STRUCTURAL ADJUSTMENT, GROWTH AND HUMAN WELFARE:  
THE CASE OF NIGER, 1982-1989 a/  

by  
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I. DEVELOPMENT POLICIES AND THE ECONOMY PRIOR TO 1982

Structural Weakness in the Economy in the Late 1970s

By 1978, the prospects for the sustained economic development of Niger were being hindered by a number of problems. These problems may be placed into four categories: the limited endowment of production factors, overdependence on uranium exports, handicaps associated with the internal structure of the economy and constraints tied to the geographical and monetary context of the economic relations of the country with the rest of the world.

The Limited Endowment of Production Factors. Despite its slow but steady decline after 1960, agriculture still represented the mainstay of the economy in 1978. The sector employed over 70 percent of the active population and accounted for 43 percent of GDP, down from 69 percent in 1960.

The principal barriers to improved production in the sector were poor soil fertility, the limited amount of good land and reliance on desperately extensive farming techniques. More than two-thirds of the country is desert, while arable land receiving over 350 millimetres of rain per year represents only 12 percent of the total area. Moreover, the drought of 1974-1975 had caused some farmland degradation. With the exception of rice production, which covered more than 90 percent of the irrigated land, food crops, including millet, sorghum, cassava, maize, potatoes and wheat, were cultivated using dry-land farming methods and were thus subject to changes in climate and poor yields.

Increases in production resulted mostly from increases in the area under cultivation, either through the expansion of farming to marginal lands, or the shortening of fallow periods, but not through the intensification of farming methods. Agricultural "inputs" were rarely found outside hydro-agricultural projects, such as ONAHA which involved 11,000 hectares. The average annual use of manure as a fertilizer did not reach one kilogramme per hectare (SEDES 1987), and 98.5 percent of producers continued to employ manual techniques.

Groundnuts, surpassed by cowpeas after the 1976-1977 season, and cotton were the major export crops. Like food crops, export crops suffered the effects of inadequate and unstable rainfalls. The situation was the same for livestock, the second most important export product: Over the long term, the development of the animal population, mainly cattle, sheep and goats, was cyclical and depended on variations in rainfall.
The rural sector's vulnerability to climate was due to phenomena mostly beyond human control, such as the hostile sub-Saharan ecosystem, insufficient surface water and desertification. However, it also stemmed from the inappropriate agricultural policies of the previous two decades that had failed to "liberate the economy from natural factors" (Commissariat Général au Plan 1964). These policies, particularly those regulating public investment in agriculture, did little to improve farming techniques or reduce the perverse effects of drought, soil erosion and variations in rainfall.

The level of capital accumulation and human resource development was still extremely low at the end of the 1970s. While investment expenditure during the 1960s and 1970s had added modestly to the limited stock of capital goods, equipment and physical infrastructure inherited at Independence, the dynamics of population growth and human resource development were contributing only marginally to economic expansion. Persistently high population growth rates, which rose from an average 2.7 percent per year in the early 1960s to about 3 percent in 1978, helped worsen the land/man ratio and, in the absence of changes in farming technologies, led to stagnation and even declines in yields and to occasional imports of food. At the same time, the "quality" of the human resource base - as measured by health indicators, education and the diffusion and diversity of skills - had improved only modestly since Independence and was, in 1978, still among the lowest in sub-Saharan Africa and in the developing world. The total population, 40-45 percent of which was concentrated in the South along the border with Nigeria and close to 90 percent of which was located in rural areas, was estimated in 1978 at about five million (the 1988 Census counted 7.2 million). In 1978, average fertility (seven children per female) and infant and child mortality rates (around 160 and 32 per thousand, respectively) were very high, while adult literacy (8 percent) and primary school (23 percent) and secondary school (3 percent) enrolments were very low. Adult literacy and primary school enrolments among females, in particular, were extremely low (6 and 17 percent, respectively). Clearly, these factors did not facilitate the tasks of reducing overall fertility, population growth and the dependence on expatriate expertise, improving agricultural practices and generating the skills necessary for the diversification of productive activities.

The Dangerous Predominance of Uranium. Up to the early 1970s, mining played a marginal role in the economy: Tin ore, the sole true mineral resource then under exploitation, accounted for less than 1 percent of GDP. The discovery and development of uranium deposits in Arlit and later in Akouta increased the
importance of mining within a short time. Uranium extraction was quickly transformed into one of the most significant items in the national budget and the balance of payments. The contribution of uranium to exports grew from 35 percent to 79 percent between 1974 and 1978 and then settled around this level. At the same time, uranium mining came to represent 27 percent of gross capital formation and provide 11 percent of the jobs in the modern sector outside of the civil service (Table 1).

| TABLE 1: URANIUM'S CONTRIBUTION TO THE ECONOMY (In Percentages, 1978-1989) |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| GDP                         | 13.0 | 11.8 | 8.0  | 7.6  | 8.1  | 8.2  | 7.8  | 6.0  | 6.0  | 5.0  | 5.5  |
| Exports                     | 79.0 | 75.0 | 79.0 | 76.0 | 78.0 | 77.0 | 85.5 | 77.0 | 78.4 | 70.2 | 74.5 | 74.6 |
| Budget Revenue              | 46.0 | 32.0 | 19.0 | 14.0 | 14.0 | 15.0 | 15.0 | 14.0 | 11.0 | 11.0 | 9.0  |
| Employment *                | 10.5 | 22.5 | 14.7 | 27.7 | 18.7 | 24.5 | 19.4 | 16.7 | 13.6 | ..   | 12.2 | 7.6  |


* In the modern sector, excluding the civil service.

Thus, the importance of uranium mining to exports, budget revenue, investments and employment conferred a determinant role on this activity not only for the achievement of equilibrium in the balance of payments and the Government budget, but also for the generation of employment and, because of its significance to investments, for overall growth. Nonetheless, this made the country very dependent on a market subject to strong exogenous fluctuations.

The Importance of the Informal Sector. Niger had not been able to escape the structural dualism typical of the economies of many developing countries. This dualism involves the existence of a modern sector, which is the privileged target of intervention by governments, along with an informal sector, which is less sensitive to manipulation through traditional instruments of economic policy.

By the end of the 1970s, the informal sector, including subsistence agriculture, was already playing an important role in the economy. It was accounting for 68 percent of GDP by 1978 (Guillaumont 1988), and the value-added generated by the urban informal sector was twice as large as that produced by the nonprimary urban modern sector (i.e., excluding mining, water and electricity). In general, such a high degree of informalization in an
urban economy poses a number of problems for policymakers since fiscal, tax, credit and other policies have only a moderate effect on this sector. In addition, an expansion of the sector is often accompanied by a decline in fiscal revenue because income assessment becomes complex, the tax base highly fragmented and tax evasion more frequent.

A Thwarted Economic Policy. The reduction in the effectiveness of economic policies that results from the spread of the informal sector was aggravated in Niger by two closely related factors. First, Niger's membership in the West African Monetary Union (UMOA) prevents it from adopting independently certain economic policies and limits the scope of others. In particular, Niger, like all members of the UMOA, can neither devalue its currency, nor undertake entirely autonomous monetary policies. Interest rates and the extent of any monetary financing of budget deficits are determined at the supranational level. Thus, the credits granted to the treasury of a member country by the Central Bank of the West African States cannot exceed 20 percent of the country's fiscal revenues during the most recent year for which complete data are available. Moreover, the CFA franc, the UMOA currency pegged to the French franc at a fixed parity and guaranteed by this convertibility, has not functioned well at the regional level. For instance, the 70 percent appreciation of the CFA franc, vis-à-vis the naira (the currency of Nigeria) on parallel exchange markets between 1980 and 1987, contributed to the deterioration in Niger's balance of payments by seriously jeopardizing the competitiveness of exports of livestock and cowpeas, the second and third most important export products after uranium (Azam 1988). However, if its membership in the UMOA did not help the country to avoid balance of payments problems, the convertibility of the CFA franc did facilitate currency adjustments without bringing the economy to a virtual standstill, as has occurred in countries with nonconvertible currencies (Guillaumont and Guillaumont 1988).

Second, economic policy was strongly conditioned by the intense trade relationship with Nigeria, which is not in the CFA-franc zone but is the most important trading partner of Niger in sub-Saharan Africa. This trade is grounded on strong historical and economic ties, including the cultural identity of people living on both sides of a border which is too long and porous for effective control, the complementary nature of traditional production systems and the cross-border integration of markets. The immense commerce between Niger and Nigeria, especially the parallel-sector component, which is certainly the largest in volume, tends to offset and even cancel out
the effects of any economic policies initiated in Niger. For example, when Sonara and OPVN, two agricultural marketing boards, fixed producer prices at high levels in order to encourage peanut or millet production in Niger, they ended up exhausting their funds in the purchase of crops actually harvested in northern Nigeria. Thus, according to the SEDES (1987) analysis:

"Parallel trade can introduce some flexibility in the allocation of production factors and the provision of consumer needs.... But it can also constitute a handicap in economic policies and development projects (the drain of goods, the nonreimbursement of farm credits, etc.). For Nigeria, which often has important problems in resource management, it is a safety valve. However, it has a greater impact on Niger, where its effects stretch far beyond the border zone.... In general terms, it may be stated that, because of the differences existing on both sides of the border, informal trade has generated some interdependence between the policies of both countries. These parallel markets clearly intensify the impact of policies followed in Nigeria on Niger."

By the same token, the people of Niger who live along the border owed the higher standard of living which they enjoy relative to the rest of the country to their access to commodities (fuel, fertilizers, etc.) subsidized by the Nigerian Government for its internal market.

1978-1982: Rapid But Unstable Growth and Questionable Development Strategies

The GDP of Niger grew at record rates of over 20 percent between 1978 and 1980 and over 10 percent in 1981 and 1982 essentially because of the combination of two favourable circumstances: steady agricultural output and a substantial increase in uranium production thanks to the opening of a second mine, in Akouta, in 1979. However, the uranium bonanza quickly distorted economic policies and the orientation of future growth. Public sector investment and employment were stepped up but without improving the productive base. Moreover, perceived as a guarantee of the ability of the country to pay, the jump in uranium revenues prompted the political leadership, encouraged by international creditors, to add rapidly to the country's debt. Both of these initiatives proved to be inefficient, even detrimental, and compounded the economic crisis which began in 1982.

Public Sector Investment and Employment Policies. Between 1976 and 1982, the number of public sector employees rose by almost 90 percent, from about 14,000 to close to 27,000. During the same period, budgetary expenditures to cover the cost of personnel shot up by 168 percent.
As an observer has noted (Chambas 1988), "Niger allocated most of the budgetary resources obtained from the boom in uranium production to investment spending..., but, because of their nature..., or their inefficiency, or because of various other factors, the investments did not increase the tax base." Although public sector investment priorities during the Five-Year Plan of 1979-1983 were shifted from the productive sector, which was incurring heavy losses, to the development of infrastructure, the investments generated only modest returns more because of their inefficiency than because of their nature. Thus, when the conditions in the mining industry began to worsen in 1981, the 54 enterprises which were part of the parastatal sector were contributing only 24 percent of the value-added produced in the modern sector, although they employed 13,000 people, representing 46 percent of the jobs in the sector. Clearly, these enterprises were relatively less productive. Their mediocre performance was mainly due to poor investment decisions and severe undercapitalization, which strapped several of them with debts they could not service. In addition, the policy introduced by the Government to raise producer prices and reduce consumer prices led to significant losses among agricultural marketing boards, while the absence of financial discipline and the recourse to private lending created a complex network of cross-debts and arrears. Finally, the lack of qualified managers was also an important barrier to the efficient operation of public enterprises.

A Euphoric Debt Strategy. In 1976, Niger’s external debt was equivalent to only 13 percent of GDP, and the ratio of debt service to export revenue was a mere 5 percent. This situation was definitely more favourable than that in most countries of the region. However, the financial well-being of the country that was achieved because of uranium export revenues and was thought to be permanent led to an euphoric indebtedness strategy. This strategy eventually became hazardous in view of the spiralling outstanding debt and of increasingly more onerous financing conditions. In fact, "during the four years from 1978 to 1981, Niger received two-and-one-half times more foreign capital in the form of public debt (133 billion CFA francs) than it had during the seven years from 1970 to 1977" (Mathonnat 1988). At the same time, the structure and the cost of the debt became unfavourable for several reasons, including the heavy reliance on private creditors who were lending on nonconcessional terms and at variable interest rates. It should again be underlined that this debt strategy was based on a "general consensus, shared by the creditors and reinforced by the second oil crisis, that assumed that the world demand for uranium would remain strong for a long period" (Mathonnat
II. EXOGENOUS SHOCKS AND MACROECONOMIC IMBALANCE

Between 1982 and 1985, the economy of Niger was hit by two powerful exogenous shocks: the slump in world demand for uranium and the 1984 drought. The increase in interest rates on international markets and the closing of the border with Nigeria compounded the gravity of these shocks.

After tumbling 20 percent in 1982, the price of uranium ore rose and then became stable at a level superior to that of 1980. However, the industry's output steadily fell, from 4,132 tons in 1980 to 2,970 tons in 1987, a drop of 23.5 percent in seven years (Table 2).

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<tr>
<td>Production (tons)</td>
<td>3,616</td>
<td>4,132</td>
<td>4,354</td>
<td>4,256</td>
<td>3,416</td>
<td>3,276</td>
<td>3,179</td>
<td>3,109</td>
<td>2,970</td>
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<td>Price (1,000 CFA F/Kg)</td>
<td>24.5</td>
<td>24.5</td>
<td>24.0</td>
<td>20.0</td>
<td>27.5</td>
<td>29.3</td>
<td>30.0</td>
<td>30.0</td>
<td>29.3</td>
</tr>
<tr>
<td>Export (CFA F billions)</td>
<td>53</td>
<td>97</td>
<td>98</td>
<td>91</td>
<td>94</td>
<td>100</td>
<td>92</td>
<td>91</td>
<td>85</td>
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The consequences of the shrinking demand for uranium on the economy were amplified by a mediocre year (1982) and then a catastrophic year (1984) in agriculture. During the 1984 drought, total production and average yields plummeted by roughly 41 percent for millet and 32 percent for sorghum. This created a grain deficit of over 550,000 metric tons that had to be covered through massive food imports and food aid. The average weight and quality of livestock also suffered, and the livestock population decreased 40 percent because of animal deaths, the expansion of exports and emergency slaughtering.

While the uranium crisis had been caused by external factors, the impact of the drought made clear the extent to which the performance in agriculture was dependent on rainfall rather than planning and capital investment and highlighted the structural weakness of the primary sector. This was even more alarming since, within 25 years, the country had been transformed from a producer of food surpluses to a net food importer.

These shocks had an immediate and powerful effect on the economy and on macroeconomic balance. The growth of per capita GDP slowed in 1982, fell close
to zero in 1983 and dropped by over 10 percent in 1984, the year of the drought. The slowdown in economic activity was accompanied by a large budget deficit, a deteriorating balance of payments and a rapid accumulation of foreign debt (Table 3).

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<tr>
<td>GDP Growth Rate</td>
<td>24.4</td>
<td>23.4</td>
<td>21.0</td>
<td>12.2</td>
<td>10.3</td>
<td>3.6</td>
<td>-7.1</td>
<td>1.4</td>
<td>0.4</td>
</tr>
<tr>
<td>GDP/Per Capita g.r.</td>
<td>21.6</td>
<td>20.6</td>
<td>18.2</td>
<td>9.2</td>
<td>7.3</td>
<td>7.3</td>
<td>0.5</td>
<td>-10.2</td>
<td>-1.7</td>
</tr>
<tr>
<td>Government Revenue/GDP</td>
<td>Excluding Grants</td>
<td>14.4</td>
<td>12.7</td>
<td>11.4</td>
<td>10.2</td>
<td>11.6</td>
<td>10.3</td>
<td>10.3</td>
<td>11.1</td>
</tr>
<tr>
<td>Including Grants</td>
<td>14.4</td>
<td>12.7</td>
<td>11.4</td>
<td>11.9</td>
<td>15.2</td>
<td>13.8</td>
<td>14.8</td>
<td>16.5</td>
<td>15.0</td>
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<td>Public Expenditure/GDP</td>
<td>19.1</td>
<td>23.6</td>
<td>18.4</td>
<td>19.0</td>
<td>22.2</td>
<td>19.4</td>
<td>18.4</td>
<td>20.1</td>
<td>19.3</td>
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<tr>
<td>Fiscal Deficit/GDP</td>
<td>-4.7</td>
<td>-10.8</td>
<td>-7.0</td>
<td>-7.1</td>
<td>-7.1</td>
<td>-5.6</td>
<td>-3.6</td>
<td>-4.0</td>
<td>-4.3</td>
</tr>
<tr>
<td>Exports/GDP</td>
<td>22.7</td>
<td>21.8</td>
<td>19.8</td>
<td>18.5</td>
<td>20.7</td>
<td>17.9</td>
<td>17.8</td>
<td>19.0</td>
<td>15.8</td>
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<tr>
<td>Imports/GDP</td>
<td>23.3</td>
<td>23.0</td>
<td>24.2</td>
<td>17.9</td>
<td>19.5</td>
<td>24.2</td>
<td>19.6</td>
<td>20.5</td>
<td>18.3</td>
</tr>
<tr>
<td>Current Account</td>
<td>Balance/GDP</td>
<td>-11.3</td>
<td>-6.5</td>
<td>-10.9</td>
<td>-6.4</td>
<td>-11.9</td>
<td>-3.5</td>
<td>-3.9</td>
<td>-3.0</td>
</tr>
<tr>
<td>Basic Balance/GDP</td>
<td>-1.7</td>
<td>2.4</td>
<td>-1.5</td>
<td>2.5</td>
<td>-9.9</td>
<td>-1.8</td>
<td>-0.2</td>
<td>-2.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>ODA/GDP</td>
<td>9.0</td>
<td>7.7</td>
<td>4.8</td>
<td>6.4</td>
<td>6.3</td>
<td>5.4</td>
<td>9.6</td>
<td>15.4</td>
<td>11.8</td>
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<tr>
<td>Net Transfer/GDP</td>
<td>4.9</td>
<td>4.5</td>
<td>5.9</td>
<td>10.8</td>
<td>0.3</td>
<td>5.4</td>
<td>1.9</td>
<td>2.1</td>
<td>2.4</td>
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<tr>
<td>GDP Deflator</td>
<td>..</td>
<td>..</td>
<td>83.1</td>
<td>90.3</td>
<td>100.0</td>
<td>106.9</td>
<td>118.0</td>
<td>113.0</td>
<td>105.5</td>
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<tr>
<td>CPI</td>
<td>61.5</td>
<td>66.1</td>
<td>72.9</td>
<td>89.5</td>
<td>100.0</td>
<td>97.5</td>
<td>105.7</td>
<td>104.7</td>
<td>101.3</td>
</tr>
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</table>

*/ Excludes ODA but includes implicit lending resulting from rescheduling.

Fiscal Deficit. Between 1976 and 1980, the state of public finances deteriorated considerably. This was the result of conflicting developments in revenues and public expenditure. Total Government revenues jumped from 30.5 billion CFA francs in 1976 to 77.5 billion francs in 1980 and 70.1 billion francs in 1981. As a percentage of GDP, budget revenues rose from 11.9 percent to 14.4 percent and then fell back to 12.7 percent during the same period (Baldet and Cornely 1987). However, the favourable growth of revenues masked the lagging tax effort, which was characterized by a drop in direct taxation (Chambas 1988) and, thus, in fiscal equity. On the other hand, this growth revealed the extreme sensitivity of Government budgetary revenues to the ups and downs of the mining industry.

Between 1976 and 1981, public expenditure increased much more sharply than did revenues and grants. This rapid growth in expenditure led to a large public deficit, which reached 25.5 billion CFA francs in 1980, or 4.7 percent of GDP against only 1.8 percent in 1977. The deficit rose further, reaching 10.8 and 7.0 percent of GDP in 1981 and 1982, respectively. This was the first clear symptom of the economic crisis and the first reason for the introduction of adjustment policies.
Foreign Debt Burden. The growing recourse to external borrowing and internal credit to finance the Government deficit led to an increase in foreign debt and in the debt-service ratio to unbearable levels. 1982 was a critical year. It was marked by two turning points linked to the mushrooming foreign debt. First, because of the drop in demand for uranium, export revenues fell. Second, net capital transfers collapsed under the burden of debt servicing. This meant that new commitments barely covered debt reimbursements. In effect, in that year Niger was contracting new debts in order to pay back old ones (Mathonnat 1988). As a consequence of these two events, the debt service ratio grew from 7.1 percent in 1981 to 10.9 percent in 1982. Similarly, despite a sharp rise in official development assistance (ODA), net transfers and donations dropped from 17 percent of GDP in 1981 to 7 percent in 1982. Excluding ODA, the net transfer of resources plummeted from 11 percent of GDP to 0.3 percent during those two years.

These developments had a catastrophic impact on Government financial operations. Between 1980 and 1982, the volume of financial resources allocated to servicing the debt multiplied threefold, rising from 2.8 billion to 9 billion CFA francs, and, in 1982, debt servicing absorbed 15 percent of total budgetary revenues, up from 4 percent in 1980 and 6 percent in 1981. The increase in the debt service ratio, combined with a reduction in gross foreign resource contributions from 35 billion CFA francs in 1981 to 13 billion in 1982, caused the share of net transfers in Government budgetary revenues to fall from 50 percent in 1981 to 21 percent in 1982. Thus, net transfers financed only 10 percent of total public expenditures in 1982, down from 24 percent in 1981. This crisis in net transfers was the second reason for the introduction of adjustment policies.

The Balance of Payments Deficit. The imbalance of public finances generated a persistent excess domestic demand over GDP that grew from 12 percent in 1979 to a record 15.5 percent in 1982. It also led to a serious deficit in the balance of payments that, in the short term, could only be reabsorbed through restraint in imports. Despite a tremendous improvement in the terms of trade, the deficit in the current account balance rose to record levels in 1978 and remained extremely high between 1980 and 1982, reaching approximately 12 percent of GDP in 1982. If it had been due to the imports necessary for rapid economic growth, the deficit would have been acceptable, but, in this case, it was symptomatic of a serious foreign payment crisis caused by the deterioration of the terms of trade and by increased interest payments on the foreign debt. This was the third and undoubtedly the most immediate reason for
the introduction of adjustment policies.

III. NATURE AND EFFECTS OF THE ADJUSTMENT POLICIES

A set of stabilization measures was introduced in 1982 to curtail the Government budget and balance-of-payments deficits over the short term. Unlike the experience in several other countries, these measures were spontaneous at first but then, in 1983, received the support of the IMF through a Standby Agreement. In 1985, the measures were replaced by a Structural Adjustment Programme (SAP I), which had been drawn up with the assistance of the World Bank and which was designed to increase the production of tradeable goods while addressing the principal structural problems at the root of the macroeconomic disequilibrium. A second structural adjustment programme (SAP II) was drafted in 1988 and initiated in 1989, and a four-year Enhanced Structural Adjustment Facility was signed with the IMF in December 1988. In addition, between 1985 and 1989, several sectoral adjustment measures were undertaken with the support of the international community, and, in late 1989, the PACSA programme was launched to reduce the social costs of adjustment.

It should be emphasized that, if the analytical categories of "stabilization" and "structural adjustment" permit in retrospect an easier classification of the various reforms, they do not reflect the exact timetable of the reforms pursued in Niger since 1982. In fact, the Standby Agreement included elements (e.g. agricultural policy) typical of structural adjustment programs. Similarly, the SAPI included measures typical of a stabilization package. Nevertheless, the conceptual categories of stabilization/structural adjustment are useful to inventory, analyze, and evaluate the policies adopted in Niger since 1982.

Stabilization Measures: 1982-1984

Stabilization consists of macroeconomic reforms designed to reduce domestic demand and the deficit in government budget and the balance of payments. It involves fiscal measures (increases in the tax rate, the tax base and tax revenue), public expenditure reductions and domestic credit restrictions. In the theoretical framework adopted for the design of stabilization policies by the IMF, an excess of aggregate demand over GDP is seen as the main cause of the external deficit. Such a deficit appeared in Niger in 1978 (Table 3) and quickly reached a dangerous level due to the drop in uranium export revenues, the deterioration in the terms of trade following
the second oil crisis and the droughts of 1982 and especially 1984. The stabilization measures adopted to curb the budgetary and external deficits can be broken down into three categories: measures for a parsimonious management of public finances, restrictive monetary policies and steps to reduce the rate of growth in foreign debt.

A Parsimonious Management of Public Finances. The control of the growth of public expenditure was achieved through the containment of recurrent expenditure and a drastic reduction of capital expenditure. Total budget expenditures fell from 163.2 billion CFA francs in 1981 to 122.7 billion francs in 1984, a drop of 25 percent within four years that sharply contrasted with the staggering increase of 185 percent recorded between 1976 and 1980. This achievement resulted from moderate growth in recurrent expenditures, which rose from 51.7 billion CFA francs in 1981 to 65.2 billion CFA francs in 1984, and drastic cuts in investment expenditures, which dropped from 111.5 billion CFA francs in 1981 to 53.9 billion francs in 1984 (Table 4). Although both such expenditures can be cut to reduce the budget deficit in the short term, the results differ widely depending on the type of expenditure being cut. If recurrent expenditures are cut by freezing government salaries, imposing hiring limitations in the public sector and reducing subsidies and transfer payments, the result is an unwanted contraction in the scope and quality of social services, a drop in the real incomes of government employees and a general decline in the overall standard of living of consumers. On the other hand, if capital expenditures are cut, future economic and social development is put in serious jeopardy.

Government efforts to increase fiscal revenue through reductions in tax exemptions, the expansion of fiscal administration and the revision of import and export duties, among other initiatives, did not achieve the expected results, although these were not particularly ambitious and were limited to maintaining tax revenue at a constant level (Mathonnat 1988). Thus, between 1981 and 1984, total Government revenue fell from 99.2 billion CFA francs to 92.6 billion CFA francs, a 6 percent drop. Although the tax pressure on salaried workers grew after 1981, fiscal revenue was subject to a similar decline, falling from 65.3 billion francs in 1981 to 61.1 billion francs in 1984 with, however, a change in composition in favour of indirect taxes (Chambas 1988).

Caused by the slump in economic activity, particularly in mining, this stagnation of fiscal revenue was probably worsened by inconsistencies in tax policy such as the increase in tax rates, which resulted in the flight of the
TABLE 4: GOVERNMENT REVENUES AND EXPENDITURES  

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<td>62.9</td>
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<td>Total **/</td>
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<td>163.2</td>
<td>145.6</td>
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<td>180.7</td>
<td>146.6</td>
<td>119.7</td>
<td>106.1</td>
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<tr>
<td>(In current prices)</td>
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<td>-45</td>
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<td>-30.1</td>
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<td>90.8</td>
<td>100</td>
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<td>104.3</td>
<td>108.6</td>
<td>107.5</td>
<td>104.2</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance (various years); Chambas (1987); Diagne (1988); Ministry of Planning (various years); Mathonnat (1990).

*/ Including grants; **/ Besides recurrent and capital expenditure, the total includes also expenditures on special accounts.

tax base, and the difficulty in expanding the tax base within the informal sector, which became an even more important source of employment during the years of the crisis. For the Government, encouraged by the IMF and the World Bank, taxing the informal sector therefore emerged as a key issue of fiscal policy (Baldet and Cornely 1987). However, the indiscriminate taxation of informal activities is not necessarily desirable since it can lead to fiscal inequities which further burden the most vulnerable groups in society.

A Restrictive Monetary Policy. The monetary policy undertaken in Niger was no different from that followed in other African countries which were confronted by a decrease in commodity prices and were striving to achieve macroeconomic balance without resorting to the manipulation of the exchange rate. This policy contributed to the success of the efforts at stabilization thanks to direct credit restrictions included in the Standby Agreement signed with the IMF and which, combined with the restrictions imposed by the Central Bank of the West African States, reduced domestic credit to the economy (in constant 1980 CFA francs) from 86 billion francs in 1981 to 71.1 billion francs in 1984. During the same period, the credit available to the Government rose from -1.3 billion CFA francs to 13.4 billion CFA francs (Guillaumont and Guillaumont 1988).
Reducing the Growth of Foreign Debt. While a significant part of official debt was rescheduled by the Paris Club, major restrictions were placed on the contraction of new loans at nonconcessional terms, and fresh efforts were made to seek more ODA in order to support those public investment programmes which could not be postponed. Thus, grants increasingly replaced loans as the source of financing of public investments; between 1985 and 1988, the share of loans in the financing of investments fell from 44 percent to 35 percent, while the share of the public treasury stagnated at around 6 percent.

The Structural Adjustment Program I (SAP I), 1986-1988

The measures included in the first Structural Adjustment Programme were designed to accelerate economic growth while maintaining external and budgetary imbalances within tolerable limits. They specifically addressed five structural problems which, according to an analysis of the World Bank and the Government, had caused these imbalances:

- The inefficiency of public resource management:
- The vast and inefficient parastatal sector, whose poor performance was largely due to stringent regulations covering prices, marketing contracts and employment.
- The constraints on the development of the modern private sector, including the lack of raw materials and an incentive system which encouraged investment for its own sake rather than emphasizing the economic viability of projects and the comparative advantages of the country.
- The weak resource base. Despite rapid population growth and the fact that Niger is a landlocked country, agriculture, the principal productive sector of the economy, was still overly dependent on climatic conditions, while agricultural policy had not stimulated cost-effective production.
- The poor performance in human resource development.

The analysis undertaken by the World Bank and the Government provided the theoretical basis for SAP I, which included macroeconomic reforms in public finance, pricing and marketing policies, and incentive policies and sectoral adjustment programmes for public enterprises, agriculture, and the social sector. Each initiative had one or more of the following objectives: improve economic efficiency through the elimination of price distortions, foster growth by widening the productive base, improve the competitiveness of the country in international markets and institutional capacity building.
(i) Macroeconomic Reforms

Public Finance Measures. One set of measures concerned the reorientation of public sector investment toward directly productive sectors, human resource development and the rehabilitation of the existing infrastructure. Moreover, a new procedure for investment planning was put in place that included an inventory of all public investments and the preparation of annual investment budgets and three-year investment programmes.

A superficial review of the distribution of public investments from 1985 to 1988 seems to show that the priorities of SAP I relating to productive sectors were generally respected, although the situation is less clear in human resource development. Investments in productive sectors rose from 38 percent of all investments in 1985 to 46 percent in 1987 and then fell back to 42 percent in 1988. However, the actual rate of realization of planned investments in productive sectors decreased steadily, shedding doubt on the extent to which SAP priorities were implemented, the efficiency of the recently developed planning procedures and, more generally, the Government's capacity to initiate a large number of new projects.

SAP I also focused on reducing the rate of growth of the public sector workforce. While the costs associated with it were to decline, recurrent expenditures on infrastructure maintenance were to increase by 10 percent per year, rather than the 2 percent per year that was typical between 1982 and 1985. Furthermore, cost recovery measures, including lower allowances for scholarships and the introduction of fees for hospitalisation and medical evacuations, for the use of irrigation systems and the provision of school supplies, drinking water and sewage disposal, were established to mobilize resources and improve the efficiency of public services. Finally, a value added tax, a reform of the tax on petroleum products and new limitations on customs exemptions were instituted to raise the effectiveness and the revenue of the fiscal system.

Changes in Pricing and Marketing Policies. Until 1984, the marketing system was dominated by Copro-Niger, the state trading company which was responsible for importing a variety of market consumer products and selling them at fixed prices in its stores; by OPVN, the state cereal marketing board, and by Sonara, the state marketing board for peanuts and, particularly, cowpea exports.

Three procedures for setting prices had been established in 1974:
- Official certification and Government decree. In 1981, the prices of
27 essential goods and services were regulated by this regime.

- A markup rate. This was applied to imported products, for which the price, including a legal profit margin, was increased by 15 to 55 percent. In 1981, 200 products were subject to this system.

- Open-market pricing. The prices of all other products could be set freely up to a limit of 60 percent above cost.

Reforms gradually introduced after 1984 were designed to increase allocative efficiency by allowing market forces to play a greater role in the determination of prices. Thus, in October 1985, all monopolies and near-monopolies were eliminated. The number of essential goods and services subject to official price certification dropped from 27 to seven and then to five, and the price regime for all local industrial products benefitting from Investment Code provisions was replaced by a more flexible procedure. In October 1986, the markup rate system was modified so that the prices of imported products were no longer set individually but were fixed automatically at profit margins of 35 percent or 50 percent. For all other imported goods, price deregulation was total.

Reform of Import-Export Duties and Production Incentives. Because international competitiveness could not be improved by unilateral devaluation (see earlier), the Government attempted to reduce imports and promote exports through a reform of foreign trade taxes. Thus, in 1982 and 1983, a number of IMF-inspired measures aimed at raising indirect taxes on external trade were implemented, including increases in import duties, in indirect taxes on alcohol, tobacco and cigarettes, and in the "statistical" tax. In 1986, the value-added tax (VAT) replaced the direct tax on production. The Government then lowered the VAT rate on certain products to encourage the private sector and, later, decreased some duties to reduce the temptation among importers to evade taxes. These rather incoherent measures had a negative impact on the Government budget, and customs revenues fell. Their effect on the balance of trade is less clear, since it cannot be distinguished from the effect of the drop in imports that resulted from the overall slowdown in economic activity.

Industrial incentives were also modified with the aim of reducing imports, and changes in the legal code regulating investments were proposed. In fact, the liberalization of pricing, the elimination of monopolies and the replacement of the old, distortive production tax by the VAT were expected to provide incentives for private sector investment.

Finally, the liberalization of cowpea exports and the elimination of the livestock export tax were designed to improve the competitiveness of the
agricultural sector in foreign markets. However, these measures seem to have resulted only in a rise in officially registered exports and a drop in the informal exports of cowpeas and livestock.

In conclusion, it appears that the application of macroeconomic reforms was hindered by the Government's limited capacity to manage SAP I. For instance, the proposed changes in the investment program were seriously delayed not because of a lack of funding but because of poor planning. Despite the pricing reforms and the elimination of monopolies, nothing indicates that an open market system has supplanted Copro-Niger in its role as supplier to the country. The tax and budget policies appear to have been merely ad-hoc measures with no real coherence or unquestionable successes.

(ii) Sectoral Adjustment Programmes

Whereas the goal of the macroeconomic reforms was to stimulate growth by creating a liberal economic environment, the sectoral adjustment programmes put emphasis on raising efficiency by eliminating distortions within individual sectors. SAP I included three main sectoral programmes: for public enterprises (PASEP), agriculture and the social sector.

The Reform of the Parastatal Sector (PASEP) started in 1985, focused on three principal areas: the modification of incentive policies, the reorganization, privatization or liquidation of certain public enterprises, and the improvement of the legal and institutional framework within which these enterprises operated.

The pricing and trade policy reforms of SAP I (see earlier) were designed to standardize and enhance the incentives offered to public and private companies by cancelling some of the privileges which had been enjoyed by public enterprises and which had discouraged private initiative. They also prepared the way for improvements in the competitiveness of the enterprises remaining in the public sector.

The aim of the rationalization measures of PASEP was to adapt the size and composition of public enterprises to real needs. Thus, following a detailed study of the 54 public enterprises, the Government decided to retain only 25, to integrate another four into regular government administration, and to partially or entirely privatize 22, or, if any could not be privatized, to liquidate them. By 1989, 13 enterprises had been partially or entirely privatized, two had been integrated into regular government administration,
one had been liquidated, and seven had been reorganized.

In addition, public companies were divided into four categories, each with a separate legal status: independent public enterprises, industrial and commercial public enterprises, parastatal companies and state companies. Whereas the "public" enterprises had a public service mission, the "companies" were expected to be subject to market conditions and generate profits. The relationship between the parastatal sector and the state were redefined on the basis of "programme contracts", which set out the respective obligations of the state and the individual enterprises. A new statute made employment in the parastatal sector different from regular government employment, outlined a scale of wages and salaries based on merit and gave managers the power to hire and fire personnel. Financial reorganization was achieved by the payment of the arrears due by the Government and the recovery of unpaid taxes due the Government by the public enterprises, state and parastatal companies.

The Agricultural Adjustment Programme. Of all sectors, the adjustment programme in agriculture involved the most far-reaching reforms, including changes in pricing policies, subsidies, agricultural credits and agronomic research.

The pricing policy in effect until 1983 pursued two conflicting goals: on the one hand, to encourage production by fixing stable and attractive producer prices and, on the other, to favour urban consumers by maintaining stable and accessible consumer prices.

The new agricultural policy focused mainly on price and trade liberalization and the establishment of a larger role for market forces, which had never really been supplanted by OPVN, the cereal marketing board, which never had handled more than one-third of marketed produce, or about 5 percent of total production.

The policy reform was carried out in three phases. First, following the signing of the 1983 Standby Agreement with the IMF, the importance of OPVN was reduced by decreasing the number of its marketing outlets, cutting its personnel from 381 to 141, and suppressing its trading monopoly. Second, in 1984, the Government signed a $32-million grant agreement for rural development with USAID. The grant was contingent on a progressive decline in subsidies for agricultural inputs, the liberalization of livestock and cowpea exports, the creation of storage capacity at the village level and the elimination of nationwide price fixing. Third, SAP I definitely sanctioned the disengagement of OPVN from the responsibility to stabilize grain prices. OPVN was allowed to maintain a maximum security reserve of 80,000 tons of
cereal and purchase quantities equal to one-third of this reserve each year through competitive bidding open to all traders. In addition, internal trade and the importation of cereals were to be open and exportation was to be authorized in case of market saturation.

Agricultural credit was also affected by the reform. In 1985, the principal rural credit institution, the National Agricultural Credit Bank, which had consistently registered losses and accumulated a large debt, suspended its credit operations and focused its activities on the recovery of overdue credits. The Government eventually decided to close the bank and create a new agricultural credit system.

Finally, agricultural research programmes were reorganized so that they would better respond to the most pressing needs of rural populations and the production problems of the country. Closer links were established among regional research centres, extension services and training institutions; the coordination among the various extension services was improved, and technical applications were reoriented so that they were within the reach of end-users in rural areas.

Adjustment in the Social Sector. Adjustment in the social sector was influenced by the overall effort to reduce the fiscal deficit (Table 4). Nonetheless, measures of particular relevance to health care and education were introduced during the years of stabilization, but particularly later, during, if not as part of, SAP I and SAP II.

Health care policy during the period was expected to "soften the social impact of recession and adjustment and protect the health of vulnerable groups" (Ministry of Public Health 1989). The effective and systematic application of user fees for hospital care and medical evacuations was, without doubt, the most important reform implemented to achieve this goal. The initiative was undertaken to meet the principal condition imposed by a $15-million health-care support grant signed by the Government and USAID in August 1986. The resources obtained through the fees were to be used for primary care activities, especially in neglected rural areas. In October 1985, the Ministry of Public Health had ordered all hospitals to apply rigorously the hospital user fees which had been established by decree in 1962 but never enforced until then. The hospital system was therefore the only branch of the health care structure that charged set fees for services, although user contributions for primary health care were important in other areas as well. In particular, rural communities donated labour and materials for the construction of village health care centres and provided the salaries for village health care units.
In addition, households continued to pay for the medicines they used.

Hospital fees were fixed according to a scale based on professional and economic status. The scale divided users into four groups: civil servants, who paid 20 percent of the fee; individual users, who paid the full fee; users with incomes below 25 percent of the guaranteed minimum wage (in this case, the fees were only applicable for hospitalization), and indigents, for whom certificates were issued by local governments and who paid no fees. Twenty-five percent of the fee was expected to be collected for a child under 5 years of age; the figure rose to 50 percent for children between 5 and 12. Although not created for this purpose, the fee scale could obviously be employed to help protect particularly disadvantaged target groups.

The initial reforms introduced in education were imposed by the contraction of public expenditures during the period of stabilization. Capital outlays and recurrent expenses were to be lowered through the adoption of simpler construction standards, the use of less expensive construction materials and charges for school supplies.

These reforms were followed by a series of measures that more specifically addressed education and truly constituted a sectoral adjustment programme. This programme had two main goals: to improve internal and external resource efficiency in education and to increase the practical effectiveness and quality of primary education by reducing dropout rates and integrating basic concepts related to health, nutrition, child care and the environment into curricula. The resources required to meet these goals were to be obtained through a reallocation of expenditures from university fellowships to primary education. This was justified by the wider social returns of primary education and the need to make the distribution of the benefits of education more equitable by eliminating the concentration of resources on a small proportion of the school-age population.

A more systematic reorganization of the education sector is the object of a sectoral adjustment programme which was outlined in discussions between the Government and the World Bank in 1989. Ten of the 13 proposed reforms directly relate to education. They involve reductions in the cost and duration of the training of elementary school teachers, the introduction of double shifts in primary school, the use of underemployed secondary school teachers in elementary education, the containment of expenditures on fellowship for secondary and tertiary education and on administrative costs, more private sector initiatives in education, an increase in enrolments in the first year of elementary school at the rate of 8 percent per year between 1988 and 1995, improved access for females to education, and a target of at least one
textbook for every two pupils by 1995.

Since this programme has only been partially implemented, its success cannot yet be evaluated. However, the priority assigned to primary education will hopefully be translated into facts, particularly in terms of more budgetary support, while avoiding "plans for cost recovery measures in the educational system, that is to say, in primary education and lower secondary education" (Permanent Secretariat of SAP 1989).

(iii) The Impact of the Policies

The adjustment policies implemented in Niger contain all the ingredients typical of recovery programmes supported by the IMF and the World Bank. The record of these measures is mixed at best. While macroeconomic balance has been rapidly re-established, economic growth has not yet resumed, the production of "tradeables" has declined, and there are no signs of appreciable change in the supply side of the economy. Furthermore, the adjustment programmes have had serious social repercussions (see later).

An Almost Perfect Stabilization. The country's external debt, which had increased rapidly until 1982, continued to rise but at a substantially slower pace. The growth rate of external debt fell from 93 percent in 1981 to about 35 percent in 1983 and below 5 percent in 1987, while becoming negative in 1989. As a result, the debt-GDP ratio, which had reached a peak of 51 percent in 1984, stabilized at around 50 percent thereafter (Table 5).

The changes in the debt service ratio show that the various reschedulings (six after the first meeting with the Paris Club in 1983) permitted the debt service burden to be considerably, though temporarily, alleviated. However, according to Mathonnat (1988), while "the steps undertaken have contributed to the improvement of the external debt problem, whose deterioration now seems to have stopped. [Nonetheless,] the situation remains worrisome." Indeed, the debt service ratio after rescheduling continued to increase until 1989 when a major debt relief was obtained.

Substantial progress was also registered in the fiscal deficit (including grants), which dropped from 10.8 percent of GDP in 1981 to around
TABLE 5: DEBT INDICATORS
(1979–1989)

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<td>6.2</td>
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<td>0.8</td>
<td>0.8</td>
<td>3.9</td>
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<td>19.9</td>
<td>20.8</td>
<td>21.9</td>
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<td>1.8</td>
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<tr>
<td>Debt Service Ratio Before Rescheduling</td>
<td>1.6</td>
<td>2.9</td>
<td>7.1</td>
<td>10.9</td>
<td>13.8</td>
<td>26.2</td>
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<td>Debt Service Ratio After Rescheduling</td>
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<td>2.9</td>
<td>7.1</td>
<td>10.9</td>
<td>11.4</td>
<td>11.6</td>
<td>19.1</td>
<td>21.3</td>
<td>25.2</td>
<td>23.5</td>
<td>5.2</td>
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<td>89.8</td>
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<td>205.1</td>
<td>276.4</td>
<td>322.0</td>
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<td>340.2</td>
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<td>402.8</td>
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<td>Growth Rate</td>
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<td>93.3</td>
<td>18.1</td>
<td>34.8</td>
<td>16.5</td>
<td>1.4</td>
<td>4.2</td>
<td>4.6</td>
<td>13.1</td>
<td>-18.0</td>
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<tr>
<td>As % of GDP</td>
<td>12.0</td>
<td>16.8</td>
<td>29.0</td>
<td>31.2</td>
<td>40.0</td>
<td>50.4</td>
<td>50.5</td>
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<td>50.7</td>
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7 percent between 1982 and 1984 and to 3 percent to 4 percent in the following years (Table 3). However, this was the result of moderately declining real total government expenditures, which oscillated at around 19 to 20 percent of GDP, a massive increase in grants, which averaged 4 to 5 percent of GDP after 1984, and stagnant tax performance due to the fall in economic activity, tax policy inconsistencies and a large amount of tax evasion despite improvements in collection.

The situation was similar for the current account balance, where the deficit reached a record high of 10 to 12 percent of GDP from 1978 to 1982 and then declined to a more manageable level of 3 to 4 percent after 1983 despite the disappointing export performance. The move toward external balance was achieved through efforts to restrain aggregate demand and an enormous reduction in import-intensive public investment programmes, that is likely to delay the return to normal economic growth, and not through an increase in export.

Decline in the Growth of Output and Stagnant Economic Structures. Macroeconomic balance was achieved at the expense of a significant slump in investment activity, a massive slowdown in economic growth and a fall in imports. While a slowdown in the growth of output in 1983 and 1984 was expected and unavoidable particularly in view of the severity of the drought, per capita GDP continued to drop for the rest of the decade despite the application of structural adjustment measures and a jump in ODA. The weak uranium market and the relatively unfavourable climatic conditions in 1987 undoubtedly contributed to this unsatisfactory performance. However, it is also clear that the adjustment measures had at best only a modest effect on
supply responses, while the adjustment policies initiated in agriculture may have even had an adverse impact.

Of particular concern was the drastic deterioration in investment activity and the trade performance. Although the full implementation of the investment programme part of SAP I was delayed, private formal sector investment did not compensate for the downturn in government investment. In addition, while the output of the informal sector has increased more rapidly than that of the formal sector, there is still no sign that investment activity has picked up.

It is also too soon to assess the impact of PASEP, the adjustment programme for public enterprises, in terms of new investment and output. Even if it is true that "thanks to a far-reaching institutional reform and significant modifications of the macroeconomic framework, the authorities in Niger were able, within a few years, to straighten out the finances of the public enterprise system" (Plane 1988), nothing guarantees that this success can be maintained over time. In the meantime, the elimination of 3,000 jobs occasioned by PASEP has had immediate, negative and, it is feared, lasting effects on the living standard of the employees involved.

The liberalization measures introduced have not stimulated the production of new tradeable goods. Traditional exports have been declining since 1982, and substantial new export sectors have failed to emerge. Moreover, the parallel fall in imports has not been due to an increase in the production of local substitutes but rather to the overall slump in economic activity. Thus, it appears that, during the years of recession, there was no sizeable restructuring towards those sectors producing tradeables so that an eventual resumption of economic activity would not be constrained from the balance of payments side. Had this been the case, the period 1982-89 could have been characterized as a period of structural, if contractionary, adjustment. This, however, was not the case.

The principal macroeconomic indicators confirm the depressed state of the economy from 1982 to 1989 (Table 6). With the exception of electricity and public administration, a significant drop in output was experienced in all major sectors between 1982 and 1989. The drop would have been even more pronounced if it were measured on a per capita basis. Agriculture and the sectors which traditionally produce nontraditional tradeables, i.e. the private modern sector and the informal sector were not spared, a clear sign
### TABLE 6: THE GDP PRODUCTION AND EXPENDITURE ACCOUNT
(1979, 1987 And 1989: 1982 = 100)

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>1987</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Rural Sector</td>
<td>89.0</td>
<td>85.7</td>
<td>81.5</td>
</tr>
<tr>
<td>The Informal Sector</td>
<td>89.1</td>
<td>90.5</td>
<td>96.5</td>
</tr>
<tr>
<td>Uranium</td>
<td>182.4</td>
<td>72.9</td>
<td>73.7</td>
</tr>
<tr>
<td>Electric Power Generation</td>
<td>12.0</td>
<td>169.9</td>
<td></td>
</tr>
<tr>
<td>The Modern Sector a/</td>
<td>96.3</td>
<td>65.3</td>
<td>56.0</td>
</tr>
<tr>
<td>Public Administration</td>
<td>59.2</td>
<td>123.4</td>
<td>148.8</td>
</tr>
<tr>
<td>GNP and Imports</td>
<td>93.4</td>
<td>87.2</td>
<td>94.9</td>
</tr>
<tr>
<td>Final Consumption (of which)</td>
<td>96.4</td>
<td>106.1</td>
<td>108.5</td>
</tr>
<tr>
<td>Private</td>
<td>99.6</td>
<td>102.7</td>
<td>108.7</td>
</tr>
<tr>
<td>Public</td>
<td>77.0</td>
<td>126.8</td>
<td>80.9</td>
</tr>
<tr>
<td>Gross Fixed Capital Formation Total</td>
<td>103.0</td>
<td>48.8</td>
<td>49.2</td>
</tr>
<tr>
<td>Public</td>
<td>153.5</td>
<td>26.8</td>
<td></td>
</tr>
<tr>
<td>SQS b/</td>
<td>72.7</td>
<td>66.3</td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>97.6</td>
<td>98.6</td>
<td>78.4</td>
</tr>
</tbody>
</table>


a/ Excluding uranium and electric power generation.
b/ SQS = Sociétés et Quasi-Sociétés non Financieres.

that measures which demand restrain measures prevailed over supply-enhancing measures.

The situation was particularly worrisome in agriculture. Even in relatively good years, yields did not increase at the same rate as did the population. Agricultural production per capita at the end of the 1980s was about 20 percent less than it had been at the beginning of the decade, and cereal imports reached 7 to 8 percent of total consumption, or about 30 percent of all imports, a sharp departure from the cereal surpluses produced in nondrought years until the early 1980s (Table 7). The fact that the rise in cereal imports and food aid was partly due to changes in consumer tastes in favour of rice and wheat did not alter the gravity of the problem.

Although they contributed to stability in the Government budget, which no longer had to support the deficits of the official marketing boards, price and trade liberalization, the elimination of farm credits and the reform of trade policies did not encourage the production and exportation of new commodities, with the modest exception of cotton, nor did they lead to more exports of traditional commodities. Indeed, the output of groundnuts and cowpeas declined until 1987, and it is unclear whether the combined official and unofficial exports of these products increased.
While climatic factors, the compression of aggregate demand in Nigeria and the devaluation of the naira played a role in this unsatisfactory performance, the overall adjustment strategy, especially the sector-specific programme, can be faulted for not confronting the structural weaknesses of Niger's agriculture, i.e. its dependence on climatic factors, the extreme backwardness of farming techniques, insufficient use of inputs and extreme price fluctuations. In particular, the liberalization of agricultural trade and the abandonment of the price stabilization mechanism controlled by OPVN, the cereal marketing board, did not stimulate output. Meanwhile, the elimination of farm credits and fertilizer subsidies contributed to deterioration in the terms of agricultural trade, delayed the application of more input-intensive techniques and restricted the opportunities for structural change. That the National Agricultural Credit Bank, the official source of farm credits, had been inefficient should not have been considered grounds for its outright liquidation; it could have been reorganized and used to support the use of intermediate inputs, finance the modernization of the sector and advance appropriate and much-needed irrigation and anti-erosion schemes, i.e. all irreplaceable preconditions for the development of Niger's agriculture.

Clearly, the adjustment process did not address the principal structural problems which hampered economic development. Thus, it does not appear to have been truly "structural".

| TABLE 7: AGRICULTURAL PRODUCTION |
| (In Thousands Of Tons, Rounded, 1979-1989) |
| Millet | 1,255 | 1,363 | 1,314 | 1,293 | 1,298 | 771 | 1,450 | 1,353 | 996 | 1,766 | 1,333 |
| Sorghum | 351 | 368 | 322 | 357 | 362 | 249 | 329 | 360 | 366 | 560 | 422 |
| Cowpeas | 304 | 266 | 275 | 270 | 269 | 185 | 115 | 297 | 209 | 302 | 320 |
| Peanuts | 89 | 126 | 102 | 87 | 74 | 31 | 9 | 55 | 40 | -- | 25 |
| Threshed Unmilled Rice | 24 | 31 | 40 | 42 | 45 | 51 | 56 | 75 | 61 | 53 | 77 |
| Cotton | 3 | 3 | 2 | 2 | 4 | 5 | 7 | 8 | 9 | 6 |
| Cereal Imports | -- | 89 | 141 | 115 | 129 | 89 | 259 | 59 | 84 | -- | -- |
| Food Aid | -- | -- | 11 | 71 | 12 | 11 | 2 | 17 | 9 | 19 | -- |
| Per Capita Food Production | 100 | 103 | 96 | 93 | 88 | 73 | 86 | 88 | 75 | -- | -- |


*| 1979-81 = 100.
IV. STABILISATION, STRUCTURAL ADJUSTMENT AND THE WELL-BEING OF THE POPULATION

A comprehensive evaluation of the impact of stabilization and adjustment on the well-being of the population of Niger, particularly children, pregnant women and the marginalized, is not easy for two reasons. First, accurate and up-to-date data, particularly health and nutrition indicators, are not available. Second, although the IMF Standby Agreement, SAP I and several of the Sectoral Adjustment Programmes have been completed, not all their effects have become apparent. Nonetheless, a number of negative effects have already become so apparent that the Government launched, in 1989 in parallel with SAP II, a specific programme (PACSA) to reduce the social costs of adjustment.

Employment and Income. The economic crisis of the early 1980s led to a significant erosion in the incomes of most households. In 1982, employment began declining sharply in all major industries in the private modern sector. In 1985, there was a modest and short-lived recovery, but in that same year, in line with the adjustment programme then underway, the growth in public sector employment began to slow as a result of two contradictory trends: a relatively rapid rise of about 8 percent per year in the number of civil servants with permanent employment contracts and a drop of 3 percent per year in the number of auxiliary workers. In addition, the Government suspended the automatic recruitment of all university graduates and introduced competitive examinations for new hiring. Tentative estimates suggest that, in contrast, informal self-employment in Niamey doubled between 1981 and 1988 because of a contraction in the number of modern sector jobs and the exodus from rural to urban areas (Table 8).

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</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>--</td>
<td>26,003</td>
<td>28,532</td>
<td>31,010</td>
<td>32,923</td>
<td>32,565</td>
<td>33,987</td>
<td>35,342</td>
</tr>
<tr>
<td>Private</td>
<td>34,552</td>
<td>25,711</td>
<td>24,227</td>
<td>21,369</td>
<td>22,882</td>
<td>26,886</td>
<td>27,948</td>
<td>25,974</td>
</tr>
<tr>
<td>Informal (Niamey)</td>
<td>22,156</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>44,620</td>
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</tr>
</tbody>
</table>

Sources: Department of Labour, Ministry of the Civil Service (1990); ILO-JASPA (1982); author’s calculations.
The fall in wages and salaries was also significant. The minimum wage was frozen in 1980. This led to a loss of about 30 percent in consumer buying power between 1980 and 1987. Salaries in the public and private sector were frozen in 1982. The erosion of purchasing power that resulted was less severe but still evident.

Because of these combined trends in employment and wages, the total wage bill in the modern sector declined in real terms by 38 percent between 1981 and 1986. Changes in the informal sector incomes are less well documented. However, it appears that "real incomes in the informal sector rose relative to those in the modern sector. This increase... did not necessarily lead to a gain in real per capita incomes in the informal sector because it was due in part to transfers within the labour force from the modern sector and perhaps also from rural areas" (Guillaumont 1988).

Although there are no time-series data on farm incomes, it is clear that these incomes were subject to wide fluctuations because of erratic shifts in the pricing and traded quantities of the principal rainfed crops on the market. Structural and sectoral adjustments, particularly liberalization in the exportation and marketing of major crops, did not raise yields or incomes, nor did they reduce the extreme year-to-year variations in prices and outputs. Moreover, the substantial price increases for fertilizers and other agricultural inputs that occurred between 1982 and 1986 as a result of the adjustment process exerted a negative influence on net farm incomes and the terms of trade in agriculture (Ricottilli 1987). In other words, it appears that "rural incomes, already severely affected by the droughts, suffer further from the policy of liberalization in farm prices, since prices rise following poor harvests and fall following good harvests, with a higher elasticity in case of price declines than in the opposite case" (Diagne 1988).

Public Expenditure on Health Care and Education. In current prices, total Government recurrent expenditure fell from a high of about 93 billion CFA francs in 1982 to 80 billion francs in 1984. It then slowly recovered, slightly surpassing the 1982 level only in 1987. In 1988, it grew by 10 percent but then dropped again in 1989 (Table 9). If the effect of inflation is taken into account, the pattern is similar though more pronounced. Inflation peaked in 1984 following the surge in food prices triggered by the drought, was negative in 1985 and 1986 and then grew moderately after 1987. On a per capita basis, the drop in total Government expenditure in constant prices was even more obvious: The one-third decline between 1982 and 1984 was not reabsorbed during the remainder of the decade.
The share of health care in total Government expenditure remained stable at around 5 percent during the period, while that of education increased moderately from 13-14 percent between 1978 and 1982 to 19.2 percent in 1984 and then declined to about 15 percent between 1987 and 1989. It thus appears

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</tr>
</thead>
<tbody>
<tr>
<td>Total Recurrent Public Expenditure (Billions of CFA Francs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Current Prices</td>
<td>43.4</td>
<td>93.8</td>
<td>91.3</td>
<td>80.2</td>
<td>86.0</td>
<td>87.9</td>
<td>105.6</td>
<td>117.3</td>
</tr>
<tr>
<td>In 1982 Prices</td>
<td>65.2</td>
<td>93.8</td>
<td>75.5</td>
<td>69.4</td>
<td>73.1</td>
<td>84.3</td>
<td>97.2</td>
<td>109.1</td>
</tr>
<tr>
<td>Per Capita Public Expenditure (CFA Francs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>In Current Prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8,238</td>
<td>15,661</td>
<td>13,142</td>
<td>12,713</td>
<td>13,172</td>
<td>13,044</td>
<td>15,137</td>
<td>16,277</td>
</tr>
<tr>
<td>Health Care</td>
<td>419</td>
<td>636</td>
<td>701</td>
<td>704</td>
<td>740</td>
<td>753</td>
<td>797</td>
<td>821</td>
</tr>
<tr>
<td>Education</td>
<td>1,063</td>
<td>2,070</td>
<td>2,378</td>
<td>2,441</td>
<td>2,437</td>
<td>2,348</td>
<td>2,316</td>
<td>2,344</td>
</tr>
<tr>
<td>In 1982 Prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12,385</td>
<td>15,662</td>
<td>12,214</td>
<td>10,997</td>
<td>12,116</td>
<td>12,506</td>
<td>13,936</td>
<td>15,141</td>
</tr>
<tr>
<td>Health Care</td>
<td>630</td>
<td>636</td>
<td>651</td>
<td>609</td>
<td>681</td>
<td>722</td>
<td>734</td>
<td>784</td>
</tr>
<tr>
<td>Education</td>
<td>1,595</td>
<td>2,070</td>
<td>2,210</td>
<td>2,111</td>
<td>2,242</td>
<td>2,251</td>
<td>2,132</td>
<td>2,180</td>
</tr>
<tr>
<td>Share of Total Expenditure (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care</td>
<td>5.1</td>
<td>4.0</td>
<td>5.4</td>
<td>5.5</td>
<td>5.6</td>
<td>5.7</td>
<td>5.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Education</td>
<td>12.9</td>
<td>13.2</td>
<td>18.1</td>
<td>19.2</td>
<td>18.5</td>
<td>18.0</td>
<td>15.3</td>
<td>14.4</td>
</tr>
<tr>
<td>Population (000s)</td>
<td>5,268</td>
<td>5,559</td>
<td>6,186</td>
<td>5,328</td>
<td>6,530</td>
<td>6,742</td>
<td>6,362</td>
<td>7,187</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance (various), "The Budget Law".

*/ See Table 3, page 8, for the GDP deflator used here.

that, while the health care sector did not benefit from preferential treatment during adjustment, the Government did make an attempt to protect the expenditure for education. However, despite this relatively positive policy stance, expenditure per capita on both health care and education stagnated because of the rapid growth in population. Thus, in constant prices, the combined per capita expenditure on health care and education had risen from 2,706 CFA francs in 1982 to only 2,790 francs by 1987. Furthermore, a more detailed analysis shows that, during adjustment, the earlier modest achievements in social service coverage and utilization were eroded.

The Health Sector during Adjustment. Although real per capita recurrent expenditure on health care remained broadly constant after 1982, allocations for inputs such as health worker salaries, medicines, maintenance and fuel and other consumables gradually fell. Thus, for example, the ratio between the expenditure for medicines and that for salaries dropped from 1.06 in 1978 to 0.97 in 1982 and then to only 0.74 in 1989. This trend, which undoubtedly
would have been even more pronounced if salaries had not been frozen, is of concern "because it carries the seeds of a deterioration in the quality of the services provided" and because "many of the difficulties encountered today in meeting the goals assigned to health care services are due to this slow decline in nonwage recurrent expenditure" (Ministry of Public Health 1989).

Furthermore, the decline in investment did not spare the health sector. As a result, delays mounted in the construction of health care facilities in areas not yet covered by the public system, particularly rural areas. The impact on the rural population was all the more negative since these facilities are the principal vehicles for preventive services (Ministry of Public Health 1987). The data on health care access are confirmed by data on service coverage (Table 10). While the number of facilities, including rural health posts, maternity clinics and hospitals, had expanded between 1978 and 1984, new construction fell off or even came to a standstill between 1984 and 1989. The pace of population growth thus quickly outstripped the ability of the system to provide services, and the number of inhabitants per health care unit or rural dispensary rose significantly. This very likely implied reduced effectiveness in coverage. Moreover, from 1982 to 1989, correcting the structural distortions in the health care system - the strong urban bias in the distribution of health resources, the fact that two of the three major hospitals in Niger are located in Niamey and employ 50 percent of the country's doctors and birth attendants and 20 percent of the qualified nurses, and the strong bias toward curative care - was not a specific policy aim.

<table>
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<tbody>
<tr>
<td></td>
<td>1978</td>
</tr>
<tr>
<td>Number of Inhabitants per:</td>
<td></td>
</tr>
<tr>
<td>Fixed Health Care Unit</td>
<td>26,600</td>
</tr>
<tr>
<td>Rural Health Post</td>
<td>26,297</td>
</tr>
<tr>
<td>Number of Women of Child-bearing Age per Midwife or Obstetric Technician</td>
<td>--</td>
</tr>
<tr>
<td>Rural Health Posts</td>
<td>159</td>
</tr>
<tr>
<td>Maternity Clinics</td>
<td>38</td>
</tr>
<tr>
<td>Maternal and Child Health Centres</td>
<td>41</td>
</tr>
<tr>
<td>Hospitals</td>
<td>7</td>
</tr>
</tbody>
</table>

Although appropriate data are almost nonexistent, two surveys carried out in 1985 and 1987 provide some indication of changes in the effective utilization of health care services (Ministry of Public Health 1985 and 1987). Concerning curative services, 92 percent of the city-dwellers questioned in the 1985 survey said that they or a family member had visited a dispensary for a consultation during the previous 12 months. On the other hand, only 59 percent of the city-dwellers interviewed for the 1987 survey said that they had visited a modern health care facility as a first step in dealing with their most recent episode of sickness or disease. In rural areas, the respective figures were 63 percent in 1985 and, depending on the region, from 15 to 44 percent in 1987.

The 1987 survey also found that more than 70 percent of the people living in villages without a dispensary wished to have one and that, in cities and villages with a dispensary, an identical proportion of individuals said that a better system for the supply of medicines would improve modern health care facilities. Clearly, the more effective health care services are in meeting these needs, the more the people are likely to be encouraged to use them. By the same token, the lack of improvement is a discouraging factor. Unfortunately, adjustment has simultaneously limited the extension of health care coverage and the resources available for the provision of medicines.

The decline in utilization was even more obvious for preventive services. Data from the same two surveys indicate a slump in the frequency of prenatal consultations in urban areas from 89 percent in 1985 to 69 percent in 1987. In addition, other sources point to a drop in vaccination coverage (Table 11), a worrisome trend in view of the potential for protection that immunization represents against communicable disease.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Tuberculosis</td>
<td>70</td>
<td>50</td>
<td>39</td>
</tr>
<tr>
<td>Measles</td>
<td>16</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>Yellow Fever</td>
<td>--</td>
<td>40</td>
<td>24</td>
</tr>
<tr>
<td>Polio</td>
<td>50</td>
<td>30</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Annuaire Statistique (various years).

Although incomplete and highly fragmentary, all the evidence tends to confirm that an increasingly smaller proportion of the population was relying
on the health care system and that, despite the goal to protect the most vulnerable, SAP I and the related sectoral adjustment measures led to a decline in access to medical care.

Any assessment of the impact of adjustment on health care in Niger must include an evaluation of the cost-recovery measures introduced in 1985 as part of SAP I. Surveys undertaken among patients at Niamey Hospital show that, although these measures helped increase the cost recovery for outpatient consultations from 7 percent in 1986 to 40 percent in 1988, the way the fees were applied produced several negative effects (Ministry of Public Health 1988b). First, "exemptions were not applied uniformly for all categories of patients. Specifically, the poor, military personnel and civil servants had sometimes to pay for health care," although they should have been totally or partially exempt (ibidem). Second, the patients who were the least likely to be able to pay were also the least likely to be sent to the hospital. In other words, the probability that the poor would be offered access to specialized hospital care was lower, not higher, because of their limited financial resources. Third, the patients exempted from paying fees (other than the poor) were of a higher socioeconomic status than were those who were not exempted. Thus, the way fees were applied at Niamey Hospital led to the de facto exclusion of vulnerable groups and to the exemption of those who were relatively better off. Fourth, the anti-redistributive nature of cost recovery at the hospital was aggravated by the level of the fees. A study of costs at Niamey Hospital has shown that the average cost of diagnostic procedures was less than the fee charged (Wong 1988).

In conclusion, the health care sector and the users of health care services seem to have been spared none of the rigours of adjustment. In particular, there was:

- Stagnation in the volume of per capita public health expenditure and a drop in the ratio of expenditures for medicines to outlays for personnel and, hence, a loss in service effectiveness.
- Reduced accessibility to curative health services and a drop in the utilization of preventive care services.
- A persistent bias in favour of urban areas and curative care in the allocation of public expenditure.
- Increased exclusion of the poor from care at Niamey Hospital because of the introduction of a fee structure and cost-recovery method that, in practice, led to fees which were higher than service costs and to exemptions which favoured the urban elite.

Therefore, recognizing that an "adjustment in reverse" is urgently
required to avoid further deterioration in the health status of the population, the Government has concluded that "the current rate of the recovery of health care costs is relatively high" and that "the system should also be revised to improve efficiency and lessen or eliminate certain biases" (Permanent Secretariat of SAP 1989).

Adjustment in Education. The share of education in total Government expenditure rose moderately during the adjustment years of 1982-1989 (Table 9, page 26). However, because of the growth in population, per capita real expenditure nearly stagnated.

Adjustment in education was principally aimed at:
- Reducing the cost of infrastructure by generally relying on local material resources.
- Reducing scholarships and student allowances and transferring a portion of operational expenses, especially school supplies, to users.
- Rationalizing expenditures for personnel.
- Assigning absolute priority to basic education.

These measures, implemented at the beginning of the 1985-1986 school year, permitted substantial savings in the education budget. Furthermore, the redistribution of spending among the three levels of education shows that the priority given to primary education had a practical impact. Indeed, the share of expenditure devoted to primary education grew steadily from 33 percent in 1981 to 44 percent in 1989 (Table 12). From 1985 onward, this adjustment was achieved mainly by imposing a ceiling of 2.15 billion CFA francs on the spending destined to benefit university students. This explains the falling share of higher education in the budget despite the increase in the university population, which rose from 3,956 in 1984-1985 to 4,969 in 1987-1988.

| TABLE 12: THE SHARE OF PUBLIC EXPENDITURE ON EDUCATION BY LEVEL (Percentages, 1981-1989) |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Primary         | 33   | 34   | 36   | 37   | 39   | 40   | 45   | 43   | 44   |
| Secondary       | 31   | 31   | 31   | 28   | 39   | 25   | 25   | 20   | 20   |
| Tertiary        | 22   | 21   | 21   | 21   | 21   | 20   | 13   | 12   | 12   |
| Administration, etc. | 13   | 14   | 13   | 14   | 14   | 15   | 21   | 24   | 24   |

The priority to primary education can be justified on the grounds of efficiency. Greater spending on primary education leads to greater "external" efficiency in the allocation of resources for education in general because, in Niger, "the benefits to the community from a rise in the educational level of its members... are the most evident" through elementary schooling. In fact, "it has been demonstrated that basic education is a prerequisite for productivity improvements, particularly in the agricultural sector" (Mingat et al., 1989). In view of the importance of the agricultural sector and the limited technologies typically employed by farmers, a broad-based upgrading of skills in rural areas through primary education would thus also have an economic benefit.

The policy favouring primary education was also well justified in terms of a more equitable distribution of resources. In 1986-1987, the 92.6 percent of the population that had, at most, attended primary school had benefitted from only 36 percent of the public expenditure on education, whereas the 0.7 percent of the population that had reached the university level had benefitted from 24 percent of the expenditure (ibidem).

Despite this relatively positive policy approach, enrolment rates in primary schools, already very low even by African standards despite the increase from 17 percent in 1978 to 28 percent in 1983, declined markedly thereafter. By 1988, the number of children in primary education represented barely 20 percent of the elementary-school-age population (Table 13). In addition, the "attrition" rate, an indicator which combines the dropout rate and the repetition rate, continued to be very high: 65 percent for the lower cycle in secondary schools and 85 percent in the upper cycle (Permanent Secretariat of SAP 1989). In contrast, the reduction in school attendance was not significant.

<table>
<thead>
<tr>
<th>TABLE 13: ENROLMENT AND ATTENDANCE RATES IN PRIMARY EDUCATION</th>
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</thead>
<tbody>
<tr>
<td>Enrolment Rates  17.0  20.9  28.5  24.2  23.6  23.9  21.8  20.8  --</td>
</tr>
<tr>
<td>Attendance Rates  --  96.5  99.5  97.8  99.4  98.4  94.3  --  --</td>
</tr>
</tbody>
</table>

Source: Ministry of National Education (various years).
There is no easy explanation of these contrasting trends between rising public expenditure on primary education and the slump observed in the corresponding enrolment rates. It is possible that demand declined while primary education remained open to all and may even have become more available. Among the factors which may have been responsible for such a decline are the greater costs for school supplies incurred by families in urban areas starting in 1985 and the increase in the "opportunity cost" of children's time during the years 1984-1989, i.e. years of falling household incomes.

**Nutritional Status during Adjustment.** Little attention was focused on concrete measures to protect or improve the nutritional status of vulnerable groups during adjustment. This policy failure occurred despite the fact that food self-sufficiency has been a stated goal in all the development plans initiated in Niger and that the hardships associated with adjustment could conceivably have aggravated the widespread nutritional deficiencies which existed throughout the population, particularly among pregnant women, infants and children.

The emphasis on the search for balance in food-sufficiency so overshadowed the problems in nutrition that even the praiseworthy steps taken to prevent a food crises, such as the Early Warning System, did not involve a methodology for the evaluation of the nutritional status of the population. As a consequence, the quantity and quality of the data on nutrition among vulnerable groups are far from satisfactory. Nonetheless, some indications do exist. First of all, a number of area-specific and time-specific surveys were undertaken before and during adjustment, and, although they were based on different approaches and are therefore not strictly comparable, they do offer a broad outline of the nature and seriousness of the nutritional deficiencies found among both rural and urban populations. Secondly, time series data on the prevalence of malnutrition among children under 6 years of age were gathered from 1981 through 1987 in Niamey, while data on the incidence of low birthweight infants are available for 1984 through 1987 for a few maternity clinics, also in Niamey.

While one must be cautious when relating changes in nutrition to structural adjustment, previous analyses have demonstrated that drastic changes in prices, incomes and access to medical care can contribute directly and indirectly to a deterioration in the nutritional status of vulnerable groups. Other things being equal, this applies in particular to food price increases, which, especially when they are associated with a cumulative drop
in incomes, translate into deteriorating nutritional standards.

For children under 6 years of age in Niamey from 1981 to 1987, the trends in the prevalence of malnutrition are represented in Figures 1 and 2. In this case, the prevalence of malnutrition is defined as the proportion of children with a weight-for-age below 80 percent of the norm.

Estimates of the prevalence of child malnutrition tend to fluctuate by a factor of up to two in any given year because of seasonal factors (Figure 1). Child malnutrition in Niger generally peaks during the preharvest season in July and August, when food prices are the highest and food stocks are the lowest. After the harvest, which generally occurs from September to November, it declines until March of the following year. Especially striking is the seasonal association between the prevalence of malnutrition and the food price index (UN-ACC 1989).

When the seasonal component is removed, the rise in the prevalence of child malnutrition after 1981 is even more evident, with the sharpest jump, from about 15 percent to 22 percent, between 1982 and 1983 (Figure 2). In 1984, the increase was only modest; this is somewhat surprising in view of the food shortages between September 1983 and November 1985 that had been brought on by the drought. Child malnutrition rose again in 1985 and then stabilized at around 25 percent in 1986. Although no firm conclusions can be drawn because of the absence of micro-data, "it is possible that the earlier rise in malnutrition was a result of the deteriorating economic situation... while

THE PREVALENCE OF UNDERWEIGHT 0-TO-5-YEAR-OLDS IN NIAMEY (1981-1987)
Source: UN-ACC (1989)

FIGURE 1: THE SEASONAL CURVE

FIGURE 2: THE DESEASONALIZED CURVE
the latter, more gradual increase was due to the drought" (ibidem, page 84). Indeed, food prices and the cost of other essentials grew rapidly until 1984 and then stabilized at high levels or fell moderately after that, while employment, real wages and unearned incomes declined from 1982 onward.

A somewhat similar picture is offered by data on the prevalence of low birthweights recorded at the maternity clinic of Lamorde, a suburb of Niamey, where from 1,000 to 1,500 births occurred annually between 1984 and 1988. The prevalence of low birthweight (less than 2.5 kilograms) climbed from 10.8 percent in 1984 to 14.1 percent in 1986 and then dropped to 12.6 percent in 1987 and 10.7 percent in 1988.

Finally, an analysis of various local surveys undertaken after 1986 that are not strictly comparable points to the persistence of relatively high levels of malnutrition despite new food surpluses and falling food prices at the national level.

Thus, up to 1986, a steady rise in the prevalence of child malnutrition occurred during the initial years of adjustment. This was due to the contraction in household incomes, to the inability of Government policy to reduce the dependency of the country's agriculture on climatic factors, the misplaced or inadequate focus of agricultural adjustment measures and the lack of significant initiatives in nutritional support and nutrition education.

The above examination of public health care, education and the nutritional status of the population shows that, during adjustment, the level of satisfaction of basic needs generally declined and, even more serious, may continue to decline even after all the adjustment measures have produced their effect. It also shows that structural adjustment was unable to eliminate, at least over the medium term, the deep-seated urban bias in the provision of health care and education. Finally, it demonstrates that, despite the stated goals of the Government, efforts to protect the vulnerable during the adjustment process were mainly unsuccessful either because positive sectoral policies, such as the reallocation of resources toward primary education, were more than offset by the negative effects of the macroeconomic policies, or because policies were poorly conceived, as in the case of cost-recovery measures implemented for hospital care in Niamey, or, finally, because of a lack of pertinence, as in the case of adjustment policies in agriculture.
V. ELEMENTS OF AN ALTERNATIVE STRUCTURAL ADJUSTMENT POLICY

It is difficult not to agree with the World Bank when it states that the goal of Niger's long-term development strategy is to achieve sustained, sustainable and equitable growth in per capita income (World Bank 1989). To what extent have the adjustment policies implemented so far favoured or hindered such growth? The discussion presented in the previous sections has shown that, although stabilisation was broadly achieved, structural adjustment lacked relevance because they did not address the structural constraints which had been identified, were clearly negative because they worked against the development of the human resources and rural infrastructures required to develop the agricultural sector, or were inadequate because they were unable to offset persistently negative external factors.

The outlines of an alternative structural adjustment policy which, given the existing constraints, is more likely to enhance the development potential of Niger and better ensure fulfilment of the basic needs of the population are presented in the following paragraphs. The components of such a policy would focus on the agricultural sector, a strategy of industrial development that includes the informal sector, and the interrelations between institutional capacity building and human resource development.

Long-term Agricultural Development

As discussed in Section I, the principal structural constraints which hamper agricultural development are:

- The shortage and degradation of farmland. Because of population pressure, lands which are unfit for agriculture have been cultivated and lands in the South, the wettest region, have been left fallow for shorter periods of time. Since there have been no corresponding improvements in farming techniques, yields and per capita food production have declined and soil erosion has increased.

- The almost exclusive concentration of production during the main growing season on a limited number of rainfed crops.

- Little utilisation of inputs, improved seeds and better farming techniques. Projects designed to raise productivity through more input-intensive techniques have generally failed.

- Growing differentiation within the peasantry. In the absence of new norms regulating access to the land, greater population density is leading to
an increase in the number of agricultural wage-earners, the disappearance of
the old custom of mutual aid and by an increasingly inequitable land
distribution. This process of social differentiation within the farming
community has contributed to an increase in the number of families who no
longer produce enough food and of migrant workers in the southern agricultural
regions (Rochette, et al., 1988).

To attain food self-sufficiency and improve rural incomes and standards
of living, at least four conditions must be met that have never been
adequately addressed by the agricultural reforms undertaken so far:

1. The diversification of agricultural production cannot be achieved
without the development of dry-season crops. Adopted by farmers only when it
provides important financial benefits or when urban markets are nearby, this
strategy is limited by the availability of water and land (Rochette, et al.,
1988). There is evidence that land which is suitable for irrigation is
becoming more scarce as merchants and civil servants buy up lots near urban
areas for speculative reasons (Herault 1989). If crop diversification is to
increase rural incomes and the value-added of the agricultural sector,
vigorous steps must be taken to irrigate more land, conserve water and
regulate the land market, through ceilings or land taxes, for instance.
Assistance in the marketing of dry-season crops and better rural
infrastructures would also be required.

2. The security of land tenure offered by customary rights is being
undermined by the flourishing of land markets and by land speculation.
Equitable access and secure titles to the land are essential not only to
ensure the success of any antipoverty programme, but also to encourage farmers
to make the long-term investments needed to improve irrigation and the
moisture retention of land and to combat erosion and preserve soil fertility.
Hopefully, the agricultural code currently in preparation will go some way in
resolving this problem.

3. A recent study of the strategies employed by farmers in Niger confirms
that they require better access to modern factors of production, such as
fertilizers, seeds, equipment and farm credit. The study found that new seeds
are not widely used not because of a refusal by farmers, but because they are
not readily obtainable, while the application of fertilizers is clearly
decreasing, except in dry-season cultivation, because farmers do not have the
cash required to pay the high prices and credit is no longer available. The
study found that even farm equipment which can be pulled by draft animals is in short supply and concluded, in part, that "the return to a system of agricultural credit is highly desired" by the farmers (Rochette, et al., 1988).

4. The provision of basic goods and services. Several analyses have demonstrated the positive effect on farm productivity of better access to education and training, primary health care and rural water supply. The hierarchy of needs expressed by the rural population in one survey (Rochette, et al., 1988) included, in order, for the men, health care, farm equipment, drinkable water, information and training, and agricultural inputs, and, for the women, flour milling equipment, health care, drinkable water, and the establishment of co-operatives for the purchase of implements and machinery. This confirms the importance of basic social services among the desires of farming communities.

Industrial Development and the Informal Sector

The principal measures adopted in SAP I in the area of industrial development were the reform of the price system, the reorganization of public enterprises and the introduction of a number of fiscal initiatives, especially the value added tax and the reduction of tariffs. However, the overall strategy for industrial development was not redefined, and the main instrument for the promotion of industry remained the Investment Code. Furthermore, SAP I did not include specific measures to support the informal sector, which has generally been neglected in the development policies of the country. Nonetheless, the informal sector can contribute substantially to economic recovery and the gradual differentiation of the industrial basis. Thus, from 1981 to 1987, while formal sector activity was shrinking, the informal sector, particularly construction and simple manufacturing activities, expanded vigorously (Tinguiri 1989, see also Section III). Therefore, although the "informal sector does not constitute... the panacea, nor constitute the basis of an alternative model of development, it nevertheless contains the potential and the dynamism that are essential in the resumption of growth and the creation of a basic social, technical and economic fabric" (Hugon 1989).

To achieve these goals, it is necessary to ensure that informal sector businesses have access to the same advantages and services as do formal sector enterprises and that the obstacles to their development be removed. Among the steps which should be taken, are the following:
The informal sector should have access to public markets and related services.

The informal sector should have access to bank credit. The Investment Code must therefore be amended so that it does not apply to and benefit only formal sector enterprises.

The fiscal treatment of the informal sector should be revised so as to improve total revenue generation, as well as fiscal equity. At present, the fiscal pressure on the sector is relatively low but highly regressive and inefficient since it discourages production and leaves ample opportunity for tax evasion (Oudin 1989 and Benahmed 1990). The sector is specifically subject to two taxes. Once each year, sedentary establishments must pay a licensing fee, the collection of which often causes liquidity problems for businesses. In addition, such fee is strongly regressive since it does not vary in relation to turnover or income. Moreover, such tax does not provide any service or confer any officially recognized status or protection on the informal activity as a business. Nonsedentary establishments must pay a market tax, which is also regressive and frequently evaded.

The training and technical assistance necessary to upgrade skills in the sector should gradually be provided.

Institutional Capacity Building and Human Resource Development

The goal of the institutional reforms implemented through SAP I was to strengthen the public institutions in charge of fiscal and financial activities. Thus, the Inspectorate of Finance and the Directorate of Research and Forecasting at the Ministry of Finance and the Directorate of Economic Analysis at the Ministry of Planning were created. Some entities, such as the General Directorate of Customs and the General Directorate of Taxes, were overhauled.

Two additional programmes were initiated to respond to the shortage of entrepreneurs and to improve personnel management in public administration. The first was the Programme for the Support of Private Initiative and the Creation of Employment. The second focused on the reorganisation of the Civil Service. However, an effective policy of human resource development should not be limited to providing government and the modern sector with competent managers and entrepreneurs; it should also focus on such general social policy issues as health care, education and training, the mobilisation of labour and popular participation. SAP I failed to deal with these issues in any significant way.
An alternative structural adjustment policy would focus much more squarely on human resource development. In particular, it would:

- Expand the provision of basic services in health care, family planning, education, and nutritional surveillance.
- Reform school curricula to make them more pertinent to the requirements of agriculture, the labour market and the healthy and meaningful life of the individual.
- Facilitate the spread of appropriate modern skills through special training in growth sectors.
- Mobilize the unemployed and the underemployed, particularly urban youth and farm workers who are idle during the off-season, for the creation of collective infrastructures and for environmental protection programmes.
- Promote decentralization and the effective participation of the population in the life of society.

In the provision of health care, education and training, and employment opportunities, special attention would be focused on women in order to combat gender discrimination. The schooling of young girls, adult literacy programmes for women and maternal and child health care would be areas of the highest priority.
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