

**THE CHALLENGES
FOR SUB-SAHARAN AFRICA**

by

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INTRODUCTION^a

I am deeply pleased to have been invited to deliver this first Memorial Lecture, sponsored by the government of Australia, in honor of Sir John Crawford. Those of you who knew him personally will understand why. It is not merely that he was a man of immense

accomplishment in the complicated field of development policy adviser—but that he wore all of these talents and abilities with such grace and modesty and contagious good humor.

All who are interested in the advancement of the developing peoples will be deeply indebted to Sir John. For he was both a man of vision, and a man of action. A man who clearly understood that progress throughout the developing world was not only theoretically possible, but quite certainly attainable. Attainable, however, only if all of us—in the rich and poor countries alike—are willing, as he was, to think clearly enough, plan wisely enough, and work hard enough to help make it happen.

I want to explore with you today a part of the developing world which is not experiencing progress and whose outlook is far from bright. It is the huge expanse of Africa and, in particular, sub-Saharan Africa.

No area of the world has captured more dramatically in recent months the attention of people everywhere. The graphic reality of mass starvation has shocked television viewers in the affluent nations. There has been an outpouring of private and public donations of emergency assistance. Sensibilities have been jolted, and consciences have been touched. There is a strong personal desire on the part of millions of concerned individuals to help in a direct and practical way.

Ironically this avalanche of compassion for the open and visible suffering of the victims of famine—genuine as it is—has tended to

^aI am indebted to the staff of the World Bank, and particularly to S. Shahid Husain, Armeane M. Choksi, and John L. Maddux, for assisting me in preparing this statement. They, of course, bear no responsibility for the judgments and conclusions I am presenting.

obscure the more fundamental problems not only of the Sahelian zone itself, but of much of sub-Saharan Africa as a whole.

Part of the public's problem of comprehension is the sheer diversity of this vast region. It encompasses 45 countries. These contain some 800 different ethnic and linguistic groups, constituting a total population of 400 million people. Ten percent of them live in countries which have few resources (for example, Burundi, Lesotho, Rwanda, and Senegal) or low rainfall (Burkina Faso, Chad, Mali, Mauritania, Niger, and Somalia). Thirty-five percent live in oil-exporting countries (Nigeria, Angola, Cameroon, Congo, and Gabon). The remainder in countries with land, water, or other natural resources that are generally adequate for long-term development.

Except for Ethiopia and Liberia, none of these sovereign states

fragile and fragmented. Per capita incomes range from \$80 per year in Chad to \$3,950 in Gabon (see Annex I).

The diversity, then, of sub-Saharan Africa is enormous, and the inclination of the mass media—and indeed of some governments—to oversimplify the issues is understandable. But it is important to recognize that there are certain long-term development problems in this immense region that tend to affect adversely virtually all of its countries, and all its peoples. These problems are not unique to Africa, nor are they equally severe in every corner of the continent. But they are basic, and they are serious, and they are getting worse rather than better.

They are going to determine the future of sub-Saharan Africa. Already they are severely eroding its present.

I want to review with you four of these critical issues as they affect the outlook for economic growth, and examine how they might best be addressed. They are:

- The macroeconomic policy adjustments required to achieve long-term development;
- The mounting pressures of population growth;
- The ecological degradation of the resource base; and
- The shortfall in external development finance.

I will conclude with a few brief comments on the task ahead for all of us.

Before beginning this review, however, I want to underscore an important point. It is this. Much has already been written about these issues. The World Bank, in particular, has published three reports. One, *Accelerated Development in Sub-Saharan Africa: An Agenda for Action*, was prepared in 1981 before I left the Bank. The other two, *Sub-Saharan Africa: A Progress Report on Development Prospects and Programs* and *Toward Sustained Development in Sub-Saharan Africa: A Joint Program of Action*, were issued in 1983 and 1984, respectively. One, then, might well ask, What possible justification is there for another statement at this time? My answer is this: the action proposed in the previous reports has, for the most part, not yet even been initiated; the situation is continuing to deteriorate; and the external financial flows that will be needed in the second half of this decade to support whatever structural adjustments the African governments are prepared to initiate are simply not now in prospect.

It is for those reasons that these issues deserve to be considered again now.

I. AFRICA'S ECONOMIC GROWTH RATES AND THE NEED FOR POLICY REFORM

The Nature of the Problem

A discussion of Africa's economic and social problems must begin by reemphasizing the fact, as is shown in Table 1 below and in more detail in Annex II, that per capita gross domestic product growth rates began to fall in the 1970s and have been negative on average in the 1980s.

Table 1
Per Capita GDP Growth Rates, 1961-84
(annual average in percent)

<u>Country Group</u>	<u>1961-70</u>	<u>1971-79</u>	<u>1980-84</u>
Sub-Sahara: Low Income	1.4	-0.1	-2.8
Sub-Sahara: Other	1.4	1.3	-4.7
Sub-Sahara: Total	1.4	0.4	-3.6
Other Africa	3.1	4.2	2.0
Total Africa	1.8	1.2	-2.4

No set of statistics, however dramatic, can convey the level of human misery that exists and is increasing throughout the continent. The most helpless victims are the children. It is they who reflect most quickly in physical terms the fact that tens of millions of human beings are living, literally, on the margin of life.

In Zambia's poorer regions, for example, height-for-age ratios have fallen in all categories under 15 years. Child mortality in all of sub-Saharan Africa was 50% higher than that in other developing countries in the 1950s, now it is almost 100% higher. The number of severely hungry and undernourished children has risen 25% in the past 10 years, and there is every reason to believe that malnutrition is so great and so widespread it will lead to increasing physical and mental impairment of children in the next 10 years.

Why are Africa's economic growth rates falling?

Some would say that the continent's present problems are the result of external economic conditions that it has neither caused nor could change. And to a degree that is, of course, true. Despite its differences and relative remoteness from the more industrialized areas of the world, the continent has not been able to escape the turbulence of the international economic environment of recent years: the persistent recessions; the severe decline in commodity prices; increasing protectionism (which has been particularly damaging to two of Africa's major exports: sugar and livestock); the high real interest rates; and the decreasing net capital flows.

All of this is the price of living in an interdependent world. Distance no longer isolates Africa, or virtually anywhere else, from major international economic currents.

But it is not true that Africa is simply the hapless victim of impersonal economic forces over which it has no control. Other regions, facing similar outside forces, have suffered far less. Africa's present difficulties have not been imposed on it exclusively from the external environment. Like all newly developing societies, the countries of sub-Saharan Africa have had to wrestle with their own internal economic distortions. And they have made their own share of mistakes.

There have been: inadequate trade and pricing policies, especially in agriculture; overvalued exchange rates that discriminate against exports; mounting fiscal deficits; and a variety of burden-

some government interventions and controls in the production process. Such policies, by and large, have pervaded sub-Saharan Africa for decades. They have exacted the inevitable penalties: an erosion of productivity, pragmatism, and entrepreneurial energy. And that, inevitably, has translated into sluggish economic growth.

A major cause of the distorted policy environment in many of the African nations has been the encroachment of the state into almost every sphere of economic activity. The politicizing of eco-

of the developing world. More and more areas of the economy have fallen under the control of the political elite. That in turn has led to the practice of accumulating wealth through access to state power rather than through contributions to productive enterprise.

This is not to suggest, of course, that all government interventions are bad. Clearly there is a major role for African governments to play in promoting their countries' economic growth. This is especially true where markets are imperfect, as is the case in many of these nations.

But government interventions are not without cost, and, in the future, officials must weigh far more carefully than in the past the penalties of intervention—reduced private incentive; inefficient parastatal institutions; dictated prices; and a suffocating atmosphere of administrative controls—against the penalties of less than perfect markets.

The Plight of Agriculture

As is shown in Table 2 below, and in more detail in Annex III,

Table 2
Growth Rates of Per Capita Food Production
and Levels of Food Imports

Country Group	Growth of Per Capita Food Production (%)			Levels of Food Imports (millions of US\$)		
	1961-70	1971-80	1980-84	1970	1980	1985
Sub-Sahara: Low Income	1.3	-1.3	-2.1	562	2,307	1,966
Sub-Sahara: Other	0.6	-1.1	-1.8	554	4,200	3,353
Sub-Sahara: Total	1.0	-1.2	-2.0	1,116	6,507	5,319
Other Africa	0.8	-1.5	-1.8	770	7,382	7,129
Total Africa	0.9	-1.3	-1.9	1,886	13,889	12,448

per capita food production, which barely held its own in the 1960s, began to decline in the 1970s, and fell at a rate of 1.9% per year in 1980–84. As a result, in current dollars, food imports rose sevenfold between 1970 and 1985 (\$1.9 billion versus \$12.4 billion).

The destruction of Africa's ability to feed itself need not have occurred. The fact is that agriculture, which accounted for a third of the continent's gross national product (GNP) in 1982, has been discriminated against for decades. Not only has it suffered from unrealistic pricing and exchange rate policies, but it has often been deprived of desperately needed government investment—investment in irrigation, in research, in training, and in extension services. It has been deprived of this essential investment by a distorted policy framework that has siphoned it off into an overprotected and inefficient industrial sector.

The key importance of agriculture in sub-Saharan Africa must not be underestimated. It is a labor-intensive sector in which most of these countries can enjoy a comparative advantage, particularly relative to industry. A vigorous growth in agricultural production and exports is an absolutely essential condition for the creation of significant employment and earning opportunities for the rural poor.

The reality is that the average African, who depends critically on agriculture for a living, is poorer today than he was in 1970. If the problems of agriculture are not addressed more effectively, he will be poorer in 1990 than he was at the time his country became independent. And what is even more ominous, the disastrous famines that are currently restricted to years of drought and to only a few countries will become everyday occurrences affecting a majority of the sub-Saharan nations.

The Debt Crisis

Another critical component of sub-Saharan Africa's economic environment—and one made worse by inappropriate domestic policies—is its debt crisis.

borrowing, and the reluctance of governments to cut back on spending programs. Matters grew worse in the early 1980s as the global recession persisted, and the structural adjustment programs were

delayed. The prolonged drought over much of the region compounded the problem even further, and all of this has resulted in severe debt-servicing difficulties.

The estimated total of disbursed and outstanding debt at the close of 1983 for sub-Saharan Africa was some \$80 billion. About 75% (\$60.3 billion) of this was public, or publicly guaranteed, medium- and long-term debt. \$5.1 billion of it is owed to the International Monetary Fund (IMF), and \$8.0 billion to the World Bank Group (see Annex V).

The absolute size of the African debt, particularly the commercial component, is of course much smaller than that of the highly publicized Latin American debt. Thus, it has received much less attention from the international financial community. But the reality is that the adjustments necessary to service this debt are as critical for most of the African countries as are those of the major Latin American nations. Sudan, for example, is already \$110 million in arrears to the IMF alone on \$700 million in outstanding loans, and Liberia and Zambia may soon be in similar straits.

Indeed for many African societies the future debt service profile is staggering. Already, in the recent past, they have been caught up in reschedulings and arrears. Now these are expanding. Scheduled debt service in the 1985–87 period for public and publicly guaranteed medium- and long-term debt is double what it was in 1983–85. The adjustment problems will be formidable.

The Importance of Reforming the Policy Framework

Given the nature of the problems confronting sub-Saharan Africa—and the food and debt crises are typical—the importance of economic reform cannot be overstated. Failure to face up to it will seriously jeopardize the long-term prospects both for growth, and for reducing absolute poverty.

What is required now is not another call for further studies. What is required now is remedial action.

The policy distortions that have penalized African progress are well documented in most countries. And the required compass headings to set a new course are clear.

They include: realignment and closer control of government ex-

penditures; keeping fiscal deficits to a lower fraction of GDP; tighter discipline on monetary expansion; more realistic trade and pricing policies and exchange rates in order to encourage production and promote exports; reforming, and where necessary eliminating, inefficient public enterprises and marketing boards; and avoiding extravagant projects designed for prestige rather than economic viability.

No country anywhere, including some of the most advanced of the industrialized nations, is free of temptations to turn away and temporize when confronted with painful economic dilemmas.

But in the end such dilemmas must be faced if they are to be solved. And that means adjustment.

There are signs that such adjustment is beginning to take place in some African countries. The recent efforts of Ghana are encouraging, and other countries, including Cameroon, Malawi, Botswana, and Rwanda, are beginning to show the beneficial effects of moving toward sound macroeconomic management.

But many other nations are postponing action. They fear that the necessary macroeconomic policy reforms may, in the short run, lead to lower—and perhaps even negative—consumption and GNP growth. There will be an inevitable transition period, and these years will be difficult. As the structural adjustments take hold, some groups in these societies will benefit, and some will be adversely affected. Some will gain new opportunities, and others will lose old privileges.

Those with vested interests against the reforms will undoubtedly bring political pressure to delay or reverse them. Certainly there will be political and economic costs that must be paid in order to see the adjustment process through.

The costs of adjustment come early, the benefits only later on. There are no quick and easy solutions, and none should be expected. After three decades of policy-induced distortions, sustainable growth with equity cannot be achieved overnight.

But what African governments must recognize is that the costs of failing to adjust will be incalculably greater. This is certainly true over the longer term, and it is very likely to be the case in the short run as well.

The critical point is to make a start, and to make it now. The penalties of further delay will be enormous.

Policy reform, of course, must go hand in hand with institutional reform. The fact is that the marked decline of key institutions is an important dimension of the crisis facing many sub-Saharan African countries. It is not simply that desirable institutional development may not yet have taken place, but rather that a number of previously able and functioning institutions are now losing their effectiveness.

There are, for example, entire central ministries that are no longer in adequate control of their budgets and personnel; public agencies that have lost their capacity to carry out their proper tasks; state universities, scientific facilities, and statistical offices that have seriously declined in the quality of their work; parastatal organizations and marketing boards that impede rather than promote productivity; and critically important agricultural research institutions that are becoming increasingly ineffective.

The primary weakness in agricultural research today is not an inadequacy of staff or funding, but rather the ineffective use of existing capacity: management is weak; researchers are underemployed and are too isolated from farmers and extension workers; and the results of research are inadequately disseminated.

The deterioration of critical institutions is not, of course, uniform (Senegal, Togo, Mauritania, and Malawi, for example, are showing some progress), but it is widespread, it is serious, and it is not yet being dealt with effectively. The matter is urgent because it is unlikely that the overall economic crisis can be halted without at least a minimally efficient level of performance by the public institutions.

A major part of the problem is that many African politicians have used the state to reward themselves and their supporters with jobs, contracts, public monopolies, and illicit income. The state itself, in turn, has become increasingly ineffective as a producer of goods and services for the mass of the population.

It is vital that this trend of institutional decline be reversed. Good public policy, no matter how wise and appropriate, cannot be put into practice—indeed, cannot even be researched and formulated in the first place—without effective public institutions. That is why institutional reform is a bedrock responsibility of African govern-

ments. Nothing lasting can be achieved without it. It is not a huge, heroic, one-time event. It is more difficult even than that. It is a vigilant, careful, and continuous process.

Public institutions are, after all, living organisms, and must remain responsive to changes in their environment. They deteriorate when they harden into inflexibility and indifference, and lose sight of their fundamental purpose: to serve and assist the public.

Before concluding this section on the importance of the reform of policies and institutions, I want to return to the problems of Africa's agriculture and to emphasize once again the key to Africa's economic recovery lies in its agricultural sector. The economic policy environment within which the sector operates is of crucial importance.

It is not enough simply to have "good agricultural projects." They can be completely undermined by an inappropriate set of incentives,

remedy for every possible problem in the development of the sector. But governments need to reflect that getting them wrong can and does lead to immense difficulties.

Altering the economic policy environment in sub-Saharan Africa more in favor of agriculture would dramatically alter the economic scene. It would apportion scarce economic resources more rationally across the economy. It would improve the international competitiveness of the agricultural sector. It would provide incentives

alleviate poverty. And they would serve as well to ease the debt problem, both by reducing aggregate demand—which for many African countries is essential in the short term—and by expanding the supply of tradable goods in agriculture.

Clearly, only the African governments and peoples themselves can take the fundamental actions required to solve the critical problems that flow out of the crippling distortions in the economic policy framework of their countries. No outside assistance—however mas-

sive or generous or well-meaning—can possibly substitute for these internal efforts.

But given the resolve of Africans themselves to take on that heavy task, the international development community has a clear obligation to assist and support them in those efforts. I will expand on this point in Section IV. I only want to stress here that if we do not make those joint efforts, then all of us must prepare ourselves for a scenario of suffering and starvation and economic collapse in Africa beyond anything we have seen thus far.

II. THE MOUNTING PRESSURES OF POPULATION GROWTH^a

Eliminating economic distortions, then, is of immediate concern. But they are not the sole set of constraints to sustainable development. The most important long-term issue is the rampant growth of population. For most countries in Africa that issue constitutes a ticking time bomb.

The Dimensions of the Population Problem

Africa's 1980 population was estimated to be about 453 million, including 363 million in sub-Saharan Africa (Annex VIII). The densities vary, but are generally low. Most countries have densities of under 40 persons per square kilometer, and even in the most heavily settled areas densities rarely exceed 200. By sharp contrast, national densities in Asia range from 42 to 600, with heavily settled areas exceeding 1,000 persons per square kilometer.

The population problem in Africa, then, is not that there are now too many people there. There are not. The problem is that the population growth rate is explosively high.

During the 1950s and 1960s, with death rates on the whole declining faster than birth rates, the rates of population growth continued to increase in most developing countries. But beginning with the early 1970s, a slow deceleration of population growth has become evident in all regions of the world except Africa. For the

^aI am indebted to the staff of the Population Council and to members of the World Bank's Population Study Task Force for assisting me in collecting material for this section.

developing world as a whole, measured over five-year periods, the growth rate peaked at 2.46% in the first half of the 1970s. For Africa it is continuing to grow, reaching 3.01% in 1980–85.

Table 3
Population Growth Rates, by Region, 1950–85
 (annual average in percent)

Region	1950–55	1960–65	1970–75	1975–80	1980–85
Africa	2.11	2.44	2.74	3.00	3.01
Latin America	2.72	2.80	2.51	2.37	2.30
East Asia ^a	2.08	1.81	2.36	1.47	1.20
South Asia	2.00	2.51	2.44	2.30	2.20
All Developing Countries	2.11	2.30	2.46	2.14	2.02

^aExcluding Japan.

Source: United Nations 1982 assessment.

Sub-Saharan Africa, already the poorest region in the world, now has the highest population growth rate in the world, even exceeding that of the rest of Africa. It is 3.2% per year. Were that to continue, the population would double in 22 years, quadruple in 44 years, and increase eightfold in 66 years.

What are population growth prospects in Africa for the next few decades, and for the longer term?

Uncertainties affecting the future argue for some caution in answering. Demographic processes have a built-in momentum that permits relatively accurate forecasts for 15 to 20 years ahead. Beyond that time span, the possibility of error becomes much greater. The question, however, remains highly appropriate, and is answerable with a fair degree of accuracy. We know, for example, that a large majority of the children born in the 1980s will still be alive past the midpoint of the next century.

To answer the question for the longer term, we can spell out plausible assumptions as to the future course of fertility and mortality, and calculate demographic characteristics. Those who wish to challenge the orders of magnitude resulting from such calculations can best do so by challenging the underlying assumptions, and by proposing and defending alternative assumptions that they consider more plausible.

The results of such a projection exercise for Africa covering the

time span 1980 to 2100, undertaken by the World Bank, are summarized in Table 4 below and presented in more detail in Annex VIII.

Table 4
African Population Projections, 1980–2100
(population in millions)

<u>Selected Countries</u>	<u>1950</u>	<u>1980</u>	<u>2000</u>	<u>2025</u>	<u>2050</u>	<u>2100</u>	<u>Total Fertility Rate, 1983</u>	<u>Year in Which NRR = 1^a</u>
Cameroon	4.6	8.7	17	30	42	50	6.5	2030
Ethiopia	18.0	37.7	64	106	142	173	5.5	2035
Ghana	4.4	11.5	23	40	53	62	7.0	2025
Kenya	5.8	16.6	37	69	97	116	8.0	2030
Malawi	2.9	6.0	11	21	29	36	7.6	2040
Mozambique	6.5	12.1	22	39	54	67	6.5	2035
Niger	2.9	5.5	11	20	29	38	7.0	2040
Nigeria	40.6	84.7	163	295	412	509	6.9	2035
Tanzania	7.9	18.8	37	69	96	120	7.0	2035
Uganda	4.8	12.6	25	46	64	80	7.0	2035
Zaire	14.2	27.1	50	86	116	139	6.3	2030
Other Sub-Sahara	<u>59.8</u>	<u>121.7</u>	<u>218</u>	<u>381</u>	<u>524</u>	<u>651</u>	6.5	2040
Total Sub-Sahara	<u>172.4</u>	<u>363.0</u>	<u>678</u>	<u>1,202</u>	<u>1,658</u>	<u>2,041</u>	6.7	2040
Other Africa	<u>42.6</u>	<u>89.6</u>	<u>148</u>	<u>225</u>	<u>282</u>	<u>319</u>	5.5	2025
Total Africa	<u>215.0</u>	<u>452.6</u>	<u>826</u>	<u>1,427</u>	<u>1,940</u>	<u>2,360</u>	6.5	2040

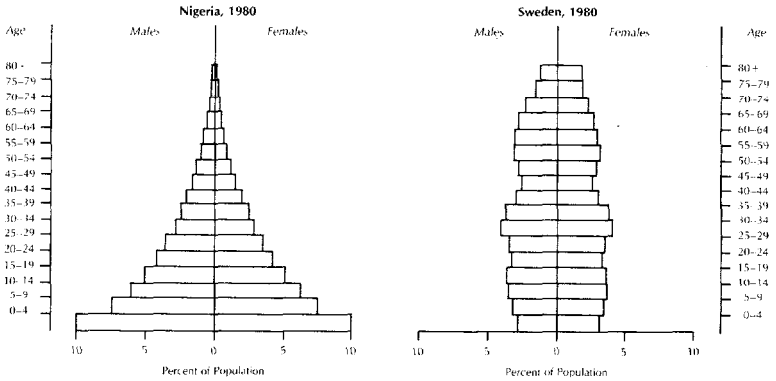
^aNRR refers to net reproduction rate. When NRR = 1, fertility is at replacement level.

The projections are based on the estimated population size in 1980 and its sex and age distribution. They incorporate the assumption that mortality improvements in the future will track the historical experience of the more advanced countries in moving toward higher levels of life expectancy.

The nature of the more crucial fertility assumptions is summarized in the last two columns of the table. Starting with the estimated level of fertility in 1983 (expressed in terms of the total fertility rate, that is, the number of children an average woman would have during her lifetime), the projections stipulate a decline to replacement-level fertility by a date that is specified for each country separately. Replacement-level fertility means a level of childbearing in

But when replacement-level fertility is reached in a society, it

may continue increasing for decades, depending on the society's age structure. Compare, for example, the current age distribution in Nigeria (which is typical of that in most developing countries) and Sweden.



Source: Carl Haub and Lindsey Grant of "The Environmental Food."

When replacement-level fertility is first reached in a country with an age distribution similar to that of Nigeria, the population will still possess a strong growth momentum. It will continue to grow for decades until the very large numbers of females at the bottom of the age pyramid have passed through their reproductive years. Such a nation will not reach a stable population level until 50 or 70 years after it has achieved replacement-level fertility. During that period its population will have increased by an additional 50 to 60%.

The assumptions concerning the future tempo of fertility decline in the African countries, incorporated in the projections, reflect the judgment—or the hope—that the high fertility rates, which are still increasing in some countries, will start to decline well before the century's end, and that then the downward trend will be precipitous and sustained until replacement-level fertility is achieved.

These are, in fact, heroic assumptions.

They require that the move from high fertility to replacement-

level fertility—which took about a century and a half in the United States—be completed within a drastically shorter time span in Africa. They envisage no possibility of temporary reversals or pauses on the downward course of fertility. They allow for no “baby booms” such as the West experienced, once replacement fertility has been attained.

And yet the populations that must conform to these demanding assumptions are largely poor and rural. They are populations in which security in old age is still derived primarily from the support of one’s children. Many are populations with religious and cultural values that place a high premium on fertility.

But let us take the assumptions at face value, despite their implicit optimistic bias. The projections in Table 4 are frightening. For the reasons I referred to, rates of growth in the African countries will remain high for decades to come.

By the year 2025—only 40 years from now—Kenya will be four times the size it was in 1980; Nigeria and Ghana will have grown have at least tripled; and the population of sub-Saharan Africa as a whole will have risen from 363 million to 1,201 million.

The Consequences of Rapid Population Growth

What does so rapid a population growth rate in fact mean for the region?

To begin with, countries will find it increasingly difficult to reverse proper agricultural policies will, of course, help. But sub-Saharan Africa will almost certainly find it impossible to achieve and maintain a rate of growth in food production that exceeds its current population growth rate of 3.2%. Agricultural growth rates that high have been achieved by very few countries, and only then under the most favorable conditions. The reality is that agriculture in sub-Saharan Africa is unlikely to grow at more than 2.5% per year for

famine will become even more frequent.

Another serious consequence of the run-away population growth

rate will be mounting unemployment. Between now and the end

the older than will either have to subsist on marginal land, or be jobless. One must remember that it will require 20 years before lowered fertility—if achieved—could begin to limit the growth of the labor force.

The present population explosion will also aggravate the ecological vulnerabilities of the continent. Already the pressures have led to a significant decline in the wood resources. The demand for firewood has increased so intensely that it has resulted in widespread deforestation. This in turn has brought on severe fuel shortages.

In many countries of West Africa families that traditionally cooked two meals a day now have fuel for only one hot meal a day, or one every other day. Thus the deforestation is beginning to lead to an accelerated degradation of the basic life-support system. I will turn to this subject in more detail in a moment, but I want to make the point here that the population problem in Africa is clearly related to its growing ecological difficulties.

High population growth rates will also put heavy strains on already overburdened educational and health care systems. Countries such as Kenya face a doubling or tripling of their school-age population within the next 15 years. Growth rates such as these will immensely exacerbate the problems of expanding these services to anything approaching required levels.

Such growth rates will almost certainly lead to pervasive and restrictive regulation of private life. Restraints on reproductive freedom could become the law of the land in cases where governments, through incapacity or unawareness, have allowed demographic pressures to build to extremes. I am not speaking here of government measures aimed at creating greater social responsibility in the reproductive decisions freely made by families. I am talking about coercive government intrusions into the decisions themselves—forced sterilization, for example.

Such government actions would, moreover, be accompanied by increasingly harsh and desperate actions by families themselves: higher rates of abortion; use of pregnancy tests to determine the sex of an unborn child, followed by abortion of female fetuses; and

rising rates of female infanticide.

If the present growth trends continue, such coercive measures by governments and such desperate actions by families are likely to be common in sub-Saharan Africa by the end of the century.

In sum, overly rapid population growth strains virtually every component of a developing society. It expands the labor force faster than new jobs. It rings the cities with slums. It overstrains the food supply and the ecological life-support system. It entrenches illiteracy, malnourishment, and ill health. And it perpetuates a culture of poverty.

Even in a vigorously prosperous environment, coping with such demographic pressures would be difficult. In the weak economies of sub-Saharan Africa they will be overwhelming. If appropriate action is delayed—if procrastination is prolonged—then we can be sure of only one thing: the problem will eventually be dealt with, but at an immeasurably higher cost. By famine, perhaps. Or by violent civil unrest. Or by draconian coercion in a context of public repression and private brutality.

What then can be done?

Let us begin to answer that question by examining the causes of Africa's population problem.

The Root Causes of Rapid Population Growth

Falling mortality rates plus constant or increasing fertility produces population growth. Mortality rates vary widely across Africa. This is due in part to natural factors such as food quality, climatic conditions, and the prevalence of disease. But it is due also, of course, to developmental influences such as GNP growth rates, levels of education—particularly that of women—and the effectiveness of public health programs.

As development has made headway in Africa, mortality rates have fallen. But they still remain substantially above the rates in other parts of the world. They can, therefore, be expected to fall further in the decades ahead.

The high fertility rate—an average of 6.7 children per woman in 1983—is the result of a broad mix of economic, social, and cultural

forces. These include such factors as the early age of marriage for African girls; the diminishing practice of prolonged breastfeeding, and sexual abstinence, after childbirth; and the very limited use of modern contraception. Fewer than 5% of couples use contraceptives in sub-Saharan Africa, as compared with some 30% in India, and some 70% in China.

The high fertility rates are due in part also to the low relative status that women have in many African societies. Though both males and females derive benefits from children, it is generally the women who bear most of the costs. In addition to the health risks of bearing children, women often have the major financial responsibility for raising them. This is particularly true in polygamous households, where each wife has primary responsibility for her own children.

Men, on the other hand, enjoy the benefits of children at a much lower cost. They are less involved in their day-to-day care, less concerned with their health, educational, and emotional needs, and hence less conscious of the costs to the children of having many siblings. Thus, to the extent that males continue to dominate the decision to have another child, fertility is likely to remain high.

Recent surveys of a number of African countries, however, have indicated that women too express a very high demand for children. These surveys show that even though most married women already have six children, more than 80% want still more. In six of the countries surveyed, women said they wanted between six and nine offspring.

Since most families in Africa still make their living on the land, child labor is commonly regarded as a valuable advantage despite the fact that careful economic studies show the reverse to be the case.

Added to all of this is the fact that many sub-Saharan African governments—including many of the Francophone countries—simply have no clear population policies in place. Some countries

cies specifically designed to moderate rapid population growth. There is little evidence that they are seriously committed to that objective.

Why is this so?

There are many reasons.

Until quite recently many African leaders regarded population growth as a distinct asset, rather than a potential hazard. They had not fully realized the inevitable consequences of runaway growth rates. ~~Population control, furthermore, is often a sensitive political issue in Africa, particularly when different groups in a society compete for power and resources.~~

There is the added problem that in many countries modern contraception itself is poorly understood, and lacks social approval. Because infertility affects a disproportionate number of Africans, couples are reluctant to control their childbearing through modern means.

The perception, moreover, that much of the pressure for small families comes from western aid donors leads to resentment and inaction on the part of officials. Government commitment is further constrained by the lack of recent and reliable demographic data. Many countries do not have a history of census-taking, and even when censuses have been taken, political controversy has often prevented them from being published. The result is that the size of the population and its rate of growth in countries such as Guinea, Nigeria, and Zaire are not known with any degree of certainty.

There are, then, very few countries in sub-Saharan Africa that have adopted policies to moderate their population growth. As recently as 1974—the year of the United Nations Conference on Population in Bucharest—only two countries, Kenya and Ghana, had such policies in place. In neither country have they been effective. The total fertility rate in Kenya has increased from 7.6 children per woman in 1975 to 8 in 1983, and in Ghana from 6.7 to 7.

This is the general pattern in most of sub-Saharan Africa. The resulting strains are already acute in countries such as Kenya, Burundi, Malawi, Nigeria, Rwanda, and the Sahelian nations. Within the next decade they will be felt in many more.

Action to Slow Population Growth

Fortunately, at least on the surface, the attitudes of sub-Saharan African governments are beginning to change. Today, in contrast to

the position that many held in 1974, more than three-fourths of them give at least lip-service support to family planning.

Action on population. It called on them to ensure the availability of family planning services to all couples and individuals, compared with the mere 5% who are actually utilizing such services today.

Among the larger countries, Zimbabwe has developed a strong family planning program. Kenya and Botswana have programs under way, and several other countries have recently made a beginning. But despite these formal commitments, the progress is disappointing. The words are in place. But the day-to-day effectiveness of the programs is not yet apparent.

What is apparent is that the task will require far greater effort than is presently being applied to it. The political will to accord population policy the priority it deserves is, of course, essential. But political will alone is not enough.

An effective fertility reduction program clearly requires an appreciable degree of administrative capacity. Experience has shown that this can best be achieved by greater decentralization of responsibility for the management of the program.

The administrative burden on national governments can be eased, for example, by placing greater emphasis on nongovernmental efforts in distributing contraceptive supplies, both nonprofit and com-

mercial. In many countries, the delivery of family planning services — even in those settings where they have obviously been unable to deliver a wide variety of other basic services.

And it is, of course, clear that by the end of the century substantial increases in expenditures will be required to implement effective population programs in each country. The funds required will have to come from a variety of national and international sources: cost-recovery programs; central and local government budgets; private family planning organizations; international welfare institutions; donor countries; and international development agencies.

20 Properly designed education and health services, important in their own right, can and do provide strong synergistic support to

family planning goals. Reducing current infant and child mortality rates, and expanding basic education—with special emphasis on increasing the proportion of girls in school—can achieve high returns in lowered fertility.

Of all the aspects of social development, the educational level appears most consistently associated with lower fertility. It is significant that as increases in the education of women tends to lower

Instruction for women in nutrition, child care, and family planning are all, of course, important. But women need market-oriented training and services as well: access to credit, extension service, and the skills necessary for participating in a cash economy.

Indeed, enhancing the status of women socially, economically, and politically—and thereby expanding their range of roles and opportunities in society—is of critical importance in this whole matter.

Women represent a seriously undervalued potential in the entire development process. To prolong inequitable practices that relegate them exclusively to narrow traditional roles not only denies both them and society the benefits of that potential, but very seriously compounds the problem of reducing fertility.

There are, of course, a variety of other components that can strengthen a national family planning effort: appropriate financial incentives; an effective public information program; a broad choice of contraceptive techniques and services; and dependable delivery systems through which parents can in fact get the services they wish.

But the most important single step that any nation can take to reduce its rate of population growth is to establish a framework—a national plan—within which all of these measures can be formulated, and against which progress can be periodically evaluated.

The truth is that had sub-Saharan African countries established such plans 10 years ago, not a single country would today be sat-

be set for specific time periods. Realistic policies should then be introduced to lead to desired family sizes consistent with those targets, and family planning services should be provided which will assist parents to achieve them.

Reports to the nation each year on the degree to which the overall targets, and the necessary supporting actions, are being realized would provide an assessment of the progress achieved. Such reports would introduce a social consciousness and discipline that would lead, over a reasonable period—say, five to ten years—to an effective fertility reduction program.

I want to emphasize that the demographic penalties for procrastination and delay are inexorable. For example, as is illustrated in the table below, if Nigeria were to begin to introduce now those policies which would permit it to achieve replacement-level fertility by the year 2000—instead of the year 2035, as is projected in Table 4—its population would level off at about 239 million instead of 532 million. Similarly, were Kenya to reach replacement-level fertility in 2000, rather than in the projected year of 2030, its population would ultimately stabilize at 55 million instead of the projected 120 million. And Africa, as a whole, would level off at 1.2 billion instead of 2.5 billion.

Table 5
Effect on Ultimate Population Size of Reaching
Replacement Level Fertility (NRR = 1) in the Year 2000
Instead of as Projected in Table 4
 (population in millions)

Country	Population in 1980	Ultimate Population if NRR = 1 in Year 2000	Ultimate Population per Table 4		Difference Due to Delay in Reaching NRR = 1	
			Pop.	Year NRR = 1	Pop.	% of 1980 Pop.
Nigeria	85	239	532	2035	293	346
Kenya	17	55	120	2030	65	392
Total Africa	453	1,236	2,462	2040	1,226	271

ease Africa's problems of tomorrow. But unless firm action is taken now, the continent's present difficulties will multiply manyfold. Let me turn now to a critical case in point: the ecological decline.

III. THE ECOLOGICAL DEGRADATION OF THE CONTINENT^a

Throughout Africa the physical resources that underpin the economy are being degraded. One sees: dwindling forests, eroding soils, and falling water tables. What is less evident, but even more alarming, is that the continued overuse of these ecosystems can set in motion dangerous processes that are self-reinforcing.

The loss of forest cover is taking place in virtually every country on the continent. In Mauritania and Rwanda the forests are almost completely gone. In Ethiopia and Zimbabwe they are rapidly disappearing. In Tanzania and Sudan woodcutting is proceeding at twice the sustainable level. In Kenya it is taking place at five times that level. And in West Africa the coastal forests are disappearing at the rate of 5% per year. At that pace they are not likely to last into the next century. The Ivory Coast, for example, which once had 30 million hectares of tropical forest, now is left with only 4.5 million.

This depletion of wood supplies has led families to turn to cow dung and crop residues for fuel. But this removes vital nutrients from the land, which in turn reduces crop yields and the ability of pastures to support livestock. Spurred by explosive population growth, these forces of ecological degradation appear to be gathering momentum.

Each stage of ecological deterioration appears to accelerate the onset of the next. As land is cleared of vegetation, soil erosion accelerates and more rainfall runs off to the ocean rather than seeping into the earth. With less water retained in the land to be re-evaporated into the atmosphere, fewer clouds are recharged and rainfall declines. The diminishing rainfall, in turn, dries out the landscape and further aggravates the already serious desertification.

These self-reinforcing processes may in part explain the persistence of drought in the southern parts of the Sahel. If, first, the shrinkage of the forests, the loss of soils, the overgrazing of the rangelands, and the drying out of the agricultural land itself have contributed to the decline in rainfall, then sub-Saharan Africa may be caught in a vicious circle.

^aI am grateful to Lester Brown, President of Worldwatch Institute, and James Gustave Speth, President of World Resources Institute, for reviewing this section of the statement.

We usually think of drought as a temporary anomaly that will pass in time—when so-called normal conditions return. But some experts now fear that what we are observing may not in fact be temporary. Africa's famine has rightly commanded headlines. But the extent of Africa's ecological degradation has not been widely noted. Certainly not by the world at large. And not sufficiently even by some African officials themselves. It is not just the tree cover or the rangelands that are under threat. It is the whole range of Africa's extraordinarily rich and diverse ecological inheritance that is threatened. The combination of the rising population growth, the declining per capita output of subsistence economies, and the overuse and misuse of natural resources is laying the foundation for a human tragedy of vast proportions. It is Africa's future that is in jeopardy, if these trends are not reversed.

Reversing the Trends

In 1981 the World Bank stated that in Africa "a strategy to stop the accelerating degradation of soils and vegetation is overdue." That is still true today. Neither the African governments nor the international community has given priority attention to the restoration of African soils.

The specific actions required will, of course, vary country by country. But sound and feasible programs are likely to include the following actions: reducing erosion through the promotion of conservation and new farming practices; better terrace design; and agroforestry systems tailored specifically for the Sahel and for the farmlands of equatorial and coastal West Africa.

Most of the international agencies that support forestry are currently reappraising their efforts. They are beginning to recognize that the complex relationship between forests, farmlands, and household fuel requirements should shape reforestation strategies. Clearly more trees need to be planted. But the critical questions are, Which trees? And in which regions? And planted for whom? And planted by whom? It is the detailed answers to these questions that will determine the success or failure of any reforestation program.

It is, of course, the local conditions that will help shape the approach. In areas adjacent to cities it will be important to establish

plantations of fast-growing trees that can readily supply firewood and charcoal to urban dwellers. It is an urgent need. Plantations today supply less than 5% of Africa's fuelwood demands, and less than one-sixth of the wood and charcoal used in cities and towns.

In the Sahel, where water supplies are limited, efforts must be expanded to identify and develop varieties of drought-tolerant trees. And the woodlands that remain must be better managed, and the wood supplies themselves used more efficiently.

In many parts of the continent, providing tree seedlings to rural families to plant and maintain on their own land could in effect increase the forestry workforce by an order of magnitude. And throughout the area more careful management of the existing forests would increase wood supplies at a very low cost. These are urgent needs since restoring Africa's woodlands and forests is absolutely essential to the continent's economy.

But if all the suggestions that I have made here are pursued, will they in fact resolve the problem? Will the degradation of the ecosystem of a continent be reversed? I don't know and I don't believe anyone knows. The extent, the causes, and the implications of the environmental degradation are far from clear. What we do know is

in Africa in 40 years' time.

I urge, therefore, that a special research program be undertaken to increase the world's understanding of African ecological issues. The project could be organized under the chairmanship of the World Bank and the United Nations Development Programme. It could be operated at a cost of perhaps \$5 million per year. Given the very real potential for a massive ecological disaster in Africa, such a

IV. THE REQUIREMENTS AND PROSPECTS FOR EXTERNAL FINANCE

Let me turn now to the overall requirements and prospects for external finance for sub-Saharan Africa.

The arguments for substantial—and indeed increasing—levels of concessionary assistance are very powerful. Such assistance is needed to:

- Support the structural adjustments which are required for long-term economic growth;
- Invest in physical infrastructure and human resource development needs;
- Arrest the growing desertification and environmental degradation of the continent; and
- Support the immediate humanitarian objective of assisting the victims of famine to get back to productive activity as soon as possible.

The success of any feasible strategy to turn around Africa's economic decline will depend on the availability of external finance. It is difficult, of course, to estimate the amount of external aid required—so much depends on the assumptions one makes on desired growth rates, on the ability of countries to mobilize their own domestic resources, and on the efficiency with which such resources are used. The link between economic growth and external financing is complex and difficult to define precisely. But I believe all would agree that if the sub-Saharan African countries are to reverse the downward trend in per capita incomes, they will need large increases in capital flows. Such increases are not now in prospect.

Indeed, on the basis of present plans, it appears probable that external financial assistance to sub-Saharan Africa will decline substantially below the totally inadequate level of 1984, which was associated with very low levels of economic activity.

In the years 1980–84, for example, per capita incomes in the region declined on average 3.6% per year (see Table 6).

Table 6
Per Capita GDP Growth Rates, 1980–84
(annual average in percent)

Country Group	1980–84
Sub-Sahara: Low Income	– 2.8
Sub-Sahara: Other	– 4.7
Total Sub-Saharan Africa	– 3.6

During that period, as shown in Table 7, external aid dropped precipitously from \$11.3 billion in 1980 to \$3.6 billion in 1984.

Table 7
Sub-Saharan Africa: Net Financial Transfers, 1980, 1982, and 1984^a
(millions of US\$)

<u>Source of Funds</u>	<u>1980</u>	<u>1982</u>	<u>1984</u>
To Low-Income Countries			
IMF	378	492	164
World Bank	376	552	553
Other Multilateral	704	463	183
Bilateral Aid	4,758	3,970	3,251
Commercial Banks	<u>854</u>	<u>424</u>	<u>-468</u>
Subtotal	7,070	5,901	3,683
To Other Countries			
IMF	85	87	-38
World Bank	97	335	453
Other Multilateral	177	251	150
Bilateral Aid	2,018	1,915	1,906
Commercial Banks	<u>1,806</u>	<u>2,757</u>	<u>-2,603</u>
Subtotal	4,183	5,344	-132
To All Sub-Saharan Countries			
IMF	463	579	126
World Bank	473	887	1,006
Other Multilateral	881	714	333
Bilateral Aid	6,776	5,885	5,157
Commercial Banks	<u>2,660</u>	<u>3,181</u>	<u>-3,071</u>
Total Net Transfers	<u>11,253</u>	<u>11,246</u>	<u>3,551</u>

^aExcludes short-term loans.

In the absence of special efforts to increase financial assistance above the levels presently projected, the net capital flow to sub-Saharan countries will fall still further in 1985–87. Such an alarming outlook cannot be allowed to stand. It calls for immediate action by all of the parties concerned.

How Much Additional Finance Is Required and How Might It Be Obtained

To provide illustrative figures, I will focus on the 29 low-income countries. They account for one-third of the region's gross national product and almost two-thirds of its population. At a minimum,

external aid to these nations should not drop below the \$6.5 billion per year level of 1980–82. Even with this assistance, the countries were forced to cut imports of essential goods and services by about 15%, and the service on their outstanding debt rose by nearly 50%. However we chose to estimate their financial requirements for 1985–90, \$6.5 billion per year would seem to be a minimum. And yet the forecast is for no more than 40% of that amount.

The decline in commercial bank lending was very sharp in 1984, and the outstanding loans are likely to decline further in the years ahead.

The IMF, which provided substantial assistance in the first half of the 1980s, will expect repayment of its loans in the second half.

This shift in commercial bank and IMF lending is neither surprising nor unjustified. But it does mean that action must be initiated for further debt rescheduling and, in addition, sizable increases in concessional assistance, beyond those presently projected, will be necessary.

Bilateral aid, therefore, must be increased—it should probably rise by at least 30%, from \$5 billion to \$6.5 billion per year. But of the countries providing concessional assistance to sub-Saharan Africa, many of the OPEC donors and eight of the DAC countries—in particular France, Germany, and the United Kingdom—have now decreased their aid.

The World Bank's Special Facility for Africa, which will add about \$200 million in each of the next three years to the financial flows projected above, is a small step in the right direction. But it is not nearly enough.

The new financial facility recently proposed by the United States, if supported by other governments, would help. It would provide about \$500 million to \$800 million per year for five years to sub-Saharan Africa.

But taken together, all these various actions will still leave a substantial deficit in the funds required for the low-income countries of the region. And we have said nothing as yet of the needs of other sub-Saharan nations such as the Ivory Coast and Nigeria. As Table 7 indicates, net transfers to these "Other Countries" fell from \$5.3 billion in 1982 to a negative \$132 million in 1984.

Given the magnitude of Africa's financial problems in the years immediately ahead, I see no alternative to the World Bank Group's

together all sources of external finance in order to lay a proper foundation for long-term growth in all the countries of the region.

To carry out such a program for Africa, in addition to fulfilling similar responsibilities elsewhere in the developing world, will require that the World Bank Group, including in particular the International Development Association, increase its lending substantially. The Bank itself should probably aim at quadrupling the net transfer of funds. Within that expanded lending program, the share of structural adjustment loans should increase sharply. And the Bank's actions should be coordinated with measures to refinance a portion of the payments due to be made to the IMF within the next five years.

At the very moment that this statement is being sent to the printer, the Annual Meeting of the World Bank and the International Monetary Fund is about to begin in Korea. I am very hopeful that while in Seoul, the Governors of the Fund and the Bank will take the first steps to permit these two institutions to provide the financial support that Africa so clearly requires.

V. THE TASK AHEAD FOR THE WORLD

The overriding development task that faces the world today is to reverse the decline in the living standards of the sub-Saharan people. And that challenge is shared not only by the African governments, but by the international development community as well.

In the past there has been close collaboration between those governments and that community. Hence the problems that have grown up over the years—in the economic policy framework, in the population growth, and in the management of the environment—are not problems that can be laid exclusively at the door of those governments. All of us care about Africa. All of us have tried to help Africa. And all of us have to share some responsibility for its present plight.

One of the most fundamental issues that both the governments and the international community have all too often neglected is the development of the human resources throughout the continent. The colonial inheritance in this matter was extremely poor. At independence, Tanzania and Cameroon, for example, had no institutions of higher learning at all. Zambia had only 36 university graduates and Malawi only 33. Countries such as Ivory Coast, The Gambia, Senegal, and Somalia had an illiteracy rate of over 90%.

Since independence, neither the governments nor the international community have done enough—nor are they doing enough even now—to create the human capital that is essential for long-term growth.

The current deficiencies in Africa of trained and skilled professionals necessary to manage a nation's development are well known. The weaknesses in the political and administrative decisionmaking systems are a function of this problem. A highly trained corps of civil servants that can keep government responsive and efficient is missing, and this has in large measure contributed to the institutional decline that I commented on earlier.

Until these staff resources can be developed domestically, many African countries will have to rely on expatriate experts in order to strengthen the administrative and institutional framework. Much of this expertise can be drawn from the large scientific and technical pool available in other developing countries. There is no room in this matter for xenophobia. Pragmatism must prevail if Africa is to cope with its emergencies.

Can the African governments—and the international donors—learn from the past? And will they? I am cautiously optimistic.

There is now increased recognition on all sides that it is imperative to rethink the development strategy of sub-Saharan Africa. There is, in particular, a noticeable willingness among African governments and policymakers to draw lessons from the errors of the past. Many now have come to appreciate the importance of developing agriculture: of giving greater support to peasant farmers; of eliminating population growth; and of reversing ecological decline.

around, and get the right policies in place—and working—still lie ahead.

Africa faces an extraordinarily tough and prolonged period of adjustment. What matters is to get the reforms under way now. Further hesitation will only make present problems worse.

But, as I have stressed, laying the foundations for sustainable long-term economic growth will require substantial increases in external financial assistance. When approaching this problem, African leaders should not ignore the fact that there is increasing concern in the industrialized nations over a number of disturbing issues affecting many African countries. There is concern over the pervasiveness of corruption. There is concern over the use of scarce resources to build large defense establishments and luxury projects. There is concern over the harsh treatment of regional groups. And there is concern over the repression of internal dissent.

None of these practices is, of course, unique to Africa or indeed to the developing world. But Africa's record on human rights, and on the encouragement of discussion and debate of critical issues including economic policies—is very poor. Among the friends and supporters of Africa in western countries there is what almost seems to be a conspiracy of silence over these concerns. That is unfortunate.

It is unfortunate because although these concerns in the developed nations do not alter the need to increase assistance to Africa, they do erode the public's sympathetic understanding of the continent's plight. Further, African leaders themselves should recognize that these harsh aspects of national political life not only will not reverse the deepening crisis in their countries, but will exacerbate it. International support will not be easy to mobilize so long as these concerns persist. Already they are adversely affecting public opinion

These are strong statements. But the problems of Africa call for candor as well as for compassion. After 13 years of working with the African peoples to address these problems, I hope they will allow me to speak frankly. The sheer urgency of the situation requires a fresh and open discussion of these issues.

The harsh truth is that sub-Saharan Africa today faces a crisis of

unprecedented proportions. The physical environment is deteriorating. Per capita production of food grains is falling. Population growth rates are the highest in the world and rising. National economies are in disarray. And international assistance in real terms is moving sharply downward.

For the governments and peoples of Africa—and for you and me and all of us in the international community—the grim warning in these facts is unavoidable.

Further delay, further temporizing with reform, further weakening of external support—in effect, further failure to recognize and confront this crisis head on—will condemn an entire continent to unimaginable human misery.

We cannot let that happen.

Anthropologists tell us that Africa is where man himself first walked on earth. In that ancient ancestral sense it is the home of us all.

It needs our help. Our generous help. And it needs it now.

ANNEXES

ANNEX I

Africa: Basic Indicators^a

Country	Population (millions) Mid-1983	Area (thousands of sq. km.)	GNP Per Capita (US\$) 1983	Life Expectancy (years) 1983	Adult Literacy Rate (%)	Primary School Enrollment (% of age group) 1982	Infant Mortality (per thousand) 1983	Enrollment in Higher Education (% of pop. aged 20-24) 1982
Sub-Sahara: Low Income								
Benin	3.8	113	290	48	27.9	65	148	2.0
Burkina Faso	6.5	274	180	44	8.8	28	148	1.0
Central African Republic	2.9	823	280	46	33.0	70	142	1.0
Chad	4.8	1,284	80	43	15.0	—	142	—
Ethiopia	40.9	1,222	120	43	53.0	46	142	1.0
Gambia	0.7	11	290	36	20.1	56	200	—
Ghana	12.8	239	310	59	—	76	97	1.0
Guinea	5.8	246	300	37	20.0	33	158	3.0
Guinea-Bissau	0.9	36	180	38	18.9	101	158	—
Kenya	18.9	583	340	57	47.1	104	81	1.0
Madagascar	9.5	587	310	49	50.0	100	66	3.0
Malawi	6.6	118	210	44	25.0	62	164	—
Mali	7.2	1,240	160	45	10.0	27	148	—
Mozambique	13.1	802	—	46	—	104	109	—
Niger	6.1	1,267	240	45	9.8	23	139	—
Rwanda	5.7	26	270	47	49.7	70	125	—
Sierra Leone	3.6	72	330	38	15.0	40	198	1.0
Somalia	5.1	638	250	45	60.0	30	142	1.0
Sudan	20.8	2,506	400	48	32.0	52	117	2.0
Tanzania	20.8	945	240	51	79.0	98	97	—
Togo	2.8	57	280	49	18.0	106	112	2.0
Uganda	13.9	236	220	49	52.0	60	108	1.0
Zaire	29.7	2,345	170	51	54.5	90	106	1.0
Subtotal	247.0	15,498	235	48	44.1	68	119	1.3

Sub-Sahara: Other								
Angola	8.2	1,247	—	43	—	—	148	—
Botswana	1.0	600	920	61	35.0	102	74	—
Cameroon	9.6	475	820	54	40.5	107	116	2.0
Congo	1.8	342	1,230	63	—	—	82	6.0
Lesotho	1.5	30	460	53	53.0	112	109	2.0
Liberia	2.1	111	480	49	25.4	66	111	2.0
Mauritania	1.6	1,031	480	46	17.0	33	136	—
Mauritius	1.0	2	1,160	67	79.0	107	32	—
Nigeria	93.6	924	770	49	34.0	98	113	3.0
Senegal	6.2	196	440	46	10.0	48	140	3.0
Swaziland	0.7	17	870	55	65.0	110	128	—
Zambia	6.3	753	580	51	44.0	96	100	2.0
Zimbabwe	7.9	391	740	56	68.8	130	69	1.0
Subtotal	151.8	6,709	762	50	36.2	96	113	2.8
Total Sub-Saharan Africa	398.8	22,207	436	49	41.0	79	117	2.0
Other Africa								
Algeria	20.6	2,382	2,320	57	35.0	93	107	5.0
Egypt	45.2	1,001	700	58	44.0	78	102	15.0
Libya	3.4	1,760	8,480	58	—	—	91	6.0
Morocco	20.8	447	760	52	28.0	80	98	6.0
Tunisia	6.9	164	1,290	62	62.0	111	83	5.0
Subtotal	96.9	5,754	1,372	57	39.8	84	100	9.9
TOTAL AFRICA	495.7	27,961	627	50	40.8	80	114	3.8
For Comparison								
China and India			280	62	55.4	98	61	4.0

^aThis table and all subsequent tables include 39 countries of sub-Saharan Africa with population exceeding one half-million in 1983. The six remaining sub-Saharan African countries (Cape Verde, Comoros, Djibouti, Equatorial Guinea, Sao Tome and Principe, and Seychelles) are not included because of lack of data.

Source: World Bank, *World Development Report 1985* and World Bank data.

Africa: Per Capita GDP Growth Rates
(annual average in percent)

Country	1961-70	1971-79	1980-84
Sub-Sahara: Low Income			
Benin	0.8	0.7	-0.1
Burkina Faso	1.0	2.2	-3.1
Burundi	3.8	1.2	-0.9
Central African Republic	0.5	0.6	-2.3
Chad	-1.3	-2.2	-16.0
Ethiopia	2.0	-0.5	-0.1
Gambia, The	3.7	2.0	-2.6
Ghana	-0.3	-3.5	-5.4
Guinea	1.7	2.6	-0.4
Guinea-Bissau	—	-0.8	1.3
Kenya	2.7	1.3	-1.8
Madagascar	0.7	-2.2	-5.7
Malawi	2.9	2.9	-0.8
Mali	1.0	2.7	-1.2
Mozambique	2.9	-6.1	-5.1
Niger	-0.1	-0.4	-6.6
Rwanda	0.4	2.2	1.4
Sierra Leone	2.9	-0.4	-2.0
Somalia	-2.0	0.4	1.8
Sudan	-1.5	4.8	-2.2
Tanzania	3.1	1.6	-6.5
Togo	5.6	1.1	-7.4
Uganda	—	—	—
Zaire	1.6	-3.1	-2.7
Subtotal	1.4	-0.1	-2.8

Sub-Sahara: Other			
Angola	2.8	-10.6	-6.1
Botswana	3.1	7.4	4.8
Cameroon	1.8	2.9	2.9
Congo	1.0	1.2	6.4
Gabon	3.6	5.5	-0.4
Ivory Coast	3.9	1.2	-6.5
Lesotho	2.8	7.6	-0.8
Liberia	2.7	-1.2	-4.9
Mauritania	4.4	-1.0	-0.8
Mauritius	-1.8	6.1	2.2
Nigeria	1.0	2.6	-6.5
Senegal	-0.1	-0.1	2.0
Swaziland	4.8	0.7	-1.0
Zambia	2.4	-2.1	-2.9
Zimbabwe	0.7	-1.9	-2.0
Subtotal	1.4	1.3	-4.7
Total Sub-Saharan Africa	1.4	0.4	-3.6
Other Africa			
Algeria	3.3	4.2	2.1
Egypt	2.6	4.9	3.8
Libya	19.5	-0.2	-9.8
Morocco	2.0	3.3	0.3
Subtotal	3.1	4.2	2.0
TOTAL AFRICA	1.8	1.2	-2.4

Source: World Bank data.

Africa: Growth Rates of Per Capita Food Production and Levels of Food Imports

Country	Growth of Per Capita Food Production (%)			Levels of Food Imports (millions of US\$)			
	1961-70	1971-79	1980-84	1961	1970	1980	1985
Sub-Sahara: Low Income							
Benin	0.2	0.3	0.5	6.4	10.8	95.6	99.1
Burkina Faso	1.9	0.0	-2.1	8.8	11.3	71.8	74.5
Burundi	-0.3	0.0	-3.0	1.2	3.9	29.6	23.6
Central African Republic	0.0	0.0	-1.2	4.7	8.2	22.9	26.4
Chad	-1.9	-0.1	-4.2	5.9	12.6	5.4	—
Ethiopia	2.4	-1.6	-3.9	7.9	16.8	105.9	158.4
Gambia, The	0.02	-5.5	2.7	3.0	5.6	37.5	32.2
Ghana	0.8	-3.5	-0.8	61.4	77.2	131.6	214.7
Guinea	0.5	-1.7	1.2	6.1	9.8	75.0	—
Guinea-Bissau	-1.8	0.1	7.1	2.3	8.1	12.2	—
Kenya	0.1	-1.6	-2.0	40.6	49.7	213.5	152.9
Madagascar	1.5	-0.5	-0.5	17.4	21.2	76.0	80.6
Malawi	0.1	-1.3	-0.7	5.3	16.9	31.8	21.3
Mali	-0.3	-0.8	-1.6	8.3	17.2	70.0	81.8
Mozambique	0.9	-3.6	-3.9	21.2	37.3	114.0	84.0
Niger	-1.7	0.0	-5.7	3.0	8.9	82.0	44.6
Rwanda	2.6	0.4	-1.2	0.3	4.1	43.7	39.7
Sierra Leone	1.2	-1.9	-2.7	15.8	30.3	89.8	75.8
Somalia	0.5	-4.6	-4.1	12.4	16.4	147.3	163.6
Sudan	2.2	0.4	-3.6	41.4	65.3	390.0	202.6
Tanzania	2.6	-0.7	-3.4	31.0	32.4	164.8	100.7
Togo	5.8	-1.3	-3.2	6.4	13.4	86.0	125.1
Uganda	0.7	-1.2	0.7	14.6	21.3	45.0	17.6
Zaire	1.3	-1.5	0.6	27.4	63.4	165.5	146.8
Subtotal	1.3	-1.3	-2.1	352.7	562.1	2,307.0	1,966.0

Sub-Sahara: Other							
Angola	1.0	-2.2	-2.2	25.4	55.7	267.6	211.1
Botswana	0.6	-5.3	0.7	3.3	18.9	93.1	91.9
Cameroon	1.4	-0.5	-2.1	13.6	31.1	130.9	151.9
Congo	0.7	-1.1	-1.7	9.2	10.4	68.2	64.0
Gabon	2.6	-0.4	0.03	5.3	11.8	108.9	132.5
Ivory Coast	4.8	0.4	-1.5	37.8	82.2	486.5	422.2
Lesotho	-1.1	-2.1	-3.8	7.9	11.8	110.5	59.2
Liberia	0.6	-0.5	-1.9	13.8	25.4	103.8	113.3
Mauritania	-0.5	-1.9	-3.4	9.3	13.1	89.6	86.9
Mauritius	-1.7	0.8	1.7	21.4	26.2	161.5	137.6
Nigeria	0.2	-0.7	-1.6	90.1	127.2	2,085.4	1,523.9
Senegal	-1.9	-4.4	2.9	57.9	71.1	254.9	250.4
Swaziland	6.1	-1.1	0.7	5.2	9.9	32.2	—
Zambia	-0.2	-1.9	-2.4	19.7	47.9	144.8	67.6
Zimbabwe	2.3	-2.8	-7.9	12.2	10.8	61.9	40.4
Subtotal	0.6	-1.1	-1.8	<u>332.0</u>	<u>553.5</u>	<u>4,199.8</u>	<u>3,352.8</u>
Total Sub-Saharan Africa	1.0	-1.2	-2.0	<u>684.7</u>	<u>1,115.6</u>	<u>6,506.8</u>	<u>5,318.8</u>
Other Africa							
Algeria	-0.1	-3.1	-3.1	260.4	172.6	2,262.4	1,999.8
Egypt	1.6	-1.3	-0.6	187.5	214.0	2,381.0	3,934.7
Libya	-0.3	8.7	-2.0	23.7	123.4	1,290.5	—
Morocco	-0.1	-2.2	-2.9	132.7	167.8	931.5	700.1
Tunisia	0.5	-0.7	-2.6	63.1	91.9	516.4	494.9
Subtotal	0.8	-1.5	-1.8	<u>667.3</u>	<u>769.8</u>	<u>7,381.9</u>	<u>7,129.5</u>
TOTAL AFRICA	0.9	-1.3	-1.9	<u>1,352.0</u>	<u>1,885.4</u>	<u>13,888.6</u>	<u>12,448.4</u>

Sources: World Bank data and FAO.

Africa: External Debt and Debt Service
(public and publicly guaranteed debt, amounts in millions of US\$)

ANNEX IV

Country	Debt Outstanding and Disbursed (as of 12/31/83)	Debt Outstanding and Disbursed as % of GNP	Debt Outstanding and Disbursed as % of Exports of Goods and Nonfactor Services	Amortization				
				1978	1980	1982	1984	1986
Sub-Sahara: Low Income								
Benin	614.8	59.2	301.5	3.6	5.2	8.4	56.3	73.0
Burkina Faso	398.4	37.6	242.9	4.5	10.6	9.1	25.2	28.6
Burundi	289.0	22.6	288.4	3.4	4.2	3.4	17.6	22.5
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Gambia, The	192.0	97.5	290.9	2.4	0.3	11.3	10.4	20.4
Ghana	1,375.3	6.4	127.3	47.4	77.7	43.1	57.7	85.5
Guinea	1,227.5	69.9	220.3	56.2	73.3	54.8	93.7	132.0
Guinea-Bissau	140.6	63.0	969.7	0.8	2.2	2.4	15.1	10.5
Kenya	2,800.6	50.6	192.3	83.2	127.0	197.4	262.8	286.3
Madagascar	1,629.1	57.1	430.3	15.5	34.7	29.4	225.1	196.1
Malawi	820.7	63.1	327.9	23.4	34.2	43.6	71.2	75.3
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Niger	661.5	51.1	222.1	5.5	22.9	66.6	27.8	64.3
Rwanda	219.7	13.9	136.8	1.0	0.6	3.3	3.9	8.6
Sierra Leone	427.6	41.1	328.9	31.8	45.6	9.6	36.1	41.2
Somalia	1,260.6	139.9	933.8	3.5	7.0	10.0	100.5	122.2
Sudan	6,288.8	90.4	793.2	81.9	95.6	132.3	461.2	606.9
Tanzania	1,870.3	42.6	336.1	55.7	52.4	32.3	162.5	118.6
Togo	844.6	119.5	376.4	46.0	33.2	15.0	93.4	87.2
Uganda	977.1	16.2	286.8	23.3	32.8	56.3	105.7	144.1
Zaire	4,532.1	103.1	276.3	60.5	249.3	87.1	206.6	453.2
Subtotal	29,204.2	40.7	304.9	581.1	946.3	857.6	2,207.7	2,803.9

Sub-Saharan: Other

Angola	—	—	—	—	—	—	—	—
Botswana	230.2	27.2	42.9	3.6	6.0	3.7	21.4	16.6
Cameroon	1,882.8	29.4	87.6	64.9	96.4	146.3	178.7	204.5
Congo	1,486.8	76.1	129.0	18.9	65.1	110.5	213.4	237.6
Gabon	730.8	27.2	32.9	201.9	285.7	193.2	189.6	140.9
Ivory Coast	5,386.3	88.0	222.2	252.5	521.0	489.0	680.9	791.3
Lesotho	145.2	23.0	285.8	0.7	3.4	4.5	12.3	8.8
Liberia	904.7	93.3	206.5	13.4	18.7	19.0	52.6	134.2
Mauritania	1,212.3	177.5	329.5	16.6	25.8	17.5	62.4	144.8
Mauritius	504.3	44.0	99.1	3.3	14.7	28.8	76.6	74.2
Nigeria	11,757.1	17.2	109.1	54.6	101.8	657.5	2,249.4	3,161.9
Senegal	1,692.6	69.2	232.3	71.9	125.7	23.9	109.6	183.4
Swaziland	193.3	32.0	46.5	1.7	5.1	10.2	11.5	14.3
	8,481.6	687.8	200.6	165.6	643.3	675.1	235.8	688.7
Subtotal	<u>31,127.3</u>	<u>30.7</u>	<u>128.8</u>	<u>873.7</u>	<u>1,546.0</u>	<u>1,945.0</u>	<u>4,426.6</u>	<u>5,800.9</u>
Total Sub-Saharan Africa	<u>60,331.5</u>	<u>34.8</u>	<u>178.7</u>	<u>1,454.8</u>	<u>2,492.3</u>	<u>2,802.6</u>	<u>6,634.3</u>	<u>8,604.8</u>
Other Africa								
Algeria	12,915.6	28.0	99.4	894.3	2,453.4	2,892.9	3,831.1	2,676.3
Egypt	15,582.4	37.8	138.0	869.8	1,207.9	1,535.5	1,884.1	1,309.0
Libya	—	—	—	—	—	—	—	—
Morocco	10,365.4	77.2	346.2	295.6	666.8	788.4	634.1	2,056.7
Tunisia	3,427.1	42.4	119.7	116.4	214.9	289.7	420.6	390.9
Subtotal	<u>42,290.5</u>	<u>38.8</u>	<u>140.3</u>	<u>2,176.1</u>	<u>4,543.0</u>	<u>5,506.5</u>	<u>6,769.9</u>	<u>6,432.9</u>
TOTAL AFRICA	<u>102,622.0</u>	<u>36.4</u>	<u>160.6</u>	<u>3,630.9</u>	<u>7,035.3</u>	<u>8,309.1</u>	<u>13,404.2</u>	<u>15,037.7</u>

Note: No debt data are available for Mozambique, Angola, and Libya.
Sources: World Bank data and International Monetary Fund.

ANNEX V

Africa: Creditors and Amortization Recipients
(public and publicly guaranteed debt, amounts in millions of US\$)

Country Group	Debt Outstanding and Disbursed (as of 12/31/83)						Amortization for 1983					
	IMF	World Bank Group	Bilateral	Commercial	Other Multilateral	Total	IMF	World Bank Group	Bilateral	Commercial	Other Multilateral	Total
Sub-Sahara: Low Income	2,962.9	4,790.2	13,150.2	5,274.7	3,026.2	29,204.2	203.0	70.0	253.2	313.7	91.3	931.2
Sub-Sahara: Other	<u>2,110.5</u>	<u>3,177.5</u>	<u>6,910.1</u>	<u>17,141.6</u>	<u>1,787.6</u>	<u>31,127.3</u>	<u>172.4</u>	<u>119.8</u>	<u>202.6</u>	<u>2,042.8</u>	<u>77.0</u>	<u>2,614.6</u>
Subtotal												
Sub-Saharan Africa	<u>5,073.4</u>	<u>7,967.7</u>	<u>20,060.3</u>	<u>22,416.3</u>	<u>4,813.8</u>	<u>60,331.5</u>	<u>375.4</u>	<u>189.8</u>	<u>455.8</u>	<u>2,356.5</u>	<u>168.3</u>	<u>3,545.8</u>
Other Africa	<u>971.7</u>	<u>3,054.8</u>	<u>18,284.0</u>	<u>11,091.8</u>	<u>8,888.2</u>	<u>42,290.5</u>	<u>37.8</u>	<u>163.2</u>	<u>880.5</u>	<u>5,367.5</u>	<u>307.9</u>	<u>6,756.9</u>
TOTAL AFRICA	<u>6,045.1</u>	<u>11,022.5</u>	<u>38,344.3</u>	<u>33,508.1</u>	<u>13,702.0</u>	<u>102,622.0</u>	<u>413.2</u>	<u>353.0</u>	<u>1,336.3</u>	<u>7,724.0</u>	<u>476.2</u>	<u>10,302.7</u>

Note: Data exclude commercial nonguaranteed loans.
Source: World Bank data.

Africa: Current Account Balances

Country	Amount (annual average in millions of US\$)			As % of GDP		
	1970-79	1980-84	1985	1970-79	1980-84	1985
	Sub-Sahara: Low Income					
Benin	-83.1	-158.1	-81.7	-15.3	-15.2	-8.4
Burkina Faso	-116.9	-194.0	-173.6	-16.9	-17.5	-16.1
Burundi	—	-158.7	-164.1	0.0	-15.3	-12.5
Central African Republic	-52.2	-110.3	-94.9	-13.8	-15.9	-13.2
Chad	—	—	—	—	—	—
Ethiopia	-61.3	-329.0	-789.9	-2.0	-7.3	-18.2
Gambia, The	-15.2	-74.1	-32.5	-9.5	-35.1	-18.8
Ghana	-55.1	-290.8	-490.0	-1.1	-1.7	-10.1
Guinea	—	—	—	—	—	—
Guinea-Bissau	—	—	—	—	—	—
Kenya	-268.3	-595.4	-369.6	-7.7	-9.1	-6.3
Madagascar	-133.7	-517.6	-267.1	-7.2	-17.5	-8.8
Malawi	-89.8	-149.6	-69.0	-13.5	-11.6	-4.9
Mali	-102.8	-214.5	-185.5	-16.3	-19.8	-18.4
Mozambique	—	—	—	—	—	—
Niger	-161.2	-439.9	-215.5	-16.9	-26.7	-17.9
Sudan	-152.1	-475.5	-620.0	-3.4	-5.7	-8.7
Uganda	-14.7	-126.1	-136.0	-0.6	-3.9	-3.6
Zaire	-459.8	-338.9	-322.0	-13.9	-6.8	-6.4
Subtotal	-2,305.4	-5,435.4	-5,233.2	-6.7	-7.9	-10.3

Sub-Sahara: Other

Angola	—	—	—	—	—	—
Botswana	-95.9	-273.1	-69.5	-36.7	-32.2	-6.8
Cameroun	111.6	227.0	81.4	4.5	5.2	1.1
Congo	100.1	337.0	277.0	27.0	17.0	13.3
Gabon	45.3	222.5	-9.2	0.8	6.3	-0.3
Ivory Coast	-394.7	-1,150.2	-219.2	-8.3	-13.6	-3.2
Lesotho	-30.8	-99.5	-70.3	-16.3	-27.8	-18.4
Liberia	-79.1	-160.6	-179.0	-9.8	-14.7	-15.5
Mauritania	-121.6	-297.8	-245.0	-23.8	-40.1	-34.7
Mali	34.0	69.7	22.1	3.1	7.3	1.7
Mozambique	100.0	200.0	100.0	5.0	10.0	5.0
Zambia	-163.8	-561.4	-311.9	-7.1	-15.5	-9.2
Zimbabwe	-45.9	-501.7	-172.5	-1.5	-8.3	-2.9
Subtotal	<u>-1,349.9</u>	<u>-6,917.5</u>	<u>-2,490.3</u>	-2.6	-6.3	-2.4
Total Sub-Saharan Africa	<u>-3,655.3</u>	<u>-12,352.9</u>	<u>-7,723.5</u>	-4.1	-6.8	-5.0
Other Africa						
Algeria	-1,049.3	10.6	1,178.1	-5.8	0.04	2.1
Egypt	-1,104.7	-1,114.9	-4,122.5	-8.2	-3.6	-8.0
Libya	1,537.4	-99.6	—	12.1	-0.8	—
Morocco	-677.2	-1,516.7	-738.0	-6.1	-10.4	-5.6
Tunisia	-240.7	-673.5	-719.3	-5.3	-8.2	-8.3
Subtotal	<u>-1,534.5</u>	<u>-3,394.1</u>	<u>-4,401.6</u>	-2.9	-2.5	-3.4
TOTAL AFRICA	<u>-5,189.8</u>	<u>-15,747.0</u>	<u>-12,125.1</u>	-3.8	-5.0	-4.3

Source: World Bank data.

Sub-Saharan Africa: Net Transfers of External Finance^a
(millions of US\$)

ANNEX VII

<u>Country Group</u>	<u>1978</u>	<u>1980</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Sub-Sahara: Low Income					
International Monetary Fund	- 117	378	492	779	164
World Bank Group	297	376	552	494	553
Other Multilateral Loans	460	704	463	405	183
Bilateral Grants and Loans	2,982	4,758	3,970	4,243	3,251
Commercial	905	854	424	- 337	- 468
Total	<u>4,527</u>	<u>7,070</u>	<u>5,901</u>	<u>5,584</u>	<u>3,683</u>
Sub-Sahara: Other					
International Monetary Fund	168	85	87	358	- 38
World Bank Group	139	97	335	322	453
Other Multilateral Loans	139	177	251	140	150
Bilateral Grants and Loans	1,179	2,018	1,915	2,176	1,906
Commercial	2,401	1,806	2,757	2,012	- 2,603
Total	<u>4,026</u>	<u>4,183</u>	<u>5,344</u>	<u>5,008</u>	<u>- 132</u>
Total Sub-Sahara					
International Monetary Fund	51	463	579	1,137	126
World Bank Group	436	473	887	816	1,006
Other Multilateral Loans	599	881	714	545	333
Bilateral Grants and Loans	4,161	6,776	5,885	6,419	5,157
Commercial	3,306	2,660	3,181	1,675	- 3,071
Total	<u>8,553</u>	<u>11,253</u>	<u>11,246</u>	<u>10,591</u>	<u>3,551</u>

a Net transfers are based on official grants, medium- and long-term public and publicly guaranteed loans, and on medium- and long-term private nonguaranteed loans.

Sources: World Bank, *World Debt Tables 1984-85*, and IMF, *International Financial Statistics*, various issues.

Africa: Population, Actual and Projected

ANNEX VIII

Country	Population (millions)						Total Fertility Rate 1983	NRR = 1 ^a
	1950	1980	2000	2025	2050	2100		
Sub-Sahara: Low Income								
Benin	1.6	3.6	6.5	11.6	16.0	19.8	6.5	2035
Burkina Faso	3.4	6.2	9.2	16.2	23.2	30.0	6.5	2040
Burundi	2.5	4.1	7.4	13.2	18.4	23.0	6.5	2035
Central African Republic	1.4	2.3	4.0	6.9	9.4	11.7	5.5	2035
Chad	2.7	4.5	7.3	12.1	16.6	21.1	5.5	2040
Ethiopia	18.0	37.7	63.7	105.8	142.0	173.3	5.5	2035
Gambia, The	0.3	0.7	1.1	1.8	2.4	3.0	6.5	2040
Ghana	4.4	11.5	23.1	39.9	53.4	62.2	7.0	2025
Guinea	3.4	5.5	8.3	13.2	17.7	22.8	6.0	2045
Guinea-Bissau	0.5	0.8	1.2	2.0	2.6	3.4	6.0	2045
Kenya	5.8	16.6	36.5	69.3	96.6	116.4	8.0	2030
Madagascar	4.4	8.7	16.2	29.8	41.9	52.2	6.5	2035
Malawi	2.9	6.0	11.4	20.6	28.7	36.2	7.6	2040
Mali	3.3	6.7	11.2	19.8	27.9	34.9	6.5	2035
Mozambique	6.5	12.1	21.7	38.7	53.7	67.0	6.5	2035
Niger	2.9	5.5	10.5	20.1	29.2	38.1	7.0	2040
Rwanda	2.1	5.1	10.2	20.1	29.5	38.5	8.0	2040
Sierra Leone	2.1	3.4	5.4	8.9	12.2	15.9	6.5	2045
Somalia	2.1	4.7	8.5	15.8	22.7	29.5	6.8	2040
Sudan	9.2	18.9	33.4	57.8	79.1	97.5	6.6	2035
Tanzania	7.9	18.8	36.9	68.5	96.4	119.6	7.0	2035
Togo	1.3	2.6	4.9	8.7	12.1	14.9	6.5	2035
Uganda	4.8	12.6	24.6	45.6	64.1	79.5	7.0	2035
Zaire	14.2	27.1	49.9	86.0	116.4	138.9	6.3	2030
Subtotal	107.7	225.7	413.1	732.4	1,012.2	1,249.4	6.6	2040

Sub-Sahara: Other								
Angola	4.1	7.6	13.2	23.2	32.2	41.4	6.5	2040
Botswana	0.4	0.9	1.8	2.9	3.8	4.3	6.5	2020
Cameroon	4.6	8.7	16.6	30.2	41.6	50.3	6.5	2030
Congo	0.8	1.6	3.4	5.8	7.8	9.1	6.0	2020
Gabon	0.7	0.8	1.2	2.1	2.9	3.7	4.5	2035
Ivory Coast	2.8	8.4	17.3	29.2	38.4	45.4	6.6	2030
Lesotho	0.7	1.3	2.2	3.7	4.9	5.8	5.8	2030
Liberia	0.9	1.9	3.5	6.1	8.5	10.5	6.9	2035
Mauritania	0.8	1.5	2.6	4.5	6.3	7.9	6.0	2035
Mauritius	0.5	1.0	1.4	1.7	1.8	1.9	2.8	2010
Nigeria	40.6	84.7	162.7	295.1	411.5	508.8	6.9	2035
Senegal	2.7	5.7	10.1	17.2	23.3	28.7	6.7	2035
Swaziland	0.3	0.6	1.2	2.1	2.9	3.4	7.0	2030
Zambia	2.4	5.6	11.0	19.6	26.8	32.1	6.8	2030
Zimbabwe	2.4	7.0	14.3	24.7	33.0	38.3	7.0	2025
Subtotal	<u>64.7</u>	<u>137.3</u>	<u>262.5</u>	<u>468.1</u>	<u>645.7</u>	<u>791.6</u>	6.8	2035
Total Sub-Saharan Africa	<u>172.4</u>	<u>363.0</u>	<u>675.6</u>	<u>1,200.5</u>	<u>1,657.9</u>	<u>2,041.0</u>	6.7	2040
Other Africa								
Algeria	8.8	18.7	37.7	65.9	88.7	104.0	7.0	2025
Egypt	20.3	42.3	62.8	85.8	101.7	110.5	4.6	2015
Libya	1.0	3.0	6.7	11.6	15.4	18.1	7.2	2025
Morocco	9.0	19.2	31.2	47.3	59.3	67.9	5.8	2025
Tunisia	3.5	6.4	10.0	14.1	16.9	18.4	4.9	2015
Subtotal	<u>42.6</u>	<u>89.6</u>	<u>148.4</u>	<u>224.7</u>	<u>282.0</u>	<u>318.9</u>	5.5	2025
TOTAL AFRICA	<u>215.0</u>	<u>452.6</u>	<u>824.0</u>	<u>1,425.2</u>	<u>1,939.9</u>	<u>2,359.9</u>	6.5	2040

² NRR = 1 shows the year in which the net reproduction rate is projected to equal 1.

Source: World Bank data.