40.7	39.0	38.4	42.5	73.0	71.7	51.9	80.5
FEDERAL REP. OF GERMANY	14.5	3.6	7.6	5.8	12.9	23.6	49.6	33.7	30.2	54.4
BELGIUM AND LUXEMBOURG	2.3	1.6	2.4	3.3	1.8	1.4	4.6	2.8	5.0	10.9
FRANCE	2.6	2.1	1.0	4.3	1.3	1.1	0.3	0.3	0.2	2.0
UNITED KINGDOM	2.4	3.1	2.2	4.1	3.4	2.9	1.3	2.0	3.6	2.9
ITALY	3.3	4.0	3.6	3.0	1.2	2.2	3.4	2.9	0.7	2.3
NETHERLANDS	0.3	2.4	1.4	1.1	1.3	1.4	0.4	0.4	1.6	7.2
OTHER	23.7	19.5	22.5	17.3	16.4	9.8	13.0	29.7	10.7	0.8
OTHER EUROPE	2.2	4.1	9.4	2.4	3.7	6.3	10.7	9.2	28.4	1.4
SWEDEN	0.2	0.4	0.5	1.1	0.1	0.0	0.0	0.3	0.0	0.0
SPAIN	0.0	0.3	0.2	0.0	0.4	0.3	0.0	0.1	0.1	0.0
FINLAND										
OTHER	1.9	3.3	8.8	1.2	3.2	6.1	10.7	8.9	28.3	0.1
ASIA	1.7	6.6	4.9	4.5	2.5	2.7	7.4	6.3	3.2	2.3
PEOPLE'S REP. OF CHINA	1.1	6.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
HONG KONG	0.4	0.7	0.5	0.4	0.0	0.0	0.2	0.0	0.9	0.0
JAPAN	0.0	0.0	4.4	2.3	2.5	2.7	7.2	5.5	1.2	1.9
OTHER	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.8	1.1	0.4
AFRICA	0.6	1.3	1.0	2.5	6.4	12.6	5.1	9.0	9.5	6.3
RWANDA	0.5	1.2	0.5	1.4	1.2	0.9	1.7	1.3	3.2	2.0
ZAIRE	0.0	0.1	0.0	0.6	3.3	2.2	1.0	2.2	2.1	1.4
EGYPT	--	--	--	--	--	--	--	--	0.0	0.0
TANZANIA	--	--	--	--	--	--	--	0.3	1.0	0.1
ZAMBIA	--	--	--	--	--	--	--	--	0.0	0.0
KENYA	--	--	--	--	--	--	--	3.5	1.3	1.1
OTHER	0.1	0.3	1.0	0.5	1.9	9.5	2.4	1.0	1.5	2.2
AMERICA	42.0	50.9	42.7	41.0	44.3	32.0	2.1	1.7	5.9	6.3
UNITED STATES	38.6	49.3	42.7	41.0	44.2	32.0	2.1	1.6	5.9	6.3
CANADA	3.4	1.6	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
OTHER NON SPECIFIED	4.5	0.1	0.7	10.0	4.3	3.3	1.6	2.4	1.0	2.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 8.9. BURUNDI: IMPORTS BY COUNTRY OF ORIGIN, 1977-1986, IN PERCENT

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
EEC COUNTRIES	50.8	51.7	45.6	44.3	39.1	45.8	45.9	47.2	51.7	57.6
FEDERAL REP. OF GERMANY	9.8	10.2	7.7	8.2	6.7	8.3	8.7	8.8	11.7	11.5
BELGIUM AND LUXEMBOURG	17.9	22.6	17.9	16.7	15.4	15.9	15.4	13.0	15.6	18.8
FRANCE	9.6	9.3	8.5	9.1	7.8	11.8	10.2	14.0	12.3	11.6
UNITED KINGDOM	5.3	3.5	3.6	3.2	2.7	2.9	2.7	2.0	1.8	2.2
ITALY	3.1	2.6	4.0	2.0	2.3	3.0	3.9	4.0	5.0	4.9
NETHERLANDS	4.1	3.2	3.5	4.5	3.5	3.2	3.0	2.6	1.5	4.2
OTHER	0.5	0.4	0.4	0.5	0.6	0.8	1.1	2.7	3.7	4.5
OTHER EUROPE	7.5	7.7	10.9	5.5	2.8	4.0	4.7	2.5	2.0	3.2
GERMAN DEMOCRATIC REPUB	1.0	0.5	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0
SWEDEN	0.6	0.2	0.5	0.3	0.2	0.2	0.3	0.2	0.3	0.3
ROMANIA	0.9	1.3	0.9	1.1	0.3	0.2	0.5	0.0	0.0	0.0
CZECHOSLOVAKIA	0.1	0.2	0.3	0.5	0.2	0.2	0.2	0.1	0.1	0.2
SWITZERLAND										
OTHER	4.9	5.5	8.8	3.4	1.9	3.3	3.6	2.1	0.6	1.3
ASIA	21.0	19.9	22.6	29.2	31.7	27.9	27.5	29.9	27.1	22.3
PEOPLE'S REP. OF CHINA	4.4	3.4	3.8	6.1	3.2	3.0	2.9	6.0	2.6	1.6
HONG KONG	1.0	0.6	0.8	1.9	0.2	0.4	0.3	0.3	0.2	0.2
JAPAN	5.4	7.1	8.7	6.4	7.4	7.9	6.4	5.3	6.4	6.6
IRAN	7.3	7.0	8.1	13.4	19.7	13.8	14.4	16.9	16.1	10.3
OTHER	3.0	1.8	1.2	1.5	1.1	2.3	3.5	1.4	1.7	3.0
AFRICA	11.3	12.5	13.1	10.4	17.1	12.7	13.2	12.7	10.7	12.1
KENYA	5.3	6.6	7.0	4.6	6.3	4.1	3.7	3.4	2.7	2.7
ZAIRE	0.7	0.5	0.9	1.3	1.0	0.9	0.9	1.3	1.1	1.3
TANZANIA	3.6	4.1	3.7	2.3	4.0	3.1	2.7	2.3	1.1	0.9
ZAMBIA	--	--	--	--	--	--	--	1.9	3.1	4.1
ZIMBABWE	--	--	--	--	--	--	--	1.3	1.2	0.7
OTHER	1.2	1.2	1.5	1.3	5.4	4.6	5.3	2.0	1.5	1.9
AMERICA	7.5	5.6	6.1	6.0	5.0	5.3	3.6	5.3	6.0	2.6
UNITED STATES	5.3	4.2	4.3	5.3	4.6	5.3	3.3	5.5	5.3	2.5
CANADA	1.5	1.2	0.9	0.1	0.2	0.2	0.2	0.2	0.1	0.1
OTHER	0.7	0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.0	0.0
AUSTRALIA	0.3	0.1	--	--	--	--	--	--	0.1	0.1
OTHER NON SPECIFIED	2.2	2.3	1.3	4.3	4.3	4.0	5.1	2.0	2.3	2.1
TOTAL RECORDED	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.1 BURUNDI EXTERNAL PUBLIC DEBT, OUTSTANDING END-1988
(in millions of US dollars)

	Outstanding	Including Undisbursed	Structure (%)
Financial Institutions	28.86	31.00	3.6
Bilateral	149.54	234.03	27.0
Concessional 1/	145.70	230.19	26.5
Non-concessional	3.84	3.84	0.4
France	66.60	99.38	11.4
Concessional	64.80	97.58	11.2
Non-concessional	1.80	1.80	0.2
Belgium	5.45	9.90	1.1
China	26.89	41.00	4.7
Concessional	24.85	38.96	4.5
Non-concessional	2.04	2.04	0.2
Kuwait Fund	25.25	39.62	4.6
Saudia	9.52	19.50	2.2
Other Concessional	16.04	24.63	2.8
Germany		1.29	0.1
Italy	1.22	2.60	0.3
Korea,	0.28	0.28	0.0
Netherlands	3.17	4.11	0.5
United Arab Emirates	1.42	6.36	0.7
USSR	9.99	10.05	1.2
Multilateral	350.01	602.93	69.5
Concessional	314.01	544.48	62.7
Non-concessional	36.00	58.45	6.7
IDA	183.99	290.09	33.4
OPEP Fund	9.49	25.69	3.0
African Development Fund	54.00	112.34	12.9
African Development Bank	35.35	55.37	6.4
Concessional	6.49	10.03	1.2
Non-concessional	28.86	45.34	5.2
European Development Fund	3.03	3.17	0.4
European Economic Comunity	7.94	19.53	2.3
European Investment Bank	5.70	7.53	0.9
Concessional	4.87	6.37	0.7
Non-concessional	0.83	1.16	0.1
International Finance Corp	3.95	3.95	0.5
IMF trust fund	11.67	11.67	1.3
BADEA	10.94	25.94	3.0
Concessional	8.59	17.94	2.1
Non-concessional	2.35	8.00	0.9
Other Concessional	13.50	23.13	2.7
IFAD	11.03	21.47	2.5
SAFA	1.67	1.67	0.2
TOTAL	528.41	867.97	100.0
Concessional	468.80	802.59	92.5
Non-concessional	65.61	65.38	7.5

1/ Using ODA definition of 25 percent grant element.

Source: IBRD External Debt Reporting System.

Table 4.2 BURUNDI COMMITMENTS BY SOURCE AND AVERAGE TERMS, 1978-86
(in millions of US dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Commitments									
Financial Institut.	3.44	1.38	-	6.89	30.14	0.48	-	2.73	-
Bilateral	9.91	39.58	21.53	26.21	27.57	37.85	22.99	47.62	8.15
Concessional 1/	9.91	38.70	18.69	25.91	27.57	37.85	19.92	47.62	
Non-concessional	-	0.88	2.84	0.30	-	-	3.07	-	-
Multilateral	28.32	24.68	87.00	124.34	33.08	30.07	64.16	88.31	58.83
Concessional	28.32	24.68	87.00	100.34	20.76	15.10	56.16	88.31	
Non-concessional	-	-	-	24.00	12.32	14.97	8.00	-	-
Total	41.67	65.64	108.53	157.44	90.79	68.40	87.15	138.66	66.98
Concessional	38.23	63.38	105.69	126.25	48.33	52.95	76.08	47.62	0.00
Non-concessional	3.44	2.26	2.84	31.19	42.46	15.45	11.07	2.73	0.00
Average Terms									
Interest rate (%)			1.29	2.95	5.45	4.33	2.18	1.35	2.72
Maturity (years)			40.00	33.50	22.90	25.60	33.20	37.90	33.20
Grace (years)			8.80	7.30	6.00	6.60	8.00	9.20	7.80
Grant element (%)			72.20	56.60	35.00	41.70	62.90	71.80	58.70
By donor									
Financial institutions	3.44	1.38	0.00	6.89	30.14	0.48	0.00	2.73	-
Bilateral	9.91	39.58	21.53	26.21	27.57	37.87	22.99	47.61	8.15
France	-	0.88	17.06	0.30	16.45	28.29	9.24	19.44	5.59
Belgium	-	-	-	-	2.20	-	1.74	3.39	-
China	-	38.70	-	-	-	-	3.07	11.94	-
Saudi	-	-	2.62	7.21	-	-	8.94	-	2.57
Kuwait	-	-	1.85	8.07	8.47	14.58	-	6.65	-
Other bilateral	9.91	-	-	10.63	5.45	-	-	6.19	-
Multilateral	28.32	24.68	87.00	124.43	33.08	30.47	64.16	88.31	58.83
IDA	14.00	6.80	37.70	47.19	20.76	15.50	19.17	56.29	32.28
OPEP	-	4.50	5.00	7.00	-	-	5.00	1.60	
ADF	1.00	-	23.26	24.23	-	-	12.72	30.42	-
ADB	-	-	-	19.35	11.04	14.97	2.39	-	-
EEC	-	5.94	-	4.46	1.28	-	16.88	-	-
IFC	-	-	-	4.65	-	-	-	-	-
IMF Trust fund	7.32	7.44	-	0.09	-	-	-	-	-
BADEA	6.00	-	-	10.00	-	-	8.00	-	-
Other multilateral	0.00	-	21.04	7.46	-	-	-	-	26.55
Total	41.67	65.64	108.53	157.53	90.79	68.82	87.15	138.65	66.98

1/ Using ODA definition of 25 percent grant element.

Source: IBRD Debt Reporting System.

Table 4.8 BURUNDI DISBURSEMENTS, AMORTIZATION AND INTEREST PAYMENTS BY CREDITOR, 19
(in millions of US dollars)

	1980	1981	1982	1983	1984	1985	1986
Disbursements							
Financial Instit.	0.55	0.00	2.74	14.72	12.14	1.13	-
Bilateral	17.95	13.19	28.29	38.76	16.48	24.69	18.69
Concessional	17.45	12.55	22.59	38.29	16.38		
Non-concessional	0.50	0.65	0.69	0.47	0.10	3.22	0.00
Multilateral	26.93	16.52	28.99	53.11	50.94	44.72	84.03
Concessional	26.36	16.52	27.88	42.92	39.97	37.81	78.95
Non-concessional	0.57	0.00	1.11	10.19	10.96	6.90	5.08
Total	45.43	29.72	55.02	106.59	79.56	70.53	102.73
Concessional	43.81	29.07	50.47	81.21	56.36	59.28	96.40
Non-concessional	1.62	0.65	4.55	25.38	23.20	11.25	6.32
Amortization							
Financial Instit.	2.94	2.36	2.06	1.57	1.16	4.03	5.74
Bilateral	0.93	0.87	0.69	1.23	3.32	2.87	4.77
Concessional	0.65	0.65	0.65	1.17	3.26	2.77	3.71
Non-concessional	0.28	0.22	0.04	0.06	0.06	0.11	1.06
Multilateral	0.33	0.37	0.63	1.35	4.72	5.835	8.02
Concessional	0.03	0.03	0.27	1.20	4.24	5.046	6.51
Non-concessional	0.30	0.34	0.36	0.15	0.48	0.789	1.51
Total	4.20	3.61	3.38	4.16	9.19	12.73	18.52
Concessional	0.68	0.68	0.92	2.38	7.50	7.81	9.51
Non-concessional	3.52	2.92	2.46	1.78	1.69	4.92	9.01
Interest							
Financial Instit.	1.04	0.54	0.21	0.47	2.18	2.16	2.18
Bilateral	0.25	0.42	0.99	1.50	2.14	2.35	4.02
Concessional	0.20	0.34	0.93	1.39	2.05	2.25	3.67
Non-concessional	0.05	0.08	0.07	0.11	0.09	0.10	0.35
Multilateral	0.69	0.79	1.18	1.44	3.79	4.12	5.86
Concessional	0.39	0.52	0.69	0.99	1.75	1.91	2.66
Non-concessional	0.30	0.27	0.49	0.44	2.05	2.22	3.20
Total	1.98	1.76	2.38	3.40	8.12	8.63	12.05
Concessional	0.59	0.86	1.62	2.39	3.80	4.16	6.17
Non-concessional	1.39	0.89	0.76	1.01	4.32	4.47	5.89

Source: IBRD Debt Reporting System.

Table 5.1. BURUNDI: SUMMARY OF CENTRAL GOVERNMENT FINANCE, 1978-86 (e)
(In billions of Burundi Francs)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Revenues and grants	11.85	13.26	14.66	16.00	17.64	16.58	21.81	24.49	28.99
Revenues	9.21	10.97	11.60	11.57	14.03	12.87	17.04	19.69	23.83
Tax revenue	7.36	9.21	10.60	9.99	12.57	11.88	16.03	18.22	21.21
Income tax	0.84	1.28	2.42	2.85	3.54	3.45	3.90	4.04	4.43
Transaction tax	0.39	0.56	0.69	0.98	1.39	2.07	2.54	2.85	3.24
Beer tax	1.34	2.36	2.77	3.17	3.52	3.16	3.36	3.76	3.76
Import duties	1.90	2.88	3.21	2.71	3.20	2.77	3.24	3.38	4.28
Coffee export duties	2.72	2.01	1.36	0.03	0.57	0.00	2.68	3.66	4.90
Other	0.17	0.11	0.16	0.25	0.35	9.41	0.31	0.53	0.54
Nontax revenue 1/	1.85	1.76	1.00	1.58	1.46	1.01	1.01	1.47	2.62
Grants 2/	1.83	2.29	3.06	4.43	3.61	3.71	4.77	4.80	5.16
Total expenditure and net lending (commitment basis)	13.72	15.14	20.69	21.59	25.36	31.75	31.59	31.56	33.98
Current (commitment)	6.00	7.58	9.47	15.11	12.66	13.48	14.12	16.06	17.56
Salaries	3.32	3.85	4.80	5.33	5.92	6.03	6.47	7.08	7.81
Goods and services	1.62	2.21	2.77	2.51	3.03	2.30	2.77	3.79	4.25
Transfers and susbidies	0.78	0.95	1.08	1.30	1.12	1.26	1.24	2.15	2.09
Other	0.28	0.57	0.82	0.37	0.75	0.02	0.78	0.55	1.18
Interest	0.18	0.12	0.20	0.28	0.45	0.85	1.55	1.98	2.23
Unclassified expendit. 3/				0.33	1.39	3.02	1.32	0.51	
Capital expenditures and net lending (commitment)	7.73	7.56	11.23	11.48	12.70	18.27	17.47	15.50	16.42
BEI (commitment)	4.47	2.90	4.84	5.45	4.52	4.24	3.29	2.93	0.99
Net change in arrears	1.21	-0.74	0.88	0.88	0.51	0.96	-0.22	-0.15	-0.56
Arrears accumulation	2.21	0.69	1.30	1.64	1.59	2.22	1.54	1.05	
Payment of arrears	-1.00	-1.42	-0.57	-0.76	-1.09	-1.26	-1.76	-1.20	
BEI (cash basis)	3.26	3.63	4.04	4.57	4.01	3.28	3.50	3.08	1.55
Extrab. account	0.16	-0.66	0.14	-0.10	-0.02	0.05	0.50	0.01	
Grants	1.83	2.29	3.06	4.43	3.61	3.71	4.77	4.80	5.16
Loans	1.27	2.43	3.19	2.66	4.59	10.27	8.91	6.72	10.27
Domest. Loans								1.03	
Adjustment for other operations				-0.48	-0.62	0.22	0.66	1.23	0.30
Overall balance (commitment)	-2.68	-1.88	-6.03	-6.07	-8.34	-14.95	-9.12	-5.84	-4.69
Overall balance, before grants	-4.51	-4.17	-9.09	-10.50	-11.95	-18.66	-13.89	-10.64	-9.85
Change in arrears (decrease -)	0.86	-1.44	0.90	0.80	1.49	2.41	-1.41	-1.56	-1.37
Current	-0.35	-0.78	0.11	-0.08	0.99	1.45	-1.19	-1.41	-0.81
Accumulation	0.20	0.25	0.48	0.33	1.39	3.02	1.32	0.51	
Payments	-0.54	-0.95	-0.37	-0.42	-0.40	-1.57	-2.51	-1.92	
Capital	1.21	-0.74	0.80	0.88	0.50	0.96	-0.22	-0.15	-0.56
Overall balance (cash basis)	-1.81	-3.32	-5.13	-5.27	-6.85	-12.55	-10.53	-7.40	-6.03
Overall balance, before grants	-3.65	-5.61	-8.19	-9.70	-10.46	-16.26	-15.30	-12.20	-11.22
Financing	1.81	3.32	5.13	5.27	6.85	12.55	10.53	7.40	6.03
External (net)	1.07	2.20	3.19	2.30	4.27	9.70	8.10	5.32	6.48
Disbursements	1.27	2.43	3.59	2.66	4.59	10.27	8.91	6.72	10.27
Amortization	-0.20	-0.23	-0.40	-0.36	-0.32	-0.57	-0.81	-1.40	-3.79
Domestic (net)	0.74	1.12	1.93	2.96	2.58	2.84	2.42	2.08	-0.42
Banking system	0.54	3.01	0.78	3.03	2.15	2.89	1.71	1.63	-1.08
Nonbanking	0.20	-1.89	1.16	-0.07	0.44	-0.05	0.71	0.45	0.66

(e) Footnotes on next page

Table 5.1. BURUNDI: SUMMARY OF CENTRAL GOVERNMENT FINANCE, 1978-86 (continued)
(in billions of Burundi France)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Memorandum items:									
On a cash basis 4/:									
Recurrent expenditures 5//	6.34	8.28	9.36	10.67	12.29	11.82	14.65	16.24	18.07
Capital expenditures	6.52	8.38	10.43	10.60	12.20	17.31	17.69	15.65	16.98
Total expenditures	12.86	16.58	19.79	21.27	24.49	29.13	32.34	31.89	35.05
Recurrent balance (w/o grant	2.87	2.69	2.24	0.90	1.74	1.05	2.39	3.45	5.76
Overall balance (w/o grants)	-3.65	-5.61	-8.19	-9.70	-10.46	-16.26	-15.36	-12.20	-11.22
As percentage of GDP:									
Revenues	17.1	15.6	14.0	13.3	15.4	12.8	14.4	14.2	16.0
Revenues and grants	20.4	18.8	17.7	18.3	19.3	16.5	18.5	17.6	19.5
On a cash basis									
Recurrent expenditures	11.7	11.8	11.3	12.2	13.5	11.7	12.4	11.7	12.1
Capital expenditures	12.1	11.8	12.6	12.1	13.4	17.2	15.0	11.3	11.4
Current balance (w/o grants)	5.3	3.8	2.7	1.0	1.9	1.0	2.0	2.5	3.9
Overal balance (w/o grants)	-6.8	-8.0	-9.9	-11.1	-11.5	-16.1	-12.9	-8.8	-7.5
Current balance(+grants)	8.7	7.1	6.4	6.1	5.9	4.7	6.1	5.9	7.3
Overal balance (+grants)	-3.4	-4.7	-6.2	-6.0	-7.5	-12.5	-8.9	-5.3	-4.1
On commitment basis									
Recurrent expenditures	11.1	10.8	11.4	11.6	13.9	13.4	11.9	11.6	11.8
Capital expenditures	14.3	10.7	13.6	13.2	13.9	16.2	14.8	11.2	11.0
Current balance (w/o grants)	6.0	4.8	2.6	1.7	1.5	-0.6	2.5	2.6	4.2
Overal balance (w/o grants)	-8.4	-5.9	-11.0	-12.0	-13.1	-18.5	-11.8	-7.7	-6.6
Current balance(+grants)	9.3	8.1	6.3	6.8	5.5	3.1	6.5	6.1	7.7
Overal balance (+grants)	-5.0	-2.7	-7.3	-7.0	-9.1	-14.9	-7.7	-4.2	-3.2
Grants	3.4	3.3	3.7	5.1	4.0	3.7	4.0	3.5	3.5
Foreign financing (loans net	2.0	3.1	3.0	2.6	4.7	9.6	6.9	3.8	4.4
Domestic financing (net)	1.4	1.6	2.3	3.4	2.8	2.8	2.1	1.5	-0.3
Banking	1.0	4.3	0.9	3.5	2.4	2.9	1.4	1.2	-0.7
Non-banking	0.4	-2.7	1.4	-0.1	0.5	0.0	0.6	0.3	0.4
Total	6.8	8.0	9.9	11.1	11.5	16.1	12.9	8.8	7.5
GDP market prices	54.02	70.43	82.78	87.22	91.19	100.66	118.17	138.79	148.81

Sources: Data provided by the Burundi authorities; and staff estimates.

1/ Includes interest receipts on on-lending to public enterprises.
2/ Includes grants passed on to public enterprises
3/ Consists of expenditure counterparts to new arrears, most of which are related to goods and services.
4/ Includes change of arrears.
5/ Includes adjustments for other expenditures.

Table 5.2. BURUNDI: ORDINARY BUDGET EXPENDITURES BY FUNCTIONAL CLASSIFICATION, 1981-86
(in millions of FBu)

	1978	1979	1980	1981	1982	1983	1984	1985	1986
Ordinary budget (BO)									
General services	3520	4702	4921	5281	5698	7430	8351	9201	7022
President's Office 1/	708	930	1038	1102	1055	1098	1113	1622	1888
Defense	1533	1769	2499	2700	3300	3195	3584	3689	3951
Other	1279	2003	1384	1479	1344	3138	3654	3490	1192
Social services	1891	2217	2675	2795	2910	3200	3567	4304	5046
Education	1454	1681	2022	2171	2240	2509	2719	3295	3704
Labor						13	14	22	32
Public Health	356	443	540	516	555	578	725	937	1148
Social Affairs	61	68	80	85	89	80	81	97	111
Youth and sports	21	25	32	23	27	21	22	33	41
Women condition	-	-	-	-	-	6	7	9	11
Economic services	853	1218	1433	1475	1460	1163	1038	1542	1626
Agriculture	231	346	405	444	545	497	440	498	534
Rural Development			41	48	54	48	49	58	62
Commerce and industry	18	24	27	26	27	28	25	33	74
Transport & Commun.	241	291	324	242	196	175	155	334	350
Public works. energy and mines	364	557	636	715	637	415	370	620	667
Interest on public debt	131	115	194	328	448	920	1581	1873	2257
Domestic	52	40	42	172	342	695	693	770	900
External	79	75	152	156	106	225	889	1103	1357
Amortization	199	1559	687	1039	1177	1605	1287	3135	5586
Domestic		1330	360	850	977	1175	555	2255	3626
External	199	229	327	190	200	430	733	881	1961
Total Ordinary Budget	6595	9811	9910	10918	11696	13627	15828	19854	21537
less amortization	-199	-1559	-687	-1039	-1177	-1605	-1287	-3135	-5586
BO (current, cash)	6396	8252	9223	9879	10519	12022	14541	16719	15951
less payment of arrears	-542	-948	-378	-508	-187	-1574	-2550	-2149	-810
accumulation of arrears	196	248	480	334	1391	3022	1810	518	..
BO (current, commitment)	6050	7554	9325	9705	11743	13470	13807	15088	15141
extrabudgetary account + special funds + other	-55	26	149	405	1537	-220	143	-253	2119
Recurrent expenditures (on a commitment basis)	5995	7580	9474	10110	13280	13250	13450	14830	17260

1/ Includes Ministry of Planning and External Relations.

Source: Government of Burundi.

Table 5.3 Implementation of the Investment Program of the Fourth Plan, 1983-87
(in millions FBu at 1981 prices)

ITEM	Average 78-82	1983 Plan	1983 Actual	1983 (%)	1984 Plan	1984 Actual	1984 (%)	1985 Plan	1985 Actual	1985 (%)	1986 Plan	1986 Est.	1986 (%)	1987 Plan	1987 Proj.	1987 (%)	1983-87 Plan	1983-87 Revised	1983-87 (%)
Total (1981 prices)	9428	20488	17381	84.8	23730	16350	68.9	24895	14676	59.8	19687	16038	81.5	18442	21691	117.6	107242	86336	80.5
Rural sector	1568	3099	2053	66.2	4283	2104	49.1	5337	2835	53.1	5877	3200	54.4	5928	3507	59.2	24524	13699	55.9
Mining & Energy	1138	2564	1750	68.2	2368	3116	131.6	2899	3822	131.8	3085	3787	122.8	2647	2638	99.7	13563	15113	111.4
Industry	820	4452	2593	58.2	3923	1944	49.6	4591	1468	32.0	3704	2593	70.0	2983	6916	231.8	19652	15513	78.9
Roads and airport	1731	4089	4683	114.5	3994	2833	70.9	3971	1885	55.9	1439	1681	116.8	2122	2791	131.5	15015	13873	92.4
Transport &telecom	496	706	381	54.0	1196	263	22.0	1068	574	53.8	1306	780	59.7	620	1358	219.0	4896	3356	68.5
Housing	954	1861	1580	84.9	1745	699	40.0	1122	942	84.0	915	1187	129.8	885	969	112.0	6508	5377	82.6
Tourism	115	62	47	76.8	883	312	35.4	694	101	16.0	41	21	52.1	41	165	403.5	1681	648	39.0
Commerce and Banques	414	407	774	190.1	753	700	93.0	980	219	22.8	269	227	84.4	275	506	184.0	2684	2427	91.1
Infrast.Admin.&Social	2192	3248	3520	108.4	4585	4379	95.5	4913	3030	61.7	3051	2562	84.0	2961	2839	95.9	18759	16332	87.1
Education		712	484	68.0	1173	1154	98.4	1417	981	69.2	1593	1289	80.9	1462	1551	106.1	6357	5459	85.9
Health		693	636	91.8	1543	1182	76.6	1205	1322	109.7	495	728	147.1	406	595	146.6	4342	4464	102.8
Other		1843	2400	130.2	1869	2043	109.3	2291	727	31.7	963	545	56.6	1093	693	63.4	8060	6409	79.5
Total current prices	11068	23480	19440	82.8	29615	20784	70.2	33857	19854	58.6	29156	22528	77.3	29747	31992	107.5	145855	114598	78.6
Financed by:																			
BEI	3336	5382	3220	59.8	7204	3459	48.0	6162	3260	52.9	4571	2889	63.2	4984	2557	51.3	28303	15384	54.4
Capital grants	2884	5102	3714	72.8	6898	4769	69.1	6122	4800	78.4	4753	5360	112.8	4919			27794	18643	67.1
Loans	2938	9382	9066	96.6	8728	9053	103.7	9952	8488	85.3	9452	9765	103.3	7748	25250	199.3	45261	61622	136.1
Commercial loans/other	1910	3614	3441	95.2	6785	3504	51.6	12621	3306	28.5	10381	4514	43.5	12096	4185	34.6	44497	18949	42.6
Total	11068	23480	19440	82.8	29615	20784	70.2	33857	19854	58.6	29156	22528	77.3	29747	31992	107.5	145855	114598	78.6
In Percentage of Total																			
Rural sector	17.2	15.1	11.8		18.0	12.9		21.4	19.1		29.9	20.0		32.1	16.2		22.9	15.9	
Mining & Energy	12.6	12.5	10.1		10.0	19.1		11.6	25.7		15.7	23.6		14.4	12.2		12.6	17.5	
Industry	8.4	21.7	14.9		16.5	11.9		18.4	9.9		18.8	16.2		16.2	31.9		18.3	18.0	
Roads and airport	17.1	20.0	26.9		16.8	17.3		13.5	12.7		7.3	10.5		11.5	12.9		14.0	16.1	
Transport &telecom	5.7	3.4	2.2		5.0	1.6		4.3	3.9		6.6	4.9		3.4	6.3		4.6	3.9	
Housing	9.8	9.1	9.1		7.4	4.3		4.5	6.3		4.6	7.4		4.7	4.5		6.1	6.2	
Tourism	1.6	0.3	0.3		3.7	1.9		2.5	0.7		0.2	0.1		0.2	0.6		1.5	0.6	
Commerce and Banques	4.3	2.0	4.5		3.2	4.3		3.9	1.5		1.4	1.4		1.5	2.3		2.5	2.6	
Infrast.Admin.&Social	23.3	15.9	20.3		19.3	26.6		19.7	20.4		15.5	16.0		16.1	13.1		17.5	18.9	
Education		3.5	2.6		4.9	7.1		5.7	6.6		8.1	8.0		7.9	7.2		5.9	6.3	
Health		3.4	3.7		6.5	7.2		4.8	8.9		2.5	4.5		2.2	2.7		4.0	5.2	
Other		9.0	13.6		7.9	12.5		9.2	4.9		4.9	3.4		5.9	3.2		7.5	7.4	
Total	100.0	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	
By financing source																			
BEI	30.1	22.9	16.6		24.3	16.6		18.2	16.4		15.7	12.8		16.6	8.0		19.4	13.4	
Capital grants	26.1	21.7	19.1		23.3	22.9		18.1	24.2		16.3	23.8		16.5	-		19.1	16.3	
Loans	26.5	40.0	46.6		29.5	43.6		29.4	42.8		32.4	43.3		26.0	78.9		31.0	53.8	
Commercial loans/other	17.3	15.4	17.7		22.9	16.9		34.3	16.7		35.6	20.0		40.7	12.1		30.5	16.5	
Total	100.0	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	

Source: Ministry of Planning.

Table 5.4. BURUNDI: PUBLIC INVESTMENT PROGRAM, 1987-89
(millions of Fbu)

Sectors	1987			1988			1989			1987-89		
	Local Funds	Foreign Aid	Total	Local Funds	Foreign Aid	Total	Local Funds	Foreign Aid	Total	Local Funds	Foreign Aid	Total
Agriculture	1131	3999	5129	1155	5135	6289	848	4048	4895	3133	13181	16314
Industry&Comm.	922	1239	2161	24	2371	2394	0	196	196	946	3806	4751
Energy/Water	136	3371	3506	365	3703	4069	142	2035	2177	583	9109	9692
Transport,telec	96	722	818	67	598	665	48	495	534	209	1815	2017
Roads	289	2602	2891	176	3612	3789	101	3586	3687	565	9801	10366
Housing	248	399	648	69	318	378	95	298	393	395	1007	1402
Education	183	824	1007	58	589	647	109	526	635	351	1939	2290
Health	39	122	162	87	325	412	27	298	323	154	748	897
Social sectors	543	0	543	220	0	220	200	0	200	963	0	963
Total	3578	13277	16855	2152	16648	18795	1562	11479	13041	7292	41399	48691
of which BEI	2557			1847			1481			5885		
(%)	21.2	78.8	100.0	11.5	88.5	100.0	12.0	88.0	100.0	12.1	85.0	100.0
					(in percentage							
Agriculture	31.6	30.1	30.4	53.6	30.9	33.5	54.3	35.3	37.5	43.0	31.8	33.5
Industry&Comm.	25.8	9.3	12.8	1.1	14.2	12.7	0.0	1.7	1.5	13.0	9.2	9.8
Energy/Water	3.8	25.4	20.8	14.2	22.3	21.3	9.1	17.7	16.7	8.0	22.0	19.9
Transport,telec	2.7	5.4	4.9	3.1	3.6	3.5	2.5	4.3	4.1	2.8	4.4	4.1
Roads	8.1	19.6	17.2	8.2	21.7	20.2	6.4	31.2	28.3	7.8	23.7	21.3
Housing	6.7	3.0	3.8	2.8	1.9	2.0	6.1	2.6	3.0	5.4	2.4	2.9
Education	5.1	6.2	6.0	2.7	3.5	3.4	7.0	4.6	4.9	4.8	4.7	4.7
Health	1.1	0.9	1.0	4.1	2.0	2.2	1.7	2.6	2.5	2.1	1.8	1.8
Social sectors	15.2	0.0	3.2	10.2	0.0	1.2	12.8	0.0	1.5	13.2	0.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Burundian Authorities and mission estimates.

Table 6.1. BURUNDI: CONSOLIDATED POSITION OF THE FINANCIAL SYSTEM, 1977-86
(In Millions of Burundi Francs End of Period)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Net Foreign Assets (net)	7967	7149	7425	7456	4611	1330	2796	2175	3271	7826
Gross Assets	8953	8004	9624	9731	6481	3820	5318	4077	4738	10892
Liabilities 1/	986	855	2199	2275	1670	2490	2522	1902	1467	3066
Domestic Credit (net)	1173	6873	11242	13716	19917	22226	26537	28017	31733	32797
Treasury (net)	185	1508	3940	4470	7178	9344	12355	13680	15644	13710
BRB	-351	1156	3385	3690	6360	7637	11101	12892	14667	..
Fonds d'Egalisation (BRB)	-1727	-470	-1065	-547	-21	-94	-388	-516	-300	..
Credit to the Economy	2715	5835	8367	9793	12760	12976	14570	14853	16389	19087
of which										
BRB	381	1221	1383	1504	714	596	388	496	300	404
Commercial Banks	1507	3309	5106	5592	8415	7422	6949	7111	8374	9775
Cadebu	111	296	386	699	724	831	1080	1074	1074	1696
CAMOFI	--	--	116	318	690	1202	1419	1529	1495	1482
Resources = Uses	9140	14022	18667	21172	24528	23556	29333	30192	35004	40623
Money and Quasi-Money	6906	9696	11304	12681	15698	15378	16756	19954	23822	24774
Currency	3215	4527	4797	4972	7059	6419	7262	7498	7253	8008
Demand Deposits	2765	3676	5249	5705	4587	4482	5426	7013	10840	12329
Term Deposits	926	1493	1258	2004	4052	4477	4068	5443	5729	4437
Commercial Banks	398	514	430	499	1254	1453	2818	2227	2432	881
CADEBU	528	979	1292	1778	2028	1057	2414	2107	1890	2247
of which										
Compulsory savings	..	..	589	901	1304	1328	1728	2080	1856	1601
Voluntary savings	..	..	704	878	725	640	691	590	831	737
CAMOFI	--	--	192	566	769	1968	1032	1109	1408	1309
Import Deposits	546	683	530	549	750	382	804	766	910	1170
Long-term Foreign Liabilities	603	1341	2219	2651	2498	2340	2938	2854	2464	3692
BNDE	381	418	803	528	533	503	737	846	840	860
Trust Fund	222	923	1616	2123	1945	1838	2201	2008	1624	2700
SDR Allocation	718	773	1062	1303	1435	1363	1681	1681	1681	2075
Own Capital	1785	2785	4376	4566	4350	5590	6711	6722	7365	8364
Other Liabilities (net)	-1418	-1258	-824	-578	-203	-1497	443	-1785	-1238	548

1/ Short term liabilities.
../ Not available.
Source: Bank of the Republic of Burundi.

Table 6.2. BURUNDI: MONETARY SURVEY, 1980-86

(In Millions of Burundi Francs End of Period)

ITEM	1980	1981	1982	1983	1984	1985	1986
Net Foreign Assets	6706.5	3842.0	922.0	2008.1	1883.8	2786.8	6464.2
BRB	6854.5	3786.4	1020.4	2058.2	1851.8	2950.7	6472.8
Of which: gold 1/	62.3	62.3	59.1	73.0	73.0	73.0	91.3
reserve position in the fund	442.6	768.9	733.2	1155.8	1153.7	1126.5	1391.2
SDR Holdings	475.2	579.3	413.5	121.5	13.5	13.5	80.5
Deposit money banks	-148.0	55.9	-98.4	-50.1	32.0	-163.9	-8.6
Domestic Credit (net)	12891.2	18308.0	20499.8	24201.7	25519.8	28474.0	28357.2
Claims on Government (net) 2/	4015.2	7308.1	9540.7	12388.6	14090.2	15795.8	14712.0
BRB	3685.9	6360.1	8252.8	11095.1	13038.6	14642.7	13528.9
Deposit money banks	860.0	844.7	1287.9	1293.5	1051.6	1153.1	1183.1
CCP	69.4	103.3	65.6	139.2	149.1	247.8	253.9
Claims on the Economy	8275.9	11000.0	10959.1	11813.1	11429.6	12678.2	13645.2
BRB	1635.6	868.9	1103.2	1229.1	830.7	583.9	534.1
Deposit money banks	6640.3	10131.1	9855.9	10584.0	10598.9	12094.3	13111.1
Of which: coffee	2942.9	4723.7	2732.8	3997.8	2331.0	3309.1	3213.8
Money and Quasi-Money (M1+M2)	12592.4	15754.4	15591.5	19708.7	20448.8	24189.1	26625.8
Money Supply (M1) 3/	10487.6	12242.7	11477.4	13732.3	14764.0	18198.6	21980.9
Currency in circulation	4971.5	7059.2	6419.1	7262.4	7497.8	7253.5	8008.4
Demand Deposits	5516.1	5183.5	5058.3	6469.9	7266.2	10945.1	13972.5
Quasi-Money (M2) 4/	2104.8	3511.7	4114.1	5976.4	5684.8	5990.5	4644.9
Coffee Equalization Fund (net)	546.9	21.3	93.5	338.1	509.6	300.0	1100.1
Medium- and Long-term liabilities 5/	2122.9	1945.0	1837.8	2200.6	2007.4	1624.3	1409.8
SDR Allocations	1303.0	1435.0	1363.1	1680.6	1680.6	1680.6	2075.1
Other Liabilities (net)	3032.5	2994.7	2535.9	2281.8	2757.2	3466.8	3520.6
Memorandum Items:							
Private sector deposits at the CCP	68.8	102.7	65.0	139.2	148.4	247.1	253.2
Credit to Public enterprises	1357.4	573.7	457.9	4353.6	4150.3	5128.1	7219.3

Source: Data provided by the Burundi authorities.

1/ Differ from BRB data due to valuation of holdings at SDR 35 per ounce. instead of valuation at market price.
2/ Include private sector deposits at the CCP.
3/ Includes counterpart of private sector's demand deposits at CCP.
4/ Includes counterpart of private sector's time deposits at CCP.
5/ Includes Trust Fund loans.

Table 6.3. BURUNDI: SUMMARY ACCOUNTS OF THE BANK OF THE REPUBLIC OF BURUNDI 1977-86
(In Millions of Burundi Francs End of Period)

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
A. Foreign Assets (net)	8039	7057	7027	7706	4638	1578	2736	2286	3503	7852
Gross Foreign Assets	8632	7502	8897	9419	6135	3365	3976	3174	3958	9503
Foreign Liabilities	593	445	1870	1713	1497	1787	1240	888	455	1651
B. Domestic Credit	-1695	1908	3683	4629	7457	8749	11292	13024	14810	12112
- Credit to Gov. (net)	-350	1156	3365	3673	6354	8250	11094	13038	14638	12873
Advances Treasury	1856	2881	5150	5795	7953	9909	12354	14598	17115	16412
Ordinary	652	639	1799	1580	2993	1459	3927	674	2353	676
Special	1204	2199	2962	3966	4876	6336	7331	9203	10890	12661
Particular	--	43	389	249	84	469	--	237	725	708
Exceptional	--	--	--	--	--	1645	1096	4474	3147	2367
Adv. Other Gov. Agencie	25	28	20	12	6	8	1	--	--	--
Deposits	2206	1725	1785	2122	1599	1659	1260	1560	2477	3539
Central Government	2061	1563	1734	2008	1501	1589	1075	1458	2371	2670
Other Gov. Agencies	145	162	51	114	98	70	185	92	106	869
- Deposits of Coffee Stabilization Fund	-1726	-470	-1065	-547	-21	-94	-338	-510	-300	-1190
- Credit to the Economy	311	1124	1253	1369	990	458	388	338	300	279
- Other	70	98	130	134	134	135	148	158	172	150
C. Claims on Commercial Banks	--	--	1141	456	2975	1573	640	447	1	165
CAMOFI	--	--	25	50	50	1522	585	50	50	50
D. Claims on Other Fin. Inst.	108	306	180	194	211	1032	693	335	112	105
E. Other Assets (net)	866	1032	399	209	249	1439	1710	--	--	--
ASSETS = LIABILITIES	7318	10303	12430	13194	15530	14371	17071	--	--	--
F. Reserve Money	4311	5102	4938	5080	7138	6555	7436	7669	7338	8137
Currency outside banks	3225	4542	4876	5001	7073	6496	7364	7594	7338	8137
Currency held by commercial banks	21	40	62	79	65	59	72	75	--	--
Banks' deposits	1065	520	--	--	--	--	--	--	--	--
G. Demand Deposits	169	815	1307	1034	1135	557	1262	2013	4624	4022
Public Enterprises	11	535	365	472	547	350	474	1198	1875	2194
Finance Institutions	108	215	774	355	452	157	788	817	2749	1828
Other	50	65	168	207	136	54	22	--	--	--
H. Prior Import Deposits	546	683	530	549	750	382	804	786	910	1109
I. SDR Allocations	718	773	1062	1303	1435	1363	1681	1681	1681	2075
J. Trust Fund	222	923	1616	2123	1945	1838	2200	2007	1624	1410
L. Own Capital	1186	2094	3092	3108	2497	2884	2918	2935	2768	3221
M. Other Liabilities (net)	-24	-53	-115	--	220	44	-36	--	--	--

Source: Bank of the Republic of Burundi.

Table 8.4. BURUNDI: DISTRIBUTION OF CREDIT TO THE ECONOMY BY TERM STRUCTURE, 1981-86
(In Millions of Burundi Francs)

ITEM	1981	1982	1983	1984	1985	1986
Short-term	8358	7488	8099	8178	9376	11668
of which: Trade	7030	5034	5516	5467	6128	7847
(coffee export)	(4724)	(3125)	(3998)	(3661)	(4672)	(4789)
Agriculture	101	134	111	207	214	198
Industry	540	697	719	768	1060	1747
Medium-term	1570	2017	2233	2130	2209	2542
of which: Industry	533	583	804	651	715	713
Civil engineering	424	642	703	679	649	777
Transport and transit	131	61	94	43	61	156
Trade	236	226	246	244	336	383
Agriculture	21	132	128	127	117	119
Long-term	1958	2716	3364	3459	3616	3607
of which: Civil engineering	1386	1941	2294	2373	2479	2475
Other services	310	284	284	256	279	237
Trade	0.3	0.3	0.3	12	63	61.80
Agriculture	55	55	81	94	138	193
Total	11886	12221	13696	13767	15201	17817
of which: Rediscounted credit	3094	2513	1219	678	8	165
(in percent)	(26.0)	(20.6)	(8.9)	(4.9)	(0.1)	(0.9)
ALLOCATION OF CREDIT TO PUBLIC ENTERPRISES						
Short-term	--	4111	4655	4260	5204	5910
of which: Export	--	3255	3975	3641	4574	4853
Import	--	217	89	53	137	180
For liquidity purposes	--	640	592	566	493	878
On Government procurements	--	--	--	--	--	--
Long- and medium-term	--	2076	1941	1934	1969	1764
Total	--	6187	6597	6195	7173	7674

Source: Data provided by Burundian Authorities.

Table 6.5. BURUNDI: CREDITS GRANTED BY THE NATIONAL DEVELOPMENT BANK, 1977-86

(In Millions of Burundi Francs)

ITEM	1977-1982 Average	1983	1984	1985	1986	Total	Number of Credits
Rural	1687.1	856.4	736.3	692.9	623.30	4596.0	58
Agriculture, Livestock	584.7	14.2	263.4	116.7	63.60	1042.6	1363
Industry, Handicrafts & Commerce	1460.3	75.2	178.8	211.6	346.70	2272.6	247
Tourism	385.0	--	--	2.5	6.20	393.7	7
Real Estate	1085.3	25.2	--	144.3	240.20	1495.0	515
Household	364.4	55.3	38.0	47.8	169.40	674.9	14800
Other	17.1	--	--	1.3	0.00	18.4	53
Total	5583.9	1026.3	1216.5	1217.1	1449.4	10493.2	17043

Source: Rapport Annuel, National Development Bank.

Table 6.6. BURUNDI: MAXIMUM INTEREST RATES FOR COMMERCIAL BANK DEPOSITS, 1981-87

ITEM	October 1, 1981 to August 1, 1986	August 1,1986 to May 1, 1987	Since May 1, 1987
Demand Deposits	--	3.0	2.0
Savings Deposits 1/			
Up to Fbu 500,000	7.0	10.0	7.0
Over Fbu 500,000	6.0	9.0	7.0
Term Deposits & Savings Certificates			
1 to 6 months	4.5	8.0	3.0
6 to 12 months	6.0	10.0	5.0
12 to 18 months	7.0	12.0	> 7.0
Over 18 months	8.5	free	> 7.0
Advance notice deposits			
1 month	5.0	8.0	3.25
3 months	6.0	9.0	4.25
6 months	7.0	11.0	5.25
12 months	8.0	13.0	7.25
Over 12 months	free	free	> 7.0

1/ Available only to individuals

Source: Bank of the Republic of Burundi.

Table 6.7. BURUNDI: LENDING INTEREST RATES, 1981-87
(In percent per annum)

ITEM	Lending Rates			Lending Rates (Rediscountable Cr.) 1/			Central Bank Discount Rate		
	Oct. 1,1981 to July 31,1986	Aug. 1,1986 to May 1,1987	Since May 1,1987	Oct. 1,1981 to July 31,1986	Aug. 1,1986 to May 1,1987	Since May 1,1987	Oct. 1,1981 to July 31,1986	Aug. 1,1986 to May 1,1987	Since May 1,1987
Short-term loans									
- Import Credits									
Equipment & food	11.0	--	11.0	7.0	9.0	9.0	5.5	8.0	7.5
Other manufacturing	14.0	14.0	13.0	10.0	12.0	11.0	8.5	11.0	9.5
Luxury product	--	15.0	13.0	--	--	11.0	--	--	9.5
- Export Credits	--	--	--	6.0	8.0	6.0	4.8	7.0	6.0
- Credits Tresorerie									
Agriculture	11.0	13.0	10.0	6.5	9.0	8.0	4.5	7.0	6.5
Industry	15.0	12.0	10.0	10.0	9.0	8.0	6.5	7.0	6.5
Other	15.0	15.0	13.0	10.0	15.0	11.0	8.0	14.0	9.5
Medium-term loans									
Agriculture	11.0	14.0	13.0	7.0	10.0	10.0	5.0	8.0	7.5
Industry	12.0	12.0	13.0	9.0	10.0	10.0	7.0	8.0	7.5
Housing	13.0	17.0	14.0	11.0	12.0	11.0	9.0	11.0	8.5
Other	--	20.0	15.0	--	16.0	12.0	--	15.0	9.5
Long-term loans									
Agriculture	--	16.0	15.0	9.5	13.0	12.0	6.0	11.0	8.5
Industry	--	15.0	15.0	11.0	12.0	12.0	7.5	10.0	8.5
Housing	--	19.0	15.0	11.0	14.0	12.0	7.5	12.0	8.5
Other	--	20.0	16.0	--	17.0	13.0	--	16.0	9.5

1/ Rates on non-rediscountable credits are set on a case by case basis by the Central Bank, having 15% as the maximun limit.

Source: Bank of the Republic of Burundi.

Table 6.8. BURUNDI: CONSUMER PRICE INDEX OF BUJUMBURA HOUSEHOLDS, 1980-86
(1980 = 100)

ITEM	weights pondera-tions	1981	1982	1983	1984	1985	1986
Foodstuffs	55.3	103.3	116.0	125.4	142.6	153.7	142.7
Clothing	13.2	120.8	124.1	128.3	137.3	125.2	140.8
Rents and household goods	16.7	122.4	132.5	131.6	146.0	149.0	144.1
Transport, culture and entertainment	10.8	119.9	117.9	154.1	200.7	200.7	270.2
Health care and others	4.0	126.7	123.4	126.5	136.4	145.7	150.4
General Price Index	100.0	113.3	119.8	129.8	148.5	154.0	156.8
Average Percentage Change		13.3	5.7	8.3	14.4	3.7	1.8
Memorandum items:			**Annual changes in percent**				
Agricultural producer price	33.2	-10.2	0.9	9.5	30.8	5.4	2.0 1/
Private consumption	28.2	3.0	6.9	8.9	15.0	5.6	3.8 1/
Export prices	6.5	-31.9	8.4	8.1	30.7	8.2	34.2 1/
Import prices	23.2	3.0	5.4	-6.5	15.0	4.8	2.0 1/
GDP deflator	19.0	-6.8	6.6	6.1	17.0	5.1	4.4 1/

1/ Preliminary

Source: Data provided by Burundian Authorities.

TABLE 7.1 BURUNDI: AGRICULTURAL INDICATORS BY NATURAL REGION
(1982 unless otherwise noted)

Natural Region	1 Population Density (pop/km2) 1979	2 Average Farm Size (ares)	3 Land Utilisation (%)	4 Intensi-fication rate	5 Cattle/ha	6 Small Ruminant/ha	7 Percentage of Farmers who can increase Pdn by Extending area	7 Increasing yields	8 Projected Population Growth Rate 1982-87
Bugesera	144	116	72	133	0.11	0.45	46.0	94.0	2.23
Buragane	81	99	42	156	0.14	0.26	47.8	98.2	3.37
Bututsi	125	64	98	150	0.82	0.41	27.6	97.1	2.55
Buyenzi	308	70	90	159	0.19	0.97	31.7	93.3	2.26
Buyogoma	81	100	56	151	0.24	0.26	56.7	79.5	2.03
Bweru	166	93	76	148	0.13	0.54	31.5	94.7	2.17
Imbo **	120	127	92	130	0.33	0.26	100.0 *		3.02
Kirimiro	259	65	94	159	0.29	0.80	36.9	93.9	2.58
Mosso	52	80	33	158	0.02	0.17	92.5	73.3	2.10
Mugamba	147	64	93	131	0.30	0.47	100.0 *		2.75
Mumirwa	185	77	70	150	0.20	0.62	48.2	78.4	2.74

*/ In these early surveys, the question posed was simply - can you increase production?
In later surveys, it was decided to distinguish between the two methods of increasing production.
**/ Excluding Bujumbura.

Sources:

Col.1. Martens, A. "Contribution a la connaissance des Regions Naturelles du Burundi: Superficie et population par colline de Recensement", Bujumbura: ISABU, octobre 1981.
Col. 2. Ministry of Agriculture and Livestock.
Col. 3,4,8. IV Plan Quinquennal de Developpement
Col. 5,6. Burundi: Etude Sectorielle-Elevage, UNDP, January 1986 (PNUD BDI/85/071)
Col.7. Bergen, D.W. "Perpectives de la Specialisation Regionale comme Strategie de Developpement", (surveys conducted between 1982 and 1985 for different regions), Bujumbura: ISABU, 1986.

TABLE 7.2. BURUNDI: LABOR PRODUCTIVITY BY AGRICULTURAL PRODUCTS, 1985

Crops	Average Yield (kg/ha) (1)	Price 1985 Fbu/kg (2)	Income ('000 Fbu/ ha) (3)=(1x2)	Work days (4)	Daily Income (5)=(3/4)
FOODCROPS					
Cassava	5370	21.1	134407	342	393.0
Sweet potatoes	6240	10.1	62924	372	142.3
Irish potatoes	5760	18.9	108675	435	249.8
Maize	800	41.9	33520	232	144.5
Sorghum	780	33.4	26062	177	147.2
Wheat	410	40.9	16769	274	61.2
Rice(paddy)	1410	30.0	42300	590	71.7
Beans	800	46.5	37203	210	177.1
Peas	650	32.6	45430	210	216.3
Groundnuts	790	74.5	58855	240	245.2
Bananas	11240	11.0	123640	253	488.7
Eleusine	460	48.2	21690	190	114.2
CASHCROPS					
Coffee	240	160	38400	500	76.8
Dried Tea	731	17	12427	528	23.6
Cotton	1185	35	41475	255	162.6

Source: Ministry of Planning.

TABLE 7.3. BURUNDI: FOODCROP PRODUCTION, 1979-85
(thousands of metric tons)

ITEM	1979	1980	1981	1982	1983	1984	1985
Roots and Tubers	988.8	1030.0	1090.0	1073.9	1088.0	1174.0	1218.0
Cassava	385.2	400.0	451.0	444.0	444.0	511.0	504.0
Yam and Cocoyam	102.5	100.0	106.0	104.0	106.0	109.0	119.0
Sweet potatoes	467.7	500.0	497.0	490.0	502.0	517.0	555.0
Irish potatoes	33.5	30.0	36.0	35.0	36.0	37.0	40.0
Cereals	169.4	208.0	216.0	211.0	216.0	214.0	244.0
Maize	136.4	140.0	148.0	144.0	148.0	139.0	157.0
Sorghum	20.4	52.0	53.0	52.0	53.0	49.0	59.0
Wheat	4.6	6.0	7.0	6.0	6.0	8.0	8.0
Rice(paddy)	9.0	10.0	10.0	9.0	9.0	18.0	20.0
Legumes	313.9	329.0	339.0	333.0	326.0	273.0	349.0
Beans	273.7	290.0	294.0	290.0	280.0	241.0	301.0
Peas	28.9	26.0	30.0	29.0	30.0	18.0	32.0
Groundnuts	8.3	10.0	12.0	11.0	12.0	12.0	13.0
Soja	3.0	3.0	3.0	3.0	3.0	2.0	3.0
Fruits and Vegetables	1308.2	1251.0	1409.0	1386.0	1331.0	1371.0	1574.0
Beer Bananas	744.9	700.0	782.0	770.0	732.0	756.0	874.0
Edible bananas	439.9	400.0	457.0	450.0	428.0	441.0	510.0
Sugar cane	5.0	5.0	6.0	6.0	6.0	6.0	7.0
Palm oil	11.9	12.0	12.0	12.0	12.0	12.0	13.0
Other fruits & vegetab	106.5	134.0	152.0	148.0	153.0	156.0	170.0
Total	2780.4	2818.0	3054.0	3003.0	2980.0	3032.0	3385.0

Source: Ministry of Planning.

TABLE 7.4. BURUNDI: AVERAGE BUJUMBURA FOODCROP PRICES BY CROP YEAR, 1980-85

(FBu/kg)

ITEM	1980	1981	1982	1983	1984	1985
Roots and Tubers						
Cassava	10.9	8.7	7.2	7.9	16.8	21.1
Yam and Cocoyam	10.0	10.0	8.6	10.0	14.8	14.2
Sweet potatoes	9.3	6.6	5.3	6.8	10.7	10.1
Irish potatoes	15.8	15.8	16.9	18.6	19.0	18.9
Cereals						
Maize	25.0	25.0	25.7	28.9	40.0	41.9
Sorghum	20.0	20.0	20.3	19.8	24.9	33.4
Wheat	30.0	30.0	30.0	30.0	35.9	40.9
Rice(paddy)	25.0	25.0	25.0	25.0	30.0	30.0
Legumes						
Beans	28.3	23.2	29.5	30.3	42.5	46.5
Peas	49.0	49.1	58.0	59.6	68.8	82.6
Groundnuts	45.0	45.0	56.6	60.3	49.2	74.5
Fruits and Vegetables						
Beer Bananas	10.5	10.0	10.0	11.0	11.0	11.0
Edible bananas	8.4	8.0	7.8	8.4	10.2	10.4
Palm fruit	9.5	10.0	9.7	10.2	11.3	15.5

Source: Ministry of Planning.

Table 7.6 IMPORTS OF FOOD PRODUCTS, 1977-86

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
					Value in FBu million					
Wheat and rye	-	-	15.7	52.7	36.5	129.7	226.4	121.8	702.7	264.0
Wheat flour	251.1	365.7	411.8	684.5	473.8	393.8	306.0	283.5	184.4	116.8
Corn flour	9.9	5.1	10.3	22.2	12.9	17.4	5.0	0.3	..	..
Noodles	24.2	69.1	70.3	136.2	152.3	284.3	87.0	238.0	166.4	34.2
Cereals	2.2	6.0	6.7	4.8	3.3	3.8	4.8	19.0	3.1	4.4
Corn								0.2	121.4	..
Rice			1.2	3.8	4.0	14.5	56.7	93.9	3.7	131.8
Sugar	129.2	142.6	360.6	255.6	507.3	572.0	260.5	437.8	479.7	492.3
Vegetables	7.5	15.0	43.4	10.8	11.6	8.8	15.4	10.1	51.7	20.0
Fruits	1.6	3.5	6.2	3.8	4.4	8.6	7.0	2.7	1.8	2.6
Vegetable oil	60	86.2	103.1	189.4	105.6	130.4	77.2	191.1	221.0	57.8
Meat	13.1	11.8	13.8	6.6	3.1	1.5	0.9	3.0	2.9	1.3
Fish	22.8	5.0	19.1	64.0	54.6	54.6	52.8	74.4	32.9	2.7
prepared meat,fish	42.8	62.7	46.1	76.0	86.6	62.7	74.0	89.7	195.6	49.2
Dairy products	107.9	131.0	247.4	226.3	220.9	380.8	262.2	445.5	440.5	335.9
Oil flour	6.7	4.5	11.9	9.2						
suifs bruit,fondus	18.1	16.1	38.5	108.7	57.5	197.0	142.4	115.5	186.1	220.5
Salt	143	133.0	156.9	224.1	268.3	356.9	207.0	209.3	180.3	330.1
Sub-total	840.1	1035.1	1663.8	1968.5	2016.6	2616.7	1785.3	2335.8	2984.2	2063.6
Total (including raw materials)	1642	1843	2835	2893	2881	3431	2505	3234	3814	0
					Volume in metric tons					
Wheat rye			338	1017	726	2130	6842	3073	14838	6823
Wheat flour	6084	9568	10605	12913	10587	8804	7727	5504	3341	3403
Corn flour	189	38	312	477	168	273	79	8		
Noodles	790	1296	1757	2999	2134	4242	1265	3537	2025	599
Cereals	1	3	6	2	2	7	8	5	1	2
sub-total	7064	10964	13018	17408	13609	15456	15921	12127	20205	10827
Corn								5	3654	..
Rice			57	30	42	183	1508	2851	9	1561
Sugar	3145	4067	8320	4246	7080	8333	5637	10004	12458	17013
Vegetables	451	634	1826	881	899	345	257	167	485	585
Fruits	174	525	1178	568	727	1644	1229	121	6	7
Vegetable oil	393	972	949	955	905	1103	588	1259	1338	321
Meat	58	40	25	19	8	4	4	5	3	1
Fish	146	38	108	306	370	422	461	428	194	4
Dairy products	562	668	1757	1638	1493	2499	1488	3326	2632	1467
Oil flour	107	88	1538	130						
suifs bruit,fondus	297	223	501	1191	1197	2515	2037	1401	2064	2199
Salt	12592	11385	13167	14369	12487	18524	11089	9181	9931	19166
Sub-total	32053	40068	56525	69155	52428	66484	56120	63002	73184	57155

Sources: Government and mission estimates.

Table 7.6 BURUNDI: COFFEE PRODUCTION, 1977/78 -1986/87
(in metric tons)

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Total	17030	22921	27760	18894	43824	20311	36020	27005	32494	31299
Arabica	15174	21146	25928	17200	42009	18495	34528	25272	31295	30292
FWAAA								165	1140	366
FWAA	75		225		60	196	135	722	630	2046
FWA	259	450	1015	959	2412	1530	2515	765	1285	1762
OCIRU 2								4545	9359	11646
OCIRU 2A								2726		
OCIRU 3A	7333	9045	12473	7211	19275	7556	14760	10066	8687	6906
OCIRU 3B	6107	10088	10098	7630	17746	7692	13943	4735	7905	4834
OCIRU 4	709	824	938	1193	1621	1191	2731	1146	1511	2334
OCIRU 5	453	542	813	71	742	298	444	368	734	3[illegible]
HTM +B	16	32	46	23	91	32		34	44	77
Roasted	222	165	320	113	62					
Robusta	1856	1775	1862	1694	1815	1816	1492	1733	1199	1007
Washed	840	876	870	1065	1022	780	595	589	448	645
Natural	1016	899	992	629	793	1036	897	1144	751	362

Source: Government and mission estimates.

Table 7.7 BURUNDI: TEA PRODUCTION, EXPORTS AND PRODUCTION COSTS, 1979-86

	1979	1980	1981	1982	1983	1984	1985	1986
Cultivated area (ha)		4715	4845	4034	4578	4921	4921	5087
Smallholders		2972	3102	2582	2930	3178	3178	3287
Plantations		1743	1743	1452	1648	1743	1743	1800
Production green tea (tons)	7697	6893	10660	10461	10682	15313	19066	16753
Plantations	5358	4266	6769	5527	5618	8458	9016	7435
Teza	2375	2061	3569	2169	2509	3763	3397	3112
Rwegura	2631	1767	2891	2781	2457	4012	4562	3262
Tora	352	438	309	577	652	683	1057	1061
Smallholders	2339	2627	3891	4934	5064	6855	10050	9318
Production per hectare (Kg/hectare)		1462	2200	2593	2333	3112	3874	3293
Dry leaves (tons)	1612	1454	2271	2178	2334	3445	4145	3597
Teza	653	626	1174	1318	1010	1303	1320	1193
Rwegura	641	468	817	768	752	1226	1290	823
Tora	318	360	280	92	572	686	754	683
Ijenda						230	781	898
Green leaves/dry tea	4.8	4.7	4.7	4.8	4.6	4.4	4.6	4.7
Exports (tons)	1548	1267	2237	2253	2179	3344	4116	3449
Producer price								
Planteurs		10	10	10	10	15	18	18
Smallholders (Villageois)		4	4	4	5	5	5	5
Ex-factory price (FBU/kg dry leaves)								
Dry leaves			21.9	36.3	26.3	37.6	59.7	70.5
Processing			47.6	22.4	26.4	26.4	37.3	36.7
General expenses			38.1	27.3	47.4	50.1	50.7	72.3
Amortization			18.9	17.3	33.2	25.0	26.6	31.3
sub-total			126.5	103.3	133.3	139.1	174.3	210.8
Marketing expenses			19	10.8	40.9	44.5	46.7	49.9
Governmnent levies							11.5	-
Total			145.5	114.1	174.2	183.6	232.5	260.7
Average export price	119.4	137.7	94.7	117.4	108.4	281.1	175.0	148.4

Source: Government and mission estimates.

Table 7.8. BURUNDI: COTTON PRODUCTION , EXPORTS AND PROCESSING COSTS, 1980-86

	1980	1981	1982	1983	1984	1985	1986
Production							
Number of producers	15742	14981	14008	13230	14807	15511	15666
Area Planted	6491	6716	6150	4850	6561	6595	6664
North	..	3498	3407	3383	2073	2143	2019
Center	..	3218	2045	1614	1320	1290	1273
South	..	..	698	680	3031	2862	2857
Extension (Mosso and Nyanza-lac)	..	..	..	20	72	301	514
Production seed (tons)	5615	6639	5701	4738	6538	7155	7914
Production per hectare (Kg/hectare)	865.0	988.5	927.0	976.9	996.2	1084.9	1187.6
Cotton fiber (tons)	2020	2341	2077	1696	2325	2583	3115
Ginning Coefficient %	36.0	35.3	36.4	35.8	35.6	36.1	39.4
1st quality (89% seed)	1811	2260	1977	1641	2293	2532	3063
2nd quality (11% seed)	209	81	100	55	32	51	52
Local consumption (tons)	450	500	677	733	782	2583	603
Price (Fbu/kg)	..	142.5	112.1	155.1	199.3	170.5	158.0
Exports (tons)1/	737	781	2083	1923	404	225	179
Exports (Fbu mn)1/	101	113	223	249	82.0	43.1	22.2
Average export price	137.0	144.7	108.1	129.5	203.0	191.8	124.0
Price (FBu/kg)							
Producer price (grain)	..	27.8	27.8	27.8	32.3	32.3	32.3
1st quality	..	30.0	30.0	30.0	35.0	35.0	35.0
2nd quality	..	10.0	10.0	10.0	10.0	10.0	10.0
Producer price (fibre)		79.8					
Production cost (seed)	44.9	47.3	49.2	51.3	57.2	..	..
(fiber equivalent)	..	134.1	135.0	143.3	143.5	135.7	157.8

Source: Government and mission estimates.

TABLE 8.1. BURUNDI: MANUFACTURING PRODUCTION 1981-86

ITEM	UNIT	Installed capacity	1981	1982	1983	1984	1985	1986
Primus beer	Hl	1,150,000	686,913	683,913	644,304	798,808	803,498	835,125
Amstel beer	Hl	--	--	--	--	--	14,117	50,840
Carbonated beverages	Hl	300,000	116,112	123,779	140,572	144,761	126,868	134,706
Bread	1000 piece	. .	39,867	45,194	51,774	41,639	46,813	34,350
Flour	Tons	15,000	256	2,607	4,831	4,421	7,933	5,088
Milk and dairy products	Liters	...	1,932,000	1,626,000	1,677,178	1,734,014	1,276,499	1,530,765
Shoes	Pairs	4,400/day	460,144	369,913	300,910	236,804	372,841	367,820
Blankets	Pieces	500,000	380,990	345,342	358,784	339,681	364,195	402,404
Oxygen	m3	132,480	49,562	55,497	50,333	33,050	31,882	33,050
Acetylen	Kg	19,200	10,498	9,478	11,632	7,823	6,249	5,476
Paint	Tons	2,400	589	734	670	560	645	612
Fibrocement products	Tons	18,420	3,460	3,671	3,748	3,390	3,136	3,822
Insecticides	Tons	3,000	1,851	2,085	2,999	1,399	2,181	2,783
Mattresses	Pieces	2,700/day	5,600	24,600	11,981	20,993	22,239	52,780
Cigarettes 1/	Cartons	200/day	25,992	23,500	29,395	33,420	29,266	28,836
Fabrics	M2	9,000,000	2,059,859	4,411,862	5,923,407	6,496,632	9,922,201	9,773,219
Matches 2/	Cartons	30,000	9,202	11,874	10,221	14,540	17,948	31,423
Cement	Tons	20,000	820	260	213	44	--	--
Soap	Tons	3,000	2,829	2,792	2,830	2,597	2,829	3,058
Metal sheets	Tons	30/day	3,067	5,175	4,880	3,230	1,800	1,290
Cottonseed oil 3/	Liters	--	347,274	365,000	277,299	229,853	346,133	601,742
Toilet paper	Rolls	...	...	...	122,222	...	1,503,156	739,736
Polyethylene bags	Kg	300,000	137,814	168,468	192,580	163,663	178,536	183,517
Bottles caps	Millions P	...	--	--	32	71	182	269
Bottles	Tons	10,000	--	--	--	2,426	4,865	2,583
Plastic cases	Pieces	420,000	--	--	--	--	235,765	192,698
PVC Tubes	kg	-	--	123,212	176,277	138,184	161,299	154,845
Prints	kg	--		--	--	1,182,000	1,000,046	1,102,003

1/ Carton of 500 packs of cigarettes.
2/ Carton of 1,500 boxes.
3/ Installed capacity: 20,000 tons of cottonseed per year.

Source: Banque de la Republique du Burundi

Table 8.2. Swaziland: Selected Manufacturing Production Indices, 1982-1986

(1980 = 100)

ITEM	1982	1983	1984	1985	1986 Prel	Current Capacity Utilization (%) 1/
Primus beer	93.5	97.6	120.9	121.6	127.0	83.9
Amstel beer 2/	--	--	--	100.0	360.1	33.9
Carbonated beverages	111.0	126.1	129.8	113.8	120.8	81.6
Shoes	88.6	68.4	63.8	84.7	83.6	33.4
Blankets	92.5	96.1	81.0	97.6	107.8	80.5
Oxygen	122.7	111.3	73.1	70.5	65.2	24.9
Acetylen	83.0	103.0	69.2	55.3	48.5	28.5
Paint	138.5	126.4	107.2	121.7	115.5	25.5
Fibrocement products	99.6	91.6	82.9	76.7	93.5	19.1
Insecticides	195.2	194.5	90.7	141.4	180.0	92.8
Cigarettes	191.1	239.0	271.8	238.0	234.5	48.1
Fabrics	167.1	224.4	246.1	375.9	370.2	90.5
Matches	124.9	110.3	158.0	195.0	341.4	31.4
Soap	124.9	110.3	101.3	110.2	119.1	102.8
Metal sheets	243.9	229.2	151.8	84.6	60.6	17.2
Cottonseed oil	277.4	218.0	174.7	263.0	455.5	60.2
Bottles 3/	-	100.0	95.7	191.8	101.8	25.8
Plastic cases 2/	--	--	--	100.0	91.6	60.0
Polyethylene bags	205.3	240.8	207.0	220.1	226.2	61.2
Bottle Caps 3/	--	100.0	229.7	586.5	866.5	53.7

Sources: Data provided by the Bureau of Statistics; and staff estimates.

1/ Ratio of 1986 production to current installed capacity.
2/ 1985=100, as production started in 1985.
3/ 1983=100, as production started in 1983.

Table 9.1. BURUNDI: EDUCATION SECTOR INDICATORS, 1977/78-86/88

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Enrollments									
Primary	142763	146018	160495	169107	180299	252973	296822	340822	385788
Secondary	14886	15639	16410	16808	16532	17492	19364	20573	22549
General	7398	7730	7967	7972	7865	7780	8848	9765	11308
Technical	1457	1591	1918	2035	2184	2548	2979	3026	3209
Teacher Training	6031	6318	6525	6801	6483	7164	7537	7782	8032
Higher	1208	1702	1763	1793	1900	1828	2479	2625	2783
Teachers									
Primary	4385	4572	4623	4822	5570	5911	6164	6714	6768
Secondary	791	865	1058	1172	1144	1116	1362	1385	1500
General	397	405	501	521	510	438	513	595	669
Technical	139	131	179	239	214	254	396	325	373
Teacher Training	255	329	378	412	420	424	453	465	458
Higher	--	--	--	--	--	--	372	447	452
Classrooms									
Primary	3831	3927	4030	4142	4351	4992	5312	5632	6003
Secondary	453	486	492	509	521	551	579	614	660
General	219	232	227	239	238	234	243	278	321
Technical	71	80	85	84	91	122	134	133	136
Teacher Training	163	174	180	186	192	195	202	203	203
Higher	--	--	--	--	--	--	--	--	--
Current Expenditure a/	1978	1979	1980	1981	1982	1983	1984	1985	1986
Primary	691.4	757.8	866.9	928.1	1001.1	1166.3	1206.7	1440.4	1685.3
Secondary	--	537.6	659	704.8	779.8	837.8	914.8	1046.4	1122.9
General and teachers training	708.3	445.9	555.6	588.7	633.1	640.5	671.2	763.7	806.8
Technical	--	91.7	103.4	116.1	146.7	197.3	243.6	282.7	316.1
Higher	245.5	288.4	456.9	486.9	402.4	521.9	531.2	615.3	832.4

Source: Ministere de l'Education Nationale.
a/ FBu millions.
b/ Preliminary.
c/ Including expenditures on the University Hospital.

TABLE 9.2. BURUNDI: RATIOS OF TEACHERS, CLASSROOMS AND EXPENDITURES PER STUDENT, 1977/78-85/86

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Students/teacher									
Primary	32.6	31.9	34.7	36.1	32.4	42.8	48.2	50.8	57.0
Secondary	18.8	18.1	15.5	14.3	14.5	15.7	14.2	14.9	15.0
General	18.6	19.1	15.9	15.3	15.4	17.8	17.2	16.4	16.9
Technical	10.5	12.1	10.7	8.5	10.2	10.0	7.5	9.3	8.6
Teacher Training	23.7	19.2	17.3	16.5	15.4	16.9	16.6	16.7	17.5
Higher	--	--	--	--	--	--	6.7	5.9	6.2
Students/classroom									
Primary	37.3	37.2	39.8	40.8	41.4	50.7	55.9	60.5	64.3
Secondary	32.9	32.2	33.4	33.0	31.7	31.7	33.4	33.5	34.2
General	33.8	33.3	35.1	33.4	33.0	33.2	36.4	35.1	35.2
Technical	20.5	19.9	22.6	24.2	24.0	20.9	22.2	22.8	23.6
Teacher Training	37.0	36.3	36.3	36.6	33.8	36.7	37.3	38.3	39.6
Higher	--	--	--	--	--	--	--	--	--
Expenditures/student (Buf, current prices)									
Primary	4843	5190	5401	5488	5552	4610	4065	4226	4368
Secondary	--	34378	40158	41932	47169	47898	47242	50863	49798
General and Teachers training	95742	57684	69738	73846	80496	82326	75859	78208	71348
Technical	--	57637	53910	57052	67170	77433	81772	93424	98504
Higher	203228	169448	259161	271556	211789	285503	214280	234400	299102

Source: Table 9.1.

TABLE 9.3. BURUNDI: STRUCTURE OF ENROLMENTS, TEACHERS, CLASSROOMS PER LEVEL OF EDUCATION, 1977/78-85/86
(in percentage)

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Enrollments									
Primary	89.9	89.4	89.6	90.1	90.2	92.9	93.1	**93.6**	**93.8**
Secondary	9.4	9.8	9.2	9.0	8.3	6.4	6.1	**5.7**	**5.5**
General	4.7	4.7	4.6	4.2	4.0	2.9	2.8	**2.7**	**2.8**
Technical	0.9	1.0	1.1	1.1	1.1	0.9	0.9	**0.8**	**0.8**
Teacher Training	3.8	3.9	3.7	3.6	3.3	2.6	2.4	**2.1**	**2.0**
Higher	0.8	1.0	1.2	1.0	1.5	0.7	0.8	**0.7**	**0.7**
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	**100.0**
Teachers									
Primary	84.7	84.1	81.1	80.4	83.0	84.1	81.9	**82.9**	**81.9**
Secondary	15.3	15.9	18.7	19.6	17.0	15.9	18.1	**17.1**	**18.1**
General	7.7	7.4	8.9	8.7	7.8	6.2	6.8	**7.3**	**8.1**
Technical	2.7	2.4	3.9	4.0	3.2	3.6	5.3	**4.0**	**4.5**
Teacher Training	4.9	6.1	5.7	6.9	6.3	6.0	6.0	**5.7**	**5.5**
Higher									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	**100.0**
Classrooms									
Primary	89.4	89.0	89.1	89.1	89.3	90.1	90.2	**90.2**	**90.1**
Secondary	10.6	11.0	10.9	10.9	10.7	9.9	9.8	**9.8**	**9.9**
General	5.1	5.3	5.0	5.1	4.9	4.2	4.1	**4.5**	**4.8**
Technical	1.7	1.8	1.9	1.8	1.9	2.2	2.3	**2.1**	**2.0**
Teacher Training	3.8	3.9	4.0	4.0	3.9	3.5	3.4	**3.3**	**3.0**
Higher									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	**100.0**
Expenditures									
Primary	..	47.8	43.7	43.8	45.9	46.2	45.5	**46.4**	**46.3**
Secondary	..	33.9	33.2	33.2	36.7	33.2	34.5	**33.7**	**30.8**
General and Teachers training	..	28.2	26.0	27.8	29.0	25.4	25.3	**24.6**	**22.2**
Technical	..	5.8	5.2	5.5	6.7	7.8	9.2	**9.1**	**8.7**
Higher	..	18.2	23.0	23.0	18.4	20.7	20.0	**19.8**	**22.9**
Total	..	100.0	100.0	100.0	100.0	100.0	100.0	**100.0**	**100.0**

Source: Table 9.1.

Table 9.4. BURUNDI: Education Sector Expenditures and Financing, 1979-1988
(in million FBu)

	1979 1/	%	1980 1/	%	1984 2/	%	1985 2/	%	1988 2/	%
Primary	1325.3	29.5	1698.4	33.9	2451.8	37.8	2356.4	54.3	2697.2	54.8
Central Government	777.6	17.3	912.8	18.2	1206.7	18.5	1440.4	33.2	1685.3	34.2
Ordinary Budget	757.8	16.9	866.9	17.3	1206.7	18.5	1440.4	33.2	1685.3	34.2
Investment Budget	19.8	0.4	45.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Local Administration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Family	318.4	7.1	535.4	10.7	714.4	11.0	916.0	21.1	1011.9	20.6
External Aid	229.3	5.1	250.2	5.0	530.7	8.1	..	0.0	..	0.0
Secondary	1672.6	37.2	1728.6	34.5	2391.2	36.7	1345.1	31.0	1508.0	30.6
Central Government	688.5	15.3	793.0	15.8	1024.8	15.7	1194.3	27.5	1319.3	26.8
Ordinary Budget	599.0	13.3	724.7	14.5	914.8	14.0	1046.4	24.1	1122.9	22.8
Investment Budget	89.5	2.0	68.3	1.4	110.0	1.7	147.9	3.4	196.4	4.0
Local Administration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Family	50.5	1.1	65.0	1.3	120.5	1.8	150.8	3.5	188.7	3.8
External Aid	933.6	20.8	870.6	17.4	1245.9	19.1	..	0.0	..	0.0
Higher Education	1499.0	33.3	1579.8	31.6	1678.9	25.7	638.6	14.7	718.8	14.6
Central Government	443.5	9.9	593.8	11.9	552.2	8.5	615.3	14.2	718.8	14.6
Ordinary Budget	370.1	8.2	459.9	9.2	531.2	8.1	615.3	14.2	712.4	14.5
Investment Budget	73.4	1.6	133.9	2.7	21.0	0.3	0.0	0.0	6.4	0.1
Local Administration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Family	40.6	0.9	35.4	0.7	25.8	0.4	24.2	0.6	..	0.0
External Aid	1014.9	22.6	950.6	19.0	1100.9	16.9	..	0.0	..	0.0
Total	4496.9	100.0	5006.8	100.0	6521.9	100.0	4341.0	100.0	4924.0	100.0
Central Government	1909.6	42.5	2299.6	45.9	2783.7	42.7	3250.0	74.9	3723.4	75.6
Ordinary Budget	1726.9	38.4	2051.5	41.0	2652.7	40.7	3102.1	71.5	3520.6	71.5
Investment Budget	182.7	4.1	248.1	5.0	131.0	2.0	147.9	3.4	202.8	4.1
Local Administration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Family	409.5	9.1	635.8	12.7	860.7	13.2	1091.0	25.1	1200.6	24.4
External Aid	2177.8	48.4	2071.4	41.4	2877.5	44.1	0.0	0.0	0.0	0.0

Source: Ministry of Education (Central Government - Ordinary Budget)
Mission Estimates (Family).
1/ Including Central Government expenditures.
2/ Not including expenditures of the Ministry of Education.
3/ Expenditures of Higher Education excluding expenditures on the university hospital.
4/ Family and External Aid expenditures include current and development expenditures.

Table 9.6. BURUNDI: ENROLLMENTS BY SEX, 1977/78-85/86

	1977/78			1980/81			1985/86		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Enrollments									
Primary	87233	55530	142763	102231	66876	169107	224753	161035	385788
Secondary	10108	4798	14906	11283	5205	16488	14882	7667	22549
General	5570	1828	7398	6121	1851	7972	8148	3160	11308
Technical	1180	261	1441	1574	438	2012	2532	677	3209
Teacher Training	3358	2709	6067	3588	2916	6504	4202	3830	8032
Higher	--	--	1208	1365	438	1793	2107	676	2783
TOTAL	--	--	158877	114869	726.9	187388	241742	169378	411120
In percent of TOTAL									
Primary	--	--	89.9	89.0	92.2	90.2	93.0	95.1	93.8
Secondary	--	--	9.4	9.8	7.2	8.8	6.2	4.5	5.5
General	--	--	4.7	5.3	2.6	4.3	3.4	1.9	2.8
Technical	--	--	0.9	1.4	0.6	1.1	1.0	0.4	0.8
Teacher Training	--	--	3.8	3.1	4.0	3.5	1.7	2.3	2.0
Higher	--	--	0.8	1.2	0.6	1.0	0.9	0.4	0.7
Total	--	--	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministere de l'Education Nationale.

Table 10.1. BURUNDI: HEALTH FACILITIES AND ACCESS TO HEALTH CARE, BY PROVINCE , 1986

Province	Popul.	% pop	hosp. beds	mater beds	PHC beds	Total beds	pop./hosp. beds	matern. PHC bed	pop/ma & PHC beds	pop/mater.	pop/PHC	pop. w/access to PHC 5 km radius	percent
Bubanza	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	294	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bujumbura	[illegible]	11.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6551	[illegible]	[illegible]
Bururi	[illegible]	7.6	[illegible]	[illegible]	[illegible]	559	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cankuzo	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cibitoke	219	4.7	79	10	[illegible]	[illegible]	[illegible]	106	2059	[illegible]	[illegible]	108	[illegible]
Gitega	559	11.9	[illegible]	[illegible]	[illegible]	[illegible]	1490	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72.8
Karuzi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100	[illegible]	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kayanza	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirundo	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Makamba	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Muramvya	[illegible]	9.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Muyinga	[illegible]	[illegible]	147	25	76	[illegible]	[illegible]	95	3154	[illegible]	[illegible]	[illegible]	[illegible]
Ngozi	[illegible]	9.7	354	[illegible]	26	489	[illegible]	133	3364	[illegible]	[illegible]	[illegible]	61.1
Rutana	169	3.6	68	10	90	166	2481	100	1687	16872	1871	76	44.9
Ruyigi	196	4.2	122	60	106	288	1607	166	1181	3268	1850	72	36.9
Total	4699	100.0	2908	783	1852	5543	1616	2635	1783	6001	2537	2874	61.2

Source: Ministere de Sante, AfDB Project Preparation Team 1986.

Table 16.2. BURUNDI: EXPANDED PROGRAM OF IMMUNIZATION, 1979-86
Access and Coverage Rates a/

year	Total Population	Population at Risk 0-2 yr. olds	DTP 1 b/	Percent	DTP 3 c/	Percent
1979	4022808	172980	11849	6.85	7365	4.26
1980	4111310	176786	33655	19.04	18911	10.70
1981	4201758	9675	99493	55.07	65252	36.12
1982	4294197	184650	92597	50.15	61396	33.25
1983	4388689	188712	118856	62.98	82500	43.72
1986	--	--	--	75.00	--	60.00

a/ The access and coverage rates for 1979-83 are based on the population immunized while 1986 rates were estimated using cluster sampling (WHO methodology).
b/ Diphteria, tetanus and whooping cough
It is the first injection in a series of three;
Used as a proxy for access.
c/ DPT-third injection in series; used as an indicator of completion rate.

Source: Evaluation Report of the Expanded Programme of Immunization WHO/Government of Burundi, December 1984; cluster sampling for 1986.

Table 10.4. BURUNDI: HEALTH SECTOR EXPENDITURES AND FINANCING, 1985/86

(Millions of FBu)

	1985	% Share	1986	% Share
Central Government	973.0	45.1	1287.0	42.5
Ministry of Health	792.5		1077.0	
Ministry of Education	123.7		181.0	
Ministry of Defense	26.8		NA	
Ministry of Social Affairs	8.0		9.0	
Ministry of Rural Development	22.0		NA	
Missions	197.4	9.1	210.0	7.0
Other	597.2	27.7	906.0	30.4
Industry and Individuals	274.9		418.0	
Government Insurance (Mutuelle)	296.1	13.7	475.0	
Local Administration	NA		NA	
Social Security	26.2		13.0	
External Aid	392.0	18.2	600.0	20.1
UNICEF	NA		NA	
UNFPA	84.2			
FENU	NA		NA	
Catholic Relief Services	NA		NA	
World Food Program	NA		NA	
France	NA		NA	
Belgium	NA		NA	
West Germany	NA		NA	
USAID	NA		NA	
Saudi Arabia	NA		NA	
Other	NA		NA	
Technical Assistance	NA		NA	
TOTAL	2159.6	100.0	2983.0	100.0

NA--not available

Source: Financing of Health Care Services, Health and Population Project, MCH; World Bank Preparation team for 1986.