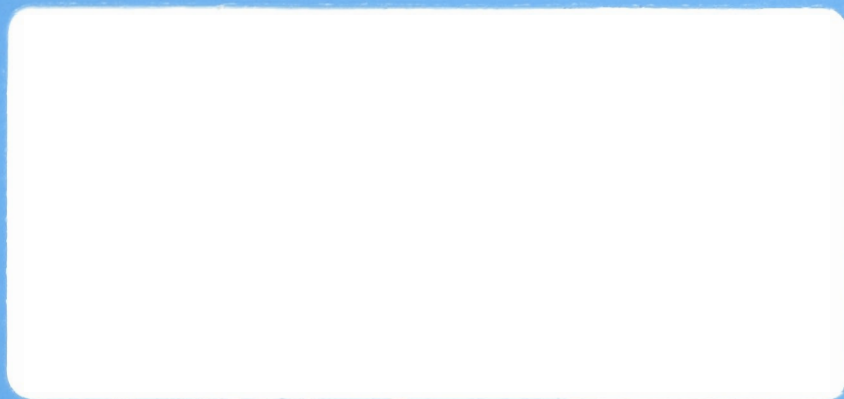




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STRUCTURAL ADJUSTMENT IN SUB-SAHARAN AFRICA

THE IMPACT OF SELF-IMPOSED ADJUSTMENT:

THE CASE OF BURKINA FASO, 1983-1989 a/

by

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a/ This paper is part of the background documentation for a study on "Adjustment, Stagnant Economic Structures and Human Development in Africa South of the Sahara: Policy Conflicts and Alternatives", edited by Giovanni Andrea Cornia, Rolph van der Hoeven and Thandika Mkandawire and forthcoming in 1991.

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## I. INTRODUCTION

With other sub-Saharan African countries, Burkina Faso shares a series of structural bottlenecks which have hampered its economic and social development over the last several decades. It is a landlocked, predominantly agricultural and densely populated country of 8 million inhabitants. Like other Sahelian nations, it faces severe ecological constraints, particularly because limited annual precipitation and little surface water create vulnerability to drought. Furthermore, other factors such as colonial neglect and exploitation, as well as subsequent political instability, have combined to make economic development a difficult objective.

At Independence in 1960, Burkina Faso inherited few skilled human resources, a weak agricultural infrastructure and practically no industry. As in many other countries of the continent, the first three decades after Independence have been politically unstable. Since 1960 there have been nine different political regimes, most of them coming to power following coups.

Despite these problems, Burkina Faso has not experienced the severe balance of payments crisis, debt and budget deficits that shook much of Africa through the 1970s and 1980s. It therefore presents an interesting case from a development perspective; classified as resource poor, it has so far avoided the plight of most sub-Saharan African countries with a similar resource base (World Bank 1989a). Moreover, while this relative success did not spare Burkina Faso from significant macroeconomic difficulties, no full-fledged World Bank or IMF adjustment programme was implemented during the 1980s. An agreement signed with the IMF and the Bank in the early part of the decade was not implemented because of the political changes resulting from the coup led by Captain Sankara (see Roth and Abbott 1990). In 1983, the new Government of Captain Sankara, the head of the National Revolutionary Council, therefore undertook its own process of adjustment, which was continued, with some modifications, by the Popular Front after October 1987. Although a fresh agreement was reached with the Bank and the IMF in 1990 following negotiations opened in 1988, the earlier "self-imposed" policies represent, to some extent, an alternative model to the adjustment programmes typically recommended by these two international institutions for resource-poor and predominantly agricultural countries in Africa south of the Sahara.

This paper describes and evaluates the policies which have prevailed in Burkina Faso since the early 1960s, while focusing on the period of independent adjustment of 1983-1989. The aim of the paper is twofold: first, to analyse the macroeconomic and sectoral performance of the policies of 1983-



1989 and, second, to recommend certain changes which would improve overall policy making, particularly its impact on the most vulnerable groups. In the next section the situation from 1960 to 1982, the two decades immediately after Independence, is examined. The shocks faced by the economy in the early 1980s are then discussed. The following three sections outline the adjustment efforts of 1983-1989, including their impact on macroeconomic performance in each major sector and their political economy dimension. Some alternative adjustment policies are then proposed, with emphasis on the satisfaction of basic human needs. Finally, the last section presents a summary and conclusions.

## II. INITIAL CONDITIONS: FROM INDEPENDENCE TO 1982

Upper Volta, renamed Burkina Faso ("the land of the incorruptible men") in 1983, came into being as an administrative unit in 1919. In 1932, it was divided among three of its neighbours, Côte d'Ivoire, Mali and Niger. Its original borders were restored in 1947, and it gained formal Independence as a nation in 1960.

### Structural Bottlenecks to Development at Independence

The structural bottlenecks to economic and social development faced by Burkina Faso at Independence were both global and sectoral. The general economic picture was dismal. Average per capita GDP was only 11,400 CFA francs (about \$50), and only 10 percent of GDP was reinvested. Domestic savings were low because of the low propensity of households to save (estimated at around 1 percent) when faced with the urgent consumption demands of poverty.

Sectoral performance was no better. Agriculture, which employed 95 percent of the population, contributed only 66 percent of total GDP and was characterized by poor labour and land productivity. Farming techniques were backward, consisting mainly of handheld hoes for tillage. The weak linkages between subsistence agriculture and the industrial sector meant that the inputs needed to raise agricultural yields were not or scarcely available.

The industrial sector was almost nonexistent, as the lack of raw materials, the narrowness of the domestic market and limited entrepreneurship posed unsurmountable constraints to development. Processing and manufacturing, which accounted for only 8 percent of GDP and 2 percent of employment (Church et al. 1990), included only a few basic industrial units: a slaughterhouse

opened in 1954, two bakeries created in 1956 and 1958, the cotton ginning unit of CFDT, the French Textile Company, which started production in 1958, and a carbonated soft drink plant established in 1960.

The development of human capital had been especially neglected during the colonial period. The literacy rate was 2 percent and the primary enrolment rate was 8 percent, probably one of the five lowest in sub-Saharan Africa and worldwide. There was only one doctor for every 100,000 people and one nurse for every 4,090 people. Inadequate access to health care was compounded by poor geographic coverage, with most of the doctors concentrated in urban areas. At Independence, the infant mortality rate was estimated at 252 per 1,000 live births and the child mortality rate at 63 per 1,000. The rural-urban disparity in health conditions was high in 1960. Life expectancy was 32 years in rural areas and 47 years in urban areas (UNICEF 1986). The natural environment was conducive to vectors of a variety of diseases, including onchocerciasis (river blindness) and trypanosomiasis (sleeping sickness); malaria and bilharzia were endemic in large parts of the country.

The fact that Burkina Faso is landlocked has been a major hindrance to economic and social development. Situated more than 1,000 kilometres from the nearest port, the country depended on overland transportation to move its goods to and from the ports. The railroad to Abidjan, Côte d'Ivoire, was the main channel for moving goods. This significantly inflated costs, and the higher prices which resulted jeopardized both consumer welfare and the competitiveness of export products. The situation is now slightly better because of the construction of paved roads to major cities in five neighbouring countries: Abidjan, Côte d'Ivoire; Accra, Ghana; Bamako, Mali; Niamey, Niger, and Lomé, Togo.

The poor internal transportation infrastructure also constrained economic development. Feeder roads were scarce between agricultural producing zones and major trade and consumption centres. Most national roads were in poor condition, many being unusable in the rainy season. These deficiencies led farmers to reduce production, as it was uncertain whether produce would reach market outlets.

### Development Strategy

In many respects the development experience of Burkina Faso during the first two decades of Independence differed substantially from that of most of the rest of sub-Saharan Africa, although this is less true in the case of other landlocked countries. Because colonial restrictions had held back



industrial development in the 1960s and 1970s, most of the new African nations adopted a strategy of accelerated import-substituting industrialization, often at the expense of agriculture. This approach was generally supported by sustained efforts at creating the needed physical infrastructure and human skills and by massive inflows of external resources, particularly after the first oil crisis. Fiscal, monetary and exchange rate policies were geared to the objectives of industrialization and modernization.

The extremely unfavourable economic conditions of Burkina Faso at Independence - its remoteness, the dominance of Côte d'Ivoire and Senegal in former French West Africa and the constraints on autonomous monetary and exchange rate policies imposed by membership in the West African Monetary Union (UMOA) - made industrialization based on import substitution an unviable development strategy. In view of the limited importance of known mineral deposits, a strategy focused on mining was also not feasible. Nor was it possible to concentrate on a "self-reliant" development because of the narrowness of the domestic market. Because of these limitations and as a continuation of the trends established during colonial rule in the 1960s and 1970s, Burkina's development was led by the export of cattle and cheap labour to the neighbouring coastal economies and by the export of a few cash crops such as groundnuts and cotton to Western Europe.

In addition to natural and objective conditions, economic policies over the 1960s and 1970s have also contributed to the "diversity" of Burkina Faso's development. Mostly for the reasons mentioned above, monetary, fiscal and exchange rate policies have been extremely prudent. As a member of the West African Monetary Union (UMOA), Burkina Faso cannot exercise an independent monetary policy. Interest rates and the extent of monetary financing of budget deficits are determined within the monetary union. In addition, the CFA franc, the UMOA currency, is pegged at a fixed parity to the French franc which guarantees its convertibility.

Prudence also characterized foreign debt policy. The level of public external debt remained trivial in the 1960s and 1970s both in absolute terms and in relation to GDP and exports. Debt performance was well below the benchmarks of 50 percent for the debt to GDP ratio, 275 percent for the debt to export ratio and 30 percent for the debt service to export ratio (World Bank 1989b) indicated by the World Bank as "critical". In fact, prior to the adjustment period, the debt to GNP ratio had never even reached 30 percent. The total debt stock was less than total export earnings until 1982, when it reached 128 percent of export earnings (Table 1).

TABLE 1: KEY MONETARY AND DEBT INDICATORS, 1966-82

	1966-70	1971-75	1976-79	1980	1981	1982
Budget Deficit-Surplus	--	0.28	-0.15	0.35	-1.55	-1.82
Public Debt (\$M)						
Total (as % of GDP)	20.70	37.04	165.65	298.70	312.40	345.80
Interest Payment (\$M)	--	--	--	12.00	12.00	12.00
Total Debt Service	--	--	--	22.00	20.00	20.00
<u>Debt Ratios:</u>						
Debt/GNP (%)	--	--	--	23.20	26.20	29.80
Debt/Exports (%)	--	--	--	88.80	95.90	128.50
Debt Service/Exports (%)	--	--	--	5.90	5.40	6.70

Sources: World Bank (1987) and (1990a).

Differences existed also in Burkina's agricultural policy (which neglected traditional crops and consistently favoured cash crops), industrial policy (which followed some of the dominant views of the time, such as import substitution and nationalization, but dedicated proportionally fewer resources to them) and human capital policies (which were never a priority and which were consistently underfunded).

A rapid survey of the main policies of the 1960s and 1970s reveals a prudent monetary approach characterized by moderate growth in the money supply and the total credit extended to the economy, tendentially stable and positive real interest rates, reflecting the common policy within the UMOA, and a moderate tax policy, which, due to the feeble level of industrial and commercial activity, led to stagnant public revenues until the mid-1960s and slowly rising revenues after 1968. Government expenditure climbed in line with revenues, with increasing outlays for development and, particularly because of brief wars with Mali in 1974-1975 and 1984, more defence spending. Thus, a balanced budget was maintained until 1980.

However, by 1982, the Government budget had reached a deficit equal to 1.8 percent of GDP. This was low in absolute terms but unprecedentedly high for Burkina Faso. Relative to that of other African countries, it seems insignificant. During the same period, the budget deficit to GDP ratio was 20 percent in Zambia, 17 percent in Malawi, 4.8 percent in Niger and 4.2 percent in Mali. The latter two countries are also UMOA members and therefore faced the same restrictions in fiscal policy formulation (World Bank 1989c). Nevertheless, the increase in the budget deficit in Burkina Faso indicated the need to improve resource generation and control Government spending and was

one of the factors which triggered the introduction of self-imposed adjustment in 1983.

### Macroeconomic Performance

Although the key macroeconomic indicators were never very disappointing during the period, economic growth was slow, with profound consequences for human welfare. GDP at constant prices grew at an average rate of 3.8 percent per year from 1971 to 1982. Because of the high population growth rate, which rose from 1.8 percent in 1960 to 2.7 percent in 1982, per capita GDP increased on average at only 1.6 percent per year over the period. In 1982, it reached almost 40,000 CFA francs, broadly equivalent to \$120 (Table 2).

The ratio of gross fixed investment to GDP (the investment ratio) climbed from 14.7 percent in the early 1960s to a high of 34 percent in the early 1970s before falling to 24 percent in 1982. These figures compare favourably with the averages for sub-Saharan Africa: 15 percent from 1961 to

TABLE 2: <u>KEY MACROECONOMIC INDICATORS, 1966-82 a/</u>						
	1966-70	1971-75	1976-79	1980	1981	1982
Population (millions)	5.53	5.96	6.56	6.96	7.13	7.31
GDP Per Capita <u>b/</u>	33,009 <u>c/</u>	33,521	36,320	36,380	37,220	39,840
GDP Growth Rate	--	2.96	4.39	-0.48	4.80	9.67
GDP Per Cap. Growth Rate	--	1.60	1.10	-2.83	2.30	7.03
Investment Ratio (%)	11.98	27.32	25.97	20.35	19.03	24.15
Exports (\$M)	30.80 <u>c/</u>	63.25	135.71	225.24	209.10	183.69
Imports (\$M)	67.70 <u>c/</u>	169.62	378.83	596.37	552.21	553.11
Exports/Imports (%)	45.49 <u>c/</u>	37.80	36.24	37.77	37.87	33.21
Trade Deficit/GDP (%)	12.24 <u>c/</u>	22.45	27.39	29.12	29.24	31.86
Current Account Balance (\$M) <u>d/</u>	8.50 <u>c/</u>	-10.56	-57.89	-48.73	-42.09	-92.07
Current Account Balance (as a % of GDP)	2.82 <u>c/</u>	-1.62	-6.78	-3.82	-3.59	-7.94
Exchange Rate <u>e/</u>	255.60	251.40	230.80	211.30	271.70	328.61

Sources: World Bank (1987) and calculations by the authors based on data of the Institut National de la Statistique et de la Démographie (Burkina Faso) and World Bank (1987).

a/ Unless otherwise noted, 1966-70, 1971-75 and 1976-79 give annual averages over the periods, except for the population figures, which are end-point estimates.

b/ In 1980 CFA francs.

c/ 1970 only.

d/ After official transfers.

e/ Average, in CFA francs per dollar.

1973, 20.6 percent from 1973 to 1980 and 15.9 percent from 1980 to 1987 (World Bank 1989c). There was thus a clear effort to create a productive base during the period. However, the estimated rate of return on investment, calculated as the ratio of the GDP growth rate to the rate of investment, was remarkably unstable, fluctuating constantly but decreasing overall from 30.7 percent in the mid- to late-1960s to a mere 8.8 percent in 1982. This situation was comparable to that in most of the rest of sub-Saharan Africa.

The trade deficit was persistently large between 1960 and 1982. The value of exports was generally less than 40 percent of that of imports, and the trade deficit accounted for about 25 percent of GDP until 1982, when the situation worsened and the trade deficit to GDP ratio jumped to 32 percent. During the 1970s, imports increased at a more rapid pace than did exports (mainly livestock and cotton) because of a rise in import-intensive public sector investment programmes, the need for raw materials, the effects of drought on food supplies and the oil crisis (Church et al. 1990). The deficit was substantially reduced by remittances from migrant workers in neighbouring coastal countries. Net remittances averaged \$95 million per year between 1979 and 1983, equivalent to more than two-thirds of the revenue from export earnings and more than one-half of the official aid during that time (ibidem, page 295). Nonetheless, the current account deteriorated from a surplus of \$8.5 million in the 1960s to a deficit of \$92 million by 1982. The same trend prevailed relative to GDP, with the current account deficit growing to 8 percent of GDP in 1982.

#### Agricultural Performance

There are three major agro-climatic zones in Burkina Faso: the Sahelian zone, with annual rainfall between 300 and 600 millimetres; the Sudanian zone, with rainfall between 600 and 900 millimetres, and the Sudano-Guinean zone, with annual rainfall exceeding 900 millimetres. In the north of the country, where rainfall is scarce, land and labour productivity is low, and the mainly nomadic or semi-sedentary population relies principally on livestock (Roth and Abbott 1990). The central region has more precipitation, but population pressure has led farmers to the cultivation of marginal lands in order to sustain output growth. The West and Southwest, which have witnessed growing public and private investment in cotton production, are the major grain-exporting areas. Land tenure is communal, with the village chiefs and households allocating long-term use rights (Sanders et al. 1990).

The production of cash crops expanded in spectacular fashion between 1960 and 1982, but the food crop subsector, which is more subject to random events, including fluctuations in weather, advanced at a much slower pace. Indeed, the level of precipitation was inadequate every year from 1968 to the early 1980s (Kandel 1984), and the Sahelian drought of the early 1970s jeopardized the food supplies of the entire rural population.

Domestic food production is concentrated on "non-tradables", such as sorghum, millet and maize, and a few "tradables", including rice, sesame and groundnuts. Total cereal production increased from about 1 million metric tons in 1960-1965 to close to 1.2 million tons in 1982 (Table 3). This suggests an annual rise in grain production of 0.53 percent during the period. The output of millet and sorghum, the main staple food crops, grew on average at only 1.1 percent per year, well below the estimated annual population growth rate of 2 percent from 1960 to 1982 (Roth and Abbott 1990). Major fluctuations in output were frequent. Total annual production dropped below 700,000 tons in 1968, the beginning of a long period of drought that extended to 1973-1974.

TABLE 3: <u>ANNUAL CEREAL PRODUCTION</u> (1960-1982)				
	Area Cultivated (Ha)	Production (Metric Tons)	Yield (Kg/Ha)	Product/Capita (Kg)
1960-65	--	1,039,169	--	--
1966-70	--	966,927	--	188.1
1971-75	--	978,991	--	174.8
1976-79	--	1,106,321	--	177.4
1980	1,974,700	1,042,300	527.8	146.7
1981	2,166,100	1,265,200	584.1	173.6
1982	2,114,800	1,174,300	555.3	157.1

Sources: 1960-79: Statistics of the Ministère Agriculture et Elevage; 1980-82: Bendow (1989).

Cereal production has usually been insufficient to satisfy the basic nutritional needs of the population. It has consistently remained below the FAO recommended norm of 190 kilogrammes per person/year. Indeed, production per capita fell from 188 kilogrammes in 1966-1970 to 157 kilogrammes in 1982. Adjusting for postharvest losses, the production of the minimum annual caloric requirement fixed by the FAO of 180 kilogrammes per person was reached only once between 1972 and 1981 (Roth and Abbott 1990).

Substantial food imports were necessary to compensate for this inadequate performance. Changes in consumer preferences were in part responsible for the increase in imports. Such changes in consumer demand are considered a major problem in sub-Saharan Africa (ECA 1989a). A study on consumption patterns in the urban areas of Burkina Faso found that income elasticities for wheat and rice were significantly higher than those for domestically grown sorghum, millet and maize (Savadogo and Brandt 1988). Even poor urban households were found to consume rice at higher rates, mostly for reasons of convenience (Reardon et al. 1988). The authors concluded that these changes in consumption habits were likely to be irreversible, thus hindering efforts to achieve food security through self-sufficiency. However, besides changes in consumer preferences, pricing policies also contributed to this shift to wheat and rice consumption. While urban prices for sorghum, maize and millet were not kept artificially low, official pricing policy has tended to favour wheat and rice. The ratio of the domestic price of rice to the domestic price of sorghum and millet seems to have been lower than the comparable ratio on the world market. In 1982, rice was about 2.7 times more expensive than sorghum and maize on the world market, whereas, in Burkina Faso, it was only 1.7 times more expensive (Table 4). Data for later years support this conclusion.

TABLE 4: PRICE COMPARISON OF RICE AND DOMESTIC CEREALS  
(1982)

	World Price (Per Ton)	Domestic Price (Per Kg)
Sorghum or Maize	\$109	80 CFA F
Rice	\$293	135 CFA F
Domestic price of Rice/Domestic price of Sorghum or Maize		1.69
World price of Rice/World price of Sorghum or Maize		2.69

Source: World Bank (1989d), calculations by the authors.

Cash crops fared much better than food crops over the same period. Policy makers had made cash crop production a priority, since it was the major generator of foreign exchange. This policy orientation was in keeping with colonial practice and the views on comparative advantages held by the World Bank and the majority of the developed economies.



In the past, cash crops, mainly sheanuts and sesame seeds, had traditionally been a "residual element" of farm production. During the 1970s and early 1980s, however, the investment of donors and the Government in livestock and cash crops, especially cotton, sheanuts, groundnuts and sesame seeds, grew rapidly. In particular, the production of cotton rose in dramatic fashion, from 10,500 tons per year between 1961 and 1965 to over 77,000 tons in 1982, at an average annual rate of growth of 11 percent (Table 5). The increase in cotton production resulting from expansion of the land under cultivation - and from higher yields - benefitted from strong Government incentives, including favourable producer prices, public sector investment and the provision of inputs. Moreover, agronomic research led to a tremendous improvement in yields, which jumped from 50 kilogrammes per hectare in the early 1950s to over 1,000 kilogrammes in 1982 and 1,300 kilogrammes in the late 1980s (Sofitex 1987). In contrast, groundnut production tended to decline, largely because of stiff competition on the international market. The domestic output is now used mainly by local peanut oil producers. Sesame production increased from the early 1950s to the mid-1960s and remained stable thereafter. The lack of adequate price and marketing incentives was the most likely reason for this relatively flat trend. Livestock production also encountered difficulties. Large numbers of animals had to be slaughtered during the drought of 1973-1974. Moreover, severe competition from international meat suppliers in the country's traditional market, Côte d'Ivoire, limited the contribution of livestock to export earnings.

TABLE 5: CASH CROP PRODUCTION IN BURKINA FASO, 1960-82

	COTTON		GROUNDNUTS	SESAME
	Quantity (Metric Tons)	Yield (Kg/Ha)	Quantity (Metric Tons)	Quantity (Metric Tons)
1961-65	10,521	158	123,408	5,023
1966-70	20,980	349	95,771	6,241
1971-75	36,497	500	74,971	3,772
1976-79	61,539	758	70,212	10,493
1980	54,248	834	53,943	6,013
1981	59,479	882	77,667	8,017
1982	77,110	1,050	70,658	5,675

Sources: Cotton: SOFITEX (1987); other crops: Statistics of the Ministère Agriculture et Elevage.

Overall, agriculture stagnated during the first two decades after Independence, so that in the early 1980s, it still faced the same structural problems that it had confronted 20 years earlier. The stagnation was due to such factors as poor soil fertility, climatic instability and occasional locust invasions. In addition, the growing demographic pressure (particularly in the Sahelian and Sudanian zones) led to a shortening of the fallow period and a lower use of manure. This caused increased soil erosion and degradation as organic content was reduced, resulting in lower output and yields. Meanwhile, the higher use of chemical fertilizers in the Sudano-Guinean zone led to increased soil acidity.

The lack of appropriate technologies was a further impediment to agricultural productivity. More modern inputs such as animal traction, chemical fertilizers and insecticides were employed only in cash crop areas in the Sudano-Guinean zone, although, even there severe institutional constraints limited supply and distribution (World Bank 1989d). By the 1980s, only 8 percent of all farms were using draught animals and chemical fertilizers were being applied on only 11 percent of all cultivated areas (Roth 1986, cited in Roth and Abbott 1990).

Policies did not encourage the overall development of the food crop sector. As in the colonial period, incentives spurred the cultivation of cash crops, and it was not until the food crisis of the mid-1970s that a series of measures aimed at improving food security were introduced. Pricing policies, in addition, favoured urban consumers through the imposition of official support prices for food crops below domestic and international market prices (Roth and Abbott 1990). Moreover, commodities were distributed primarily in grain deficient areas and the cities, resulting in a regional bias (*ibidem*). Finally, as shown above, relative prices benefitted consumers of internationally traded cereals such as rice and wheat.

#### Limited Attempts at Industrialization

Despite efforts to galvanize industrial development, little progress was made from 1960 to 1982. In line with the prevailing philosophy in the region, early strategy focused on import substitution, particularly in simple capital and consumption goods. By the 1970s, this strategy had shifted somewhat toward export promotion. A number of institutions were created to support industry: the National Development Bank, the Fund for the Nationalization of Strategic Enterprises and the Caisse Nationale des Dépôts et des Investissements. Most investment took place from 1968 to 1978, although investment in industry

generally remained very low through 1975, when it totaled 6.7 billion CFA francs. In 1977, the creation of a brewery company, Sobbra (Société Burkinabé des Brasseries), contributed 9.8 billion francs to total investment, and, in 1980, investment reached 7.3 billion francs following the founding of Sinac, a shoe manufacturing firm.

The goals of industrial promotion remained largely unmet. The number of enterprises rose from 38 in 1965 to 50 in 1969 and 61 in 1980. By 1983, there were 67, of which 49 were active and 16 had suspended operations. Between 1979 and 1983, the average annual real growth rate of production increased only a modest 3.7 percent. Many plants had to lay off workers or close down during the period, and employment fell or stagnated. By 1983, the manufacturing zone in Kossodo, near Ouagadougou, had become an industrial graveyard with only a few plants operating. In the same year, only 11 of 56 public enterprises were active, and average capacity utilization was below 50 percent.

The causes of this poor performance are diverse. The country is highly dependent on foreign technology, capital goods, raw materials and spare parts. Foreign investors contribute a very important share of investment, and local control over the initiatives which are supported is therefore limited. Moreover, successive governments have failed to provide sufficient incentives for industry. The investment code is unfavourable and the institutions designed to promote industry are weak. The narrowness of the domestic market, the underuse of local expertise, inadequate technology assimilation, poor management and a training system which emphasizes commercial and service activities are among the other barriers to the development of industry.

#### International Trade

The import-export structure changed little from Independence to 1982. Exports consisted mainly of raw primary products. Available data show that primary commodities represented more than 80 percent of exports between 1979 and 1982 (Table 6). The export value of the major export commodity, cotton, rose from 5.3 billion CFA francs in 1979, or 39 percent of the value of primary commodity exports, to 7.6 billion francs in 1982, or 51 percent. By the late 1980s, one-third of all farmers were estimated to be involved in the production of cotton (EIU 1990a, page 37).

Livestock played an important role in earlier years when it accounted for 25 percent of total exports. This share had dwindled to less than 19 percent by 1982 because of intense competition from international suppliers, especially Argentina and, later, the European Community, in nearby coastal

TABLE 6: THE STRUCTURE OF IMPORTS AND EXPORTS  
(1979-1982)

	1979	1980	1981	1982
<u>Exports */</u>				
Food Products	5.62	5.67	4.68	3.72
Livestock	4.28	4.51	3.51	2.29
Fruits and Vegetables	0.25	0.22	0.37	0.61
Raw Nonedible Commodities	8.13	11.20	12.40	11.10
Cotton	5.34	8.37	8.17	7.59
Oil Nuts and Grains	1.97	2.09	3.30	2.90
Sesame	0.71	0.44	0.29	0.44
Groundnuts	0.16	0.09	0.02	0.08
Primary Products/Exports (%)	84.70	87.90	85.10	81.20
<u>Imports */</u>				
Food Products	10.89	12.46	18.72	23.04
Cereals	6.28	6.86	8.29	11.76
Rice	2.04	2.60	1.75	3.63
Nonfood Products				
Chemicals	7.14	8.10	9.52	11.57
Manufactured Goods	12.82	14.64	16.03	21.33
Machinery	18.22	22.17	22.30	25.72
Petroleum	7.25	10.00	14.23	18.74
Food Products/Imports (%)	17.00	16.50	19.80	20.30
Petroleum/Imports (%)	11.30	13.20	15.60	16.50

Source: INSD (1987).

\*/ In billions of CFA francs unless otherwise indicated. The individual items included are not necessarily exhaustive.

countries, the traditional export markets of Burkina Faso.

The value of fruit and vegetable exports increased from 250 billion CFA francs in 1979 to more than 500 billion francs in 1982. Since irrigation is now a major priority of the Government, the contribution of fruits and vegetables to total exports is likely to rise.

Among imports, food products accounted for 20 percent of the total in 1982, up from 17 percent in 1979. Rice alone represented nearly 16 percent in 1982. The average annual outlay for commercial food imports equalled more than 60 percent of average annual export revenues from 1972 to 1980 and exceeded export revenues in some years (Roth and Abbott 1990, page 330).

#### Modest Improvements in Human Welfare

The generally slow improvement during the first two decades after Independence is also evident in the social field. Although the health,

nutrition and education of the population recorded some progress, this did not compare favourably with what was being achieved in other low-income countries, nor with what could have been achieved even under the adverse conditions prevailing in Burkina Faso. Neglect and the low priority attached to human resource development were the main reasons for this slow improvement. The evolution of public expenditure by sector over the 1972-1982 period offers an indication of the neglect. Indeed, while the budgetary resources allocated to education, health and housing grew in relation to GDP because of the increase in the overall expenditure/GDP ratio, they declined as a share of total public expenditure from 35.4 percent in 1972 to 28.2 percent in 1982 (Table 7). In contrast, the share of defence spending during the same period rose by a similar amount, i.e. 6-7 percent of public expenditure.

TABLE 7: <u>THE SHARE OF SOCIAL SECTORS IN GOVERNMENT EXPENDITURE AND GDP</u> (1972 And 1982)								
	% of Government Expenditure				% of GDP			
	Education	Health	Housing	Defence	Education	Health	Housing	Defence
1972	20.60	8.20	6.60	11.50	2.19	.87	.70	1.22
1982	15.70	6.60	5.90	17.10	2.42	1.02	.91	2.63

Source: World Bank (1985).

The limited growth in the social sectors was due mainly to the lack of a consistent social policy geared to the needs of a majority of the population and, particularly, the most vulnerable. For example, the educational system was poorly adapted to the requirements of a primarily agricultural society; it tended to focus on higher education and thus favoured relatively wealthy groups. The health system was similarly elite-oriented, with costly investments concentrated in the urban areas of the country.

Improvements in Health and Nutrition. The access to health care was expanded. The ratio of doctors to total population rose from 1/100,000 in 1960 to 1/58,824 in the early 1980s, and the corresponding ratio for nurses climbed from 1/4,090 in 1960 to 1/3,870 in 1981. By the early 1980s, there were two national level hospitals - Ouagadougou, with a capacity of 690 beds, and Bobo-Dioulasso, with 500 beds - and three regional hospitals, which totalled 530 beds.

Health and mortality information is scant in Burkina Faso; it is thus difficult to measure the impact of the expansion of health care coverage in terms of health outcomes. Civil registration, especially for death, is often incomplete (UNICEF 1986). Censuses were taken in 1975 and 1985, and estimates of mortality for the period between those years are therefore likely to be projections or figures based on health service records. Despite these deficiencies in data, it is evident that the very poor health conditions prevailing at Independence improved slowly from 1960 to 1983. Life expectancy at birth increased from 32 years in 1960 to 43 years in 1983, due primarily to the drop in the infant mortality rate from 258 per 1,000 live births in 1960 to 148 per 1,000 in 1983 (Table 8). The under five mortality rate (U5MR) fell from 363 per 1,000 live births in 1960 to 265 in 1980, an average annual decrease of 1.6 percent. However, despite this progress, the child mortality rate in Burkina Faso remains among the highest in the world, reflecting poor nutritional status and hygiene, a high prevalence of infectious diseases and limited access to health services.

TABLE 8: KEY SOCIAL WELFARE INDICATORS  
(1960-1983)

	1960	1965	1970	1975	1980	1981	1982	1983
Crude Birth Rate <u>a/</u>	50	48	46	46	48	48	48	48
Crude Death Rate <u>a/</u>	32	28	25	25	24	22	21	21
Population Growth Rate (%)	1.8	2.0	2.1	2.1	2.4	2.6	2.7	2.7
Life Expectancy (years)	32.0	41.4	42.5	43.2	43.6	43.8	44.1	44.5
Infant Mortality Rate <u>b/</u>	252	195	170	159	153	151	150	148
Under-5 Mortality Rate <u>b/</u>	362	--	--	--	265	--	--	--
Population/Doctor ('000)	100	74	--	50	49	--	--	--
Population/Nurse ('000)	4.1	4.2	--	4.5	5.0	3.1	--	--
Primary Enrolment Rate <u>c/</u>	8	12	13	16	21	--	23	24
Food Production Index <u>d/</u>	--	114.5	116.7	109.9	94.9	101.1	99.3	--

Source: The World Bank (1990b).

a/ Per 1,000 population.

b/ Per 1,000 live births. The figures on infant mortality are interpolated.

c/ Percent of total school-age population.

d/ 1979-1980 = 100.

The Performance in Education. As in the health sector, initial conditions in education were dismal. Moderate progress was made between 1960 and 1982. The number of primary schools increased threefold between 1960 and 1983, and that of secondary schools climbed sixfold. The number of classrooms rose even more sharply. The number of primary school classrooms quadrupled, and that of



secondary school classrooms expanded by a factor of 15. The number of students also grew substantially (Table 9). The proportion of elementary school-age children in school jumped from 9 percent in 1960 to 27 percent in 1983, and the enrolment rate for girls rose from 5 percent in 1960 to 16 percent in 1983. At the secondary level, the overall gross enrolment ratio increased from 1 percent in 1960 to 4 percent in 1983 (World Bank 1988). The adult literacy rate, estimated at 2 percent in 1960, reached 5 percent in 1975, 13 percent for men and 3 percent for women. Despite this progress, indicators of achievement and expansion in the educational system show a performance which is among the weakest in sub-Saharan Africa and the world.

TABLE 9: STUDENTS AND CLASSROOMS IN PRIMARY AND SECONDARY EDUCATION  
(1960 And 1982)

	Primary Education			Secondary Education		
	Schools	Classrooms	Students	Schools	Classrooms	Students
1960	328	1,044	51,490	12	66	2,012
1982	1,306	4,365	276,732	73	1,026	43,226
% Change	398.2	418.1	537.4	608.3	1,554.0	2,148.4

Source: Dianda (1986).

### III. THE ECONOMIC AND POLITICAL SHOCKS OF THE EARLY 1980s

#### Political Shocks

Burkina Faso experienced extreme political instability between 1981 and 1983. On November 25, 1981, the Government, known as the Third Republic, was ousted by the Colonels of the Comité Militaire de Redressement pour le Progrès National. On November 7, 1982, the Colonels were in turn overthrown by the Commandants in a coup which brought to power the Conseil de Salut du Peuple under the military doctor, Commandant J.B. Ouédraogo, with Captain T. Sankara as a key member of the new government. On May 17, 1983, Captain T. Sankara was arrested, and the moderate Ouédraogo and others subsequently took over until August 4, 1983, when a coup led by Captain B. Compaoré returned Sankara at the head of the National Revolutionary Council. This rapid power shuffle was largely motivated by the poor economic situation, but profoundly affected the economic evolution of the country.

### Economic Shocks

Because of the dependence of Burkina Faso on imported oil as the main source of energy, the sharp rise in oil prices in 1979-1980 not only exerted strong inflationary pressures but also damaged the balance-of-payments profile and the productive potential of the country. The appreciation of the dollar starting in the early 1980s increased the unit cost of imports, which were denominated in dollars, relative to exports prices, which were mostly denominated in other currencies.

In agriculture, the growing reliance on imported food and the steady deterioration of climatic and ecological conditions, particularly the 1984-1985 drought, exerted negative pressures on the balance of payments. The fluctuations of the world market prices for the country's agricultural exports added to the uncertainty of farmers over production quantities and to the problems in the balance of payments. Overall, the prices of the major goods traded internationally followed a downward trend, significantly reducing export earnings and jeopardizing the budgetary balance. For example, the international price of cotton lint rose from \$1.60 per kilogramme in 1982 to a high of \$1.85 in 1983, then dropped steadily to a low of \$1.06 in 1986, the year in which the Government was forced to adjust the domestic producer price downward to 95 CFA francs per kilogramme of grain cotton in order to dampen the losses supported by the Société Burkinabé des Fibres Textiles (Sofitex), the state cotton marketing and export monopoly (Table 10). However, despite these price fluctuations, cotton production continued to grow, probably because of the market guarantee still provided by Sofitex.

TABLE 10: INTERNATIONAL PRICES FOR COTTON LINT AND GROUNDNUT OIL \*/  
(In Dollars And CFA Francs, 1982-1987)

	1982	1983	1984	1985	1986	1987
Cotton Lint						
CFA F/Kg	525.79	704.98	782.16	593.02	367.08	495.89
\$/Kg	1.60	1.85	1.79	1.32	1.06	1.65
Groundnut Oil						
'000s F/Metric T	1,922.43	2,709.41	3,106.79	4,065.80	1,970.80	1,502.70
\$/Metric T	585.00	711.00	711.00	905.00	569.00	500.00
Exchange Rate:						
CFA F/\$	328.61	381.07	436.96	449.26	346.30	300.54

Source: World Bank (1988).

\*/ No data are available for sesame.

The international price of groundnut oil fluctuated even more sharply: from \$585 per metric ton in 1982 to a high of \$905 in 1985 and then to a low of \$500 in 1987. This translated into an overall drop in the price received by producers for unshelled groundnuts from 94 CFA francs per kilogramme in 1982 to 61 francs in 1986 and 1987 (Table 11) and correlates positively with the decline in production in the subsequent year.

TABLE 11: <u>PRODUCER PRICES FOR COTTON, GROUNDNUTS AND SESAME</u> (CFA Francs Per Kilogramme, 1982-1987)						
	1982	1983	1984	1985	1986	1987
Premium Grain Cotton	62.0	70.0	90.0	100.0	100.0	95.0
Unshelled Groundnuts	94.0	94.0	94.3	102.0	61.2	61.2
Sesame Seeds	89.0	96.0	96.0	113.0	175.0	175.0

Source: World Bank (1988).

Increased protectionism in foreign countries and the high inflationary pressures resulting from the oil shock and the instability in the dollar exchange rate also affected industrial growth. The shocks caused many layoffs and shutdowns in the weak industrial sector of Burkina Faso.

The combined effect of these shocks on the budget deficit, balance of payments and inflation, while difficult to quantify precisely, was clearly devastating. This was most evident in the external sector. After transfers, the current account deficit, which had averaged 5-6 percent of GDP in the late 1970s, reached 8 percent in 1982 (Table 2, page 6) despite an increase in foreign grants, which represented no less than 16 percent of GDP between 1982 and 1984. Less obvious was the deterioration in the budget deficit, which rose by 2 percentage points relative to GDP between the late 1970s and 1982, and the inflation rate, which climbed from an average of 6.5 percent in 1965-1980 to 11-12 percent in 1981-1982 (UNDP and World Bank 1989). Adjustment was therefore unavoidable. It must be underlined however that the need for policy reforms caused by these macroeconomic imbalances had been exacerbated by the unsatisfactory performance of the economy during the two previous decades and by the need to correct the growing urban bias and slow social improvement which characterised that period.

#### IV. 1983-1989: SUCCESSFUL SELF-IMPOSED ADJUSTMENT

The economic and social policies adopted by the National Revolutionary Council (CNR) in 1983 were designed to correct the macroeconomic imbalances arising from the shocks of the early 1980s, accelerate growth and the structural transformation of the economy and promote social equity. They can be divided into three broad categories: stabilization measures, growth-oriented measures and social sector measures, including income redistribution.

##### Stabilization Measures

Expenditure Reduction. The main effort in this area was focused on containing the public sector wage bill. Initially, all civil service wages, which accounted for 45-60 percent of total public spending, were frozen at the 1982 level. In 1984, housing allowances of less than CFA F 10,000 per month were reduced by 25 percent. Allowances greater than 10,000 CFA F but less than 15,000 CFA F were reduced to 7,500 CFA F. Allowances greater than 15,000 CFA F were halved. In 1985, higher-ranking civil servants were required to give up one month's pay and lower-ranking civil servants one-half of one month's pay as contributions to the Effort Populaire d'Investissement. In 1987, salaries were reduced once more. Despite these steps, the average salary of civil servants remained relatively high. In 1987, it was 119,000 CFA francs per month, compared to 75,000 francs in Niger, 69,000 francs in Mali and 38,000 francs in Chad.

Other expenditure-saving measures adopted during the period included the hiring of more elementary school teachers at entry-level wages; the creation of a service (SNP) to provide low-cost labour in the public sector; the reduction of the early retirement age from 55 to 53; cuts in general expenses, such as a ban on the importation and use of luxury cars by Government officials, and, on the advice of the World Bank, the elimination of the fertilizer subsidy. More controversially, the Government fired civil servants judged incompetent.

Raising Additional Revenue. Augmenting Government revenue was a major priority of the CNR from the start. In 1984, the Government introduced a tax on both alcoholic and nonalcoholic beverages. In 1985, the salary tax (IUTS) was increased. Between 1983 and 1987, the Government raised the duties on certain imported products and raised some registration fees and the taxes on cola nuts and tobacco. An effort was undertaken to improve tax collection and reduce tax

evasion and arrears. Road fees were levied on paved roads, and a heavy wealth tax was imposed on urban landlords. A long-term objective of the fiscal policy was to move away from import-export taxes toward domestic taxes on production and distribution. As a result of these measures, Government revenue rose from 13.5 percent of GDP in 1983 to 15.3 percent in 1985 and 16.3 percent in 1987 (Table 13).

Measures to Improve the External Balance. To reduce the external imbalance, the Government attempted to lower the import bill by seeking cheaper sources for the imported products. For example, it tried to turn away from European suppliers toward those in selected Asian countries, including Hong Kong, Taiwan and Thailand. However, the European Community and the Economic Community of West Africa remained the major exporters to Burkina Faso. The Government also tried to increase food self-sufficiency in order to reduce food imports. Finally, it sought to raise gold exports by reviving the exploitation of known gold reserves (see below).

Attempts were made to diversify export markets. Because Côte d'Ivoire, the main traditional market for livestock, was being flooded by less expensive Argentinean and European products, alternative markets had to be found in the region. Meanwhile, the search for more stable export markets for fruits and vegetables was largely unsuccessful. Nonetheless, in the late 1980s, one-fourth of the country's external trade took place within the region, the highest proportion among Sahelian countries (World Bank 1989a).

#### Growth-Oriented Policies

Although the Government opted for state capitalism as an overall development approach, nationalization was not a set objective of the adjustment programme. While many private companies which were near bankruptcy were rescued by the state and transformed into mixed enterprises, the limited budget resources meant that the private sector had to become involved in the development process. Public enterprises were reorganized. The Ministry for Public Enterprises was created, and some of the arrears owed by the state to these enterprises was cleared. Several of these firms were also restructured, and the newly created Caisse Autonome d'Investissement supported the revival of firms near bankruptcy.

The goals of the industrial strategy were twofold: to provide inputs to agriculture in order to promote increased mechanization and higher yields, and to favour the growth of the mining sector in order to exploit the reserves of

gold at Poura, zinc at Perkoa, manganese at Tambao, lime at Tin-Hrassan, and phosphate at Kodajri and the existing traces of diamond and copper.

Policy makers focused more attention on the informal sector by providing tax incentives and encouraging better integration with the formal sector through subcontracting and increased access to the banking system.

In agriculture, the major objective of the CNR Government was to promote food self-sufficiency. Important efforts were undertaken to improve irrigation and water conservation through public investment and the encouragement of community action. In addition, official producer prices for both cash crops and food crops were raised above market prices at harvest time in order to augment rural incomes and realign the domestic price for cash crops, such as cotton, with international prices. This was a departure from previous policy, which had fixed farm prices irrespective of international market conditions.

#### Policies for the Development of Human Resources

The self-imposed adjustment policies adopted by the CNR Government placed strong emphasis on the social sector. The increased public revenue which was being generated permitted the expansion of social programmes, while efficiency-raising measures, such as the hiring of teachers at entry-level wages for rural schools, allowed more services to be provided. The combined expenditure on health and education rose from 22.3 percent of total Government expenditure in 1982 to 24.2 percent in 1987 and from 3.75 percent of GDP in 1982 to 3.96 percent in 1987. In addition, the Government mobilized the rural population to contribute labour and financial resources for the provision of social services.

Housing. In 1983, the Government guaranteed the right of all citizens to decent housing. In August 1984, it abolished all private ownership of land in urban areas and introduced new laws which ensured access to a parcel of urban land for construction purposes (at 200 CFA francs per square meter) to any citizen 18 or above. In the following year, the Government imposed a 100 percent tax on all rents paid by tenants of luxury homes; the tax was subsequently reduced to 50 percent because of political resistance. The revenues generated through this tax and the 50 percent reduction in housing allowances for civil servants were channeled to a housing fund, which was administered by the Société de Construction et de Gestion Immobilière and used to finance low- and middle-income housing. In 1984, the Government also decreed the "year of free rent", relieving all medium- and low-income tenants



from rent payments. In December 1985, this decree was replaced by a rent control system which defined two "rent zones" in the cities. In zone A, rent could not exceed 60,000 CFA francs per month, while in zone B, the ceiling was 40,000 francs.

Education. The Sankara Government undertook a major reform which was designed to increase control over private education and widen access to schooling, particularly in rural areas. To achieve the latter objective, the Government reduced school fees from 20,000 CFA francs in 1983 to 10,000 francs for elementary schools and from 80,000 francs to 40,000 or 45,000 francs for high schools. Popular committees were created to increase enrolment, and the participation of nongovernmental organizations was mobilized to build schools. A greater diffusion of education in rural areas was made possible through an expansion in rural schools so that students can graduate in only three years as opposed to six years in the normal system, and by lowering unit costs by giving teachers six-year contracts at 30,000 CFA francs per month rather than the 40,000 to 50,000 francs in conventional schools.

Health and Nutrition. Health policy under the Sankara Government was designed to redress rural-urban inequities in the coverage of health care services. To accomplish this, the Government enlisted communities to provide labour for the construction of primary health care units and to participate in the vaccination campaign of 1985. The Government adopted the first explicit population policy in the country and promoted family planning programmes through health care services. Additional resources were mobilized for these programmes by drawing on community and donor contributions. The primary health care approach was revamped through the training of community health workers.

## V. EVALUATION OF POLICY PERFORMANCE

The following analysis of the impact of the policies introduced during the period of self-imposed adjustment requires two qualifications. First, some of the outcomes attributed to the new policies may be due to lagged effects of earlier policies. For example, growth in GDP reflects underlying structural conditions beginning well before adjustment. Second, information gaps, particularly in the area of welfare and social services, often prevent the identification of direct causal links between policies and outcomes.

# Macroeconomic Performance

The growth of real GDP accelerated dramatically between 1983 and 1989 (Table 12); although there were large fluctuations, it averaged 5.8 percent per year (as estimated in Front Populaire 1990), significantly higher than the 3.8 percent average recorded over the 1970-1982 period. Given the estimated population growth rate of 2.7 percent, per capita GDP therefore increased at an average of 3.1 percent per year. These rates were well above the sub-Saharan average of 0.5 percent per year for real GDP and -2.8 percent per year for per capita GDP (World Bank 1989c). The gain in GDP was fueled by rising Government expenditures, an expansionary monetary policy, the growth in agriculture, including export crops, particularly cotton, and the gold boom.

TABLE 12: SELECTED MACROECONOMIC INDICATORS  
(1982-1988)

	1982	1983	1984	1985	1986	1987	1988
Population (millions)	7.31	7.49	7.68	7.88	8.09	8.31	8.55
GDP							
Total (bn 1980 CFA F)	291.12	296.53	293.21	319.15	368.42	361.49	393.74
Per Capita <u>a/</u>	39.84	39.58	38.17	40.50	45.53	43.49	46.02
Growth Rate (%)							
Real	9.67	1.86	-1.12	8.85	15.44	-1.88	8.92
Per Capita	7.03	-0.63	-3.57	6.08	12.44	-4.49	5.94
Investment Ratio (%)	24.15	23.08	22.49	25.26	22.82	22.75	24.73
Exports (\$M current)	183.69	156.54	174.99	172.44	189.26	288.48	306.53
Imports (\$M current)	553.11	471.78	408.80	501.53	621.14	778.06	843.01
Exports/Imports (%)	33.2	33.2	42.8	34.4	30.5	37.1	36.4
Trade Deficit/GDP <u>b/</u>	31.9	29.8	24.4	30.9	29.7	28.9	28.8
Current Acct. Bal/GDP <u>c/</u>	-7.94	-5.68	-0.36	-5.90	-2.38	-1.79	-3.57
Net Official Trans/GDP	16.3	15.7	16.6	11.9	14.2	14.0	13.1
Remittances/GDP	9.5	10.7	9.4	11.8	13.2	12.4	11.6
Exchange Rate <u>d/</u>	328.61	381.06	436.96	449.26	346.30	300.54	297.85
GDP Deflator (1980=100)	123.90	130.60	137.90	143.70	130.60	134.60	134.70

Source: World Bank (1990b).

a/ In thousands of 1980 CFA francs.

b/ The trade deficit figures are positive since imports exceeded exports.

c/ After transfers.

d/ Average, in CFA francs per dollar.

Although external balance did not improve, as demonstrated by the debt and foreign trade situation (Table 13), this impressive performance was achieved without worsening the fiscal balance, at least until 1986. Indeed,

expenditures were reduced as a result of the vigorous actions initiated by the Government in response to the sudden deterioration of public finances from 1982 to 1984. The ratio of Government expenditures to GDP fell from 15.9 percent in 1984 to 13.7 percent in 1985, while the revenue to GDP ratio rose from 13.5 percent in 1983 to 15.3 percent in 1985 and 16.3 percent in 1987 (Table 13).

TABLE 13: <u>KEY MONETARY AND DEBT INDICATORS</u> (1983-1988)						
	1983	1984	1985	1986	1987	1988
As % of GDP						
Government Revenue */	13.50	15.10	15.30	--	16.30	--
Government Expenditure	13.40	15.90	13.70	--	17.40	--
Budget (Deficit) Surplus	0.14	(0.80)	1.61	(1.67)	(1.09)	--
Total Public Debt (\$M)	422	432	541	672	865	866
Interest Payments (\$M)	11	9	13	15	19	58
Total Debt Service (\$M)	18	22	30	3	36	53
Arrears (millions CFA F)	--	--	5,500	--	1,652	19,262
Debt/GNP	36.2	41.3	45.4	41.9	46.1	42.5
Debt/Exports	156.4	162.9	184.0	171.8	177.6	170.9
Debt Service/Exports	6.7	8.2	10.1	9.50	7.4	10.4

Sources: World Bank (1987), (1990a) and (1990b); IMF (1987), Front Populaire (1990).

\*/ Including grants.

The fiscal deficit increased slightly in 1986-1987. Public expenditure rose to 17.4 percent of GDP, accompanied by a budget deficit equivalent to 1 percent of GDP (UNDP and World Bank 1989). Since 1987, deficits have entailed growing arrears. The authorities have used treasury resources, such as the deposits of public enterprises, other public institutions and the central bank, to finance the deficits.

There was a deterioration in the debt situation relative to that of the previous period. The debt to GNP ratio reached 46 percent in 1987, close to the critical level of 50 percent. Similarly, the ratio of debt service to exports climbed to 184 percent in 1984, before falling back to 171 percent, i.e. below the critical benchmark of 275 percent, but much higher than any previous level recorded for the country. Although the external debt situation grew worse during the adjustment period, it remained favourable relative to the rest of sub-Saharan Africa and, more particularly, to the debt status of neighbouring Côte d'Ivoire, Guinea, Mali, Niger and Togo (Table 14).

The external accounts showed a chronic trade deficit, which was estimated at around 29 percent of GDP. The export-import ratio deteriorated somewhat between 1983 and 1989, falling to 36.4 percent in 1988. This was slightly below the performance of the preceding period, when the export-import ratio averaged 37.6 percent (see Table 1, page 5).

TABLE 14: A COMPARISON OF DEBT RATIOS IN SELECTED COUNTRIES  
(1988)

	Côte d'Ivoire	Guinea	Mali	Niger	Togo	Burkina Faso
Debt GNP	415.8	392.9	483.7	494.2	232.1	170.9
Debt Exports	161.8	105.0	108.1	74.6	93.1	42.5
Debt Service/Exports	9.9	23.6	20.1	49.8	26.8	10.4

Source: World Bank (1990a).

The improvement in the trade balance relative to GDP after 1982 was due to increased revenues from cotton exports and the gold boom. While gold had been discovered at Poura early on, exploitation had been suspended in 1966; it was resumed by the Government in 1984 with substantial foreign backing and then expanded in 1985 by private mining interests. The revenue from gold climbed quickly, with the value of exports reaching 24 billion CFA francs in 1982 and then 74 billion francs in 1987 (UNDP and World Bank 1989). Now accounting for 28 percent of total exports, gold has become the third largest source of foreign exchange (Jeune Afrique 1989).

The negative trade balance was financed by remittances from Burkinabe workers in neighbouring countries that represented about 11.5 percent of GDP between 1983 and 1988, public and private transfers which were part of official development assistance and net official transfers equivalent to 14 percent of GDP (Table 12, page 22). During the 1980s, the major providers of foreign aid were France and the United States; a substantial portion of this aid came in the form of grants. The ratio of remittances to GDP, which are exceptionally difficult to measure, generally rose between 1983 and 1988, although there was a drop in 1984 due to economic difficulties in host countries. In contrast, net official transfers as a proportion of GDP fell between 1982-1984 and 1988.

### The Performance of Agriculture

Output Growth. In arid countries such as Burkina Faso, farming is highly dependent on weather conditions, and, more than in any other sector, to attribute progress in agriculture to a particular set of policies is therefore difficult.

Overall, agricultural production advanced at a sustained rate from 1983 to 1988. In particular, cereal output reached unprecedented levels, peaking at more than 2 million metric tons in 1988. The implicit average growth rate was a staggering 14 percent per year. The gain in production was the result of an expansion of the land under cultivation by an average of 7.2 percent each year and an average annual increase in yields of 6.3 percent (Table 15). This was an unusual performance in the Sahel.

Cash crops also flourished during the period. Cotton output more than doubled, from 79,000 metric tons in 1983 to 177,000 tons in 1987, and groundnut production nearly doubled, from 82,000 tons in 1983 to 160,000 tons in 1988. However, sesame growers experienced fluctuations from as low as 5 tons in 1983 to as high as 40 tons in 1987 (Table 16).

This positive performance was favoured by the good weather prevailing after the latter part of 1985. However, domestic policies and the de facto devaluation of the currency vis-à-vis the dollar in 1986 succeeded in compensating for the unstable pricing trends in the international market, particularly for cotton and sesame seeds. For cotton, producer prices rose from 62 CFA francs to 95 francs per kilogramme between 1982 and 1987 and for sesame they rose from 89 CFA francs to 175 francs per kilogramme (see Tables 10 and 11, page 17). While price support measures were selective because the

TABLE 15: CEREAL PRODUCTION  
(1983-1988)

	Area Cultivated (Ha)	Production (Metric Tons)	Yield (Kg/Ha)	Production/ Capita (Kg)
1983	2,168,200	1,100,200	507.4	143.4
1984	1,967,800	1,112,500	565.4	141.3
1985	2,216,600	1,586,800	715.9	196.4
1986	2,689,100	1,926,806	716.5	232.4
1987	2,538,800	1,638,486	645.4	192.4
1988	2,752,700	2,100,563	763.1	237.8
Annual % Change	7.2%	14%	6.3%	

Source: Bendow (1989).

TABLE 16: THE OUTPUT OF MAJOR CASH CROPS  
(1983-1988)

	Cotton		Groundnuts	Sesame
	Metric Tons	Kg/Ha	Metric Tons	Metric Tons
1983	79,287	1,032	82,000	5,000
1984	88,134	1,071	72,000	7,000
1985	115,490	1,221	128,000	8,000
1986	169,227	1,334	158,000	10,000
1987	176,982	--	146,000	40,000
1988	--	--	160,000	8,000

Sources: Sofitex (1987), INSD (1988).

Government had only limited capacity to enforce them, price incentives worked well for cotton because Sofitex was a guaranteed purchaser of last resort and cotton production was limited to a relatively small land area. Moreover, there was a policy-induced improvement in production and marketing techniques for cash crops in which the country had a comparative advantage, such as groundnuts, cotton and sheanuts, and for off-season crops like green beans. Thus, the decline in the 1960s and 1970s in groundnut production following the drop in international prices was reversed in 1983 through improved domestic marketing policies which encouraged farmers to replant that particular crop.

The recent experience in Burkina Faso suggests that the choice between food crops and cash crops may not be an exclusive one. Farmers in the cotton zone often alternate cotton and sorghum or maize in their fields. This should be an important point in any consideration of food self-sufficiency. Furthermore, the techniques and skills which have been developed in the cultivation of cotton have proved useful for staples. Crops of maize and sorghum have benefitted from residual cotton fertilizers in the soil, and the cotton zone also produces the best yields per hectare for maize and sorghum.

The Technology Issue. Greater productivity was achieved in the cultivation of cereals during the 1980s because technologies had been adopted that were appropriate to the agro-climatic context of Burkina Faso. Since the supply and the quality of arable land had been deteriorating, the Government encouraged farmers to adopt technologies which would substitute for land by increased capital investment, thus raising agricultural yields (Sanders et al. 1990). Because many of these techniques were labour-intensive, they also had the advantage of helping farmers increase family employment.



In the more arid areas of the Central Plateau and the Sahelian zone, where water is the limiting factor and soils have been degraded, these simple techniques focused on the retention of water and moisture. With the assistance of nongovernmental organizations, the Government helped farmers to build earth and stone "diguettes", or dikes, to reduce water runoff and increase infiltration. In the area behind the dikes, the increased soil moisture combines with organic fertilizers to boost yields substantially (Sanders et al. 1990).

In the Yatenga region, farmers developed a technique known as "zai", which consists of digging holes and filling them with manure before the onset of the rainy season. The holes acted as "water harvesters", and the cereal yields of land thus prepared were significantly higher.

Water retention is also essential to good returns on purchased inputs such as chemical fertilizers. In the more humid zones, agronomic conditions were already favourable to the success of improved cultivars based on high yielding varieties. Field-station and farm-level testing using moisture- and fertility-raising techniques during the crop season can foster technologies which are highly productive. The major water-retention technique employed in this context involved the application of "tied" ridges, which are created by digging a crosshatch of ridges, each containing a depression where water can collect. Between 1982 and 1984, sorghum yields increased by 1.9 to 4.4 times through the use of a combination of tied ridges and chemical fertilizers (Sanders et al. 1990). Through the introduction of tied ridges or fertilizers, average sorghum yields on test farms in the Central Plateau rose by about 50 percent and in some villages, such as Nedogo, by up to 200 percent (Table 17). When both ridges and fertilizers were applied, yields were two or three times higher than those in control areas. The merit of this technological improvement lies in the fact that yields can be raised substantially at very little material cost to farmers; the only additional input required for the tied ridges is appreciable amounts of time and labour.

The Government was also successful in its effort to raise crop yields, particularly in more remote rural areas, by drawing on traditional community self-help schemes and labour exchanges and by encouraging small-scale projects among village cooperatives.

Food Security. The attention of the Government to food security represented a successful departure from earlier policies which had largely neglected the issue. By helping women to develop simple techniques to augment household incomes, the Government was also able to benefit family health. For instance,

TABLE 17: SORGHUM YIELDS IN FARMS ADOPTING TIED RIDGES AND/OR FERTILIZERS  
VS FARMS ADOPTING TRADITIONAL FARMING TECHNIQUES  
(In The Central Plateau, 1983-1984)

Village	No. of Farmers	Traction Source	Sorghum Yields (Kg/Ha) By Type Of Technique			
			Control Farms */	Tied Ridges	Fertilizers	Tied Ridges & Fertilizers
Nedogo	11	Manual	157	416	431	652
Nedogo	18	Donkey	173	425	355	773
Bangasse	12	Manual	293	456	616	944
Dissankuy	25	Ox	447	588	681	855
Diapangou	19	Manual	335	571	729	1,006
Diapangou	19	Donkey	498	688	849	1,133
Diapangou	19	Ox	466	704	839	1,177

Source: Sanders et al. (1990).

\* Adopting traditional farming techniques.

women in the Yatenga region, with the assistance of a national nongovernmental organization, the "Six S's" ("Se Servir de la Saison Sèche en Savane et au Sahel", i.e. profit from the dry season in the Savanna and the Sahel), were encouraged to find ways to fatten up small livestock. In many cases, the income from this activity was sufficient to allow women to improve the nutritional status of their families. Another simple technique which had positive nutritional consequences was the effort to have the population in the Yatenga region conserve potatoes for six to eight months. Finally, the Government offered a more dramatic example of its concern for food security when it mobilized the military to distribute food during the 1984-1985 famine.

#### Industrial Development

Though agriculture remained the main thrust of the development policy since 1983, the adjustment measures were relatively successful in reviving the industrial sector as compared to the earlier period, particularly after 1986. Despite its low level of development, the industry in Burkina is relatively diversified. The contribution of industry to GDP, after falling from 21.3 percent in 1976 to 18.1 percent in 1985, had risen to 23.2 percent by 1987.

The state was the major player in industrial development between 1984 and 1987. Six public enterprises represented 60 percent of the turnover in manufacturing. Except for Sofitex, these enterprises were highly dependent on the domestic market and used mainly raw agricultural products as inputs. Among the larger firms, private capital dominated only in the two brewing companies.

Despite heavy protective barriers (tariffs exceeded 100 percent for bicycles, soap, tomatoes, cooking oil, shoes, plastic, sugar, beer and cigarettes), exports remained low, primarily because of poor management.

The CNR regime did not significantly expand the parastatal sector and was able to avoid the damaging investment and management mistakes made in many other African countries. After 1983, only four medium-sized companies were created and reforms - increased capitalization, wage compression, better internal management and plant renovations - improved the financial position of many firms, including the Société Sucrière de la Comoé (Sosuco), the milling company GMB, the retail chain Faso Yaar and the Hôtel Silmandé.

The informal sector was large and dynamic, contributing an average of 37 percent to industrial value added. Private gold extraction companies accounted for 65 percent of value added in mining, and the informal sector produced 40 percent of value added in manufacturing (on the other hand, the informal sector played a rather minor role in public works, construction and other areas in which modern technologies are used). The informal sector was also an important source of employment. It has been estimated that the creation of one job in the agroindustry required an investment of 8 million CFA francs in Ouagadougou, or 5 million francs in Bobo-Dioulasso, whereas a 20,000 franc investment was sufficient to create a job in the informal sector (van Dijk 1986). Nonetheless, Government policy during the period broadly ignored the informal sector. Tariff protection, import quotas, fiscal and budgetary incentives and access to credit were all geared to the modern sector. During the first five years of operation, modern sector industries were often exempt from taxation, such as the tax on industrial and commercial profits.

#### Human Welfare and Human Resource Development

Housing. Through urban land reform, 120,000 parcels of land were redistributed and the Government built 2,500 new homes for low-income families. The rent ceiling established in 1985 constituted a real gain for wage earners, who, because of speculation, previously had to pay from 40,000 to 60,000 CFA francs per month, or about one-half the average wage, for a standard-quality home. Although the ceiling led to a drop in housing starts by private sector contractors, construction activity revived from 1987 onward, with investments estimated at 30 billion CFA francs. In 1989, the health of the housing sector was a measure of the regained vitality of the national economy.

Health Status. Government allocations for health care showed no clear trend. However, as a percentage of GDP, they rose from 0.91 percent to 1.13 percent between 1980 and 1987 (Table 18). Given that GDP growth was good during the period, this represented a real increase in health care spending from 2.3 billion CFA francs in 1980 to 4.1 billion francs in 1987. Per capita health care expenditure in 1980 prices advanced from 388 CFA francs in 1983 to 491 francs in 1987 (UNDP and World Bank 1989). Foreign aid also played a crucial role in health care. In particular, a large-scale \$120 million effort to eradicate onchocerciasis was undertaken over several years by United Nations agencies, and substantial assistance was also provided for immunization and primary health care programmes.

TABLE 18: GOVERNMENT HEALTH CARE EXPENDITURE  
(1980-1987)

	1980	1981	1982	1983	1984	1985	1986	1987
Health Spending as % of:								
All Government Spending	5.8	5.8	6.6	6.9	5.5	6.2	6.0	5.8
(Sub-Saharan Average)	5.1	5.1	5.2	5.2	5.1	4.9	--	--
GDP	0.91	0.97	1.11	0.98	0.92	0.92	0.92	1.13
(Sub-Saharan Average)	1.56	1.57	1.64	1.60	1.59	1.54	--	--
Real Health Expenditure								
Per Capita (1980 CFA F)	331	361	442	388	351	373	419	491

Source: UNDP and World Bank (1989).

The greatest health policy success during the self-imposed adjustment period was the mobilization of the rural population to build primary health care centres. The slogan of this initiative was "For every village, a primary health care unit". Indeed, the number of units rose from 964 to 5,992, and a total of 7,500 "health care huts" were built. Moreover, the population helped construct 24 Centres for Health and Social Promotion (CSPS), 6 maternity clinics, 90 pharmaceutical units, 28 dispensaries and a medical centre. 7,137 village health care agents and 7,497 village midwives were trained and given medicine kits. The number of regional hospitals grew from five in 1983 to nine in 1987, the number of CSPS from 42 to 55, and the number of dispensaries and maternity clinics from 253 to 396.

Massive mobilization was also responsible for the success of the 1985 "vaccination commando" campaign, during which 1.18 million 1- to 6-year-olds were vaccinated against measles and 2.6 million 1- to 14-year-olds were

vaccinated against meningitis and another 2.1 million against yellow fever. However, immunization coverage declined the following year.

Between 1983 and 1987, the proportion of the population with access to clean water remained at around 20 percent. This figure masks a sharp disparity. The rate in urban areas was 60 percent, and that in rural areas 15 percent. The World Bank (1989e) estimates that 65 percent of the population had access to safe water, 43 percent in urban areas and 69 percent in rural areas. The latter figures compare favourably with averages of 36.5 percent (total), 75.5 percent (urban) and 24.2 percent (rural) in sub-Saharan Africa.

Service coverage indicators reflected the progress in health care. The number of medical centres headed by a physician rose from 13 in 1983 to 54 in 1986. The number of people per health care worker improved from 2,980 in 1980 to 2,630 in 1986. Likewise, the proportion of the population per hospital bed declined from 1,625 to 1,364 during the same years. The number of physicians nearly doubled between 1983 and 1987. By 1987, there was one doctor for every 28,000 individuals. The proportion of births attended by qualified personnel rose from 20 percent in 1983 (UNICEF 1986) to 32 percent in 1987 (World Bank 1989e). Despite a vigorous family planning programme introduced in 1984, the contraceptive prevalence rate remained low, rising from 1 percent among women of childbearing age in 1983 to 2.3 percent in 1987.

Assessment of progress is hampered by the poor quality of health data at the national level (World Bank 1989e). The limited information available seems to point to a slowly improving situation. While the crude birth rate remained stable between 1983 and 1987, the crude death rate fell from 21 to 17.5 per 1,000 population (Table 19). Life expectancy rose from 44.5 years in 1983 to 48.5 years in 1987, more rapidly than it had done during the previous

TABLE 19: THE EVOLUTION OF SOCIAL INDICATORS, 1984-87

	1984	1985	1986	1987
Birth Rate (per 1,000)	48.6	49.6	49.6	49.6
Death Rate (per 1,000)	21.0	19.0	19.0	17.5
Population Growth Rate (%)	3.0	3.0	3.0	3.2
Life Expectancy (years)	44.7	45.2	45.3	48.5
Number of Residents per Physician	--	--	30,000	--
Number of Residents per Nurse	1,680	--	--	--
School Enrolment Rate (%)	26.0	29.0	31.0	32.0
Food Production Index (1979-80 = 100)	96.1	114.3	124.0	122.0

Source: World Bank (1990b).

period. The proportion of low birthweight infants (less than 2,500 grammes) dropped from 21 percent in 1983 to 11.8 percent in 1987.

Trends in infant mortality cannot be assessed because reliable surveys were not taken in the 1980s. However, whereas the 1975 census recorded an infant mortality rate of 172 per 1,000 live births (reference year: 1971), the 1985 census found a rate of 134 (reference year: 1981). The corresponding figures for the under-5 mortality rate were 282 and 216 per 1,000.

A population-based assessment of trends in nutritional status is especially difficult since surveys have typically been carried out only on a regional basis. Health centre data reveal that during the 1980s, the prevalence of underweight children, i.e. children weighing less than 80 percent of the norm for their age group, generally showed a slight downward trend, with significant seasonal fluctuations (Figures 1 and 2). Thus, in 1984, despite the drought and the drop in the food production index to 96.1 relative to a 1979-1980 baseline of 100, malnutrition prevalence at health centres maintained the 1983 level. After the good harvest of 1985, the prevalence of underweight children had fallen by early 1986. However, the slow but significant advance was less than what might have been expected on the basis of the rapid improvement in food availability.

TRENDS IN UNDERWEIGHT 0-TO-5-YEAR-OLDS  
(1982-1987)

FIGURE 1: THE SEASONAL CURVE

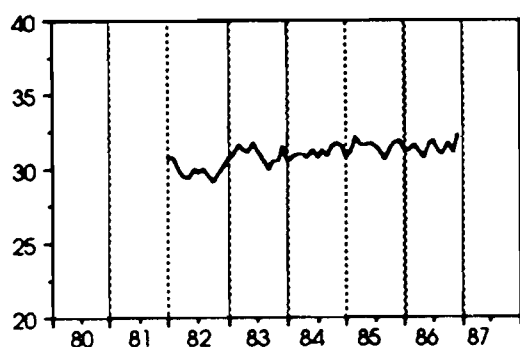
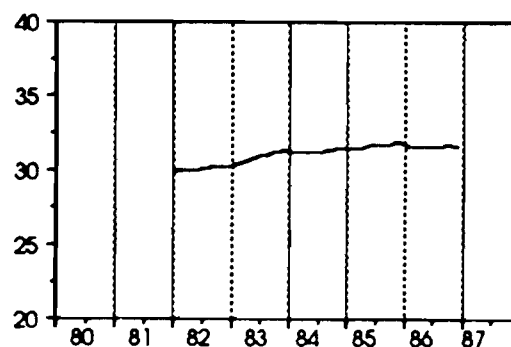


FIGURE 2: THE DESEASONALIZED CURVE



Education. Some progress was achieved also in the education sector. Expenditure on education rose from 15.7 percent in 1982 to 19 percent in 1987 as a proportion of total government expenditure and from 2.85 percent in 1983 to 3.69 percent in 1987 as a proportion of GDP ((Table 20). Other estimates show an even greater increase, from 15 percent between 1982 and 1984 to 23 percent in 1987. In constant 1980 prices, total expenditure in the sector doubled from 6.2 billion CFA francs in 1980 to 13.3 billion francs in 1987 and per capita expenditure doubled from 884 CFA francs to 1,604 francs. However, average per student expenditure fell from 38,929 CFA francs in 1982 to 32,957 francs in 1987 due to rapid growth in enrolments.

TABLE 20: <u>GOVERNMENT EXPENDITURE IN EDUCATION</u> (1980-1987)								
	1980	1981	1982	1983	1984	1985	1986	1987
Education Spending as % of:								
Total Government Exp.	15.50	15.80	15.70	20.10	16.80	17.70	18.40	19.00
(Sub-Saharan Average)	14.90	14.80	15.20	15.40	14.30	13.00	--	--
GDP	2.43	2.64	2.64	2.85	2.81	2.64	2.83	3.69
(Sub-Saharan Average)	4.56	4.57	4.82	4.76	4.46	4.10	--	--
Real Education Expenditure Per Capita (1980 CFA F)	884	983	1,052	1,128	1,073	1,069	1,289	1,605

Source: UNDP and World Bank (1989).

Foreign aid had an important part in financing education in the 1980s. Thus, training centres for young farmers benefitted from two World Bank loans, and UNESCO and the World Bank provided substantial assistance for a \$23 million education reform project begun in 1984.

Between 1982 and 1986, the primary school enrolment rate rose from 24 percent to 32 percent: from 28 percent to 41 percent for boys and from 16 percent to 24 percent for girls. The overall enrolment rate increased by 10 percentage points between 1982 and 1989. Thanks to a jump in the number of classrooms, the number of primary school students swelled by 11.8 percent between 1982 and 1987, compared to 7.4 percent between 1975 and 1980. In secondary education, the enrolment rate, which had grown from 1 percent in 1960 to 3 percent in 1982, reached 5 percent in 1985, also in part due to a substantial expansion in the number of classrooms. The annual increase in the number of secondary school students had averaged 5 percent from 1975 to 1980; now, between 1983 and 1986, it has surpassed 7 percent (Table 21).

TABLE 21: EVOLUTION OF THE NUMBER OF STUDENTS AND CLASSROOMS  
(1983 And 1986)

	Primary Education			Secondary Education			University		
	Schools	Classrooms	Students	Schools	Classrooms	Students	Schools	Classrooms	Students
1983	1,176	3,967	251,269	79	1,026	43,226	8	--	3,351
1986	1,758	5,484	351,807	125	1,498	53,214	12	--	4,085
% Change	49.5	38.2	40.0	58.2	46.0	23.1	50.0	--	21.9

Source: Dianda (1986), page 48.

Despite this substantial progress, major disparities in access to education persisted between urban and rural areas, across regions and between boys and girls. The enrolment rate in the six major cities of the country was 60 percent, whereas that in rural areas was only 17 percent. The northern regions exhibited the lowest enrolment rates, 5-7 percent, while the western regions had the highest rates, 50-60 percent. The primary school enrolment rate for girls was only one-half of that for boys.

One aim of the process of reform begun in 1983 was to correct the strong intrasectoral imbalances in resource allocation typical of the Burkinabe education system and reduce the relatively high per student costs in secondary and higher education. Much remains to be done despite the progress, which included improved resource allocation among primary, secondary and higher education (the share of primary education in total Government expenditure rose from 32 percent to 38 percent between 1980 and 1985) and salary cuts for newly hired teachers. In 1987, higher education cost 930,186 CFA francs per student year, or 15 times per capita GNP, and secondary education cost 121,143 CFA francs per student year, or 2.5 times per capita GNP. The per student cost for general training and technical schools was roughly equivalent to 2.5 times to five times per capita GNP. In contrast, per student primary school costs, at 57,000 CFA francs, were only slightly less than per capita GNP, in spite of the large number of pupils per teacher. (There were on average 63 pupils per teacher, i.e. many more than the international norm of 35). (MEBAM 1988).

One reason for these high unit costs is the low internal efficiency of education. The resources of the state and of parents are wasted on students who repeat or who drop out. Only 276 of every 1,000 first year elementary school enrollers graduate and only 70 gain access to secondary school.

Another main component of the high per student costs was teacher salaries. The average yearly earnings of the approximately 6,600 civil service



employees in education were 1,064,385 CFA francs, or about 19 times average annual per capita GNP, and the salaries of primary school teaching staff accounted for 16.75 percent of recurrent government expenditure. The average salary among primary school teachers was equal to about 13 times per capita GNP, whereas the median among low-income countries was six times the median per capita GNP (Lockheed and Verspoor 1989). This relatively high expenditure for teacher salaries contrasted with the low per pupil expenditure for course materials: \$0.30 compared to \$0.50 for low-income countries overall and to a recommended norm of \$5 (Lockheed and Verspoor 1989). The low expenditure on teaching materials remains a crucial constraint to the improvement of the quality of education. Part of the reason for the high salaries was the multiple categories of teachers, whose pay is fixed according to their educational achievement. In order to economize on training costs and salaries, thereby favouring higher enrolment rates by permitting more teachers to be available, ENEP, the teacher training school, organized a one-year training programme for rural teachers who are then hired at lower pay.

Much of the burden of the recurrent expenditure for primary schools was shifted to families and communities. The buildings, equipment and upkeep of the primary school infrastructure have traditionally been the responsibility of village groups with substantial support from nongovernmental organizations. Moreover, at the beginning of the 1980s, the state stopped providing school supplies, which are now the responsibility of parents and community groups. In 1987, parents spent an average of 7,000 CFA francs annually for each first year primary school pupil, more than one-tenth of per capita GDP income. The role of the state was thus limited to covering the salaries of teachers and administrative staff, setting educational standards and developing programmes.

In conclusion, economic growth, greater emphasis on the social sector and massive mobilization of the rural population after 1982 led to improvements in education, nutrition, health and, to some extent, housing relative to the previous period. However, basic social indicators remain substantially below those of most African countries.

## VI. THE POLITICAL ECONOMIC DIMENSION OF CHANGES SINCE 1983

The political objectives underpinning adjustment were set out in 1983 in the "Discours d'Orientation Politique", which established the bases for decision making throughout the period. The speech made it clear that the new Government wished to favour certain social classes: workers, small traders,

private sector employees, small farmers and the lumpenproletariat. Specific mention was made of women, who were asked to participate actively in improving working conditions (CNR 1983).

Henceforward, Government policy placed strong emphasis on the social sectors and on the more equitable distribution of income. For example, unlike under the previous Government, civil service reform ensured that salary differences based on different educational achievements were kept at a minimum.

Although the social consequences of adjustment were far-reaching, especially from 1984 to 1986, the process met little resistance, first because the Government had a clear policy agenda which it was able to implement and second because the general public accepted the logic of wage and salary cuts and the demand for popular contributions as necessary steps to resurrect the country from backwardness and promote rapid and equitable growth.

The principal priorities of the 1984-1985 interim Popular Development Plan (PDP) and the 1986-1990 first five-year Popular Development Plan were infrastructural development, social services and food security, with special emphasis on rural areas. PDP funds were allocated as follows: 25 percent for livestock programmes; 19 percent to irrigation and water-retention projects, mainly the Kompienga dam project; 23 percent for transportation, mainly the Sahel railroad, and 12 percent for human resources. Financed by the Government and substantial foreign aid, the PDP represented pledges of 142.6 billion CFA francs (about \$350 million), although only 56 percent of this amount had been disbursed at the end of the programme. The interim PDP increased the focus on the rural sector, with 44 percent of all funds channeled to agriculture and water-related projects. This focus was maintained during the first five-year PDP, in which 42 percent of the funds were assigned to the same two areas. The aim of most of the high priority projects was to raise food production. An important proportion of the rural population therefore benefitted from the development spending on transportation and irrigation. This was a clear departure from a long-established trend, which almost exclusively favoured only a small part of the rural population. The social sector policies also helped narrow the urban-rural gap by promoting primary health care, primary school education and the construction of secondary schools in rural towns.

From 1983 to 1989, pricing policies were shifted in favour of rural areas (see earlier). However, support was more forthcoming for cash crops, and, among food growers, maize producers benefitted more than did producers of sorghum or millet. In practice, this meant that the Southwest, where all the cotton production and most of the production of other cash crops and sugar

and maize was concentrated, received a relatively greater share of the support.

Credit policies were even more biased toward the Southwest and, in particular, toward large marketing companies. While the agricultural sector received 89 percent in 1986/87 and 93 percent in 1987/88 of the credit made available by the Caisse Nationale de Crédit Agricole (CNCA), the main rural credit institution, 75 percent to 80 percent was allocated to companies such as Sofitex and Sosuco, the public sugar company, which process cash crops (Table 22). A few individual cash crop farmers received loans, equal to about 2 percent of the total, to buy low powered tractors to improve their yields of cotton and maize, and cooperatives and village groups acquired 9.5 percent of the total, mostly for cash crop production (Table 23). Small subsistence farmers thus hardly benefitted at all from the formal credit policies. Although nongovernmental organizations may yet fill the gap, this confirmed the inability of the banking system to respond to the needs of the rural poor.

TABLE 22: <u>THE DISTRIBUTION OF CNCA CREDIT BY TYPE OF ACTIVITY</u> (1986-1988)				
	1986/1987		1987/1988	
	CFA Francs (Bn)	Percent	CFA Francs (Bn)	Percent
Agriculture	11.014	89.4	9.345	93.1
Livestock	0.052	0.4	0.185	1.8
Others */	1.260	10.2	0.511	5.1
Total	12.326	100.0	10.041	100.0

Source: CNCA (1988).

\*/ Rural handicrafts, commerce, the agroindustry and miscellaneous activities.

It is estimated that, because of these broadly consistent if somewhat biased policies, agricultural incomes rose more quickly than either urban incomes or the fixed minimum wage, which was received mainly in towns. The average annual increase in the minimum wage was 3 percent, while that of agricultural incomes was 8.3 percent. Incomes from cash crops climbed the most rapidly. Incomes linked to food crops may have grown at a pace no greater than that of the rise in the minimum wage, despite the jump in food grain production (see earlier). On the other hand, the situation of food producers may have improved more quickly than that of minimum wage earners since only a small portion of the profits from food grains enters commercial hands.

TABLE 23: THE DISTRIBUTION OF CNCA CREDIT BY TYPE OF BORROWER  
(1985-1988)

	1985/1986		1986/1987		1987/1988	
	CFA F (Bn)	%	CFA F (Bn)	%	CFA F (Bn)	%
ORD/CRPA */	1.229	12.3	1.173	9.5	--	--
Cooperatives & Village Groups	1.103	11.1	0.684	5.5	0.954	9.5
Individuals	0.171	1.7	0.333	2.7	0.253	2.5
Other Institutions	7.469	74.9	10.136	82.2	8.834	88.0
Total	9.972	100.0	12.326	99.9	10.041	100.0

Source: CNCA (1988).

\*/ Extension services were under the Organismes Régionaux de Développement (ORD) until 1987, when that entity was disbanded. ORD was replaced in 1988 by the Centres Régionaux de Promotion Agro-pastorale (CRPA).

In conclusion, by the end of the CNR regime in 1987, the Government had managed to radically alter the distribution of benefits within the Burkinabe society. The "people's tribunals", before which former public officials charged with political crimes had been tried, had effectively reduced the traditional power of rural chiefs and exerted strong controls over the civil service. Policies aiming at making the distribution of income and benefits more equitable within the public sector and between it and other groups and succeeded in boosting output and productivity in agriculture and, to a lesser extent, industry.

Rural areas benefitted the most from these policies and from the two development plans introduced between 1983 and 1989, but cities and towns also benefitted, particularly as a result of urban rent and land reform. The only group mentioned in the "Discours d'Orientation Politique" that probably did not benefit was the lumpenproletariat, although the Government did attempt to organize them into productive groups; for example, the "Foyers de solidarité", besides providing some housing, gathered homeless beggars and handicapped people together to perform productive tasks.

## VII. ALTERNATIVE STRUCTURAL ADJUSTMENT AND DEVELOPMENT POLICIES

While the policies introduced beginning in 1983 increased the dynamism of the economy, some of them were conflicting, while important elements of the overall policy package were missing. The following section contains

recommendations on ways to further improve economic and social conditions and, in particular, to diversify the production and export basket. In some cases, these recommendations build on policies introduced during the period of self-adjustment that could be strengthened; in others, they depart from previous policies to focus on new approaches.

### Policy Measures in Agriculture

Agriculture should meet three objectives: food self-sufficiency, the generation of foreign exchange and the provision of industrial inputs.

1. Farm Incentives and Infrastructure. The climate and the supply and demand constraints affecting agriculture in Burkina Faso make market failure an especially pronounced risk for farmers. A totally liberalized agricultural economy could face intractable problems, such as sharp fluctuations in prices or insufficient outlets, that would dampen production. Moreover, without price support, the adoption of new techniques and technologies by farmers cannot be guaranteed. This suggests that government intervention on agricultural markets is necessary and desirable as long as it leads to the fulfilment of the objectives in agriculture.

"Because of the importance of the agricultural and food sectors" in sub-Saharan Africa, write Ghai and Smith (1985, pages 57-58), "manipulation of agricultural and food prices is one of the major policy instruments available to a government for stimulating output, reallocating resources or altering and shifting purchasing power within the economy."

In the case of Burkina Faso, price support is the key to stimulating export production, increasing rural incomes and generating Government revenues through taxation of surpluses, although some of these goals may conflict. Even for sorghum and millet, which are not internationally traded but which are the main staples of the population, price support is appropriate in order to correct the disincentive of huge year-to-year price changes.

If price incentives were to be implemented properly, the main problem would then become the reduction of the budgetary item associated with the collection of the output by the Government. Local farm associations could play a major role in solving this problem. If supplied with storage facilities and access to credit, village groups could gather grain from farmers at harvest time at incentive prices, store it and then sell it to private traders at a markup. Off season these groups could also resell some of the stored grain to farmers at affordable prices. Although the Cereal Banks are currently trying

to foster local farm associations, the effort must be redoubled.

In addition to price incentives, food security could be increased if the Government would invest in a transportation infrastructure and encourage private traders and village organizations to move grain from areas of surplus to areas of need and to the cities, where incomes are relatively higher.

2. A Change in Credit Policy. Access to credit is required if people in rural areas are to progress beyond subsistence farming. The prevailing form of credit is short-term, usually one crop season, rather than long-term, which would allow farmers to purchase equipment. An appropriate infrastructure must therefore be developed that could provide medium- and long-term credit to farmers. The credit targeting system of the CNCA must also be reoriented in order to strengthen the role of village savings institutions.

3. Cash Crops vs. Food Crops, Small Farms vs. Large Farms. One might argue that whenever adjustment emphasizes cash crops over food crops, the most vulnerable small-scale producers benefit the least. The macroeconomic result of emphasis on cash crops would be greater dependence on unstable world markets and the further impoverishment of a whole class of poor staple producers. However, it has been demonstrated that smallholders have higher yields per hectare than large farms (Cornia 1985). There are therefore social benefits to the support of small-scale production whether for cash crops or food crops. Since most small-scale producers in Burkina Faso are food crop producers, support for this class of farmers would likely raise food production. Furthermore, experience has shown that cotton cultivation can improve the production of food staples (see earlier).

4. Improving Technology. More should be done to encourage farmers to adopt sustainable technologies. Small-scale technical improvements, such as small dikes and water channels which prevent soil erosion and retain water and moisture (see earlier), should be extended throughout the country according to regional requirements, but particularly to the small farms of the harsher environments of the Central Plateau and the Sahel. Through food-for-work and credit programmes, the Government could help farmers purchase the simple equipment needed to apply these technologies. Although such low-scale technologies cannot arrest desertification, they can help to assure food self-sufficiency at the farm level.

Agronomic research on cotton should be encouraged, as yields have only slowly improved since the beginning of the 1980s. Part of the problem is

natural degradation. The increasing use of chemical fertilizers has made farmland acidic, and the soil must be supplied with organic matter, such as manure and compost, to restore organic content.

### Industrial Policy

Domestic industry is focused essentially on import substitution. This type of industrialization has failed almost everywhere, including Burkina Faso. Although the Government is trying to encourage private initiative, it should remain a major investor given the low level of development and entrepreneurship in the sector. More support services would also be an improvement. For instance, a management training centre should be created that would take advantage of economies of scale.

The informal sector also requires support. Tariffs, import quotas, fiscal and budgetary incentives and access to credit are all preferentially geared toward the formal sector. If industry is to be consolidated, linkages must be created between the industries of the formal sector and those of the informal sector; this means that the informal sector must be furnished with better access to credit. For example, small-sector mining should be further developed. Attention to the informal sector would help diversify both industry and foreign exchange earnings, an important objective of true structural adjustment. Finally, to increase investment in the informal sector is sensible since it is an inexpensive way to generate employment.

### Budgetary and Fiscal Policies

As discussed earlier, the budget deficit is relatively small, and the Government has not encountered major financing difficulties so far. However, it is important to reconsider the structure of spending. As further public investment in rural, transport and social infrastructure is crucial, there will be a growing need for additional fiscal resources. Savings on existing expenditures could generate these resources. Indeed, the proportion of unproductive public spending is excessive and salaries constitute a major item of the budget. It is therefore necessary, first, to align public sector salaries to an overall resource level of the country. There should also be a renewed effort to reduce waste in the public sector. Second, the fiscal base needs to be broadened to include other income earners, including those in agriculture and in the informal sector. For salary earners, taxation should take family charges into account, as was done prior to the revision under the

self-imposed adjustment policies. Tax recovery should be improved. It has become low because of insufficient staffing. The training of the staff is also inadequate. While the recovery rate is 100 percent for salary earners, it is less than 20 percent for liberal professions and tax evasion is common. An effort should be made to increase the volume of direct taxes relative to indirect taxes. However, indirect taxes on luxury goods should be kept in place and even increased. A wealth tax and a tax on financial market profits might also be considered.

### Social Measures

Sustained economic growth is impossible without human resources in sufficient quantity and quality. The preceding sections have made it clear that, despite considerable progress over the last decade, Burkina Faso still lags behind other sub-Saharan countries in social development.

1. Health and Nutrition. Food self-sufficiency is necessary if an acceptable level of nutritional status is to be achieved in Burkina Faso. This requires an appropriate producer price policy and an adequate transportation infrastructure which would facilitate the movement of food between surplus and deficit areas. Greater emphasis should be placed on nutrition education for women and children. One glass of milk per child per day could lead to substantially lower infant mortality. Since women are important subsistence producers, support for them by, for example, improving their access to credit would have a direct impact on family welfare.

Recent findings have shown that classic curative health care is costly. There are a number of ways in which unit costs in health care could be reduced, enabling wider access to health care for a given amount of resources. First, highly cost-efficient preventive health care, which is currently weak in Burkina Faso, should be strengthened by encouraging more efforts like the 1985 vaccination campaign and putting more emphasis on improved water supply and rural hygiene. Second, generic drugs should be used instead of commercial brands wherever possible since this can generate substantial savings. Third, infrastructure expansion should rely on less costly local materials.

The institution of user charges could also generate more resources, although experience elsewhere has shown that providing exemptions for the poor is difficult. Alternatively, the Government could permit the establishment of private clinics in the cities to cater for higher income groups. A tax on such clinics could finance the rural health infrastructure and assure the poor



access to medicine. There is a risk in such a strategy, however. It might drain scarce human resources from the public sector, which would thus be weakened. Finally, since urban health services are more accessible and of much higher quality than those in rural areas, it is essential to narrow the gap between cities and villages, men and women and income groups.

2. Education. To reduce overall costs in education, each of the subcomponent costs (infrastructure, teaching staff and supplies) needs to be reduced. The use of local materials such as reinforced mud instead of cement in the construction of schools would lower the cost of infrastructure. Local groups should also be encouraged to participate more in generating the resources necessary for infrastructure expansion. The subsidy for school supplies should be raised, as these supplies are very costly for parents. The savings generated through cost reductions at the secondary and university levels should be redirected to primary schools. The allocation of Government scholarships should be more selective. Many people, both in the public and private sectors, do not need Government assistance for the schooling of their children. These people should be identified and their children excluded from scholarships in a fair manner. Thus, more attention could be directed toward the children of those who are poorer. Another approach would involve loans which are provided according to social status.

#### VIII. SUMMARY AND CONCLUSIONS

The foregoing analysis has shown that the gains of adjustment relative to the 1960-1982 preadjustment period were significant, particularly in the social sectors. During the self-imposed adjustment, the Government emphasized the improvement of human resources through extended health care and increased education facilities. Increased attention to rural areas succeeded in raising enrolment ratios and the access to health care throughout the country.

In macroeconomic terms, the self-adjustment was generally successful. Real GDP climbed 5.3 percent per year between 1983 and 1989, implying a per capita GDP growth rate of 2.6 percent, higher than the average both in sub-Saharan Africa and during the preceding period in Burkina Faso. After stagnating in the 1970s, output in the food crop sector rose at an unprecedented annual rate of 14 percent between 1983 and 1988 as a result of a deliberate policy of agricultural self-sufficiency and better food security. Nutritional status showed a slight improvement over the period. Cash crop

production, particularly of cotton, also increased, although these gains have been eroded by falling international commodity prices. Success in the production of both food and cash crops was partly the result of favourable natural conditions but was also due to a favourable pricing policy, the improved distribution and marketing of output and investments to raise agricultural productivity, especially through water-retention techniques and research.

Industrial performance advanced relative to the earlier period but, with the exception of the mining sector, failed to generate substantial export earnings. Insufficient attention was paid to the informal sector despite its vibrancy.

Some economic indicators, including debt arrears, the debt service ratio and the debt/GNP ratio, worsened, partly because of the more expansionary policies adopted during the period. The public finance situation also worsened a bit. Since 1983, the Government made an effort to balance the budget by cutting expenditures, improving tax collection and widening the tax base. Nonetheless, relative to the 1970s, the budget situation deteriorated, if only marginally. Several budgetary measures were contradictory. Thus, cuts in some areas were offset by increases in unproductive areas such as defence spending. However, in comparison to that in other countries of sub-Saharan Africa, the budget deficit in Burkina Faso remained low throughout the period.

Overall, adjustment has been beneficial to Burkina Faso. For the first time in its history, the country witnessed wide public participation in the development of human resources and the construction of schools and health centres in villages. The system of "popular tribunals" increased accountability in the civil service. Villagers were made aware of the importance of education and displayed their willingness to participate both through physical labour and financial contributions.

Despite this progress, much remains to be done before Burkina Faso can move beyond underdevelopment. Social indicators (school enrolment, health status) are still among the lowest in the world and agriculture, the country's major productive sector, remains subject to a variable climate and other natural conditions. Until farm technology and industrial management are improved, the production of food and industrial output will remain unstable and social welfare will suffer.



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