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EXECUTIVE SUMMARY

Few African countries have Sudan's enormous potential for growth. Sudan is blessed with abundant natural resources, including mineral reserves which have yet to be verified and exploited. It is often referred to as the "breadbasket" of the Middle East because of its considerable agricultural potential as evidenced by its ability to produce annual sorghum exports. It is also the source of the world's finest gum arabic, an export in decline due to unwise Government of Sudan (GOS) policies. In addition, known large oil reserves exist in the South, although civil war prevents their exploitation.

Sudan is the largest country in Africa, but is sorely lacking in infrastructure, such as power, communications, and, especially, a proper road network, to facilitate the movement of commercial goods and services and to serve as a cohesive force for unifying the many tribes, religions, and regions, indeed nations, that comprise this state. Competing pressures from these groups make it very difficult for the democratically elected government of Prime Minister Sadiq El Mahdi to form a coalition amongst the several political parties. As if that were not enough, Sudan is also plagued by recurrent crises from drought, the most serious occurring in 1983-84, to locusts, grasshoppers, rats, and by increasing desertification as the rapidly growing population (3.1 percent per year) requires more space and charcoal, and by high infant mortality. Sudan's population, now about 25 million, will more than double to 56 million in 25 years, exacerbating all of the above problems.

Confronted with these formidable challenges, the GOS has responded with a set of unwise policies that exercise tight controls over the economy: the exchange rate is fixed and the Sudanese Pound greatly overvalued, prices of most agricultural and consumer commodities are controlled, Government subsidies are pervasive for basic items such as bread, sugar, and fuel. Regulations largely negate the effect of market forces on the allocation of scarce resources. The result has been an economy in continuing decline, with official GDP per capita falling by 27 percent since 1977 to $340 in 1987, with profligate GOS spending for increasingly inadequate services, and with formal sector employment opportunities available for only 15 percent of the annual labor force entrants. Income distribution has also worsened. Government control has forced many talented Sudanese to find employment abroad and much domestic activity into the "shadows" leading to the development of a vibrant parallel economy. More than a black market, it is testimony to Sudanese ingenuity to adapt to difficult situations. Financed largely by the considerable remittances from Sudanese nationals working abroad, this parallel economy allows things to get done, whether it be obtaining essential imports, converting pounds for hard currency, creating informal employment, or providing basic consumer goods.

Recent GOS actions supported by donors, the IMF, World Bank, and USAID in particular, have shown a glimmer of hope. This collaborative donor process led to adoption of an IMF-sanctioned, but donor-financed, program in October 1987 which resulted in a series of modest reforms, including a 40 percent devaluation, government spending controls, decreased subsidies, and increased prices for gasoline and sugar. While moving in the right direction, these steps are modest, indeed, have proved insufficient, and the economy continues to deteriorate. The Government seems unable to understand or admit that Sudan's fundamental problem is that the Government's persistent efforts to control and expand its role in the economy is inhibiting sustainable economic growth, is distorting the economic

structure, and is creating the need for a shadow economy. It is also weakening the Government's own ability to provide adequate services in health, education, and infrastructure because of declining revenues.

USAID Sudan has identified four major problem areas which we believe must be confronted. This conclusion is based on our analysis of the situation in Sudan and opportunities for response suggested by the President's Initiative to End Hunger, GOS objectives, AID comparative strengths and other donor programs, inter alia. The overriding problem is inadequate economic growth which affects the whole process of development, followed by food security and natural resources degradation, child survival, and rapid population growth. The common denominator among these problem areas is the generally declining availability of locally-generated resources to address economic growth, but food security, natural resources degradation, child survival, and rapid population growth are also important in their own right.

An extensive analysis of Sudan's problems has led the Mission to conclude that the overall USAID strategy for Sudan should be to reduce the role of Government and public sector in the economy while expanding the reliance on market forces. The appropriate use of private sector solutions can address the problems of inadequate economic growth, as well as food security/natural resources degradation, child survival, and rapid population growth. The Mission will approach these four problems with a variety of instruments including policy dialogue based on sound problem analysis, commodity import programs, food assistance, and project assistance. The approach will take into consideration those areas where USAID has a comparative advantage such as in agricultural development, the private sector, population and transportation, leaving other areas to other donors to take the lead because of their own expertise and higher resource levels. For example, in Sudan, the IMF and World Bank are taking the lead in economic policy reform issues such as the exchange rate, while USAID complements those efforts by directing attention to bread subsidy reductions and foreign exchange savings by increased use of composite sorghum/wheat flour. Besides working to establish a proper economic policy framework, the Mission will encourage the use of market forces development through cost recovery in child survival to complement UNICEF, commercial marketing of contraceptives, local private sector production of oral rehydration salts, and market pricing and reduction in parastatal control of gum arabic and perhaps the marketing of other cash crops. The Mission recognizes that there also is an important role for Government in some of these problem areas, and proposes to address these through basic socio-economic information and data collection, natural resources protection, and child survival sustainability.

Traditional rainfed agriculture in western Sudan will receive top agricultural priority because of its greater potential growth in food production and exports with less foreign exchange, subsidies and donor assistance than that required by mechanized and irrigated subsectors.

At this time, there are many uncertainties in Sudan. The coalition government is not yet formed, the war continues in the South, and a comprehensive economic reform plan is not in place. Therefore, the Mission has formulated four options for the foreseeable future, with the degree of economic reform the key factor determining choice. The options directly address the four problem areas, with the most resources supporting Option I, major expansion, and the least for Option IV, minimum program. Should Sudan undertake a major comprehensive economic reform

program fully satisfactory to AID, every effort would be made to obtain resources to support this program. If a modest program is adopted, USAID Sudan will continue to push with modest and performance-based assistance. If no program is adopted, or is very minimal, the Mission will wait 12-18 months from the approval of this strategy to determine if meaningful measures will be adopted by the GOS. If they are not, the Mission will shift its emphasis to Option IV. Without meaningful economic reform, a continued AID program at even current levels would simply support the continuation of the present unacceptable situation, and permit the GOS to avoid addressing its fundamental problems.

I. Overview

Sudan is one of a very small group of democracies in Africa in which the preservation and expansion of democratic institutions is one of the principal worldwide goals of American diplomacy. It is strategically located on the Red Sea through which passes much of the petroleum needed by Western Europe and borders on the politically unstable countries of Libya, Ethiopia, Chad and Uganda. The River Nile, upon which Egypt depends for its existence, is formed in Sudan through the confluence of the White and Blue Niles, as well as the discharge of the Atbara River further downstream. Lately, Sudan's civil war has become an increasing concern of Egypt because of its potential to affect flows of the Nile and as an obstacle to the completion of the Jonglei canal.

Sudan is the largest country in Africa, approximately the size of the United States east of the Mississippi. The distance from Port Sudan in the East to El Genina in the West is the same as from New York City to Des Moines, Iowa, for example. Its vast size covers several geographic areas with considerable variability in soil, water and infrastructure. Many observers believe Sudan has the potential to become "the breadbasket" of the Middle East, particularly if the civil war would end and permit the development of the South. Development of Sudan's agricultural potential could ensure food security for the Arabian peninsula and, thus, contribute to the stability in this important but volatile part of the world.

Sudan has six broad natural resource regions: northern Sudan, eastern Sudan, central clay plains, southern clay plains, and an ironstone plateau. Taking into account soil conditions and rainfall patterns, about 208 million acres are potentially cultivatable. Only 28 million acres (14 percent), however, are presently being cropped. In addition to the potentially cultivatable area, Sudan has another 69 million acres of pasture land and 59 million acres of forest and woodlands, both of which, under proper management, have the potential to carry more livestock and produce a sustainable flow of fuelwood, charcoal, building materials, and export earnings. Finally, the waters of the Blue and White Nile remain only partially utilized for irrigating agricultural lands. The agroclimatic distribution also reflects extremes: 19 percent of this land receives rain sufficient for less than a 90 day growing period, 40 percent of the agricultural land has a 90 - 300 day growing period, and the remainder, 41 percent, has a zero growing period.

Sudan has other resource advantages as well. These include the *Acacia senegal*, or gum arabic tree, which is the source for a major export and an asset in which Sudan has a distinct comparative advantage. Its resources also include untapped petroleum reserves, uranium, other minerals, and, by African standards, a strong human captial base. Many of Sudan's well regarded professionals, as well as laborers, are working in Gulf states earning high incomes and remitting considerable amounts of money back to support relatives or to finance investment in Sudan.

Nevertheless, Sudan has been unable to live up to its potential for a variety of reasons. It is subject to recurrent localized drought and plagued by pests such as locusts, grasshoppers and rats; by increasing deforestation and desertification; and by a declining standard of living for most of its rapidly growing population. Currently, inflation is over 50 percent, the Government of Sudan (GOS) is nearly $11 billion in foreign debt, and the debt service ratio is 528 percent, though little debt is in fact paid. Meanwhile, as more and more job seekers enter the workforce every year, there are fewer opportunities awaiting them. The proportion

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of the population forced to find employment in the informal sector is growing, and that sector is expected to employ upwards of 57 percent of the working-age population by 1990/91, not including refugees and displaced people. The continuing civil war in the South also diverts scarce resources to unproductive uses. Exacerbating Sudan's problems is rapid population growth, estimated, at a minimum, at 3.1 percent per year. This rate will increase the population from about 25 million currently to over 40 million by 2000 and to 56 million in 2013.

The GOS's failure to mobilize and inability to manage its resources also has precluded investment in or led to a severe deterioration in public services. Roads are in terrible condition in urban areas and usually non-existent in rural areas. Power is unreliable. Telephones work sporadically, if at all. Hospitals, schools and the railway all are sorely lacking in infrastructure and essential supplies. Likewise, Government policies and efforts have failed to address high infant mortality (140 per thousand), low literacy rates, particularly among women, high transportation costs, poor communications, and intermittent shortages of basic commodities such as fuel, bread, and sugar.

The GOS has responded to most of the country's problems by attempting to exercise tight controls over prices, imports and exports, while maintaining an overvalued currency. These policies have forced Sudanese to seek alternatives to the formal economy. As more and more job seekers attempt to enter the official workforce, as the population grows inexorably, as the infrastructure everywhere deteriorates, and as inflation and shortages persist, a shadow, or parallel, economy has developed and is flourishing. This economy - about which there is much anecdotal, but little precise data - offers many of the goods and services which the formal economy cannot provide. Examples include informal employment selling items such as cigarettes and alcoholic beverages, fuel and flour; export earnings from smuggled gum arabic; and a thriving and sophisticated black market in currency which bypasses the official, overvalued Sudanese Pound exchange rate in order to meet the need for Sudanese nationals working abroad to send money to their families at home, as well as to provide for imports essential for business and for consumer goods. Thus, Sudanese ingenuity permits a semblance of modern life to exist in spite of strong government controls. The shadow economy, in short, bypasses the "official economy" and serves as a mechanism to get things done.

The process of solving Sudan's ills is both supported and complicated by its democratically elected government. GOS policies call for improving the lives and welfare of its people. This motivation derives in part from Islamic, and, to a lesser extent, Christian values of equality, selflessness and cooperation, but the difficulty of Prime Minister Sadiq-El Mahdi's administration has had in gaining a majority to form a viable coalition government has hampered efforts to achieve its objectives. Likewise, while democratization has encouraged a meaningful deliberative process, it has also slowed decision-making. Finally, the continuing civil war in the South drains GOS resources and attention from Sudan's growing development problems. Resolving this conflict would, by itself, have probably the greatest impact on improving Sudan's development prospects, but the contesting parties seem unable to agree to the compromises necessary to end it.

The October 1987 multi-donor sanctioned and financed economic stabilization and reform program reflected a minimal and timid GOS approach to economic reform. The program contained a modest devaluation and unification of the exchange rate, small price increases in fuel and sugar and subsidy reductions, and ceilings on government spending and borrowing. These steps were not sufficient to turn the economy around. A new four year 1988-91 medium term stabilization and recovery

plan, now being developed with IMF and World Bank assistance, seeks to establish a clear direction with major policy changes. Encouragingly, preliminary indications are that the plan has some of the elements of a program proportional to Sudan's economic ills. Nevertheless, adopting a good recovery and development plan is only part of the problem facing Sudan and the donor community, for the Government's past performance in implementing reform programs has proved to be inconsistent and inadequate. When steps in the right direction have been taken, they have often been too little, too late, and later reversed.

While some Sudanese decision makers seem to understand most of the development arguments for reform suggested by donors, there are forces working against reform. Sudan is still a largely conservative and traditional society comprised of different tribes, races, regions and religions (Islamic, Christian, animist), with their competing interests presently balanced and with women playing a largely subordinate role to men throughout of the country. Moreover, the enormous size of Sudan, with a poorly constructed overlay of communication and transport systems, does not encourage national identity or cohesion. The extent to which these factors shape the policies actually adopted and implemented by the GOS is not clear. Nevertheless, donor programs must be viewed with the recognition that solutions must not only be technically correct, but must also take Sudanese values and special interests into account.

The donor community increasingly coordinates its efforts in Sudan under the leadership of the World Bank Resident Representative. Occasional Development Assistance Group meetings, chaired by the Minister of Finance, offer donors the opportunity to question GOS plans and intentions, albeit in general rather than detail. More frequent informal evening sessions of donors allow franker discussion and review of the economy and economic policy. Recently, the donors have agreed to establish sector specific groups on agriculture, water, transport and communications, health, institutional reforms, refugees, and food policy. Donors have had some success in encouraging the GOS towards meaningful macro-economic reform, and this effort will be tested at the next Consultative Group Meeting. This meeting will provide an opportunity to assess GOS commitment to meaningful macro-economic reform.

The prospects for successful development, however large the problems may be, are not necessarily dim. Sudan's fate is in its own hands, for if it makes the necessary policy changes to unleash the private sector and takes the proper steps to protect its human and natural resources, then prospects are bright and Sudan can live up to its considerable potential.

II. Problem Analysis and Description

The major ills currently confronting Sudan can be grouped into four problem areas: declining economic growth, lack of food security[1/] and a rapidly deteriorating natural resource base, high infant mortality, and alarming population

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1/ Food security here is defined as Sudan's ability to feed its people, either through domestic food production or from export earnings which allow the purchase of food. This definition also takes into account food distribution and family incomes.

growth. Declining economic growth and the need to reverse this condition and reestablish self-sustaining growth is clearly the predominant problem facing Sudan. While it is not clear if lack of food security is a national problem of major magnitude or whether there are "only" regional food deficit areas, any efforts to address food security would not be wasted because they also address the problem of inadequate economic growth. There is strong, clear evidence that infant mortality and high fertility are serious problems. The severity of these problems has been quantified where possible, although data is often insufficient, inaccurate, and outdated. The impact of these problems, as well as their solutions, on women also has been specified. Finally, GOS and donor efforts are presented to the extent known at this time.

A. INADEQUATE ECONOMIC GROWTH

1. KEY INDICATORS OF PERFORMANCE

(a) **Declining Overall and Per Capita Production.** The size of the economic pie has gotten smaller in Sudan, making the average Sudanese worse off today than a decade ago. Total output has dropped over the last ten years while Sudan's population has grown rapidly. Sudan's gross national product currently stands around $8.5 billion, which works out to be roughly $340 per capita in 1986/87[1/], down from $360 in 1984. In real terms, gross domestic product has fallen by 5 percent since 1977. However, on a per capita basis, it fell by 27 percent, a decline of roughly 3 percent per year between 1977 and 1986. Over the same period, real gross domestic income per capita fell by 26 percent.

(b) **Declining Productive Employment Opportunities.** Sudan has had difficulty in maintaining or generating productive employment opportunities. Between 1977 and 1980, the average decline in real productivity per worker in the formal sector was slightly more than 5 percent per year. Between 1978 and 1986, less than 10 percent of all new entrants in the labor force found employment in the formal sector (agriculture, government, industry, commerce). The remaining 90 percent, or 1.9 million new entrants, were forced to find jobs in the informal sector, both rural and urban, or remain unemployed.[2/] Macro-economic developments since the mid-1980s offer little to suggest that productivity is improving or that more people are finding employment in the formal sector. In 1988, 352,000 people will enter the labor force, but only about 54,000, or about 15 percent, may be able to find employment in the formal economy.

(c) **Severe Balance of Payments Disequilibrium.** The serious imbalance in Sudan's external sector has continued to worsen throughout the decade. Over the last several years, the deficit on the overall basic balance has averaged 12 to 15 percent of GDP and 175 to 200 percent of commodity export earnings. Over the past six years the current account deficits have averaged 12 percent of GDP. The deficits were financed not by capital inflows, but by debt rescheduling and accumulation of payment arrears which together averaged 12.5 percent of GDP over the past three years. External debt, currently around $11 billion, of which nearly $4 billion is in arrears, is the largest in Africa and was equivalent to more than 130 percent of gross national product in 1986/87.

1/ Years expressed as 1986/87 or 1983/84 refer to GOS fiscal year which is July 1 - June 30

2/ The labor force is comprised of all working age people (i.e., aged 15 through 64).

(d) Growing Inequality of Income Distribution. During the 1970's, the distribution of income became more unequal. The income share accruing to the poorest half of the population declined from 22 percent to 18 percent, while the income share of the top 20 percent rose from 48 percent to 53 percent. In the 1980's, it is unlikely that the trends have been reversed or that Sudan has met AID's minimum criteria of 2 percent real income growth per year for low income groups, either in total or per capita terms.1/ These statistics are scarce and incomplete, focusing only on the formal sector (i.e., agriculture, commerce, public sector, and so forth), which employs about 45 percent of the working age population. About 70 percent of these workers received only 26 percent of total income (cash and in-kind) paid by formal sector employers during 1979/80 and 29 percent during 1983/84. Most of these low-income workers were employed in agriculture, which accounts for some 70 percent of total formal sector employment. The average growth in real income per agricultural worker in the formal sector over the 1979/80 to 1983/84 period has been an encouraging 3.3 percent. Nevertheless, the absolute gap between average agricultural (low) and urban (high) income remains large and has been getting larger. Urban income levels per employee range between 3.5 (public services) and 10.8 (commerce and finance) times the average agricultural employee's income in real terms. The overall gap grew by 3.7 percent per year between 1979/80 and 1983/84. The average level of compensation in the informal sector was probably lower than that received by formal sector agricultural workers. It is difficult to see significant improvements in the level or the distribution of income going to lower-income people.

(e) Limited Educational Opportunities. Only a limited number of people in Sudan are likely to improve their future employment and earnings potential through basic education because it is not widely available and is, therefore and de facto, preempted by elite and urban groups. In 1983, primary school enrollment for all children was only 52 percent, significantly below the Sub-Saharan Africa average of 69 percent and the AID standard of 90 percent.2/ Males also have a greater probability of receiving education than do females. The percentage of females enrolled as a percentage of total females in the primary school age group (42 percent) lags behind the similar statistic for males (59 percent), as well as for the Sub-Saharan average for enrollment (51 percent). Adult literacy was only 31 percent in 1986, well below the AID standard of 50 percent.3/

2. ASPECTS OF ECONOMIC DECLINE

Sudan's fundamental problem is that the Government's persistent efforts to control and to expand its role in the economy is inhibiting sustainable economic growth and is distorting the economic structure. The pervasive official system of controls on pricing, imports, exports, product types, credit, business practices and so forth has distorted price signals, frustrating the private sector's initiative within the official ("open") economy and encouraging its movement into the shadow economy. Second, GOS attempts at economic adjustment and at controlling

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1/ Sudan's national accounts are subject to many limitations, including inadequate coverage and technical problems in data compilation. Accordingly, estimates should be interpreted with caution.

2/ Unless otherwise noted, the standards referred to are AID standards, as summarized in 87 State 340629.

3/ The literacy rate is estimated at 53 percent in urban and 25 percent in rural areas.

expenditures have not been consistent, adequate or comprehensive. The continued excess demand, particularly by the GOS, relative to the supply of goods and services has fueled inflationary pressures and distorted further the economy's price signals. Third, the GOS failure to effectively use the substantial foreign capital inflows received over the years has led to the severe balance of payments disequilibrium and the massive accumulation of international arrears, which now also constitutes a damper on economic growth. Other factors have also contributed to the economic decline. The 1984/85 drought reduced production and savings and disrupted lives. The civil war and inflows of well over a million refugees from other conflicts in the region continue to constitute a significant stress on the economy. Nevertheless, the main causes of the decline have been political instability and the plethora of Government controls, the resulting distortions of prices and incentives, and dramatic reversals in macro-economic policies by the GOS over the past decade. This has set in motion trends resulting in the currently unstable economic structure.

(a) Government-controlled Development. A development strategy emphasizing public control over the economy was initiated in the early 1970s with a wave of nationalizations, new controls, and large public-sector investments. These were expanded by successive GOS administrations. The strategy was, and still is, motivated, in part, by a persistent belief held by segments of the public and Government that the interests of the country are not served well by free-market processes. Indeed, many people expect the Government and public sector to increase total welfare through direct interventions in markets and productive sectors of the economy.[1/] There is little understanding, by these people, of the negative economic effects created by the Government's attempt to control.

In many spheres of economic activity, the Government tries to control what is produced and the prices charged each step of the way from production through to consumption. For example, in producing wheat bread, the Government sets the producer price of wheat, the price millers pay for the wheat, the price millers charge the bakeries for the flour, and the price bakeries may charge the public for the bread. The Government controls which miller can mill and how much, which bakery can purchase and how much, and which of two types of bread each bakery can produce. It also has created a series of complicated regulations on investments (credit controls), banking, business, employment, and trade, both internal and external. The net results are inefficient mills and bakeries, and a high demand for bread whose price bears no relation to its economic costs, subsidies which Sudan can ill afford, and the growth of a parallel market in wheat/wheat products.

Implicit and explicit subsidies have played an important role in the GOS programs. Although it was not until October 1987 that subsidies were first explicitly accounted for in the budget, there are clear indications that they have been and are still substantial. The IMF notes that inefficient parastatals have been receiving large credits, although the total amount is unknown due to the way records are kept in the state-owned banks. Land rents, when collected by Government, the sole owner of all land, are only one Sudanese Pound per year per acre, which is roughly 22 cents at the official rate. This has been attributed by

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1/ "It is felt that the farmer has to be protected against volatile world market prices, the urban consumer against the profit drive of producers and traders, redundant workers against their employers, the industrialist against foreign competition, and the country as a whole against speculating foreign exchange dealers" (World Bank 1987a:1)

many as a factor encouraging soil "mining" cultivation practices, particularly in mechanized rainfed areas. There are also subsidies on pharmaceuticals and wheat bread, although Sudan produces less than 20 percent of its annual wheat needs and is highly dependent on concessionally-provided donor wheat. GOS irrigation schemes have also accumulated huge operating deficits due to undercharging of water and land.1/ There have long been subsidies on petroleum products, although Sudan now produces no oil and is highly dependent on grants from friendly Arab countries.2/ Petroleum subsidies account for roughly 15 percent of projected Government revenues in 1987/88, and wheat bread for another 8 percent. Together, the explicit subsidies in the budget account for roughly a quarter of total Government revenues.

There are currently 140 parastatals in Sudan. They are found in most spheres of economic activity, but are concentrated in industry (32), trade (19), agriculture (16), and finance (8). Comprehensive or accurate data on employment and financial performance are not available. Based on scattered analyses, they tend to be highly unprofitable and absorb a large share of new domestic credit each year. In 1985/86, for example, parastatals borrowed an amount equivalent to 81 percent of total domestic borrowing by Government.

(b) **Ineffective Use of External Capital Inflows.** The severe imbalance in Sudan's external accounts shows that the country has been living beyond its means and that the annual capital inflows have been used for consumption and non-productive rather than productive investments. Indeed, the Government masked the economy's problems for a number of years by continued increases in urban incomes and consumption, financed by large capital inflows and supported by Government price policies designed to protect urban consumers from the effects of growing inflationary pressures. This non-productive use of capital did not go unnoticed and capital inflows began to diminish in the mid-1970s. Since the economy had not expanded its capacity to produce, severe balance of payments problems emerged by 1978 as grace periods on external debt ended. The continued lack of adjustment by Government worsened the balance of payments disequilibrium. As a result, the accumulation of international debt and arrears is now so massive that it constitutes a damper on new private investment in Sudan.

(c) **Growing Role of Services.** Economic growth in Sudan is determined largely by what happens in the services and agricultural sectors. In any given year, services account for roughly half of GDP and agriculture for another 35 percent. Among the disturbing features of Sudan's economic structure since the early 1980s are the lack of any significant improvement in the production of (visible) tradeable commodities, a key ingredient for establishing a stable foundation for growth, and the growing share of GOS in the services sector. Government services have expanded by nearly 30 percent since 1981/82, and now constitute 23 percent of the services sector,3/ though the quality and effectiveness has deteriorated markedlyover the past decade. Indeed, since 1981/82, the growth of Government services alone has offset the decline in other

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1/ The IMF reports that the agricultural schemes deficits have been covered by direct large-scale borrowing from the central bank.
2/ To its credit, the Government recently did remove a sugar subsidy, which is estimated to have saved LS 250 million in 1987/88.
3/ The Government also has many interests in the manufacturing, electric and water sectors, which are not included in the services sector and which have also grown.

services (commerce, finance, and so forth), almost all of which declined, as well as offset most of the net decline in agriculture.

Within agriculture, the rainfed traditional (including livestock) and mechanized subsectors' contribution to GDP has declined absolutely and relatively more than the irrigated subsector. The contribution of Government-dominated and controlled irrigated subsector continued along a steady growth path of 1.8 percent per year between 1981/82 and 1986/87. It presently accounts for a third of agricultural GDP, the largest of agriculture's subsectors. Livestock continues to be the second largest component of agricultural GDP, in spite of the fact that it is still recovering from the 1983-84 drought. There is no general consensus on the reasons for the decline in the rainfed subsectors between 1981/82, a normal year, and 1986/87, the second bumper harvest after the drought. Among the factors noted are declining productivity due to the use of poor cultivation practices which rapidly deplete soil nutrients, i.e., soil "mining", particularly by the mechanized rainfed subsector; declining quality of seed stocks; and continuing disincentives for export production or for marketing through official channels as a result of the Government's exchange rate policies that kept the Sudanese Pound overvalued.1/

(d) **Growth of Shadow Economy.** Not surprisingly, the pervasive official system of controls has distorted price signals and has been frustrating private initiative within the official economy. The formal private sector has been shifting a portion of its activities away from the influence of official controls and markets to what is now termed by some the "shadow" (also parallel, informal) economy, to signify that it is more than just a black market. Likewise, the current controls have created an incentive structure that favors the provision of services and trading activities over the production of commodities, which are harder to conceal from authorities. Thus, the private sector continues to shift away from the production of visible tradables to the provision of services and quick-return trading activities (i.e., the preference is for consumer goods as opposed to investment or intermediate goods). The role of the parallel economy has been growing significantly. Roughly 46 percent of the 9.7 million people of working age were employed in the rural and urban informal sector, unaccounted, or unemployed in 1979/80.2/ A majority of these are women. If the trend in the late 1970s is projected to the present, then about 54 percent of Sudan's 11.8 million people of a working age are employed in the informal economy, unaccounted, or unemployed. If the Government does little to alter the current economic trends, then by 1991, the end-point of the four-year plan currently under preparation, the percentage could increase to 57 percent (7.6 million people) of the working age population (13.2 million people). Most of these people are believed to live in rural areas. If their distribution corresponds to the general distribution of the population, then roughly 60 percent are found in the geographic belt running across the middle ofSudan (western, eastern and central Sudan), 10 percent are in urban areas, and another 25 percent are in the South. The influx of well over a million refugees and displaced persons, which are not included in the above projections,

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1/ Badawi, 1987. One of Badawi's findings was that the net of subsidies and direct taxes, plus the effect of the overvalued exchange rate on Sudan's seven most important agricultural tradables, results in taxes on producers ranging from between 38 (wheat) and 62 percent (livestock). Badawi's study was funded by USAID.

2/ The number of students within the 15-64 age group in Sudan is negligible. In addition, the distinction of "unemployed" is not a useful concept in Sudan since in order to survive a worker must undertake some activity, no matter how low its productivity. It is often these activities that characterize the informal sector.

from Ethiopia and southern Sudan since 1982, has undoubtedly increased the rate of growth of the informal sector, particularly in urban areas.

Some of the detrimental effects of the GOS's economic policies on employment were masked by the number of Sudanese nationals finding employment abroad and remitting earnings back to Sudan, albeit through the shadow economy. In 1983, there were roughly 340,000 Sudanese working abroad. The bulk of these have been found to be highly-educated business people, accountants, engineers, and other technical skills. While the numbers working abroad have declined with the decline in world oil prices, the number of Sudanese workers currently abroad is officially estimated to be 310,000, with about 60 percent working in Saudi Arabia.

(e) Deterioration of Exports. Agricultural commodities account for over 90 percent of total commodity export earnings. Rank ordered by value these include cotton, livestock, sesame and gum arabic. Commodity export earnings have stagnated at under 10 percent of GDP since the start of the 1980s. This aggregate statistic, however, masks a fundamental deterioration in exports. Although the commodity terms of trade have declined by an average of 7 percent per year since 1977, the volume of all export commodities, other than cotton, has declined by nearly 20 percent since 1980/81. For example, the forty-plus percent decline in official gum arabic exports since 1977/78 is largely attributed to long-term mismanagement by the Government marketing parastatal, the Gum Arabic Corporation. While exports for all crops other than cotton declined markedly, cotton exports rose to offset that decline, hence a stagnant total earnings picture. Cotton increases were due to concentrated GOS and donor efforts in Government controlled schemes. Increases in cotton exports will become more difficult to achieve as poor management, absence of a dependable watersupply, pests, and canal maintenance problems, as well as issues surrounding the subsector's dependence on subsidies and donor assistance grow in importance.

Workers remittances from Sudanese working abroad are Sudan's next most important source of foreign exchange after commodity exports. Remittances through official channels in 1986/87 were $250 million, equivalent to half of total export earnings. However, this represents a decline of 40 percent from its peak in 1982/83. Most workers abroad do not remit earnings through official channels because the well-developed black market pays more for their foreign exchange than does the Government. Currently, a worker remitting his/her earnings through the black market will receive almost two and a half times as many Sudanese Pounds as a worker remitting through official channels. The exact role these workers and their remittances play in the Sudanese economy is not well understood. For example, a recent World Bank report argues that official imports are currently well below a level that would permit the economy to recover. However, a USAID-financed study concluded that in 1983 there were an estimated 334,000 Sudanese workers abroad who reportedly remitted over $3 billion (cash and commodities), but that only 11 percent of the remittances flowed through official channels -- a clear reflection of Government's control and exchange rate policies. Any statements about Sudan's import requirements need to be tempered until the determinants and magnitude of unofficial remittances and imports are clarified and understood. Nevertheless, increasing the flow of remittances through official channels would certainly help Sudan's external accounts situation.

(f) Inadequate Reform Attempts. The GOS's attempts at economic adjustment have not been consistent, comprehensive, or sustained. Adjustment efforts often emphasize the supply-side and neglect the demand side. Excess aggregate demand, particularly by Government, continues to fuel inflationary

pressures and to distort further the economy's price signals. The GOS only partially continues or fails to implement reform measures when required. For example, the Government rationale for exchange rate adjustments is to make Sudan's exports more competitive on world markets; it does not consider adjustments as another policy instrument to help temper the demand for imports. Therefore, the Government's exchange rate actions to date have done little to help correct the economy's distorted price matrix. When exchange rate adjustments are made, they are often inadequate in size. When they are adequate, their positive impact is quickly eroded by the high domestic inflation, due to continued excess demand, and by the absence of additional complementary policy adjustments. The net result has been further deterioration of Sudan's external position and increased overvaluation of the Sudanese Pound.1/

The inability to control spending, i.e., aggregate demand, is reflected in the GOS's budget deficit, which had been reduced to 7.9 percent of GDP by 1982/83, but rose again to over 12 percent by 1985/86. The money supply rose from an average annual rate of 36 percent in 1982 to 42 percent between 1982 and 1987. Over half of this monetary expansion went to central Government. The IMF reports that an additional unknown percentage went to parastatals through state-owned banks. Real private consumption has declined by 10 percent since 1977, while Government consumption increased by 7 percent.2/

Since the start of the 1980s, inflation has averaged over thirty percent per annum, far in excess of the increase in average urban wages or official farm-gate prices. Inflation is currently between 35-40 percent, as measured officially, and, unofficially, over 50 percent.

(g) **Disruptive Policy Reversals.** There have been reversals in macro-economic policy by successive administrations over the past decade. Economic adjustments (e.g., liberalization of oilseeds marketing, acknowledgment of a private sector foreign exchange market, reduction of the Government deficit, currency devaluations) made during the 1979-82 "liberalization" period were all reversed by the mid-1980s.3/ The new policies reasserted the pervasive system of public controls. A shift to an Islamic legal system in 1983, commonly referred to as the "September laws," was then followed by the announcement of new Islamic business taxes and banking laws in 1984. These laws prohibited payments of interest, eliminated personal loans, controlled the quantities of short, medium, and long-term credit and types of investments. The net effect of these changes was to increase uncertainty for the private sector and to limit any chances for

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1/ The free market rate of the Sudanese Pound is currently about two and a half times the official rate, i.e., LS 12 per $1.00, as opposed to the official rate of LS 4.5 per $1.00. USAID-financed studies of Sudan's foreign exchange markets show that the black market is very organized and conducts a substantial volume of business (SCB 1985, 1986). It is noteworthy that the free market rate closely approximates and tracks the movements in the real effective exchange rate calculated on the basis of purchasing power parity.

2/ On a per capita basis, real private consumption declined by over 30 percent.

3/ There were positive signs that economic adjustment was beginning to take place. Investment, which had been declining between 1975 and 1978 by 10 percent per annum in real terms, rose by 11 percent per annum between 1979 and 1982. The national savings rate made a turn about which was similar in magnitude. Agricultural output increased from 0.3 percent per annum during 1975-78 to 4.2 percent during 1979-82.

meaningful economic adjustment. Matters were further complicated by the abolition of taxes in 1984 and the introduction of Zakat, an Islamic taxation system, which reduced Government tax revenues by 40 percent, leading to increased Government borrowing. Indeed, Government tax revenues were equivalent to only 7.9 percent of GDP in 1985/86, which is among the lowest in the world.

(h) Drought and Civil War. In addition to these deleterious economic developments, the Sudanese economy was also shocked by a resurgence of the civil war in the South in 1983 and an extended major drought culminating in the 1984-85 crop year. Fortunately, donors provided substantial foreign assistance to ameliorate the direct impact of the drought, and the agriculture sector provided two bumper crops in 1985 and 1986. While it is difficult to statistically apportion the effects of the drought and the war from the economy's mismanagement by Government, it is evident that these two factors contributed to economic decline and the momentum behind the economy's downward trends.

3. PROSPECTS FOR RECOVERY AND ECONOMIC DEVELOPMENT

Prospects for economic recovery in Sudan are closely tied to checking and reversing the disturbing trends resulting from the Government's attempts to control economic activity. A continuation of the current trends will undermine the Government's legitimacy. The GOS is, and will, find it increasingly difficult to perform rightful functions as more and more private economic activity skirts the official economy, thus providing less and less tax revenues.

The ability of the formal Sudanese economy to improve productivity in existing jobs and in generating new jobs and sources of income for the additional workers entering the labor force each year has steadily diminished. Broad-based economic growth must, for equity reasons, entail widespread improvements in employment and productivity since the only income-earning assets most people in Sudan have is their own labor and, for those in rural areas, the rights to some land. Unfortunately, Sudan's overall economic growth prospects are further complicated by its rapid population growth rate.

Any economic reform program must be cognizant that Sudan's overall financial needs are far beyond the capabilities of the entire donor community. The GOS projects an external financing requirement for the four-year plan that averages over $1.5 billion per year until 1992/93. And this requirement does not include the anticipated GOS, IMF, and World Bank request to donors for over $3 billion of debt rescheduling and relief in 1987/88, and additional debt rescheduling averaging $600 million per year until 1991/92. The very size of the estimated need argues strongly for rapidly adjusting the economy to increase the open participation of the private sector in Sudan, for only it can generate the magnitude of human and financial resources needed to resolve Sudan's and the Government's financial problems.

In light of the historically slow pace and reversals in implementing substantive reform programs in Sudan and the apparent distrust of free-market processes and the private sector, progress in restructuring the economy may be slow and measurable only in small steps. Those in Government and the private sector with a vested interest in continuing the current system have had more than a decade to ensconce themselves. A continued skepticism of free-market processes by people

in many parts of the Government and the public does not help matters.[1/] However, there are a growing number of people in influential positions, though still believed to be a small minority, who recognize that the Government has been excessively dogmatic in its attempt to improve overall welfare through direct interventions in and controls on markets and productive sectors of the economy.

Encouragingly, the GOS, in collaboration with the IMF and World Bank, has taken the first, but small, steps toward restructuring the economy by implementing a number of policy reforms in August and October 1987. Among the changes were:

- -- re-establishing and broadening the system of self-financing imports, regardless of whether the source of foreign exchange is legal or not;
- -- unifying the multiple exchange rate system and devaluing the Sudanese Pound by up to 40 percent against the US dollar;
- -- eliminating sugar subsidies, saving some LS 250 million per annum;
- -- instituting Government spending and borrowing ceilings; and
- -- raising Government revenues by reducing petroleum subsidies (increased prices), raising duties (e.g., cement), and intensifying tax collection efforts.

The US and other donors indicated their support for these first steps, as evidenced by the commitments of assistance at the December 1987 Heads of Delegation meeting in Paris.

Currently, the Government is completing a four-year recovery program for which it is seeking public support. The program will be completed before the next Consultative Group (CG) meeting. Preliminary indications from the IMF's Article IV Consultation visit in January-February 1988 are that the Government has performed "reasonably well" during the September-December 1987 period, even though it is not certain that all benchmarks were met.[2/]

Drafts of the four-year program reveal many of the elements of a comprehensive economic adjustment program that is proportional in scope and magnitude to Sudan's economic problems. The drafts, however, have not yet been agreed upon by the Council of Ministers or the Constituent Assembly, two steps necessary to get the approval of the program before the CG. While the program's specifics are very important, the key question is whether the GOS can and will implement the program since it requires full concurrence by the fragile ruling coalition and the general public. Continued political differences between the coalition parties or continuation/expansion of the civil war or both could seriously delay the adoption of any program. It is also not beyond the realm of possibility for there to be a resurgence of new controls on the economy, as occurred in 1983. Indeed, the October 1987 reforms have not generated momentum for further reforms. There have been no substantive reforms announced since then, and some activities, such as the World Bank supported privatization project, are seriously behind schedule. The current situation is such that Sudan may opt for one of three directions: it may reverse itself once again and adopt additional controls; it may push forward with a comprehensive economic adjustment program; or it may continue on its steady decline, continuing to make adjustments that are too little and too late to have any meaningful impact on the economy.

1/ Some public officials attribute the economy's current failures to inadequate Government controls and misguided attempts to liberalize the economy in the early 1980s.

2/ Further details are not yet available.

B. LACK OF FOOD SECURITY AND DETERIORATING NATURAL RESOURCES BASE

1. Introduction.

The plethora of development problems facing Sudan both affect the development of the agricultural sector and are affected by it. As the single most important sector of the formal Sudanese economy (one-third of GDP, 75 percent of productive GDP, 95 percent of export earnings, and employer of four-fifths of the labor force), this sector must make the major contribution to the achievement of sustained growth, food security[1/] and preservation of natural resources, which are interrelated objectives:

(a) Food Security. Sudan does, in fact, currently produce most of its internal consumption requirements and has the potential to produce much more. Yet, the country annually experiences serious regional food deficits arising from imbalances within the agricultural economy. These imbalances reflect the low average agricultural productivity and the low average level of family incomes in food deficit areas (largely in traditional agricultural areas), the generally weak infrastructure and transport to and within traditional agricultural areas, and the variability of Sahelian weather. These all work against a more balanced internal distribution of food supplies.

Unwise public sector policies probably constitute the major constraint to the achievement of food security. As noted earlier, a large, inefficient and growing public sector absorbs a disproportionate share of revenues from agriculture. A major source of finance for the national and provincial governments is derived from taxes on agricultural production; this has discouraged production. The various GOS controls and investment biases that favor the modern (irrigated and mechanized rainfed) agricultural subsectors over the traditional rainfed subsector also distort production patterns.

Moreover, the Sudan produces very few non-agricultural commodities, or consumer goods, except food. Therefore, it relies heavily on the foreign exchange earned on agricultural exports to permit the importation of fuel and most producer and consumer goods. The general decline in agricultural commodity prices and the volume exported, while petroleum and most manufactured goods increased in value, has led to a chronic merchandise trade imbalance. Correcting this trade imbalance by increasing agricultural exports is complicated by an overvalued exchange rate and lack of aggressive marketing of Sudanese products. The impact of an overvalued exchange rate has led to a scarcity of agricultural production inputs and consumer goods, and has fostered the creation of the parallel black market in currency and consumer goods. This, in turn, has encouraged imports of competing agricultural products while discouraging Sudanese agricultural exports. Agriculture is also beset with a mixed public/private economy involving the heavy control of marketing and pricing. These controls serve to increase Government revenues, not to improve food security.

1/ The most immediate food requirements are, of course, to provide emergency food to areas in western and southern Sudan that are in food deficit because of drought or civil war, respectively. The Mission, in close collaboration with the GOS and other donors, is contributing to a coordinated response of emergency food and transportation to needy areas. The interim strategy presented here, then, addresses only the development constraints to achieve sustained food security for Sudan.

(b) Agro-Ecological Deterioration. Sudan's natural resources, while still significant, are neither limitless nor uniformly productive and are deteriorating at a rapid pace. The woodlands are constantly under pressure from farms for cropping (especially for mechanized farmers) and pasturage, for the production of charcoal, and from nomadic grazing as nomad groups are forced, by the conflict in the South, to move into other areas and compete for scarce resources with sedentary farmers. Reforestation and forest protection policies hardly exist and, throughout the last two decades, have lagged way behind the level needed to ensure that forest capital is maintained. Over the past 20 years, the combined effects of agricultural encroachment, fuelwood harvesting and overgrazing have reduced the forest area by 20 percent and have been a continuing cause of desertification.

2. **Subsectors.**

Agricultural producers are generally divided into three different subsectors: traditional rainfed (including livestock), mechanized rainfed, and irrigated. Each of these subsectors produces food, livestock, and cash crops for both local consumption and exports. Although usually stable in the aggregate, Sudan's large size, its widely dispersed population, the different climates, and different production practices together result in a highly variable agricultural output amongst and within regions.

There are wide differences in the investment and cultivation practices in each subsector. Over 70 percent of public sector investment has been allocated to the modern subsectors 1/, which encompass both the mechanized rainfed and the irrigated subsectors, but primarily the latter. In addition, inputs such as fertilizers, tractors, threshers and combine harvesters have been provided at subsidized rates to farmers in the modern agricultural subsectors. Moreover, rehabilitation of infrastructure and investment in services has been concentrated mainly in the modern subsector while the traditional subsector has been neglected.

People directly engaged in agriculture in the traditional rainfed sector (14-16 million of Sudan's approximately 25 million persons) are largely farmers working on family plots. Most are located in western Sudan (about 30 percent of total population) and southern Sudan (about 25 percent of total population). About 70 percent of traditional farmers are women. They tend to live in scattered homesteads rather than centralized villages. The traditional subsector appears to have evolved little beyond slash and burn cultivation with simple implements and tending of livestock. In recent years, the availability of water and transport (bringing in goods and moving surplus production) have become continual problems. Particularly in the West, but also more generally, these subsistence farmers do not consistently produce enough food or income as a group to meet their annual minimal staple food requirements.

This subsector has long been ignored in spite of contributing both to the country's foreign exchange earnings as well as to its food supplies. The average subsectoral contribution to net foreign exchange earnings during the pre 1984-85 drought period is as follows: traditional, including livestock - 55 percent; mechanized - 25 percent; irrigated - 20 percent.1/ The average contribution of the traditional subsector to total food production (staples and oilseed) is estimated at 60 percent during the same period. The GOS's policy after

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1/ D'Silva and El Badawi, 1987

independence in 1956 has resulted in both implicit and explicit taxation of agricultural commodities, impacting heavily on the traditional subsector in particular.

Incomes from traditional rainfed farming are constrained by low productivity, unavailability of credit inputs, and the need for cash which motivates farmers to sell crops at harvest. For millet, the staple in much of western Sudan, there is a differential of 100 percent in the price at harvest time and the price five to six months after harvest. This difference is due partly to high storage losses and partly to interest on loans. Local village councils also impose high taxes on the sale of cash crops in the formal markets, while the central government captures revenues by using the various parastatal marketing boards to set low producer prices on export commodities[1/]. The combined effect is to reduce the farmer's proportion of final sales value. This not only limits net income, but lowers the ability and incentive to achieve greater productivity. For at least the last twenty years, some western farmers have annually migrated to the irrigated and mechanized subsectors. This has constituted a significant source of total family incomes for about 450,000 people. Income (cash and in-kind) from this seasonal employment has been estimated to be from 15 percent (from the mechanized subsector) to upwards of 40 percent (from the irrigated sector) of total family income.

Mechanized rainfed farming, consisting of between 4,000-6,000 generally wealthy owners, is highly capitalized relative to traditional rainfed agriculture. Many of these owners are in fact absentee lease holders who sublease to resident farmers. Allocations are obtained in the names of a number of family members. This results in farms which are often several thousand hectares in size. The level of technology employed varies widely, ranging from large-scale slash and burn to sophisticated large-scale modern cultivation techniques (e.g., deep plowing, timely planting, weeding, crop rotation, etc. Government statistics, many generated through USAID's Agriculture Planning and Statistics Project, indicate that most of the new land brought into cultivation during the past six years has been by the mechanized rainfed sector. Similarly, most of the land temporarily abandoned as a result of poor cultivation practices is attributed to this subsector. The work is typically done by wage-earning employees supplemented by many seasonal laborers, usually from the traditional rainfed sector, at weeding and harvesting times. It provides year-round employment to roughly 100,000 persons and seasonal employment (approximately two months of the year) to perhaps one million people, mostly from the western parts of Sudan. This subsector accounts for roughly sixty percent of Sudan's total sorghum production. The subsector's surplus accounts for most food exports and supplements the consumption requirements of the traditional rainfed sector and urban areas.

The irrigated subsector (the largest in sub-Saharan Africa) is comprised mainly of Government-owned agricultural schemes worked by tenants who, except for labor and some working capital, are supplied with agricultural inputs by the schemes. It is highly mechanized, even in comparison with the rainfed mechanized subsector, and annually receives substantial donor support, especially from the World Bank, for inputs and other capital investments, largely to produce cotton for export which accounted for 36 percent of export earnings in 1986/87. The schemes realize a low return on investment due to poor management and emphasis on cotton production, a high-value but extremely high-cost commodity, and cultivation of low value, high

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1/ Prices are controlled.

bulk crops such as sorghum. It provides year-round employment to roughly 350,000 people and seasonal employment (approximately four months of the year) to another 450,000 people.

3. Production.

Currently, Sudan produces, on average, enough of its primary staple food, sorghum, to meet its internal consumption requirements. Over the 1977/78 to 1981/82 period, the average annual level of official sorghum exports was 265,000 metric tons (MT). Sudan has exported sorghum every year since 1975 except in the 1984/85 season when it was only 37 percent of the 1981/82 production level. However, bumper crops over the next two years followed the drought with resultant increases in food stocks, both at the national and household level. Unofficial exports of sorghum are not known with accuracy, but for the 1987/88 crop year official exports are being estimated at 135,000 MT and unofficial exports at 180,000 MT, on a milled basis. The enormous potential of Sudan to grow sorghum was demonstrated in 1985/86 and 1986/87 when, for the first time, the total area planted to sorghum exceeded 12 million acres, up from the 1975-79 acerage of 6.25 million acres.

4. Regional Food Shortages.

Despite the usual overall availability of staple food at the national level, there is a serious structural problem with the distribution of food within Sudan, a factor closely linked with the regional variability in production. This is fundamentally a food equity problem. Drought, pests, and civil war accentuate the problem. Annually, there are areas of food need, particularly in the fragile areas of western Sudan, but also in the East where mechanized rainfed agriculture is concentrated (the South is a unique situation due to the civil war, and is considered later in this paper). In 1988, areas of Darfur and Kordofan are short of food, but regional figures are difficult to obtain. Perhaps 1.75 million of the area's more than 6 million people may be "at risk" in 1988, i.e., liable to require supplementary food assistance to avoid malnutrition, but the exact scope of the problem is extremely difficult to determine.

In the aggregate, in 1986, Sudan met about 93 percent of the daily caloric requirement per capita as calculated by FAO, down from 96 percent in 1982, but still surpassing AID's 90 percent standard. The 1987 World Bank Health Sector Report for Sudan states that 90 percent of the caloric needs of the population are being met. The Mission is unsure about the quality of this data, however, and wishes to note that caloric intake by itself is insufficient to meet minimum nutrition requirements. While there is evidence of chronic and severe malnourishment throughout Sudan, 14.4 percent of children under five nationally, according to SERISS,[1/] in November 1987, even this figure is under the AID standard of 20 percent. While reliable national baseline data are still required to help identify regional food deficit areas, USAID Sudan believes about 1 in 7 children suffer from malnutrition and 1 in 55 suffer from severe malnourishment.

In order for Sudan to sustain a level of production capable of feeding the population throughout the country, but especially in western Sudan, many factors which limit Sudan's ability to continue to be self-reliant in basic staples must be addressed. These include unwise agricultural policies and macro-economic policy

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1/ Sudan Emergency Recovery Information and Surveillance System

reversals, poor planning and inappropriate response to severe periodic droughts and outbreaks of pests, inexorable population increases, disproportionate emphasis on investment in irrigated land to produce export commodities such as cotton, average or low crop yields even by African standards[1/], and an inadequate transport network which all work against the geographic redistribution of food to deficit areas. Among the reasons for low and declining crop yields in particular are: 1) degradation of land resources resulting from expansion of cultivation (particularly mechanized) onto marginal lands with fragile soils and poor cultivation practices; 2) use of poor quality seeds, as a result of the decline of seed quality and the general absence of truly improved seeds in Sudan; and 3) poor maintenance of irrigation canals.

In the mid-1980's, an unusually severe drought led to a temporary reduction in agricultural production. Emergency imports of sorghum were distributed, primarily in western Sudan, because households were unable to purchase sorghum or millet due to the large increases in prices and lack of income. Livestock herds also were sold off due to lack of water and grasses, further diminishing rural families ability to provide for their food requirements. The drought resulted in internal migration, population dislocation in the traditional subsector, and an increase in urban influx of migrants. Donors incurred the direct costs for emergency food and transportation in 1984-86 with the U.S. alone providing 705,000 tons of sorghum and other supplemental food at a cost of $366 million.

The inability to distribute relief food supplies adequately during 1984 and 1985 or to redistribute locally produced food from surplus to food areas in "normal" years dramatizes the heavy economic costs of a weak transportation system. Because of Sudan's large size and scattered population, transport costs constitute a significant percentage of the market price of food. To move low value, bulk grains such as sorghum from central to western Sudan costs about 180 percent of the purchase price of the food and can take up to 4-1/2 days one way in the dry season. Mobil Oil Company estimates it costs about 106 percent of the cost of fuel to move fuel itself that distance. Mobil executives believe a road linking East and West could cut transport costs by two-thirds and reduce time to 1-1/2 days. Sudan has one of the lowest densities of all weather roads in the world. Few intercity roads are paved, while most are unimproved tracks that become impassable in the rainy season. The small trucks and high operating costs per ton mile which this engenders contributes to the high differentials between farmgate and consumer prices.

The transportation situation is complicated by Sudan's heavy dependence on imported petroleum, oil and lubricants (POL), much of which must be granted by friendly Arab nations due to Sudan's shortage of foreign exchange. The Government tries to control the cost of transport by controlling the allocation and price of POL. However, the unofficial market in POL is vigorous, and prices are often twice the official rate but fuel can be purchased. The Government allocation bias has been in favor of the public sector, urban areas, and mechanized (including irrigated agriculture), which have benefitted from obtaining POL at subsidized prices.

A serious food shortage problem of another kind is also emerging. Wheat, primarily in urban areas, has become a strongly preferred substitute for sorghum in Sudan. The level of wheat consumption in Sudan is the result of donors suppling

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1/ ICD 1987: 106-10

large amounts of concessional wheat imports. Consumer preference for wheat over sorghum has been further encouraged by GOS price controls, which have reduced the cost of wheat relative to sorghum. Bread prices are controlled and subsidized (30 percent of the cost of a loaf of bread), while sorghum prices are largely uncontrolled. It is unlikely that domestic wheat production, which accounted for two months of annual consumption in 1987, will meet domestic demand during this century. In 1986/87, the P.L. 480 Title I program supplied, on highly concessional terms, about 60 percent of all wheat consumed in Sudan, with other donors providing an additional 15 percent. In recent years, the U.S. has provided annually $40-60 million in P.L. 480 Title I wheat and wheat flour. Neither the U.S. nor other donors can guarantee to continue providing wheat under present terms, as rapidly increasing demand for bread swells the requirement for wheat from its current estimated level of 800,000 MT/year to over 1,000,000 MT/year by 1993. Because of its increasing dependency on wheat, Sudan faces the risk of a serious food crisis with associated political, social, economic, and budgetary dimensions.[1/]

5. Forestry and Natural Resources.

Sudan's forest resources consist of an estimated 59 million acres of woodland and forest, which is 23 percent of the country's total land area. There are 17 national wildlife parks, sanctuaries and reserves, some of which boast rare species of flora and fauna. The annual consumption of wood products is estimated at 48 million m^3, of which all but 1.0 million m^3 is locally produced[2/]. Of this total, 45 million m^3 is used for woodfuel, which accounts for 82 percent of all energy requirements. The use of woodfuel saves a considerable amount of foreign exchange. The value of charcoal alone, in kerosene equivalent terms, is about $570 million or about 20 percent of the total import bill.

These resources provide direct employment for about 170,000 people. In particular, gum arabic, a product of Acacia senegal, had an export value of about $62 million in 1983/84 from a production of 47,000 metric tons[2/], but which declined to 20,000 metric tons in 1985/86, valued at $27 million.

Trees provide other direct and indirect benefits. It is estimated that about 30 percent of the feed requirements of Sudan's livestock population are provided through browsing from shrubs and trees. Other forest products of importance to the rural communities are honey, fruit, fibre, and medicines. Trees also improve the 'micro-climate' and soil fertility, help recycle water, and thereby lead to increased crop production and soil conservation.

The low productivity of Sudan's forests, woodland, ranges and pastures is primarily due to lack of proper management. This is manifested in the form of unregulated harvesting for fuelwood and charcoal and by increasing livestock pressure. The recent drought has further exacerbated Sudan's natural resource problems, including those directly related to the forestry sector. Increased emphasis on agricultural production has resulted in record grain harvests in both 1985 and 1986, placing additional strain on the country's natural resources.

Proper management of Sudan's natural resources, such as forests and woodland, ranges and pastures, wildlife parks and sanctuaries, is handicapped by:

(a) Lack of a sound information base regarding the magnitude and status of

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1/ Riley and Ward, 1987

2/ USAID/IBRD Forestry Sector Review 1986; m^3 is cubic meters

these resources and the pressures on them;

(b) Institutions ill-trained and ill-equipped to address the problems confronting the sector; and

(c) Inadequate appreciation by both policy makers and the public of the significance of these resources and of the role these play in the national economy and in the environmental stability of the country.

The recovery of Sudan's traditional subsector, however, has not been as rapid due to the substantial migration during the drought years and environmental degradation in the rainfed areas where Sudan's subsistence farmers are concentrated. This mass migration by both nomadic and sedentary populations and their animals has resulted in further pressure on the already fragile resource base. The expansionist tendencies of the large scale mechanized farmers have led to further reduction of the forest/woodland/range resource base and accelerated erosion in catchments of major rivers, leading to siltation of dams and reservoirs. The consequences of all these activities add to a negative impact on forest products, fuel, fodder, timber, etc., and deterioration of ranges and pastures. This results in environmental degradation leading to desertification, and a net reduction in the pool of genetic resources with consequent decline in biological diversity.

6. Earlier Strategy.

Broadly speaking, USAID's agricultural strategy since 1979 has been to concentrate on developing rainfed, traditional agriculture in western Sudan. The major elements of this assistance has been the Western Sudan Agriculture Research Project (WSARP), the Agriculture, Planning and Statistics Project, the Kordofan Rainfed Agriculture Project (KORAG), Western Sudan Agriculture Marketing Road (WAMR), and the newer Sudan Reforestation and Anti-desertification Project. These efforts have addressed, with some success, the need for improved production systems, for strengthening the agricultural marketing and transport network, for improved data collection, reporting and analysis, and for managing and rehabilitating forest areas.

7. Other Donors.

Other donors have been supporting a variety of activities in agriculture throughout Sudan. The World Bank's large agricultural portfolio, focused on nine projects in the irrigated sector, is valued at about $1 billion. In addition, a forestry project and rural development project in the eastern region is under appraisal, and the Bank supervised two International Fund for Agricultural Development (IFAD) projects in agricultural/irrigation rehabilitation in the northern region. The European Community (EC) has been involved in projects in forestry, in the rainfed and irrigated sector, and a tea project (now at a standstill) in the South; also the EC is developing projects in livestock and irrigation. British assistance (ODA) has emphasized agriculture inputs through a commodity import program, the rehabilitation of light railways at the Gezira irrigated scheme, and pesticide research with the Agriculture Research Corporation, support for irrigation in northern Sudan, and the major Western Savannah Project in conjunction with the World Bank. West Germany is supporting a plant protection project in the Nile valley, a forestry project in Jebel Mara (west), agricultural credit through the Agricultural Bank of Sudan (ABS), and two new projects in Darfur in development and conservation of soils and rehabilitation of water wells. Japan plans to concentrate on the Gezira scheme. UNDP has been supporting the Kordofan gum belt restocking project. The UNDP is also preparing a project in Kordofan in

animal traction. Finally, Global 2000 is promoting farm level research and extension through the Ministry of Agriculture's extension workers. Their emphasis has been on irrigated wheat and sorghum, and on traditional rainfed sorghum and millet. The use of fertilizer and improved cultivation practices have increased yields several times for traditional farmers.

C. HEALTH DEFICIENCIES, ESPECIALLY CHILD SURVIVAL

The problems facing the Sudanese health sector are enormous. Targeting health care delivery to areas without a logistic and organizational infrastructure is an extremely difficult task. A high fertility rate (6.7) keeps 45 percent of the population under the age of fifteen in a population that has a annual growth rate of 3.1 percent. Life expectancy at birth is only 49 years. Sudan has an estimated infant mortality rate of 140 per 1000 live births, far above the AID standard of 75 deaths per 1000. Child mortality is also high (21 per 1000), above the 10 per 1000 AID standard, although no reliable health data system exists to confirm positively these figures. It is generally believed that diarrhea, measles, fever and acute respiratory infections (ARI) are the leading causes of morbidity and mortality among children under five. Endemic diseases - measles, schistosomiasis, malaria, leishmaniasis, tryponosomiasis and TB - are increasingly prevalent and compounded by malnutrition in some areas. For these reasons, Sudan has been designated by AID as one of eight Africa Child Survival emphasis countries.

Government health expenditures as a share of total government expenditures decreased from 10 percent in 1970 to about 0.6 percent in 1987. Consequently, the major portion of the health budget has been used to pay salaries, leaving little or nothing for service delivery costs. The resultant deterioration of health care delivery in the public sector has encouraged a rapid growth of private services. Many local communities have supported health sector operating costs and financed the construction of new health care facilities. Hospitals and outpatient facilities have introduced user fees and regional authorities have instituted "health taxes" to defray recurrent costs. However, most of these changes have been in urban areas. Personal health care expenditures has been estimated at 11 percent of household expenditures for the lowest income group, and about 8 percent for the more affluent. Based on 1986 GOS estimates, private health care expenditures range from a low of about LS 400 million to a high of around LS 575 million annually.

Sudan was one of the first African countries to accept the concept of a comprehensive national primary health care program. Improved primary health care (PHC) was to be the major vehicle for achieving this goal through the control of common endemic and epidemic diseases; maternal and child health; expanded programs of immunization; health education; and improved sanitation. The problem of underfinancing in all sectors has reduced the original concept of PHC delivery to the maintenance of only the most elementary preventive services.

A major effort is underway to rethink national health policies and to establish short term adjustment measures through more efficient management and organization, and the development of a fundamental primary health care service from which more comprehensive services can later be developed. The new plan will require an investment of $75 million over the next four years over and above the current and expected recurrent budget for the central and regional MOH directorates. Emphasis will be on meeting urgent health needs, i.e., reducing infant mortality from 140 to 90, reducing maternal mortality, assuring the availability of essential drugs, improving planning and budgeting procedures, and attacking endemic and

epidemic diseases. Rural hospitals will be used as delivery centers from which primary health care services will be provided to rural populations.

Since the Regional Government Act of 1980, the MOH's role has been limited to policy development, research, training, legislation, inter-regional drug supply management, and the management of national referral and teaching hospitals. Regional governments have separate MOHs with considerable autonomy. However, regional MOH effectiveness has been severely constrained due to a limited tax base, personnel shortages, and insufficient supply and logistics systems.

The inadequate economic growth described earlier affects the quality and quantity of services available to address pressing health problems. Drought and civil strife combine to add enormous impediments to progress. The slow but steady drain of trained personnel to more lucrative overseas positions reduces an already overtaxed labor pool, and increasing urbanization combined with an 11 percent nomadic population make health planning and delivery complicated. Moreover, reliable health status data are limited or non-existent. There are no standardized reporting procedures and no regularized reporting systems. Without a reliable information system, it is practically impossible to plan, implement and evaluate a national health program. Finally, no formal mechanism for coordination between directors of departments and/or project managers has been established. Most directors develop their plans and activities in isolation. Resources, experience and information are not readily shared. The resultant duplication and verticality make program sustainability difficult to achieve.

Numerous corrective measures are being introduced. First, the MOH is currently in the process of developing a national PHC policy and program, and is classifying the roles and responsibilities of the numerous departments and agencies involved at both central and regional levels.

Second, the MOH and the Directorate of PHC are aware of the lack of reliable health information. Short and long term plans call for improved collection and analysis of demographic and health data. The MOH Office of Vital Statistics has recently completed an inventory of health facilities and personnel. To assist in this effort, the AID-funded Rural Health Support Project (RHSP) is in the process of developing a regional health management information system.

Third, a primary concern for the MOH is the increasing burden of recurrent costs upon the problem of maintaining the existing system and initiating child survival activities. The Minister of Health has expressed interest in working with USAID to explore and expand health financing mechanisms. The Minister is willing to appropriate a percentage of revenues generated by such mechanisms to support child survival activities. Through the Central Regional Ministry of Health (CRMOH), a financing experiment was put in place to contain costs, raise revenues and share costs with users. In order not to exclude low income users of the system, affordable fees were set for low income clients. User fees included subsidized drugs, a hospital bed charge, evening clinics charge, a hospital visitors fee, food service charges, and cinema and bus surcharges. In 1986, the CRMOH realized LS 1.2 million in revenues generated by the new system, representing 30 percent of the annual CRMOH operating budget excluding salaries and capital expenditures. More work is required from this promising beginning to determine fee rates that maximize revenue and coverage, the ability of the health sector to retain the revenues it generates, and to plan and use those revenues effectively.

Fourth, pharmaceutical supply and distribution are inadequately managed by the

MOH's Central Medical Stores (CMS). The GOS is aware that this part of the health system is poorly funded and has a flawed management system. First steps already underway are the reorganizing and coordinating of donor support for medical supply management with WHO assistance, USAID's RHSP has began developing a cost recovery community pharmacy system in Kordofan and Darfur Regions.

Fifth, the MOH views improved management skills as essential to improve the capacity of health care personnel to supervise and deliver child survival services. The University of Gezira, with the assistance of Columbia University, has developed short courses to train young physicians in PHC service management at the rural hospital level. The Management Development Center (MDC) was established as a joint venture between GOS, UNDP and ILO. It provides short and medium term management courses for senior and mid-level managers.

Numerous donors and PVO's are active in child survival activities in the Sudan. Over the past decade, UNICEF has provided assistance in many child survival related areas. It has been and continues to be involved in water projects, training, and provision of basic drugs. UNICEF has recently developed a Child Survival Strategy Plan of Operations for 1987-1991. This ambitious plan comprises activities in immunization, EPI, oral rehydration therapy (ORT), and nutrition surveillance. The plan is estimated to cost $68 million, of which $15.5 million will be provided by UNICEF and the rest ($53.3 million) is expected to be financed by other international donors.

UNICEF is supplying vehicles, vaccination materials and cold chain equipment, sponsoring training courses, and providing technical assistance in the areas of disease surveillance and monitoring, program planning and management, social mobilization and salary supplements to MOH personnel involved in EPI. Assistance has also been provided to combatting diarrheal disease (CDD) in the form of oral rehydration salts (ORS) packets and advice on the local production of ORS. Unfortunately, UNICEF implementation has followed the lines of many former such programs by becoming self-contained and vertical. Local, regional and national MOH personnel have had minimal involvement in planning and management exercises. The result has been alienation and growing dissatisfaction with the UNICEF/EPI and CDD support programs. Additionally, health officials have expressed serious concern that UNICEF programming will not be sustainable.

Working through UNICEF and WHO, the Government of Italy has just provided $8 million to the Joint Nutrition Support Project in Red Sea Province and $7 million for the UNICEF/MOH National EPI program, and is providing funding and technical assistance for the repair and rehabilitation of the MOH Central Medical Stores warehouse and office complex. In addition, through a larger socio-economic package, funds have been earmarked for the full rehabilitation of hospitals in northern Darfur.

The World Health Organization (WHO) has been involved with maternal child health programs for the past ten years. It is currently providing financial and technical support for EPI, CDD, and acute respiratory illness (ARI). It is providing two technical assistants for cold chain management and maintenance, allocated $80,000 for training and applied research, supports AIDS research; and has assisted the MOH to develop a list of rehabilitation needs for rural and urban health facilities.

The World Bank has decided to proceed directly to support program planning. The Bank will emphasize completing the draft four year health plan, testing a pilot scheme for health care financing and assisting the MOH to write proposals for MCH/FP and health systems management and development.

Unfortunately large donor grants often become entities unto themselves that heavily influence the MOH process of identifying PHC and CS priorities. While this influence is not bad in itself, it brings into question both the integration and the sustainability of these projects by the MOH system.

The bulk of USAID/Sudan's current involvement in the Health Sector is through PVO's. Ten different PVO's receive central, regional, OFDA or DA funding in support of their activities. Child survival has been supported through emergency food relief, family planning, nutrition education, food transport/distribution and introduction of ORT to nomadic and semi-nomadic populations.

D. POPULATION PRESSURES

Sudan has one of the higher population growth rates in the world. The average Sudanese woman has seven live births during her reproductive years. The GOS recently estimated that Sudan's population is increasing at a rate of at least 3.1 percent per year, which results in a doubling of the population in about 22 years. Current estimates put the country's total population at 25.1 million. The National Population Committee (NPC) projects that, without significant changes in fertility rates, Sudan's total population will pass 40 million about the year 2000 and pass 56 million thirteen years later. Currently, about half the population is less than 15 years old. Urban areas account for 20 percent of the population, though this figure is expected to surpass 50 percent within 20 years.

The Third National Conference on Population in Khartoum in October 1987 highlighted the negative impact rapid population growth has on education, health, status of women, migration, and natural resources. The educational system is under severe pressure to maintain minimum quality standards in the face of spiraling enrollment. Similarly, the health care system, already deteriorating because of severe budget constraints, is facing demand that is rising much faster than the system can accommodate. Also, closely spaced births greatly increase the risks of infant and maternal mortality. It has been estimated that spacing of 24 plus months could avert about one-fifth of all infant deaths in Sudan. High fertility is also seen as an impediment to improving the status of women. Moreover, rapid population growth has contributed to rapid urbanization which, in turn, has outstripped GOS and donor capacity to meet new housing, water, transport and public health requirements. Finally, rapid population growth is contributing to the rapid deterioration of marginal agricultural lands and the natural resource base generally.

It is important to note that it is the Sudanese themselves, both the public and private sector, who now acknowledge the severity of the problem. Renewed GOS interest in the population issue resulted in the highly successful National Population Conference, which enjoyed broad and high level participation by GOS officials. During this conference, the Prime Minister, with support from several other key ministers, announced GOS intention to develop, promulgate, and implement a comprehensive national policy on population. Pending final acceptance, the guiding principles are provision of family planning services and information to all Sudanese couples, and expansion of programs to improve infant and child care, promote child survival, and ensure safe motherhood. Also recommended are that the

role of the private sector in the provision of family planning services be expanded to meet growing demand, and that an office of population for planning and coordination be established to guide implementation of the policy.

Along with the lack of a policy framework, the availability of contraceptives is a critical constraint to the reduction of rapid population growth. Contraceptive use has apparently increased from only 5 percent in 1979 (very low by world standards), to probably 9 percent today. Evidence is also mounting that there is considerable unmet demand, with pharmacists reporting that what little supplies are available clear the market rapidly at inflated prices. Public health workers and PVOs report steadily increasing client requests. Demand is concentrated in urban areas.

The commercial private sector, namely pharmacists and drug distributors, which provides 80-85 percent of modern contraceptives, is having difficulties obtaining supplies because they cannot obtain foreign exchange. Contraceptives have not been on the "essential imports" list prepared by the Ministry of Health. The black market for contraceptives has grown as a result. For example, a best selling brand of pills in 1984, which cost LS2.0 to 3.5 per cycle, is now selling for LS18, if available. In short, there is a crisis in the supply of contraceptives in Sudan, and the use of modern contraceptive methods is probably declining due to the lack of these supplies while unwanted pregnancies are increasing.

There are other problems as well. A 1979 fertility survey revealed that while 80 percent of Sudanese couples in Khartoum knew of at least one method of modern contraception, the figure in rural areas is only 42.5 percent. There are few examples of successful population education programs at this time. Likewise, the Ministry of Health, a late-comer to family planning, and the associated regional, provincial and district systems are very underdeveloped with the public system, accounting for no more than 10 percent of total use. Considerable constraints exist for public sector expansion: lack of basic health coverage (only 35 percent of rural population covered), lack of an Information, Education and Communications strategy to expand services, poorly developed logistics system, poor organization, lack of trained personnel at every level, and limited financial resources.

Donors, while critical to the success of the program, have concentrated almost entirely on the public sector and PVOs, with little attention to the private sector. The UNFPA supports a modest maternal child health/family planning program, sponsors data collection, and funds education at the Ministry of Education and a Population Studies Center at the University of Gezira. The World Bank, which has no program now, is completing a sector review and proposing a sector program. International Planned Parenthood Federation (IPPF) supports the Sudan Family Planning Association (SFPA) which trains workers and operates family planning services through a number of their own and MOH clinics. USAID support to the population sector has been comprised of a variety of centrally-funded technical assistance projects emphasizing policy development, operations research, physician training in reproductive medicine, and census and survey research. In addition, through Family Planning International Assistance (FPIA), AID has been providing about half of all donor contraceptives consumed in the country and is financing a small but effective family planning clinic on the outskirts of Khartoum (Hag Yousif).

III. Strategy

A. EXPLANATION OF PROBLEM SELECTION

The Mission views four main problem areas as deserving of USAID attention in FY 1989-90. Inadequate economic growth is clearly the overriding problem. Food security appears to be a major problem in Sudan, but the nature of the problem is significantly different from other African countries. In Sudan, it is more of a distribution rather than an inadequate production problem. Likewise, it appears to be a localized, rather than a national problem, as evidenced by the national-level indicators on per capita caloric consumption and percentage of malnourished children, both of which Sudan exceed AID indicators of performance. Even so, efforts aimed at increasing food security also address the problem of economic growth. Deteriorating natural resources, child survival, and population pressures are all persistent and quantifiable problems, national in scope.

Food security is viewed here from a development, as distinguished from an emergency, perspective. Natural resources degradation is closely related to food security since the natural resource base is essential for both sustained and increased agricultural production and producer incomes. Child survival and population pressures are both affected by GOS inability to finance basic services due to inadequate revenues, largely a result of a poor economic policy framework.

The overall USAID strategy for Sudan is to promote the increased and appropriate use of market forces to address these four main problems. Each problem area has its own particular strategy, but the strategies described below place increased reliance on the private sector and private voluntary organizations.

The selection of these problems is based on a variety of criteria and assumptions (see Table 1). These are: severity of problem, Agency and Bureau priorities, GOS priorities, other donor programs, Mission resources and capabilities, prior Mission commitments and experience, likelihood of success, and scope for demonstration effects and impact at the sector level.

All of the problem areas are severe, though not necessarily equally so, and fully warrant the immediate attention they are receiving. The President's Initiative to End Hunger in Africa calls for increased market-based growth through adoption of appropriate economic policies. The Africa Bureau is strongly behind macro-economic reform for Sudan at this critical time to increase the role of market forces and is also supportive of natural resources preservation, including biological diversity, for Sudan. Likewise, the Agency has selected Sudan as a child survival emphasis country, and population programs continue to receive high priority ranking. In all these areas, other donor programs are active, and USAID has entered into activities which complement other donor programs to more fully realize development impact.

Some of the solutions to these problem areas are riskier endeavors than others, so success is not always certain. Regarding macro-economic reform, for example, it is unclear whether the GOS will adopt and implement the full range of measures required to reestablish economic growth. The GOS is likely to address food security and natural resources preservation since they are explicit priorities, though there is some question as to the extent of GOS commitment to the latter. Population growth is probably the area where the GOS support is currently most evident, receiving consistent support at the highest levels. The likelihood of success is high for both population and child survival, though much of the latter

will be achieved through direct donor, not GOS, interventions, and there is, therefore, an issue of sustainability.

TABLE 1
PROBLEM AREAS

Criteria for Problem Selection	Inadequate Economic Growth	Food[1/] Security	Deteriorating[1/] Natural Resources Base	Child Survival	Population Pressures
Is it severe?	Yes	Maybe	Yes	Yes	Yes
Is it an Agency/Bureau priority?	Yes	Yes	Yes	Yes	Yes
Is it a real GOS priority?	Yes	Yes	Maybe	Maybe	Yes
Is there other donor support?	Yes	Yes	Yes	Yes	Yes
Does the Mission have adequate resources/capabilities ?	Maybe	Yes	Yes	Maybe	Yes
Is there an established history of directed USAID bilateral involvement?	Yes	Maybe	Yes	No	Yes
Is there likelihood for success?	Maybe	Yes	Maybe	Yes	Yes
Is there scope for demonstration effect/impact at the sector level?	Yes	Yes	Yes	Yes	Yes

Mission resources and capabilities in terms of funding and staff are adequate to address most of the problem areas though lower assistance levels have reduced Mission ability to influence change in macro-economic reform efforts. The scope for demonstration effects is high in all areas. For example, there appears to be strong support for a Mission-designed bread subsidy reduction scheme, and reforestation measures, child immunization, and private sector distribution of contraceptives all offer sectoral demonstrative impact. Finally, the Mission has had some, or even considerable, commitments and experience in all the areas in Sudan, except perhaps for the mix of health interventions presently termed child survival.

USAID Sudan does not plan to address directly the education problem, at least at this time. While it is severe in nature, it is of lower priority than the four problem areas selected for emphasis. Likewise, upgrading this sector would require major capital and other investments, well beyond the current resources of the Mission.

1/ The problems are closely related but are separated here for presentational purposes.

B. PROBLEM SPECIFIC STRATEGIES

1. Problem: Inadequate Economic Growth

The Mission's proposed macro-economic strategy is based on the premise that the country's current reform effort is likely to proceed slowly and that the Mission must try to encourage the Government to pick up the pace. Nevertheless, it is possible that the current reform effort could move much more quickly than is currently expected, or that it may breakdown completely.

Any substantive and sustainable improvement in the Sudanese economy requires redressing the current imbalance between the public and private sectors in the economy and an improvement in the Government's finances. The current public/private balance is unstable and unsustainable, even with considerable external inflows. The Mission's interim strategy must give priority attention to improving the country's poor financial situation in the short term. Thus, the scope of the Mission's effort must be circumscribed and selective, owing to reduced assistance levels and the large size of Sudan's needs. It also has other limits. For example, we leave the exchange rate issue to IMF and World Bank leadership, though we support their efforts.

The Mission's overall economic reform/private sector objective is to increase economic growth by reducing the role of the public sector in the economy while expanding the role of the private sector. This will be addressed through a variety of AID instruments including Mission-GOS policy dialogue, USAID-funded policy studies and analyses, ESF-DFA project/program aid and P.L. 480 Title I food assistance.1/

The Mission's objective is directly supportive of two main GOS objectives in the forthcoming four-year strategy:

- -- to revitalize the production and investment activities of the private sector, and
- -- to rationalize the parastatal sector (e.g., financial self-sufficiency or divestiture for commercially-oriented parastatals, and increased efficiency in non-commercial enterprises, with explicit recognition in the budget of any subsidies).

There are three specific means for making progress toward attaining the overall objective:

1/ The Mission has been investigating the possibility of converting P.L. 480 Title I debt to a grant, in exchange for performance-based policy changes. Sudan's P.L. 480 debt is currently around $570 million (principal and interest). The mechanics of a debt conversion for a policy reform program would essentially be that when the Government reduces a subsidy, a certain amount of debt (in direct proportion to the size of the subsidy reduction) would be placed on a repayment moratorium for several years. If after the agreed upon time the Government has not reintroduced the subsidy, directly or indirectly, then the moratorium is converted to a grant, otherwise it is lifted and the Government is back where it was originally. Other advantages of such a program are that it avoids the use of food assistance as a lever and that the Government makes the necessary decisions, for it should be ultimately responsible in the final analysis.

This program mechanism could be used with other policy reforms. If this instrument for encouraging policy reform is successful, then the Government will have reduced its external debt. See 87 Khartoum 14816 for additional details.

(1) reductions in expenditures (aggregate demand), particularly by the GOS and its parastatals;
(2) improvements in Sudan's external sector, particularly foreign exchange earnings, and external debt level; and
(3) reducing and removing GOS regulations constraining and distorting private sector initiatives.

Progress needs to be made in each of these priority areas. Reducing GOS, including parastatals, expenditures will reduce the government's deficit and borrowing requirements. This opens the way for increasing the amount of credit available to the private sector and reducing inflationary pressures from the Government's excessive spending on non-productive activities, such as subsidies and money-losing parastatals. Increasing foreign exchange earnings, reducing debt, and rationalizing currency controls will increase the willingness of both Sudanese and foreign investors to invest new resources or reinvest profits in Sudan. Reducing GOS controls and regulations will reduce uncertainties the private sector faces as a result of GOS administrative controls. Just as important, this change will compel those firms who have benefited from administrative controls to become more innovative (e.g., adopt new technologies, develop new products) and competitive or be driven out of business. Those firms which have not benefitted from GOS controls will have an opportunity to expand on the more "level playing field." Increasing the contribution of the private sector to the economy has the benefit of not only increasing real per capita growth, foreign exchange earnings, and productive employment opportunities over time, but also of increasing Government tax revenues as a result of increased productive economic activity. Reducing controls and regulations, particularly those affecting the exchange rate, will also help bring the shadow economy back into the official economy, will encourage the development of medium, small, and micro-enterprises in the private sector, and will improve incentives to Sudanese nationals working abroad to remit their earnings through legal channels.

The Mission has concentrated its attentions on potential policy reforms that are as valid and necessary today as they were five or more years ago when they were first addressed. In these areas the Mission has established a comparative expertise within the donor community; an expertise which is acknowledged by Government. Indeed, the Mission's past momentum in these areas has also made it easier to broach these sensitive subjects:

(a) **Reducing Bread Subsidies.** The Mission is continuing its efforts to encourage the GOS to reduce the wheat bread subsidy while ensuring access to bread for low-income consumers, and to increase private millers and bakeries' freedom to make product line and pricing decisions. Progress in these areas will reduce GOS expenditures, increase the role of private millers and bakers, and help, on the margin, to save the country foreign exchange. It would also increase the consumption of sorghum, the country's staple and abundant commodity. The Mission and GOS will be co-funding an analysis of how best to implement five previously-identified policy options for reducing the subsidy. One option will be to increase the production and consumption of a composite sorghum-wheat bread. The Mission has recently resolved the technical issues surrounding the milling of composite flour. As part of the FY 1988 P.L. 480 Title I Agreement, the GOS agreed to expand its "unofficial" policy of selling unsubsidized flour to a number of private bakeries.1/ In turn, these bakeries

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1/ See 87 Khartoum 14816 for details.

are no longer constrained by the Government's product type, price, and profit regulations. The analysis and implementation of the recommended reforms will be encouraged through the on-going Project Analysis and Implementation Program Project, and be supported by P.L. 480 Title I conditionality program and, possibly, a debt conversion for policy reform program.

(b) **Reducing Diesel Subsidies.** The Mission has begun to encourage the Government to re-examine the costs and benefits of its diesel pricing and allocation procedures. Currently, these procedures tend to favor the public and parastatal sector, urban areas, and mechanized rainfed agricultural areas. This leaves those in traditional rainfed areas, such as those in the western Sudan, and medium and small sized private concerns without access to the official allocations and therefore paying much higher fuel and transport prices. Shadow economy prices for diesel in the West have recently been observed by Mission personnel to be four-times the official price. Changes in this area could reduce GOS expenditures on subsidies, and allow a more efficient and equitable use of diesel. Beneficiaries will tend to be agricultural producers in rural areas, such as in the West, and medium and small scale private enterprises who will see their access to petroleum products improved.

To encourage reductions in the subsidy and changes in the allocation procedures, the Mission will use the PAIP project to fund the analyses, and consider a performance-based P.L. 480 debt conversion for policy reform as an incentive for change. Similarly, reduction in diesel subsidies could be tied to any Mission efforts in transportation. Progress in this area will be difficult. However, Ministry of Finance and Economic Planning representatives understand that the current system is not equitable, particularly between urban and rural areas.

(c) **Reducing Public Employment.** The Mission intends to support a multi-donor and GOS effort to reduce public employment through early retirement programs, and through the divestiture of parastatal operating units that can be private, self-financing concerns. Changes in this area would reduce the GOS role in the economy, reduce its expenditures on inefficient public enterprises, and increase the role of the private sector. Although the World Bank has taken the lead in this area, additional USAID financial and analytical support has been requested by other donors and the GOS. To that end, the Mission is financing the analysis on how to implement a staff reduction program for the Sudan Railway Corporation (SRC). SRC must, as part of a multi-donor project, reduce its staff of over 30,000 by 9,000 within three years. The Mission will use a portion of its P.L. 480 and ESF (CIP) local currency to help defray the costs of retiring staff before retirement age. A success in this area could be a model for other parastatal reform efforts in Sudan.

(d) **Increasing Remittances from Sudanese Workers Abroad.** The Mission continues to encourage the GOS to increase the flow of remittances from Sudanese nationals working abroad (SNWA) through official channels. The SNWA topic is a primary vehicle through which the USAID Sudan emphasizes the need for exchange rate reform. The increased access to foreign exchange can help reduce Sudan's massive external debt and improve its balance of payments situation. Not surprisingly, meaningful progress in this area is hampered by the Government's reluctance to consider further exchange rate adjustments or adopt programs (e.g., "bonuses" for dollars officially remitted) that improve the effective exchange rate. Through the PAIP project, the Mission will be working with the GOS to examine ways of implementing exchange rate reforms. Nevertheless, the Mission will let the IMF and World Bank continue to take the lead in direct negotiations for

further exchange rate adjustments. Depending on developments, the Mission will consider developing a multi-year ESF and DFA program, if the GOS undertakes major reforms in this area.

(e) **Reducing Agricultural Marketing Controls** The Mission is investigating the means of encouraging the GOS to alter its role in the pricing and marketing of agricultural products and inputs. Among the possibilities being analyzed by the Mission are the costs and benefits of altering the Government parastatal's role in gum arabic pricing and marketing (also an interest of the World Bank, EEC, and WFP) and in the distribution of inputs, particularly fertilizers and in irrigated schemes, where most of the fertilizer consumption is centered. Both of these options have positive implications for increased private sector agricultural production, private rural employment and incomes, and foreign exchange earnings.

(f) **Expanding the Role of Medium and Small Private Enterprises.** The Mission plans to develop a separate private sector strategy. The major effort to date has been directing a portion of the CIP to a few large private sector firms. Because of the large difference between the official and free market exchange rates, these few large firms have had the clear opportunity to reap very large profits. The new Mission strategy will promote explicitly the expansion of medium and small enterprises. Although the information has not been systematically compiled, preliminary indications suggest that these firms have been hampered more by the current system of GOS controls than larger, more capitalized firms. For example, the larger firms tend to have better access to donor-financed commodity import programs, import licenses, and tend to receive special exemptions on costing of inputs and pricing of outputs. The Mission expects that emphasizing the development of medium and small enterprises, which include women entrepreneurs and employees, will have greater employment effects and create better linkages within the economy, than emphasizing larger concerns that are more capital intensive and dependent on imported inputs. Greater opportunities for private business to expand will also directly address the need of the Sudanese economy to quickly create productive employment opportunities for its rapidly growing labor force. Possible interventions may be in the areas of removing bureaucratic and administrative constraints to operating smaller businesses, and improving the financial markets serving smaller enterprises. These interventions may be supported by DFA, ESF, and local currencies generated under the P.L. 480 Title I and CIP programs. This could include exercise of P.L. 480 Title I Section 106/108 provisions, depending on the needs identified during the assessment stage.

The first steps being planned by the Mission are a private sector profile, to be undertaken by Sudanese consultants, and an assessment, to be undertaken by AFR/PRE and Sudanese consultants, both to be completed in the summer of 1988 and both of which will address gender issues.

The Mission plans also to hire a local private sector expert to serve as a contact with the private sector and to assist in developing and implementing a private sector development strategy. A separate assessment of the training, education and employment of Sudanese women will provide complementary data that will be used in developing the strategy.

(g) **Improving Policy Analysis and Implementation.** The Mission's policy dialogue is directly supported by the Policy Analysis and Implementation Program project (650-0071). In the past, the UNDP and World Bank have been helping to improve statistics and some policy analysis, while the PAIP project has

concentrated on improving the policy analytical and implementation capabilities of Government, particularly the Ministry of Finance and Economic Planning's (MFEP) macro-economic planning section. UNDP assistance to the MFEP has stopped and World Bank assistance has declined in the past year and a half. MFEP sees the PAIP project as an important vehicle for analyzing exchange rate, price decontrol, and parastatal reform issues. Presently, the PAIP project is undergoing a management review by the Mission and Government to make sure that it is directly related to the objectives and proposed policy changes to be announced as part of the forthcoming four-year recovery and development program. In fact, the GOS has asked USAID to use the project to monitor price decontrols and analyze alternative exchange rate regimes.

2 Problem: Lack of Food Security and Deteriorating Natural Resources Base

As part of its new 1988 - 1991 medium term recovery and development program, the Government of Sudan has identified the following agricultural objectives:

- -- Maximize foreign exchange earnings.
- -- Maintain adequate food supplies for the domestic population (food security).
- -- Enhance and preserve the natural resource base.
- -- Correct the imbalance of agricultural and regional development in the traditional rainfed sector.
- -- Stem the tide of rural-urban migration.
- -- Promote changes in institutions leading to greater efficiency and productivity.

In the face of recurrent drought, increasing desertification, a deteriorating economy, and given limited US resources, USAID/Sudan believes the most important and appropriate objectives for agriculture in Sudan, in priority order, are to:

- -- Improve food security, by increasing agricultural productivity and raising incomes of rural men and women.
- -- Maintain and enhance the natural resource base.
- -- Increase foreign exchange earnings from agriculture.

An understanding of the relative contributions of the three main subsectors to the achievement of these objectives is essential. The Mission rates the positive potential contributions (i.e., where investments should be made) of these three subsectors on the USAID selected objectives in Table 2

Table 2
Potential Subsectoral Contributions to Mission Objectives

	Subsectors		
Objectives	Traditional Rainfed	Mechanized Rainfed	Irrigated
Food Security	HIGH	LOW IN WEST HIGH IN EAST	MEDIUM
Natural Resources Conservation	HIGH	HIGH	LOW
Increased Foreign Exchange	HIGH	LOW IN WEST MEDIUM IN EAST	HIGH

The Mission's highest priority for investment is in traditional rainfed agriculture. The traditional subsector, including livestock, is the major source of basic food commodities for Sudan, contributing 60 percent of total food production and also providing 55 percent of net foreign exchange earnings. This subsector makes these major contributions despite heavy explicit and implicit taxation. In contrast, the mechanized and irrigated subsectors receive heavy Government subsidies and considerable donor support in the case of the latter. An increase in exports of 20,000 MT of traditional gum arabic will earn at least $50 million in foreign exchange whereas it would take an increase of 600,000 MT of sorghum to gain the same amount. Moreover, gum arabic does not require any imported inputs, while some foreign exchange is required for inputs to produce sorghum exports, particularly the mechanized rainfed sector. Also, the potential for rapid increase of gum arabic is greater than for sorghum. In addition, investments in traditional rainfed agriculture will provide the most productive employment for the largest number of people. Finally, investments in gum arabic production and in better food crop tillage would also support natural resources conservation.

Increases in traditional subsector productivity and production can be achieved through sorghum-millet systems research which can lead to significant yield increases, complemented by the transfer of technology to traditional farmers. Research should also concentrate on improving agroforestry systems in which

[redacted]

Likewise, to take full advantage of Sudan's fragile but near monopoly position

(3) Increasing incomes of residents of food deficit areas in western Sudan by ensuring farmgate prices which mirror free market prices;
(4) Improving efficiency in food distribution through improved transportation in western Sudan.

Protect and enhance western Sudan's natural resource base by:

(1) Encouraging appropriate land use planning and management of natural resources based on sound data collection and reporting, and on principles of conservation, sustainability and environmental stability;
(2) Encouraging appropriate reforestation, management, and rehabilitation of the gum belt;
(3) Developing improved technology and management and establishing an incentive/disincentive system, such as addressing pricing policies and subsidies to maintain efficient, environmentally sound, and sustained mechanized agriculture;

Increase foreign exchange earnings by:

(1) Improving macro-economic environment;
(2) Increasing quantity and productivity of traditional exports;
(3) Giving greater attention to non-traditional exports.

Considering the above, USAID Sudan proposes a series of activities for FY 1989 and FY 1990, both continuing and on-going, which address the means necessary to achieve the agreed upon goals. On-going activities include:

FY 1979 Regional Finance and Planning Project
FY 1981 Agriculture Planning and Statistics Project
FY 1983 Policy Analysis and Implementation Project
FY 1984 Western Agriculture Marketing Road
FY 1985 Kordofan Rainfed Agriculture Project
FY 1987 Sudan Reforestation and Anti-Desertification Project
FY 1988 Medium-term Locust Project
Continuing PL 480 Title I Program

The Mission proposes to undertake the following new activities, subject to availability of funds, (provided in more detail in Annex 3) to address its agricultural objectives:

1. Develop the Sorghum-Millet Systems Research Project to build on the large WSARP investment in western Sudan and to increase production through research on sorghum and millet.
2. Develop a Food Security Grant for western Sudan to address food security through a restructuring of the gum arabic industry. This will include addressing food security through increased prices, thus incomes, to gum arabic producers, natural resource protection by conserving gum arabic trees, and increased foreign exchange through increased production. A performance-based, policy reform approach will be utilized.
3. Design a Transport Improvement Project to connect En Nahud to Ogre (180 kilometers) to promote food security and facilitate increased exports and emergency food transportation in western Sudan.
4. Pursue the Resource Base Monitoring System Project to permit accurate and timely monitoring of agricultural resources, including food security, desertification, and rapid population growth.

5. Refine the Private Sector Seed Initiative to address food security through increased production and productivity.
6. Develop the Strengthening Agriculture Production and Marketing Project to strengthen traditional rainfed farmer marketing associations to provide essential production, storage and marketing services.

3. Problem: Health Deficiencies, Especially Child Survival Issues

The goal of AID's Health Strategy is to improve health status as it is reflected in increased life expectancy (AID Policy Paper, Health Assistance revised, December 1986). This coincides closely with those of the GOS mentioned earlier. AID's Child Survival Strategy emphasis rests on ORT, EPI, Nutrition and FP. However, current policy also acknowledges the importance of improving management and service delivery to rural populations. Specifically,

1. Policy objectives will be approached through selected child survival interventions - immunization, oral rehydration treatment (ORT), improved nutrition, and adequate birth spacing.
2. AID recognizes that other health interventions, in addition to those mentioned above are necessary, including primary health care, water, sanitation projects, vector-borne disease treatment and control, improved health financing, training, supervision, logistics, information systems, and management systems to meet pressing country-specific health problems."

The Mission's health sector strategy is based upon the awareness that USAID Sudan has limited factual knowledge of health problems and answers in Sudan. Therefore, the Mission has concentrated on meeting short term needs through child survival activities in immunization and ORT. These activities save lives, introduce low cost technologies, and address health objectives. The Rural Health Support Project provides operational experience in rural areas. In addition, experience will be gained in developing community based cost recovery mechanisms and a rural health information system will be established. By 1990, the Mission should have substantial information on rural health staffing patterns, public acceptance of new health technologies, cost recovery, epidemiological data, commodity needs and training requirements in three diverse and culturally different areas of rural Sudan. Continued smaller scale assistance to PVOs will offer ancillary data from other rural areas, as well as data and project experience from urban settings in PHC, MCH and FP. Continued support to SERISS, and the Vitamin A Survey Activity, and the Adventist Development Relief Agency (ADRA) nutrition project will supply additional information on nutrition, growth monitoring, and infant and maternal mortality.

USAID Sudan's child survival strategy objectives are to assist the GOS to improve the health status of women and children as it is reflected in increased life expectancy. This can only be accomplished by improving both the quality and accessibility of service delivery. The Mission's strategy concentrates on reducing infant and early childhood mortality and morbidity. The means to accomplish this include using child survival interventions as the basis for building a more comprehensive health care system, ensuring that child survival projects are sustainable, reducing maternal mortality and morbidity, and improving nutrition practices. Progress toward achieving these objectives will be accomplished by using existing projects to improve management, data collection and analysis, reduce recurrent costs, encourage cost recovery, improve the delivery of immunization, oral rehydration therapy (ORT) and to assure the availability of pharmaceuticals, in short, by promoting sustainability.

Therefore, USAID Sudan child survival strategy will do the following:

Continue to support UNICEF efforts to develop child survival activities. The UNICEF program's isolation must be reduced to bring it into the existing health system. The FY 1988 agreement with UNICEF will encourage the use of using centrally funded technical expertise (PRITECH, PRICOR, REACH.) which will allow for more Mission influence on the use of resources and will improve the technical quality of the program. Through the support it provides to UNICEF, USAID will ensure that its support emphasizes activities that:

(a) link together discrete child survival activities and enhance their complementarity such as combining GOS diarrheal diseases and nutrition programs, both of which need strong educational, social mobilization and social marketing components;
(b) promote the integration of UNICEF programming into health care services, such as improving the management training of health personnel at all levels;
(c) establish mechanisms to promote more regional participation and responsibility in planning and implementation of programs;
(d) develop a health information system;
(e) thoroughly explore areas of possible private sector involvement in ORS production and distribution;
(f) encourage more community responsibility in support of child survival activities at the village level to improve health care financing;
(h) reinforce the drug distribution system.

OPTION - that USAID Sudan consider not continuing funding for UNICEF beyond FY 1988. New donor assistance from Italy (reportedly $7 million) for this area may preclude the need for additional AID funds and staff time. Instead, the Mission could let UNICEF take the lead but continue to address child survival in the context of the proposed activities described below:

(a) Infant and maternal mortality rates would be addressed through child spacing as part of the new FY 1989 Population Policy Support Project, described later.

(b) USAID/SUDAN would continue to support the ten PVOs whose activities range from MCH to ORT. Described on page 49. The Mission plans to expand PVO support to include a growth monitoring program in northern Sudan during FY 1988-89.

(c) The Mission would continue local currency support to the National Office for the Control of Diarrheal Disease (CDD). CDD would also be encouraged to collaborate with UNICEF to obtain dollar funding for staff training and essential commodities and equipment. CDD would also be encouraged to work more closely with RHSP activities to assure better collaboration and program compatability.

(d) Nutritional concerns would be addressed in a three fold manner. First, the SERISS Project would continue to provide the GOS with valuable nutritional status information. Second, the New Vitamin A Program, implemented by The Harvard Institute for International Development (HIID), would study the relationship between infant mortality and Vitamin A deficiency. Local currency would be made available to market targetted nutritional programs including nutrition education and supplemental feeding.

(e) The Demographic and Health Survey Project, implemented by Westinghouse, would conduct a survey to assist the MOH in determining levels of maternal mortality and child health along with other demographic indicators in Sudan.

(f) Local currency support would be provided for health support and cost recovery activities that emphasize child survival. The selection of these activities would take into account existing health programming by the GOS and other donors, particularly in the area of infrastructure.

(g) Explore the possibilities of mutual support for cost recovery health programming with WHO. If no agreement can be reached with WHO, the Mission would propose to AID/W a two part study to assist Sudan in its efforts to reduce recurrent health costs. The first part of the study would analyze the potential for and recommend ways in which a national health cost recovery program could be developed. The second part of the study would evaluate private sector potential to relieve the stressed GOS health system budget. Of particular interest would be the potential for future USAID/Sudan programming to support private sector health initiatives through policy changes and a possible small loans program including technical assistance to assist health entrepreneurs respond efficiently to increasing public demand.

(h) Continue the FY 1980 Sudan Rural Health Support Project (RHSP) with more concentration on integration and collaboration with other CS component activities. Focus for RHSP North would be on improving and implementing the Management Information System, integrating ORT activities with CDD, further developing the regional logistics plan and perfecting the community pharmacy network to increase drug supplies. In addition, local and US based training programs would be established to improve specific program component management skills among regional MOH personnel. RHSP South, due to civil strife, would be restricted to Juba Town and suburbs. The program's emphasis will be to continue voluntary and community health worker training, management support to the RMOH and child survival delivery to the population of Juba.

(i) Improve Policy Dialogue. By bringing the Mission project efforts in EPI, ORT and health information systems under a sectoral management system chaired by the DG/MOH and including representatives of other MOH departments, donors and implementing PVOs, a ready platform for policy dialogue would be established. Core issues, such as those mentioned above, would be discussed, revised, elaborated and resolved in a climate of effective planning, management and collaboration. Policy revision and or development would be the principal outputs to facilitate achieving a sustainable economically sound health sector.

4. Problem: Population Pressures

USAID Sudan's objectives in the population sector are to assist the GOS to increase the availability and use of modern family planning methods in order to improve maternal and child health status and lower high fertility rates. USAID proposes a short term strategy to build upon past successes through centrally funded technical assistance projects in policy development, operations research, physician training, survey research, and the provision of contraceptives, plus the development of a bilateral population project for FY 1989. This approach takes full advantage of the current momentum for change in the sector. The strategy will be implemented by: 1) providing technical and financial assistance for developing

a national population policy and implementation plans; 2) assuring the supply of contraceptives emphasizing the private sector; 3) providing limited assistance to the public sector to expand family planning services; 4) stimulating informed demand; and 5) developing the bilateral Population Policy Support project.

(a) **Develop National Population Policy and Implementation Plans.** Recognizing the need for Sudan to develop and promulgate a national population policy, the GOS acknowledges that the policy must be made operational through a coordinating office with official high-level status. The GOS is currently in the process of developing the policy and determining the role and scope of a coordinating office. In the meantime, the NPC has been assigned full responsibility to prepare the policy and guide the development of sectoral implementation plans. Funding and technical assistance for this effort is being provided by USAID and centrally-funded sources over the next 12-18 months. Thereafter, there will be a need for further financial and technical support to the designated population office to establish itself and carry out its functions.

The short-term development and the long-term implementation of a national population policy also will require the continued collection and analysis of demographic data. A demographic and health survey will be undertaken with AID support in 1988 to address these information needs.

(b) **Guarantee Contraceptive Supplies; Utilize Private Sector.** There is growing concern among GOS officials and donors that the lack of contraceptive supplies could set back family planning at this critical juncture for the population sector. Steady and sufficient supplies need to be guaranteed for the next 5-10 years if Sudan is to make any progress in achieving fertility decline. Guaranteed supplies would alleviate price constraints in commercial private sector and greatly increase the availability of contraceptives. Steady supplies for the public and PVO facilities would allow these organizations to expand services to lower income clientele in both rural and urban areas, and avoid temporary shortages and mixing of brands that now effect services. In the short-term, Sudanese PVOs and the MCH/FP Department have made known their desire for increased supplies of contraceptives. The commercial private sector offers the best opportunity to expand the availability of contraceptives quickly and cost-effectively. There are over 500 pharmacies, 1,000 private clinics, and 2,000 doctors with private practices in Sudan. In the private sector, expenditures on health care are ten to twenty times greater than central government expenditures. Past experience has shown that the majority of couples in Sudan practicing modern contraception prefer to obtain their supplies from doctors and pharmacies, and there is considerable evidence that there is a willingness to pay for these services and supplies. A large supply of inexpensive contraceptives introduced into the pharmaceutical market in Sudan would meet a critical need for contraceptives, cause a major decline in prices, and eliminate the black market. In addition, these supplies could be utilized in obtaining GOS agreement to have contraceptives placed on the "essential imports" list.

USAID was on the verge of developing a commercially based contraceptive distribution project in 1985. This approach was revived by the 1987 Population Assessment Team and is now part of the Mission's strategy. In the meantime, a recent MOH team traveled to El Obeid where it discovered that pharmacies provide 75 percent of all contraceptive services in Kordofan. It now wishes to test the viability of further utilizing the pharmacy system in Kordofan to increase contraceptive distribution.

Until the bilateral project described below is operative, the Mission would make every effort to assure that adequate contraceptive supplies are available to the MCH/FP Department and PVOs. The Mission has already taken steps to increase deliveries from the centrally-funded FPIA commodities project for 1988. In addition, the Mission has invited representatives from FPIA and the Centers for Disease Control/John Snow Logistics Project to review contraceptive needs and suggest improvements for the MOH logistics system. The Mission is also now examining the possibility of importing contraceptives for the private sector through the existing CIP program by attempting to get contraceptives on the "essential import" list. The Mission would support private sector family planning services until these services can be included in a new FY 1989 bilateral project, described below.

(c) **Assist the Public Sector to Expand Family Planning Services.** The above analysis of constraints in the public sector suggests that major structural changes will have to occur before the Ministry of Health can effectively deliver family planning services. However, the corrective measures required in the Ministry of Health are beyond the project approach currently contemplated by the Mission. Structural reforms are more suited to the sector loan approach which the World Bank is presently formulating with the GOS. In addition, the UNFPA is also addressing this issue in the negotiation of its new five-year agreement with the MOH. A continuing need of the MOH's MCH/FP program is contraceptives. These are currently provided by AID and UNFPA.

A final corrective measure needed by the public sector is operational research. Testing the efficiency of alternative public sector delivery systems will be an essential part of any expansion of MOH family planning services. Operations research has played an important role in the initiation of family planning services in Sudan and should continue to be utilized as the GOS seeks to expand availability. With AID funding and management, Columbia University has been supporting operations research activities to test alternative delivery models since the 1970s. It also has a resident advisor in place. As part of the short-term strategy, the Mission is requesting that Columbia complete its work in two important studies: the follow-up survey to the Community Based Family Health Project and the IUD Insertion Study. In addition, the Mission is requesting that Columbia pursue the development of a factory-based operations research project and maintain the position of resident advisor through FY 1989.

(d) **Stimulate Informed Demand.** The previous analysis of constraints pointed out that couples' knowledge of contraceptive methods and use is imperfect, and that little has been done to promote information, education, and communication (IEC) activities. If contraceptive prevalence is going to rise above the relatively low rates that exist today, Sudan will need to address the issue of IEC. The recommendations of the Third National Population Conference strongly support this approach. At present, little is being done in this area beyond the Population Education Program at the Ministry of Education. None of the PVO, GOS or other donor projects produce posters, visual materials for non-literates, or pamphlets to help reinforce the work of community and clinic workers. Mass media promotions have been considered but rejected. Observers now believe that with the advent of a national policy and rising demand for family planning that generic mass media promotions might be a viable means to stimulate demand. In the short-term, the Mission is requesting that John Hopkins Population Communications Services Project visit Sudan to assist the family planning PVOs to develop much needed IEC materials. If funds are available, the proposed bilateral project would continue this type of assistance and may support mass media IEC as

part of contraceptive distribution.

(e) Develop the FY 1989 Bilateral Population Policy Support Project. The Mission proposes to develop a bilateral project beginning in FY 1989 to address Sudan's long-term needs in the population sector. The Mission is scheduling the preparation of a PID in June 1988 with the Project Paper to be developed in FY 1989. Its conceptualization takes into account the plans of other major donors and AID's special strengths in the population sector. It also recognizes that much needs to be accomplished in the population sector but that AID does not have the resources to address all of them. Instead the Mission proposes to focus on two broad but critical areas: The first area is private sector family planning, including provision of contraceptives; stimulation of services through private sector providers; and improved management and sustainability of family planning PVOs. The second area is technical support to the GOS for population policy implementation including policy and sectoral analyses; sector management; sector strategy development; monitoring sector performance; and evaluation and revision of operational policies.

The prospects for achievement of strategy objectives are excellent. First, the GOS is firmly committed to expanding access to family planning and reducing high fertility. Second, the demand for family planning services is rising indicating that increased availability will translate into increased contraceptive prevalence. Third, there is an established private commercial sector experienced in the distribution and sale of contraceptives willing to participate in the bilateral program. Fourth, highly trained personnel are available to manage policy implementation activities. And finally, the strategy utilizes two major strengths in AID's population assistance program - private sector delivery systems, and policy development. The combination of these factors auger well for successful implementation.

The potential gains to AID from this short-term sector strategy are manifold. It fulfills several of the highest priority targets for the Agency. Its principal aim is to increase access to voluntary family planning services. The principal conduit for achieving the objectives of the long-term strategy is the private sector which greatly increases the potential to stimulate self-sustaining programs. It also is responsive to stated GOS priorities to reduce extremely high fertility and improve access to family planning services. Its private sector approach is consonant with that of the GOS which wishes to expand private participation in this sector. Finally, the strategy goal of reducing high fertility is complementary to all other AID development efforts since rapid population growth is one of the principal constraints to general economic improvements.

5 Other: The South

The level of hostilities in southern Sudan has contributed to large numbers of displaced persons and people generally in distress. USAID, together with other donors, has had food and transport resources in place, but has been frustrated by the inability of the RRC to overcome such obstacles as lack of cooperation from the military and the Sudan Railway Corporation as well as administrative, financial and physical constraints to move food and relief supplies into the South. Although the trend is for these difficulties to increase, thus far, sufficient food has gotten into the South to prevent substantial starvation among displaced persons in major towns. Due to the lack of a strong initiative on the part of the GOS, the Mission strategy has been to press ahead when there is an opportunity to do so. This has

been a very unsatisfactory approach to a serious situation. But, under the circumstances, and until the GOS plays a much more assertive coordination role, it is about the best that can be done.

The only relatively secure area in the South currently is Juba Town. Food is being provided there through airlifts from Khartoum and surface transport from Kenya and Uganda. The Mission believes the U.S. should continue a "presence" in southern Sudan to demonstrate our humanitarian concerns and to be prepared to move quickly toward longer term development should peace be achieved.

In order for AID to maintain a minimal presence in the South (i.e. Juba), the Mission will extend AMREF funding for an additional 18 months under the bilateral FY 1980 Rural Health Support project. The AMREF project will continue medical assistance and health related training/sanitation efforts to the estimated 50 thousand displaced persons in the camps in and around Juba. In addition, the SORMAR project, whose purpose is to construct, maintain, and repair roads through much of the South, is being held in abeyance with three sets of road construction equipment in storage in Juba.

In the event that a cease-fire is be reached in the next 2-3 years, the Mission could move into the reconstruction/rehabilitation mode relatively quickly. First, the retention of the SORMAR equipment and funding (albeit probably at a reduced level) would form the cornerstone of the post-hostility period. Second, during FY 1988, the Mission plans to undertake an analysis of the existing and resultant manpower training requirements for the South to put in place the cadre required to undertake post war rehabilitation/development efforts. This effort cannot be undertaken until the national Government is in place since the Supreme Council has been dissolved and because there is now no organization which represents the South with which we can carry on discussions sensibly. Since access to the South is limited, a large portion of this part of the analysis will entail outlining post-hostility requirements and identifying the types/numbers of trained manpower which will be required to implement post-conflict efforts. Also, since a very significant number of Southerners have migrated to the North (mainly to Khartoum and western Sudan), the companion half of the analysis will entail a review of (1) the existing trained manpower among these displaced persons; (2) the level of education/potential within the younger/middle age groups of the displaced population; and (3) training opportunities for those who qualify. If these groups in Khartoum are representative of most of the South, most of the males have good English language capability, speak limited Arabic, and probably have primary to limited secondary education. This suggests that training will take considerable time and for the most part could not be carried out in the existing Arabic institutions available in Khartoum and would probably require a rather extensive special Education/Training project within the USAID Sudan program relatively soon.

IV. US Resources

It is time to recognize that AID now has far fewer resources for its program in Sudan with a concomitant decline in ability to influence change, and that this situation is unlikely to change significantly in the next few years, even with major positive changes in Sudanese macro-economic policy. USAID Sudan must, therefore, become increasingly creative and concentrate its efforts on fewer

problem areas, letting other donors take the lead in other areas or risk spending additional resources with little hope of having anything more than a marginal impact. To the extent possible, the Mission will emphasize the private sector both as a targetted beneficiary and as a means to achieve its objectives. Looming ahead, however, is Sudan's growing debt burden generally, with Brooke sensitive payments and PL 480 debt of particular concern. Should Sudan remain under Brooke sanctions, the strategy presented here is moot, for new assistance funds cannot be obligated. U.S. debt rescheduling, which is beyond the scope of this development strategy, must be seriously considered. Perhaps most importantly, any strategy the Mission adopts should be performance-based, because in Sudan, sustained implementation has been a repeated problem. Without explicitly remembering lessons learned, future donor assistance may continue to finance the mistakes of the past and make any future reform efforts even more difficult.

The Mission believes there are four program options that USAID Sudan might take based on the current uncertain situation (see Table 3). Each option has its own set of assumptions and resultant USAID response which addresses the problem areas selected for the strategy. Should any of these assumptions change significantly, the shape and content of the program would also change. In particular if Sudan adopted and implemented a macro-economic reform program proportional to the problem and acceptable to the USG, the Mission would recommend that increased program assistance be made available to Sudan above the currently planned levels. At the other extreme, if even minimal reform measures are not adopted within a certain time frame, USAID should consider recommending an orderly phase-out of Mission activities. The major difference would be the level of program assistance in the form of PL 480 Title I, ESF and limited DFA funds. Population, agriculture/natural resources and, possibly, child survival would be considered for DFA funding. Under all scenarios, emergency food would be continued as necessary.

Option I, Major Expansion, is a very optimistic but probably unlikely scenario. It assumes that increased levels of assistance would be available for Sudan to support major policy reforms undertaken by the GOS, hostilities in the South have ended, and Brooke payments are current. Economic reforms would include establishing a free market exchange rate, aimed particularly at increasing remittances from Sudanese nationals working abroad, subsidy reductions, relaxation of import and export controls, reduced explicit and implicit taxes on agriculture, and a clear plan to increase the role of the private sector. This option would mean that USAID would undertake all reasonable actions to ensure that the level of assistance Sudan receives is the maximum budgetary and bureaucratic constraints would permit. Every attempt would be made to release the outstanding FY 1985 $25 million CIP and provide increased levels of program assistance, either CIP, cash or food, use local currency generations for budget support, and pursue PL 480 debt conversion. This approach would demonstrate full US support for a macro-economic reform program suited to Sudan's requirements. It also would most likely strengthen a democratic administration. The only negative aspects foreseen are that it might raise GOS expectations beyond USAID's ability to deliver in terms of resources and staff.

Option II, Modest Expansion, might also be called the incentive approach. Under this scenario, the GOS would begin important, but modest reforms. However, the pace of implementation would be slow. This might be due to continued hostilities in the South drawing attention away from the macro-economic situation, and it would assume Sudan continues to have difficulty making Brooke payments. The USAID response would continue to encourage economic reform. Efforts to release the $25 million from FY 1985 would be continued, but PL 480 Title I levels would be

Table 3

PROGRAM OPTIONS FOR USAID/SUDAN

Option I MAJOR EXPANSION	Option II MODEST EXPANSION	Option III MAINTENANCE	Option IV MINIMUM
Programmatic Assumptions			
- major economic reforms undertaken	- modest substantive reforms undertaken, but at a slow pace	- minimal reforms undertaken, but not proportional to problem	- no reforms undertaken
- hostilities in the South end	- hostilities in the South continue	- hostilities in the South continue	- hostilities in the South continue
- increased USG program assistance available	- increased USG program assistance available		
- Brooke will not be a problem	- Brooke may be a problem	- Brooke is a problem	- Brooke is a problem
- USG considers unilateral debt rescheduling/forgiveness	- USG considers debt rescheduling	- USG does not undertake debt relief measures	- USG does not undertake debt relief measures
USAID Response			
			- AID begins orderly phase-down to political minimum
- effort to release embargoed $25 million from FY 85 CIP	- effort to release embargoed $25 million from FY 85 CIP	- no effort to release embargoed $25 million from FY 85 CIP	- no effort to release embargoed $25 million from FY 85 CIP
- P.L. 480 increases to at least $60 million per year	- P.L. 480 holds steady at $40-60 million per year	- P.L. 480 declines from from $40 to $30 to $20 million during FY 88-90	- P.L. 480 declines to $25 million in FY 89 and none in FY 90
- FY 88-90 ESF multi-year program at more than the planned $44.4 million	- FY 88-90 ESF multi-year program at no more than the planned $44.4 million	- FY 88 ESF for $14.35 million, no ESF during FY 89-90	- no ESF during FY 88-90
- debt conversion/policy reform program pursued	- debt conversion/policy reform program pursued	- debt conversion/policy reform program not pursued	- debt conversion/policy reform program not pursued
- local currency generations for budget support	- local currency generations for budget and project support	- local currency generations for project support only	- local currency generations for project support only
- DFA at more than the planned $15 million per year during FY 88-90	- DFA at no more than $15 million per year during FY 88-90	- limited DFA starts in FY 89-90, funding between $5-10 million per year	- no new DFA starts in FY 89-90, reduce funding to $5-6 million per year

straightlined and ESF would not be increased beyond the currently planned three year level of $44.4 million. Debt conversion efforts would be continued, but local currency would be used for projects and clearly identified budget support. DFA would continue at the current level of $15 million per year. This option would reflect strong continued US interest in macro-economic policy reform while holding out the possibility of increased assistance. USAID Sudan would move forward on a number of fronts supporting areas where major progress could be made, as in reducing the bread subsidies and reforming gum arabic marketing. A negative aspect might be that this assistance does not push Sudan towards reform, but, rather, that it perpetuates the problem by making it easier for the GOS to avoid the kind of reform actually required.

Option III is the Maintenance program, i.e., the status quo. Minimal reforms would be undertaken by the GOS, e.g., small devaluation, some price increases, some subsidy reductions, but no real effort to confront the overall problem. Hostilities in the South would continue and Sudan would be in and out of Brooke sanctions. Under this scenario, USAID would place a time limit of 12-18 months by which the GOS either would have to demonstrate progress toward reform efforts, or an orderly phase down would begin. No AID effort would be made to release the embargoed FY 1985 $25 million. PL 480 would decline from $40 million in FY 1988 to $30 million in FY 1989 to $20 million in FY 1990. No ESF would be pursued, debt conversion efforts would be dropped, local currency would be used only for projects, and DFA would fund only a few new starts. Some influence with GOS officials would be retained but it would be limited. Certainly, this option would send a signal as the program passed the 12-18 month time frame that the US was serious about economic reform.

Option IV, the Minimum program, acknowledges that the GOS has no intention or is unable to undertake any necessary policy reforms. In this situation PL 480 Title I, ESF, and DFA program assistance would be reduced to politically acceptable minimum, though in an orderly fashion. Minimal humanitarian and selected DFA projects would continue, such as population, child survival and natural resources preservation. The disadvantages of this option are that it could harm US-Sudan relations. Certainly, it would drastically reduce our ability to influence change, and it might cause a fall off in other donor assistance flows. Nevertheless, a clear signal would be sent that US economic assistance flows would not be forthcoming in the absence of the requisite reform program.

All options would continue to address, to the extent appropriate, the problem areas identified in this strategy. Table 4 provides a quantative summary of how these options might be funded.

V. Monitoring, Evaluation, and Reporting System (MER)

The objective of USAID Sudan's MER system is to make increased use of performance monitoring, both at the national or regional level, and in terms of each program or project. While this particular concept is new to USAID Sudan, the Mission's Economic Policy and Program office will begin to maintain a data series reflecting socio-economic change in Sudan, as well as specific program and project data. The purpose of this effort is to assess development impact and justify resources aimed at the four problem areas mentioned above.

Table 4

BUDGETARY OPTIONS FOR USAID/SUDAN

STRATEGY OBJECTIVES	Option I		Option II		Option III		Option IV	
Funding Instruments and Projects/Programs	MAJOR EXPANSION		MODEST EXPANSION		MAINTENANCE		MINIMUM	
	FY 1989	FY 1990	FY 1989	FY 1990	FY 1989	FY 1990	FY 1989	FY 1990
	in millions of US dollars							
Inadequate Economic Growth	80.0	85.0	52.0	58.0	30.0	20.0	25.0	0.0
ESF	20.0	25.0	12.0	18.0	0.0	0.0	0.0	0.0
P.L. 480 Title I	60.0	60.0	40.0	40.0	30.0	20.0	25.0	0.0
Food Security and Natural Resources	23.5	23.5	12.5	12.5	9.5	5.5	3.0	3.0
DFA:								
Reforestation and Anti-Desertification	4.0	0.0	4.0	0.0	2.0	2.0	2.0	2.0
Medium-term Locust Control	2.0	0.0	2.0	0.0	1.0	1.0	1.0	1.0
Sorghum-Millet Systems Research*	6.5	2.5	6.5	2.5	6.5	2.5	0.0	0.0
Food Sector Security Grant*	10.0	3.0	0.0	10.0	0.0	0.0	0.0	0.0
Transport Improvement*	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0
RBMS*	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Seed Multiplication*	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Ag. Production and Marketing*	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Health and Child Survival	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(no bilateral planned)								
Population Pressures	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
DFA:								
Population Policy Support**	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Other	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3
DFA:								
HRDA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
PD & S	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1
Memo items:								
Total ESF, DFA, and P.L. 480	106.0	111.0	67.0	73.0	41.9	27.9	30.3	5.3
(of which DFA)	(26.0)	(26.0)	(15.0)	(15.0)	(11.9)	(7.9)	(5.3)	(5.3)
Non-additive USAID Activities								
FY 1985 CIP	25.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
P.L. 480 Debt Conversion**	50.0	50.0	50.0	50.0	0.0	0.0	0.0	0.0

*New projects or programs.

**Conservative estimate of the debt conversion for policy reform program. Assuming the FY 79-83 Title III is converted, then the direct foreign exchange savings to Sudan are $3.0 million in FY 89 and $3.6 million in FY 90. If more P.L. 480 debt is incorporated into the program, then the savings will increase correspondingly.

Principal benchmarks tentatively identified for the four major problem areas include:

Inadequate economic growth

- GDP/Per capita
- Employment growth rate
- Income distribution
- Income type
- Government expenditures as a percent of GDP
- Money supply growth/consumer prices
- Total debt, arrears, and service ratio
- Remittances from Sudanese working abroad

Food Security/Natural Resources Degradation

- Malnutrition rate
- Caloric intake
- Food exports
- Cash crop exports
- Rate of desertification
- Land use, especially mechanized farming

Child Survival

- Infant mortality rate
- Child mortality rate
- Child malnutrition rate
- Immunization prevalence

Population Pressures

- Population growth rate
- Fertility rate
- Contraceptive prevalence
- Knowledge of some form of contraceptive

The evaluation system will be established upon approval of this strategy. The above indicators will be tracked to the extent the information becomes available. Individual projects will be reviewed in terms of their impact on the selected indicators. The Mission strongly believes that a project intervention along the lines of the proposed Resource Base Monitoring System would be fully consistent with the Africa Bureau's requirement for a MER system.

Finally, the Mission has been preparing a quarterly economic report. Henceforth, each report will include, at a minimum, the latest data available on these indicators.

ANNEXES

1. Economic Growth Strategy.
2. Objectives of Mission's Agricultural Strategy.
3. On-going and Proposed Activities.
4. AIDS.
5. Women in Development.
6. Disaster Preparedness Planning.
7. Bibliography.
8. Selected Statistical Annexes.

ANNEX 1

ECONOMIC GROWTH STRATEGY

	LOW	CORE	HIGH
REDUCE GOS AND PARASTATAL EXPENDITURES			
-reduce bread subsidy	PAIP studies: PL 480 Title I reduced to political minimum.	PAIP studies; PL 480 Title I Current level $40 million; debt conversion.	PAIP studies PL 480 Title I increase to $60 million; debt conversion; turn over local currency (simple transfer).
-reduce diesel subsidy	PAIP studies	PAIP studies; debt conversion; cash transfer; program local currency.	PAIP studies; debt conversion; cash transfer; turn over local currency (simple transfer).
-reduce public sector employment	PD&S studies; local currency.	PD&S studies; local currency.	PD&S studies; local currency; assistance to divest/ privatize.
IMPROVE SUDANESE EXTERNAL SECTOR			
-increase SNWA remittances through official channels	PAIP studies	PAIP studies	PAIP studies; Cash transfers
-food security sector	----------see agriculture on sector strategy----------		
REDUCE/REMOVE GOS CONTROLS AND REGULATIONS (and Expand Private sector at micro and SME levels)			
-develop private sector strategy	Do profile and assessment.	Do profile and assessment; DFA (PD&S) program; focus ESF (CIP) on sector. private sector.	Do profile and assessment; DFA program; focus on
ESF (CIP) on private			
-reduce bread & diesel subsidies	----------see above----------		
-adjust exchange rate controls	----------see SNWA----------		
-food security sector grant	----------see above----------		

ANNEX 2

OBJECTIVES OF MISSION'S AGRICULTURAL STRATEGY

	IMPROVE FOOD SECURITY	PROTECT AND ENHANCE NATURAL RESOURCE BASE	INCREASE FOREIGN EXCHANGE EARNINGS
MEANS TO ADDRESS GOALS	1. Carry out policy studies 2. Increase productivity of crops in western Sudan	1. Encourage sound planning and management	1. Improve macro-economic environment, especially policy changes in the traditional & irrigated subsectors
	3. Increase incomes of farmers in traditional subsector	2. Encourage afforestation and development of the gum belt	2. Increase quantity and productivity where appropriate of traditional exports
	4. Improve transport network in western Sudan	3. Develop improved technology and management and encourage GOS to establish system of incentives/disincentives to sustain efficient, environmentally sound mechanized farming	3. Analyze potential of of exporting non-traditional crops
USAID FUNDED ACTIVITIES			
Ongoing	1. FY 1988 Medium-term Locust Control Project	1. FY 1987 Sudan Reforestation and Anti-Desertification Project	1. FY 1983 Policy Analysis and Implementation Project
	2. FY 1989 PL 480 Title I Program		2. FY 1981 Agriculture Planning and Statistics Project
	3. Western Agriculture Marketing Road Project		
	4. Kordofan Rainfed Agriculture Project		
New	1. Sorghum-Millet Systems Research Project	1. Sorghum-Millet Systems Research Project	1. Food Security Sector Grant Program
	2. PL 480 Title I Program	2. Food Security Sector Grant Program	
	3. Food Security Sector Grant Program	3. Resource Based Monitoring System Project	2. Western Sudan Transport Improvement Project

NEW	4. Western Sudan Transport Improvement Project	4. Agricultural Production and Marketing Project
	5. Private Sector Seed Initiative Project	
	6. Agricultural Production and Marketing Project	

ANNEX 3

ON-GOING AND PROPOSED ACTIVITIES

Below are descriptions of the on-going and proposed, new FY 1989 and FY 1990 activities should sufficient funds become available:

ON-GOING ACTIVITIES

1. Implement the FY 1988 Multi-donor Medium-term Locust Control Project.

This new FY 1988 project (recently approved PID) directly contributes to food security through averting crop losses and opportunities for plague and famine. Sudan is a preferred breeding area for the desert locust which poses a real threat of crop devastation. This activity should be viewed as an insurance policy against pest-generated famine over the long term.

2. Continue P.L. 480 Title I Program.

The U.S. has provided 2,275,000 metric tons of wheat and wheat flour and supplementary foods over the last four years, including 186,000 metric tons of wheat and 50,000 metric tons of wheat flour in FY 1988. In Sudan, especially in urban areas, consumption of wheat products is increasing dramatically while consumption of sorghum products is stagnant or declining due largely to bread subsidies, but also because of bread's ease of preparation and taste. Food security can be enhanced by reducing dependence on concessionally supplied donor surplus food through increased use of sorghum blended bread. This is one way to reduce the foreign exchange drain and the risk associated with over-reliance on uncertain donor commitments of wheat. PL 480 Title I levels should therefore be continued at the $40 million level in FY 1989 and FY 1990.

3. Implement the FY 1987 Sudan Reforestation and Anti-Desertification Project.

The purpose of the project is to assist Sudan rehabilitate drought-affected areas in order to halt desertification by developing a sound information base from planning, managing, and monitoring forest resources in western Sudan. This will be accomplished by promoting reforestation in southern Kordofan through participatory forest management and activities aimed at introducing and sustaining greater utilization of trees in traditional agricultural systems. It is directly aimed at reversing the process of desertification and declining soil productivity which have led to a reduction in agricultural production and income of rural farmers in western Sudan. This FY 1987 project will be implemented in the short-term with a view toward future expansion should it prove successful.

4. Implement the FY 1979 Regional Finance and Planning Project

5. Implement the FY 1981 Agriculture Planning and Statistics Project

6. Implement the FY 1983 Policy Analysis and Implementation Project

7. Implement the FY 1984 Western Agriculture Marketing Road Project

8. Implement the FY 1985 Kordofan Rainfed Agriculture Project

PROPOSED NEW ACTIVITIES

1. Design the FY 1989 Sorghum-Millet Systems Research Project

This proposed activity is national in scope but builds on the terminating FY 1979 multi-donor Western Sudan Agriculture Research project in Kordofan and Darfur, capitalizing on that project's large investment in research. The stated purpose of this new activity is to improve the operational effectiveness of the national agriculture research system to produce, test and promote sorghum and millet-based production systems which improve national food security, farmer's incomes, and the sustainability of the natural resource base.

2. Develop a FY 1990 Food Security Sector Grant.

Still in the very early stages of development, this program probably will be the Mission's major new start in FY 1990 given expected resource levels. The proposition, still being formulated, is to address the Mission's primary sector goals, i.e., food security through increased incomes, protection of natural resources, and increased foreign exchange earnings into a comprehensive program. The Mission sees the problem of food security not so much as an overall production problem at the national level, but rather as a problem of food distribution hampered primarily by low incomes of many residents of western Sudan which limit purchase of food grown as far away as 1,000 kilometers in eastern Sudan.

Likewise, deliberate government policies directly (and indirectly through the over-valued exchange rate) tax traditional farmers, and, in particular, the GAC indirectly taxes producers heavily. This has reduced incentives to produce gum arabic (and encourages smuggling of a large share of the crop to Chad where it fetches higher prices), thus lowering incomes and reducing foreign exchange earnings. The gum arabic sub-sector lends itself to this approach for the following reasons: (1) the current policy constraints are well known and have been analyzed; (2) there are groups in Sudan that would actively support the policy changes and who could be relied upon to lobby within the GOS for change; and (3) the World Bank and EEC have supported reforms in this area. The combined programs of all three donors could have significant leverage in bringing about change.

A variety of USAID instruments will be utilized. For example, USAID Sudan is examining the possibility of a DFA and/or ESF cash grant plus local currency to effect changes in the pricing and marketing of gum arabic. The proposed program would systematically address key policy

3. Design the FY 1989 Transport Improvement Project as a shelf project should additional DFA or ESF funds become available.

An obvious constraint to the movement of emergency food, as well as for normal marketing and input requirements, is the very poor transportation network in western Sudan. The Mission proposes a Transport Improvement Project for FY 1989 that will assist in the construction of a 650 kilometer road from El Obeid to Nyala in western Sudan. The road is estimated to cost approximately $140 million in 1987 prices. USAID Sudan feels the construction of the road is an essential infrastructure component in the development of the West. Both Kordofan and Darfur would be very different places today if this road had been constructed thirty years ago. The impact of this road will be to reduce transportation and time costs, allowing food and inputs to flow more easily to their intended destination. For example, during the drought in 1985-86 USAID expended approximately $100 million just for transport costs to Kordofan and Darfur. Had this road been constructed the cost would have been one third that total.

USAID Sudan will fund a feasibility study for the road using PD&S funds this FY, with a view towards interesting the donor community in portions of the payment. ADF is considering funding the El Obeid to En Nahud section. In addition, the Governments of Japan and China have expressed interest in the project. USAID's interest is in funding a 180 kilometer section from En Nahud to Ogr, costing approximately $40.0 million.

4. Pursue the FY 1988 Resource Data Base Monitoring System project.

This activity is designed to develop GOS capabilities to accurately monitor agricultural and natural resource conditions in Sudan in order to provide up-to-date information for decision makers. To solve problems such as food security, land degradation, poor health conditions, and rapid population growth, better data is essential for policy makers to make better policies. The project, building on SERISS remote sensing activities, proposes a mechanism to provide such information on a timely basis. An early warning system will be a major element, including forecasting crop production and nutrition status, both critical for assuring food security. While this activity has a longer-term outlook than this strategy, it is central to Mission thinking in addressing food security and natural resource degradation issues, and a sine qua non for effective, informed decisions.

5. Refine the FY 1989 Private Sector Seed Initiative Proposal.

It is clear that improved seeds properly utilized will increase productivity and production. It is also generally acknowledged that the introduction of improved seed is the most cost efficient method of increasing crop yields. Yet in Sudan, high quality coarse grain seed is not readily available to all farmers largely because the public sector is responsible for, but very inefficient in, production, multiplication and distribution. The goal of this activity is to improve agricultural production output and raise farmer income. The purpose of the activity will be to increase the economic efficiency of GOS-funded activities in seed research, production, quality control and distribution, and to improve the environment in the seed subsector to allow the private sector to assume some of these functions/activities. Recent contacts with the Minister of State for Agriculture reveal strong support for this concept. In the meantime, FAO with African Development Bank funding, is considering an additional $15 million for a total contribution of $40 million to its seed project. As a way of clarifying true Government interest and other donor plans, the Mission will support a National Seed

Workshop in the summer of 1988. Project development, which has been underway for the last two years, will be postponed until after this Workshop. The Mission feels strongly that improved seeds will contribute to the Mission's agricultural goals. The only question is what precise role should USAID/Sudan play?

6. Develop a "shelf project" should additional DFA be available in FY 1990: Strengthening Agriculture Production and Marketing Project.

Two important constraints to increasing agriculture production and productivity in Sudan are the inefficiency of the agricultural marketing system and the general lack of production inputs. This project will help alleviate these constraints by strengthening the capability of existing private sector organizations to provide agriculture inputs as well as storage and produce marketing services to their members.

Producer marketing associations, properly organized with trained managers and technical assistance, could assist farmers through the distribution of inputs, storage and orderly marketing of commodities. This project will focus on the rainfed area and will strengthen existing local and regional farmers' organizations to provide essential production, storage and marketing services to farmers. In FY 1990, if funds are available, USAID will develop a Strengthening Agriculture Production and Marketing project.

ANNEX 4

AIDS

A National Committee on AIDS has been created and has developed a short term plan to combat AIDS. The Virology Unit has been designated as the central coordinating agency. The Mission is currently collaborating with WHO through the use of central funding to support AIDS activities. The GOS recently submitted a proposal to the Mission requesting additional funds (both pounds and dollars) to meet unforeseen expenses in the MOH effort to combat AIDS disease. Mission is in the process of reviewing the proposal, and will encourage GOS agreement for local currency support for the activity.

ANNEX 5

WOMEN IN DEVELOPMENT

Until recently, women's rights in Sudan have been circumscribed and women have been systematically excluded from the decision-making process that directly affects their lives. But at the National Conference on the Role of Women in Agriculture and Rural Development in the Sudan, the Prime Minister declared that the State's concern for women is sincere and that "policies and programs must be directed towards the abolishment of social, economic, and political practices that curtail women's effective participation in development. Nevertheless, much remains to be done for women still play a subordinate role to men in Sudan. Islam is a major factor in defining gender ideals and social behavior. Gender expectations shaped by Islam relate to the prevailing fertility rate of over 6 children per woman and female circumcision, whereby reportedly 70 percent of all Sudanese women and 98 percent of all Sudanese Islamic women are circumcized. While the number of women receiving education at all levels has been increasing (in 1984/85, girls comprised 42 percent of primary through secondary enrollments), female literacy still is believed to lag far behind male literacy. Percentages of women have also increased dramatically at the university level with accounting for between 18-33 percent of various entering classes in 1985. Women are also entering non-traditional fields such as science, law, and medicine in greater numbers.

ANNEX 6

DISASTER RESPONSE

Sudan has, over the last three years, suffered from a variety of natural and man-made disasters which were caused by poor weather, inappropriate governmental policies and lack of adequate infrastructure. The same issues which plague Sudan's developmental efforts also impede its disaster response efforts. Although planning for the appropriate response certainly can and should be done, advance planning to identify potential problems will have a high payoff in Sudan. The dilemma of the donor community has been how to respond to the human suffering that demands relief assisted without, at the same time, allowing the Government to avoid having to take those steps that, over time, would help to prevent or ameliorate future disasters.

The USAID Mission strategy for disaster preparedness has been developed within the overall context of the Mission strategy to limit the area of direct governmental control and to encourage private sector responses. To implement this strategy, the Mission has assisted the GOS to develop early warning systems, based on weather tracking, crop forecasting, monitoring of cereal prices in remote rural areas, and health and nutritional reporting systems, that can be used to alert governmental and donor authorities that poor harvests may be leading to a famine situation. USAID projects such as FEWS and SERISS are designed specifically to support collection of data that can be used to predict potential problems.

Poor harvests are the most easily identifiable result of drought, rats, locusts, insecurity due to war and banditry, and inappropriate agricultural policies. But famine results when both traditional coping mechanisms (inter-annual storage, moving to a different area, barter, etc.) and modern coping mechanisms (improved drought tolerant seeds, chemicals for pest control, wage employment, etc.) fail. Sudan is unusual for Africa in that a private sector grain trader network exists as part of both the traditional and modern coping mechanisms. The USAID strategy for responding to disaster has been to encourage the Government to allow these coping mechanisms to function.

USAID has developed specific projects such as the Medium Term Locust project to assist the GOS to carry out programs that are legitimate governmental functions which the private sector could not undertake. USAID has also provided support to the Government's relief agency, the Relief and Rehabilitation Commission (RRC); but, USAID and the other donors have also been sensitive to the fact that free donor assistance should not undercut other traditional, non-governmental, coping mechanisms.

For example, during the current drought relief operation in western Sudan, the donors recognized that there was adequate grain in country to meet the need. The problem was how to finance the movement of grain from the surplus areas to deficit areas. The importation of donor food would only be a disincentive to domestic agricultural production. The donors, therefore, agreed to finance the purchase and transportation of Sudanese sorghum. The relief plan was based on the assumption that some increase in the price of cereals was both warranted and indeed desirable. The higher price would encourage private trade both by attracting farm storage into the market and by providing incentives to private traders to move grain from surplus areas into the drought affected areas. The estimated food deficit for governmental coverage was, therefore, conservative. Monitoring of food prices was accompanied by the monitoring of cash crop, livestock sales and wage employment opportunities. Governmental food relief should be provided, for the

most part, on a subsidized sales basis which reflected its transport cost if not its acquisition cost. Only 15 percent was targetted for free distribution by the Red Crescent to the truly destitute.

The early warning systems did alert donors and governments to the potential need for a relief program at an earlier date so that plans could be made for the West, although civil war severely handicapped any plan for the South. The western relief operation has shown that the capacity of the RRC to plan for and implement a food relief program is substantially better than it was three years ago during the massive 1984/85 relief program. Experience has also shown that the GOS lacks the will and/or the capacity to implement some necessary policy changes. For example, export of food grains has continued and has frequently been given priority over the relief effort and the need to maintain adequate buffer stocks for the coming year. The pricing of food relief grains has been contentious in some regional locations. And the Government has not yet acknowledged that its own pricing policies led to lower acerage planted and thus lower availabilities.

ANNEX 7

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ANNEX 8

SELECTED STATISTICAL TABLES
(See World Bank Report 6491-SU Volume III for additional details)

Sudan - Percentage Distribution of Gross Domestic Product by Sector, 1975/76-1982/83, in Constant 1981/82 Prices

Sudan - Comparison of Changes in Real Gross Domestic Product Between 1981/82 and 1986/87, in Constant 1981/82 Sudanese Pounds

Sudan - Balance of Payments, 1981/82-1986/87

Sudan - Unofficial Estimates of External Debt and Arrears, 1986-1987

Sudan - Foreign Exchange Earnings by Subsector, 1978/79 - 1985/85

Sudan - Estimates of Agricultural Export Earnings by Commodity and Subsector, 1978/79-1985/86

Sudan - Sorghum Area Planted by Subsector

Sudan - Sorghum Production by Subsector

Sudan - Central Government Finance, 1975/76-1986/87, in Constant 1981/82 Sudanese Pounds (LS)

Sudan - Monetary Aggregates, 1976-1986, Current Sudanese Pounds

SUDAN - PERCENTAGE DISTRIBUTION OF GROSS DOMESTIC PRODUCT BY SECTOR, 1975/76-1986/87, IN CONSTANT 1981/82 PRICES

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
	in percent											
Gross Domestic Product, factor cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	38.4	39.2	40.4	37.6	33.9	32.0	38.4	35.1	35.0	33.3	36.0	34.6
Mining	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Manufacturing	6.7	6.3	5.7	7.0	6.9	7.9	5.9	6.4	6.4	7.2	6.9	6.8
Construction	5.4	4.9	4.6	4.3	5.2	4.6	6.1	7.5	7.0	6.7	5.4	5.5
Public Utility	1.8	1.6	1.5	1.6	1.4	2.0	1.2	1.5	1.7	2.2	2.2	2.1
Services	47.5	47.8	47.7	49.5	52.5	53.4	48.4	49.5	49.8	50.4	49.4	51.0
of which:												
Transport/Storage	11.5	10.6	10.6	11.7	12.6	10.3	11.0	11.1	10.8	11.1	10.7	10.7
Commerce	16.0	17.9	18.7	19.5	17.3	23.2	14.9	15.6	14.9	15.2	14.8	14.1
Banking Insurance and Finance	8.5	7.9	7.4	7.5	9.7	6.4	11.0	11.1	11.9	11.4	11.0	11.1
Public Administration and Defence	10.7	10.6	10.3	9.8	10.8	10.9	8.7	8.6	9.1	11.7	12.2	12.0
Personal Services	0.8	0.8	0.7	1.1	2.0	2.6	2.9	3.0	3.2	3.1	3.0	3.0
Memo items:												
Productive GDP (1)	52.5	52.2	52.3	50.5	47.5	46.6	51.6	50.5	50.2	49.6	50.6	49.0
Agriculture as a percent of Productive GDP	73.1	75.1	77.3	74.5	71.4	68.7	74.4	69.4	69.8	67.1	71.1	70.6

(1) Includes agriculture, mining, manufacturing, construction, and public utilities.

Sources: adapted from World Bank, Sudan: Problems of Economic Adjustments, June 19, 1987. Unpublished data.

USAID/SUDAN/EPP, March 1988
file: GDPSEC

SUDAN - COMPARISON OF CHANGES IN REAL GROSS DOMESTIC PRODUCT
BETWEEN 1981/82 AND 1986/87, IN CONSTANT 1981/82 SUDANESE POUNDS

	1981/82	1986/87	Absolute Change	Percentage Change
	- - - - - LS millions - - - - -			
Gross Domestic Product, factor cost	6,236	6,244	8	0.1%
Agriculture	2,396	2,143	(253)	-10.6%
of which:				
Irrigated	583	713	130	22.3%
Rainfed Mechanized	354	317	(37)	-10.5%
Rainfed Traditional	494	226	(268)	-54.3%
Livestock	810	698	(112)	-13.8%
All Other (1)	155	188	33	21.3%
Mining	4	6	2	50.0%
Manufacturing	365	437	72	19.7%
Electricity and water	76	127	51	67.1%
Construction	378	341	(37)	-9.8%
Services	3,017	3,190	173	5.7%
of which:				
Commerce and Hotels	927	912	(15)	-1.6%
Transport and Communications	683	664	(19)	-2.8%
Finance and Real Estate	683	686	3	0.4%
Personal Services	179	183	4	2.2%
Government Services	545	745	200	36.7%
Memo items:				
Government services as a percent of total Services	18.1%	23.4%		

(1) Includes forestry, fisheries, and agricultural services.

Source: calculated from Ministry of Finance and Economic Planning, Four Year Economic Salvation, Recovery, and Development Program 1987/88-1990/91.

USAID/SUDAN/EPP, March 1988
file: tonergdp

SUDAN - BALANCE OF PAYMENTS, 1981/82-1986/87

	1981/82	1982/83	1983/84	1984/85	1985/86	Estimate 1986/87
	- - - -	- - - -	millions of US $		- - - -	- - - -
Current Account (1)	-1192	-779	-771	-642	-842	-771
Exports	432	581	722	595	497	492
of which Cotton	69	175	333	245	136	176
Imports (2)	-1754	-1534	-1370	-1114	-1055	-911
of which Petroleum	-339	-333	-351	-286	-266	-169
Services, net	-220	-241	-518	-553	-634	-602
of which Interest Payments (3)	-190	-191	-448	-478	-559	-522
Private Transfers, net (2) (4)	350	415	395	430	350	250
Official Transfers (2)	174	462	309	288	412	223
Official Capital Flows	588	161	-390	-322	-477	-175
Disbursements	685	219	152	137	177	216
Amortization (3)	-97	-58	-542	-485	-654	-391
Errors, Omissions, and Private Capital	n/a	n/a	-52	-189	-137	-149
OVERALL BALANCE	-430	-156	-904	-865	-1044	-872
Change in Net Foreign Assets (5)	n/a	n/a	7	100	-21	246
of which IMF	n/a	n/a	-62	-13	-43	-44
Debt Relief	n/a	n/a	949	257	270	110
Net Change in Arrears (6)	n/a	n/a	-52	508	795	516

(1) Excluding official transfers.
(2) Excluding imports and corresponding transfer receipts in connection with the emergency food aid.
(3) From 1983/84 onward, debt service is presented on an accrual basis rather than on an actual payments basis.
(4) Estimates.
(5) Negative is an increase.
(6) Excludes arrears on IMF repurchases and charges, which are included in the Net Foreign Assets, but includes arrears on interest and principal payments to the Trust Fund.

Sources: IMF, Sudan - Recent Economic Developments, SM/87/23, and Sudan - Report of the Sudanese Authorities' Program of Action, September 10, 1987. Recent Economic Developments.

USAID/SUDAN/EPP, March 1988.
file: BOP

SUDAN - UNOFFICIAL ESTIMATES OF EXTERNAL DEBT AND ARREARS, 1986-1987 (a)

	Outstanding Debt End 1986 (1)	Arrears End 1986	Estimated Arrears End 1987 (2)
	- - - - - millions of US $ - - - -		
Total	9,361	3,380	4,811
Concessional	4,332	1,043	1,339
Multilateral	1,752	61	136
Bilateral	2,580	983	1,203
Nonconcessional	3,063	1,566	2,618
Multilateral	904	106	1,670
Bilateral	2,159	1,459	1,725
Private	1,966	771	854
Financial Institutions	1,266	73	154
Suppliers Credit	248	246	248
Other	452	452	452
Memo items:			
Total Multilateral	2,656	167	1,029
Total Bilateral	4,739	2,442	2,928
As percent of total			
Multilateral	28.4%	4.9%	21.4%
Bilateral	50.6%	72.2%	60.9%
Private	21.0%	22.8%	17.8%

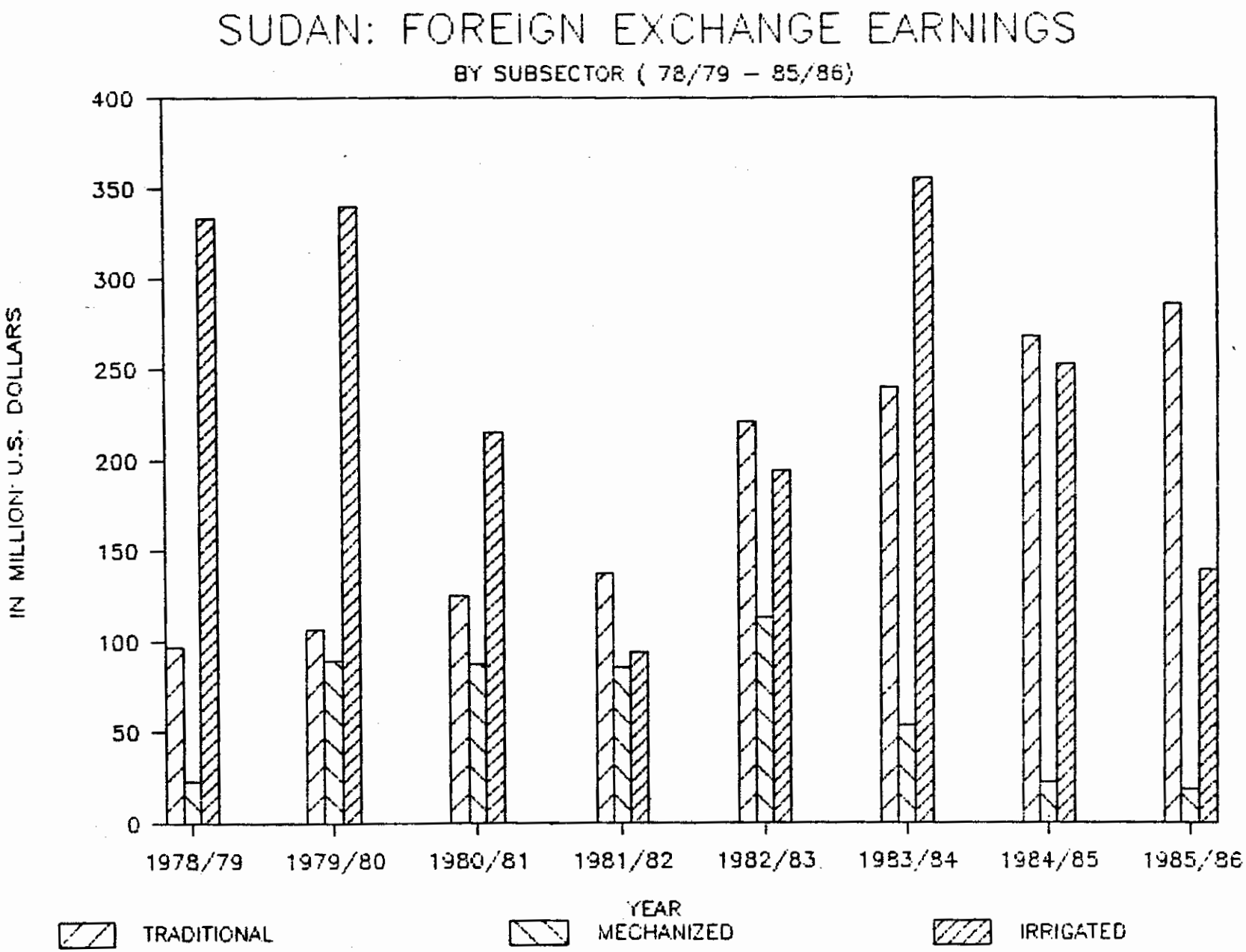
(a) Current Government estimates of Sudan's total debt and arrears are around $11 billion.

(1) Includes principal in arrears, but not interest in arrears. This is significant. For example, Sudan's owes the IMF is $740 million of principal plus an estimated additional $300 million of interest/late payment penalties.

(2) Incorporates estimates for principal and interest payments during 1986 and 1987.

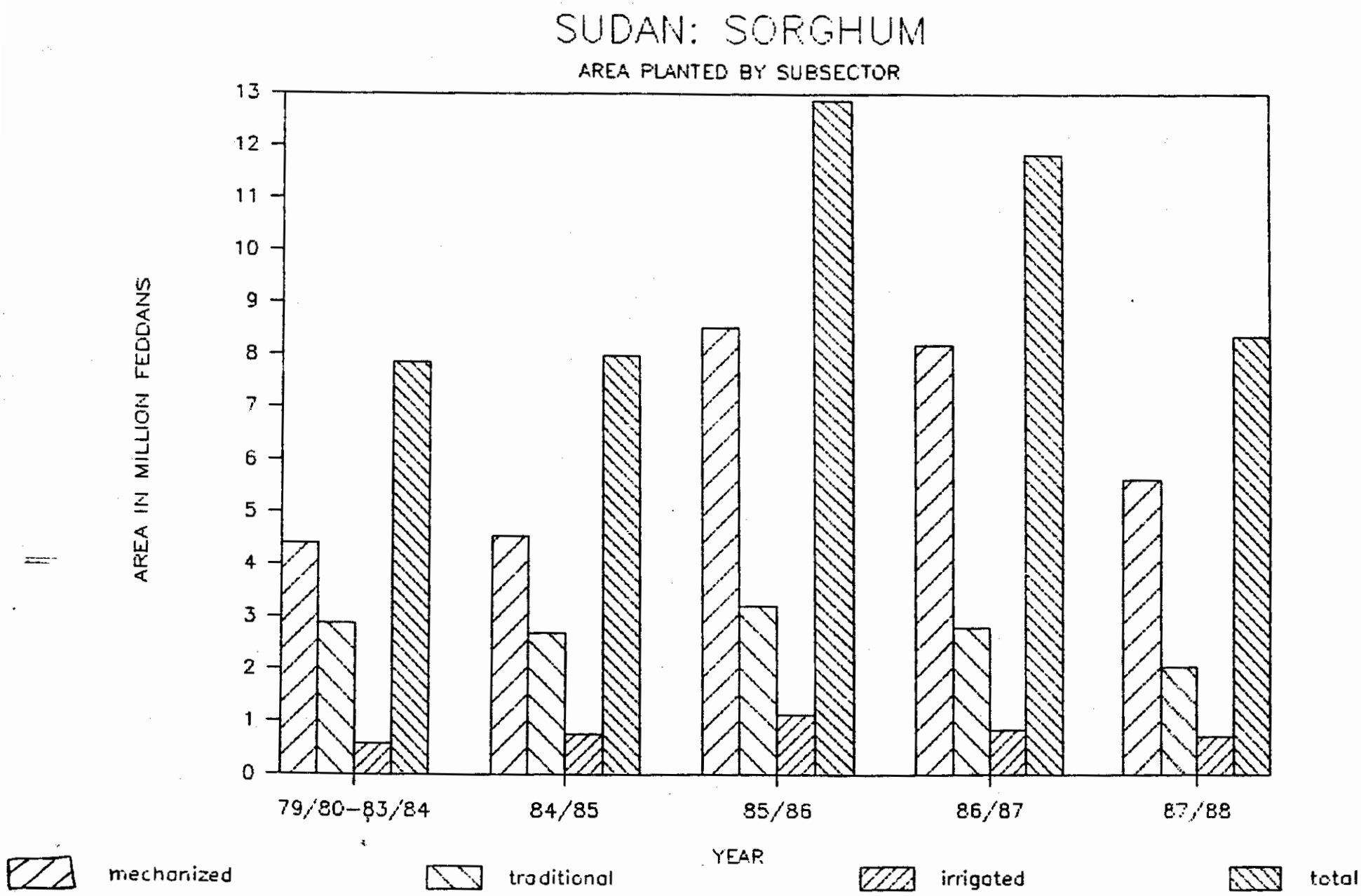
Sources: Unpublished sources.

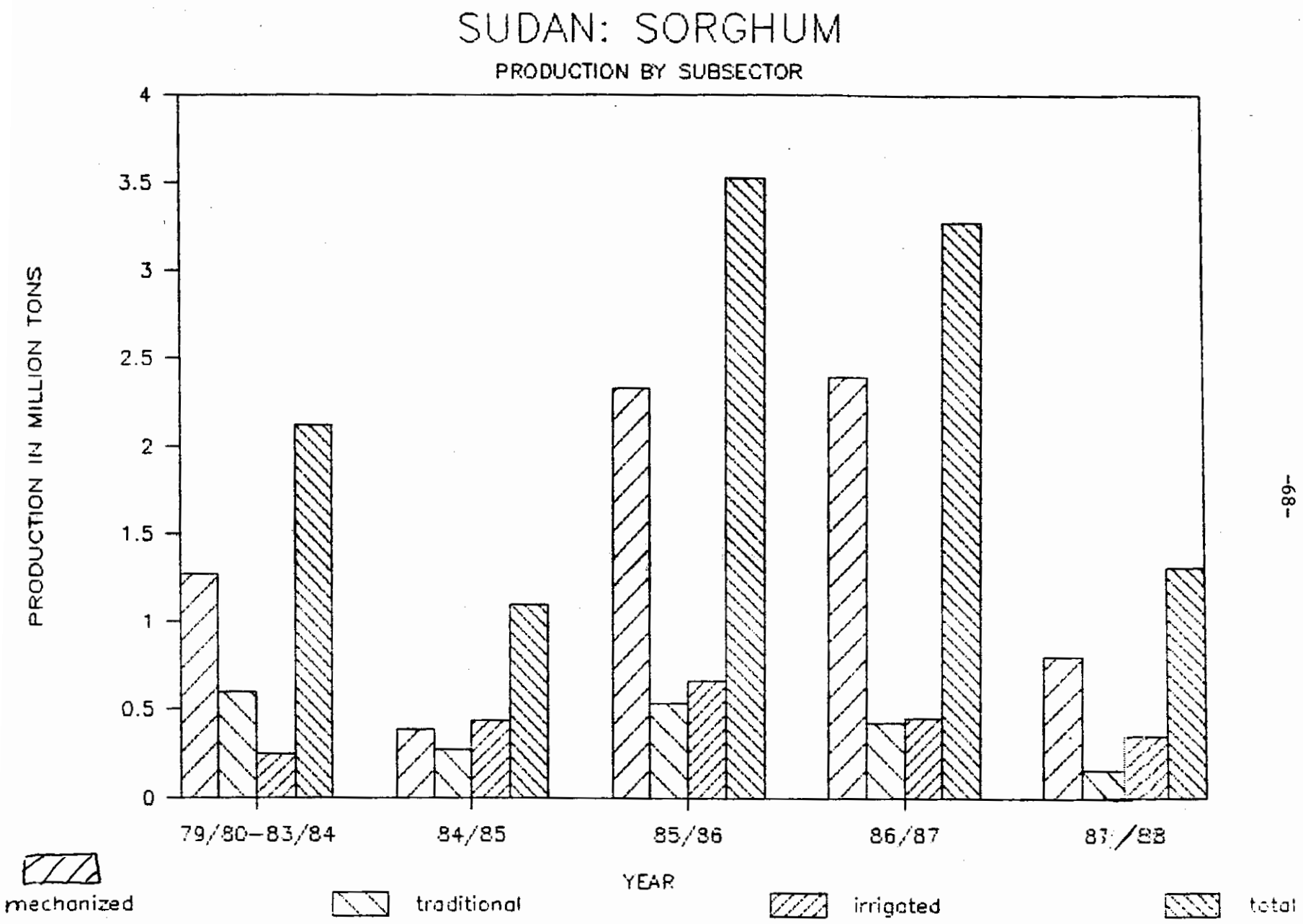
USAID/SUDAN/EPP, April 1988
file: DEBT2


SUDAN: FOREIGN EXCHANGE EARNINGS
BY SUBSECTOR (78/79 – 85/86)
IN MILLION U.S. DOLLARS
400
350
300
250
200
150
100
50
0
1978/79
1979/80
1980/81
1981/82
1982/83
1983/84
1984/85
1985/86
YEAR
TRADITIONAL
MECHANIZED
IRRIGATED

SUDAN: ESTIMATES OF AGRICULTURAL EXPORT EARNINGS
BY COMMODITY AND SUBSECTOR
(1978/79 - 1985/86)

	COMMODITY							SUBSECTOR		
YEAR	COTTON	SORGHUM	GROUNDNUTS	SESAME	LIVESTOCK	GUMARABIC	TOTAL	TRADITIONAL	MECHANIZE	IRRIGATED
1978/79	320.7	8.7	25.5	27.8	30	40	452.7	96.65	22.6	333.45
1979/80	333.4	68.7	13.2	40.6	35.6	43.9	535.4	106.4	89	340
1980/81	182	71.4	65.6	32.2	43.7	32.6	427.5	125.2	87.5	214.8
1981/82	69.4	64.4	48.1	41.7	48.9	43.6	316.1	137.4	85.25	93.45
1982/83	175	87.4	38.1	51.3	128.6	47.5	527.9	220.8	113.05	194.05
1983/84	333.2	31.1	44.6	45	133.3	61.9	649.1	240	53.6	355.5
1984/85	245.1	0	15	43.4	197.3	41.6	542.4	268.1	21.7	252.6
1985/86	136	0.5	6.7	35.1	237.7	27.3	443.3	285.9	18.05	139.35


SUDAN: SORGHUM
AREA PLANTED BY SUBSECTOR
AREA IN MILLION FEDDANS
0
1
2
3
4
5
6
7
8
9
10
11
12
13
79/80-83/84
84/85
85/86
86/87
87/88
YEAR
mechanized
traditional
irrigated
total


SUDAN: SORGHUM
PRODUCTION BY SUBSECTOR
PRODUCTION IN MILLION TONS
4
3.5
3
2.5
2
1.5
1
0.5
0
79/80–83/84
84/85
85/86
86/87
87/88
YEAR
mechanized
traditional
irrigated
total

SUDAN - CENTRAL GOVERNMENT FINANCE, 1975/76-1986/87, IN CONSTANT 1981/82 SUDANESE POUNDS (LS)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
	in LS millions											
Total Revenue, of which	1,042.6	1,127.6	1,077.7	940.6	903.7	921.5	895.1	944.8	858.7	569.2	523.5	525.5
Non-tax Revenue	159.7	216.7	230.5	168.2	178.0	176.3	149.4	142.3	132.6	76.7	59.8	178.9
Tax Revenue, of which	882.9	910.9	847.2	772.4	725.7	745.2	745.7	802.5	726.2	492.4	463.7	346.5
Direct Taxation	103.9	122.3	113.1	104.3	127.5	142.7	143.8	150.9	150.8	115.1	102.8	89.7
Indirect Taxation, of which	779.0	788.6	734.0	668.2	598.2	602.5	601.9	651.6	575.4	377.3	360.9	292.6
Foreign Trade Taxes	553.5	500.9	516.0	497.4	406.8	433.5	445.4	505.0	420.6	305.0	268.1	184.7
Domestic Trade Taxes	218.4	281.5	212.2	164.6	188.6	163.6	148.9	136.9	146.4	61.6	82.2	60.7
Total Expenditure, of which	1,279.0	1,430.5	1,429.6	1,511.4	1,500.3	1,744.3	1,694.7	1,492.3	1,473.2	1,475.1	1,319.2	1184.3
Current Expenditure, of which	914.5	974.8	993.4	1,204.8	1,113.7	1,317.9	1,348.0	1,161.4	1,156.7	1,277.1	1,190.9	1049.8
Hydro-power	24.2	22.9	21.6	22.3	23.4	23.6	21.9	20.7	22.8	13.4	12.0	n/a
Education	32.3	28.4	16.0	13.2	13.8	14.9	13.8	15.5	12.5	8.6	6.9	n/a
Health	20.6	21.7	22.1	17.5	14.0	12.3	14.9	22.0	21.0	14.4	11.7	n/a
Interest Expense, of which	57.4	53.4	125.4	58.8	73.8	242.4	281.4	240.7	218.1	359.8	343.2	250.2
Foreign Interest	40.3	24.0	90.1	32.4	32.8	220.3	262.5	222.1	202.7	359.8	339.2	239.0
Domestic Interest	17.1	29.3	35.2	26.4	41.1	22.1	18.9	18.6	15.4	0.0	4.0	11.2
Defence	146.8	197.1	189.9	140.8	165.2	157.0	113.9	121.8	174.7	177.0	138.3	145.7
Development Expenditure	364.5	455.7	436.2	306.5	340.5	364.5	314.8	307.6	269.8	180.8	107.9	206.3
Equity Expenditure	n/a	n/a	n/a	n/a	46.2	61.9	31.9	23.3	46.6	17.2	20.3	11.2
Overall Deficit, Cash Basis	236.5	302.9	351.9	570.8	596.6	822.8	799.6	547.5	614.4	906.0	795.6	741.8
External Financing (1)	241.0	117.3	66.2	272.6	365.5	459.8	766.6	492.6	482.8	647.5	557.8	533.7
Internal Financing	(4.5)	185.6	285.7	298.1	231.1	363.0	33.0	54.9	131.6	258.2	237.8	49.1
Memo items:												
Deficit as a percent of total Revenue	23%	27%	33%	61%	66%	89%	89%	58%	72%	159%	152%	141%
External Financing as a percent of Deficit	102%	39%	19%	48%	61%	56%	96%	90%	79%	71%	70%	72%
Foreign interest expense as a percent of total Revenue	4%	2%	8%	3%	4%	24%	29%	24%	24%	63%	65%	45%
Total interest expense as percent of total revenue	6%	5%	12%	6%	8%	26%	31%	25%	25%	63%	66%	48%

(1) Includes both grants and loans.

Sources: adapted from World Bank, Sudan: Problems of Economic Adjustment, June 19, 1987. Unpublished data. Ministry of Finance and Economic Planning, The Four Year Salvation Recovery and Development Program - 1978/88-1990/91.

USAID/SUDAN/EPP, March 1988
file: RGFINANC

SUDAN - MONETARY AGGREGATES, 1976-1986, CURRENT SUDANESE POUNDS

	June 1976	June 1977	June 1978	June 1979	June 1980	June 1981	June 1982	June 1983	June 1984	June 1985	June 1986
	in millions of Sudanese Pound										
Net Foreign Assets	-192.6	-191.8	-218.0	-201.3	-349.4	-446.3	-1575.0	-2497.5	-2416.8	-3569.9	-3938.1
Money Supply (1)	369.6	530.0	669.1	877.0	1047.5	1445.2	1899.9	2697.5	3261.7	5180.6	6841.5
Domestic Assets	562.2	721.8	887.1	1078.3	1396.9	1891.5	2610.5	3096.8	3570.4	5263.3	6996.7
of which:											
Claims on Government (net)	240.6	413.6	548.2	659.7	978.2	1185.5	1412.5	1552.4	1748.7	2447.4	3366.3
Claims on Public Entities	154.3	168.0	172.4	245.7	288.4	419.9	624.3	397.8	495.0	640.3	1188.8
Claims on Private Sector	239.0	264.5	318.4	407.1	525.9	698.8	936.9	1271.2	1509.1	1827.9	2317.5
Memo items:											
Distribution of Domestic Assets											
Claims on Government (net)	42.8%	57.3%	61.8%	61.2%	70.0%	62.7%	54.1%	50.1%	49.0%	46.5%	48.1%
Claims on Public Entities	27.4%	23.3%	19.4%	22.8%	20.6%	22.2%	23.9%	12.8%	13.9%	12.2%	17.0%
Claims on Private Sector	42.5%	36.6%	35.9%	37.8%	37.6%	36.9%	35.9%	41.0%	42.3%	34.7%	33.1%
Growth in Money Supply		43.4%	26.2%	31.1%	19.4%	38.0%	31.5%	42.0%	20.9%	58.8%	32.1%
Official Consumer Price Index (urban)		17.0%	19.2%	31.3%	25.3%	24.6%	25.7%	30.6%	34.1%	45.4%	53.3%

(1) Currency plus demand, time, and savings deposits.

Source: adapted from World Bank, Sudan, Problems of Economic Adjustment, June 1987, Government of Sudan price data.

USAID/SUDAN/EPP, March 1988
file: NOMONEYAG