The World Bank

Toward Sustained Development in Sub-Saharan Africa

A Joint Program of Action

Toward
Sustained Development
in
Sub-Saharan Africa

AFRICA

Atlantic Ocean

Mediterranean Sea

Persian Gulf

MOROCCO
TUNISIA
ALGERIA
LIBYA
ARAB REPUBLIC OF EGYPT

MAURITANIA
MALI
NIGER
CHAD
SUDAN

THE GAMBIA
SENEGAL
GUINEA BISSAU
GUINEA
SIERRA LEONE
LIBERIA
IVORY COAST
BURKINA FASO
GHANA
NIGERIA
CAMEROON
CENTRAL AFRICAN REP.
ETHIOPIA
DJIBOUTI
SOMALIA

TOGO
BENIN
EQ. GUINEA
SAO TOME AND PRINCIPE

GABON
UGANDA
KENYA
RWANDA
BURUNDI
ZAIRE

PEOPLE'S REP. OF THE CONGO

TANZANIA

SEYCHELLES

ANGOLA
ZAMBIA
MALAWI
COMOROS

Red Sea
Nile
Gulf of Aden
Zaire
Victoria
Zambezi

Indian Ocean

Atlantic Ocean

NAMIBIA
BOTSWANA
ZIMBABWE
MOZAMBIQUE
MADAGASCAR

SWAZILAND
SOUTH AFRICA
LESOTHO

Rivers
International Boundaries

KILOMETERS 0   500   1000   1500
MILES 0   250   500   750   1000

IBRD 18514

Toward

Sustained Development

in

Sub-Saharan Africa

A Joint Program of Action

The report draws heavily on the ideas of many col-
leagues inside and outside the World Bank and the
views expressed by scholars and officials in Africa and
in donor countries. The judgments expressed do not
necessarily reflect the views of the Bank's board of
executive directors or of the governments that
they represent.

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affiliation.

Foreword

Sub-Saharan Africa today faces acute economic difficulties. The long-term outlook appears bleak, but this need not be the case. With sufficient will and determination the nations of sub-Saharan Africa and the international community can act to set the base for a new era: a time of development progress when the quality of life of tens of millions of Africans can be significantly improved.

This report is one of hope and pragmatism. This Action Program leaves no doubt that much of the efforts to secure improvements will have to be shouldered by the peoples of sub-Saharan Africa, with the governments of these nations having to make difficult, yet vitally necessary policy changes.
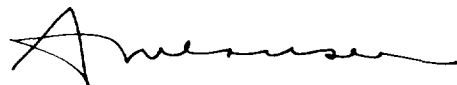
But progress will be achieved only if the international community provides strong and consistent support to the reform efforts of the sub-Saharan nations. There needs to be better coordination among the international institutions involved in Africa's development and by the aid agencies of the donor nations. There needs to be increased international support for sub-Saharan development by the provision of both expertise and concessional funds.

The World Bank will seek to work still more closely and forcefully with all parties to make this program of action a reality. The Bank is prepared to take a wide array of specific actions, ranging from increases in the resources it deploys to improve international aid coordination, to expanding its offices in Africa, to strengthening its support for agricultural research. In addition, the Bank will make every effort to facilitate the implementation of this program of action by governments and multilateral organizations.

Further, having increased Africa's share in the resources of the International Development Association in recent years, we shall continue to give Africa the highest priority in the allocation of scarce IDA funds. We shall seek, as far as is possible, to expand lending to sub-Saharan Africa by both the International Bank for Reconstruction and Development and the International Finance Corporation.

In preparing this report we have consulted widely, and we are convinced that the actions outlined here can yield significant results. It is an agenda for action and urgent action is now required. We are keen to join with the United Nations and its agencies, with the European Communities, with the African Development Bank, with the Economic Commission for Africa, and with other international and national organizations to assist the countries in sub-Saharan Africa in their development efforts. The tide can be turned on sub-Sahara's fortunes, sustained development can be secured, and a brighter future can be realized.

A. W. CLAUSEN
President, The World Bank

August 1984

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Definitions

The thirty-nine sub-Saharan African developing countries are arranged in ascending order of per capita gross national product as follows:

Low-income economies are those with 1982 per capita gross national product (GNP) of less than $410:

- *Semiarid economies* are Chad, Mali, Burkina Faso, Somalia, Niger, and The Gambia
- *Other economies* are Ethiopia, Guinea-Bissau, Zaire, Malawi, Uganda, Rwanda, Burundi, Tanzania, Benin, Central African Republic, Guinea, Madagascar, Togo, Ghana, Kenya, Sierra Leone, and Mozambique.

Middle-income economies are those with 1982 per capita GNP of $410 or more:

- *Oil importers* are Sudan, Mauritania, Liberia, Senegal, Lesotho, Zambia, Zimbabwe, Botswana, Swaziland, Ivory Coast, and Mauritius
- *Oil exporters* are Nigeria, Cameroon, Congo, Gabon, and Angola.

Billion is 1,000 million.

Tons are metric tons (t), equal to 1,000 kilograms (kg), or 2,204.6 pounds.

Growth rates are in real terms unless otherwise stated.

Dollars are U.S. dollars unless otherwise stated.

Unless otherwise specified, all tables and figures are based on World Bank data.

Acronyms and Initials

ADB	African Development Bank
CGIAR	Consultative Group on International Agricultural Research
Caisstab	Agricultural Price Stabilization Fund
ECA	Economic Commission for Africa
EC	European Communities
FAO	Food and Agriculture Organization
GDP	Gross domestic product
GNP	Gross national product
IBRD	International Bank for Reconstruction and Development
ICIPE	International Centre of Insect Physiology and Ecology
ICRAF	International Center for Agroforestry
IMF	International Monetary Fund
IDA	International Development Association
MSA	Most seriously affected
OAU	Organization of African Unity
ODA	Official Development Assistance
OPAM	Office des Produits Agricoles du Mali
Paris Club	Refers to ad hoc meetings of representatives of the governments of Western donors
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WFP	World Food Program

Introduction and Summary

This report, like the two that have preceded it,[1] has its origin in the widespread and growing concern about economic conditions in Africa. While this latest report reiterates the main theme of its predecessors—the need for domestic policy reforms to accelerate growth—it has several distinctive features.

- First, it places more emphasis on donor assistance strategy. While the reform of the policy and institutional framework within each African country is crucial, domestic reforms cannot be fully effective unless supported by appropriate levels and types of external assistance.
- Second, it stresses that better use of investment—both domestic and foreign—is the key issue. Making the most of investment requires not only appropriate pricing policies, but also adequate management capacity in the government, supplemented by technical assistance. In addition, it requires a more active role for nongovernmental institutions and for the private sector.
- Third, it analyzes the growing debt servicing burden of sub-Saharan countries in the context of their overall requirements for foreign exchange.
- Fourth, it draws attention to the long-term constraints on development—population growth, human resource development, technological change, and the erosion of natural resources (through deforestation and desertification, for example). Unless these long-term issues receive continuing and increased attention, whatever the short-term problems,

1. The two earlier reports prepared by the World Bank staff are *Accelerated Development in Sub-Saharan Africa: An Agenda for Action* (1981) and *Sub-Saharan Africa: Progress Report on Development Prospects and Programs* (1983).

development in Africa will continue to be frustrated, leading to what the Economic Commission for Africa (ECA) has called a political, social, and economic "nightmare" by the turn of the century.

The Present Situation and Outlook

Africa's economic and social conditions began to deteriorate in the 1970s, and continue to do so. Gross domestic product (GDP) grew at an average of 3.6 percent a year between 1970 and 1980, but has fallen every year since then. With population rising at over 3 percent a year, income per capita in 1983 is estimated to be about 4 percent below its 1970 level. Agricultural output per capita has continued to decline, so food imports have increased: they now provide about a fifth of the region's cereal requirements. Much industrial capacity stands idle, the victim of falling domestic incomes, poor investment choices, a failure to develop export opportunities, and inadequate foreign exchange for materials and spare parts. After the impressive start the newly independent African nations made in building infrastructure, education, and health services, progress is faltering and may be reversed by a shortage of funds. Many institutions are deteriorating, both in physical capacity and in their technical and financial ability to perform efficiently. Although the picture varies from country to country, even those with good records in the 1970s now face serious difficulties. In short, the economic and social transformation of Africa, begun so eagerly and effectively in the early years of independence, could be halted or even reversed.

The effects of the drought have understandably claimed the most international attention. Immediate priority has to be given to saving

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human lives through emergency relief operations. These needs and the response of donors were examined in an internal World Bank report (1984) on the 1983 drought in sub-Saharan Africa, its short-term impact, and desertification and other long-term issues. The effects of the drought are, however, only the most extreme and distressing aspects of the more pervasive economic crisis in Africa. Pressing as these current problems are, it is important to emphasize that they are not short term. They are part of a long-term unfavorable trend, best illustrated by putting the current food crisis in a longer perspective. Annual per capita grain production in the twenty-four countries most seriously affected by drought has been falling on average by 2 percent a year since 1970. Per capita production is expected to be below the trend in 1984 by almost exactly the same amount as it was above the trend in 1981. If the fifteen-year production trend continues, per capita production in 1988 will be the same as in the drought-ravaged year of 1984, even if 1988 has normal weather. Something must be done to reverse this trend.

Against this disquieting background, is it possible to look with hope toward the future? The World Bank, in its reports *Accelerated Development in Sub-Saharan Africa: An Agenda for Action* (1981) and *Sub-Saharan Africa: Progress Report on Development Prospects and Programs* (1983), has answered with an emphatic "yes." This optimism can be justified by recent experience both in Africa and elsewhere. For instance, the despair that is now focused on Africa was matched by a comparable feeling about India in the early 1960s. In recent years, India, despite its terrible poverty, has emerged from despair to hope in the eyes of the world. This change has been achieved largely through sustained improvement in the government's policies and programs, with support from donors wherever their finance, technical assistance, or advice could be useful. There are many other cases around the world of the mutually reinforcing roles of good domestic programs and appropriate external assistance.

The same combination of domestic reform and donor support can be successful in sub-Saharan Africa. The potential for rapid growth exists. Although some parts of the region are prone to drought and other natural hazards, most countries have a large agricultural potential. Some have oil or other mineral resources. The lack of edu-

cated and experienced people, which was a major barrier to development for most countries at independence, has been eased. More important, African leaders increasingly recognize the need to revise their development strategies. As the Bank's 1983 progress report noted, some countries are introducing policy and institutional reforms. However, progress remains inadequate, both in the number of countries affected and in the scale and speed with which the reforms are made. Similarly, aid donors have recognized the need to adjust their programs to support these reforms more effectively, but their response has also been inadequate. They have typically failed to coordinate their programs so as to provide the well-focused support that African governments require.

Neither the essential objectives of Africa's development nor the policy issues that must be addressed to achieve them are in dispute, even though views on timing and priorities may differ. African heads of states established the objectives in 1980 in the Lagos Plan of Action. These include human resource development, greater self-reliance (including food self-sufficiency, rapid growth of industry, and national development of mineral resources), greater economic integration, and rapid scientific and technological progress. Since 1980, many other institutions—including the ECA, the African Development Bank (ADB), the European Communities (EC), and the World Bank—have examined what needs to be done to achieve these objectives. For instance, the "Economic Report on Africa, 1984," produced jointly by the ADB and the ECA, together with the 1983 study, *ECA and Africa's Development 1983–2008*,[2] set out the major policy issues. Both reports recognize that Africa's problems are structural and therefore need to be tackled by a range of policy measures:

- Health and other programs to reduce the rate of population growth
- Changes in the structure of education and training to ensure greater relevance to the needs of African economies
- Budgetary and pricing policies (including correction for the overvaluation of exchange rates) that will switch the internal terms of trade in Africa toward agriculture

2. *ECA and Africa's Development 1983–2008: A Preliminary Perspective Study* (Addis Ababa: Economic Commission for Africa, April 1983).

- Improved financial control, including more realistic interest rates, to increase the efficiency with which investment projects are selected and implemented
- Greater emphasis on smallholders rather than large farms
- Stimulation of employment outside the public sector through incentives to the private sector, including foreign direct investment
- Stimulation of foreign exchange earning, from both traditional and nontraditional exports
- Stimulation of foreign exchange saving through efficient substitution of domestic for imported supplies to meet energy requirements, consumer demand for food and manufactures, and the needs of industry for materials and intermediate and capital goods
- More economic integration in Africa, particularly to meet food and energy requirements.

The emerging consensus on policy issues dwarfs any remaining areas of dissent. Delay in taking action, whether by African governments or donors, can no longer be justified on the grounds of major disagreements in diagnosis and prescription. Action in the main areas of agreement will be enough to ensure economic progress, and action now is a matter of urgency.

Summary: A Joint Program of Action for Sub-Saharan Africa

This report proposes a program of action that can be summarized under six main headings.

National Economic Management

Formulation of national rehabilitation and development programs by African governments.

The starting point for any program of rehabilitation and development is recognition by governments of the need for reform and the directions to take. While emergency assistance can, if necessary, be predominantly organized and financed by outside international and national agencies (for example, the World Food Program, nongovernmental organizations, and bilateral and other agencies), a special program of action for Africa to handle the deeper economic crisis can only be conceived as a series of national programs. There is no avoiding the central point that unless individual African gov-

ernments formulate and implement programs that address the constraints on the more rapid growth of their economies in the short term, the medium term, and the longer term, programs of international assistance cannot do the job.

Moreover, the way in which programs are formulated has to change considerably. Planning must be strategic, recognizing that an inflexible plan is largely irrelevant for policymaking and of little use in developing the programs now needed as a basis for action. These programs must be flexible enough to adapt to the lessons of experience and to handle unexpected developments in the availability of finance. Flexibility does not, however, imply lack of firmness in determining priorities and in ensuring that they are observed by all agencies of the government and by the donors. Firm priorities are needed, particularly for public spending. Simultaneously, governments should be improving the price incentives and the framework of institutional support in marketing and transport that are required to evoke a production response. The thrust should be toward more efficient use of resources through (a) fuller use of existing capacity in all sectors—agriculture, power, education, health, and industry (except for projects that have been costly mistakes and should be "written off"), and (b) better use of new resources for public and private investment. Moreover, the respective roles of the central government, local governments, community and cooperative groups, and the private sector need to be examined, and in many cases the balance needs to be altered if a more efficient use of resources is to be achieved.

Although more African countries recognize this need to revise their economic strategies, few appreciate the urgency and scale of action demanded by their deteriorating economies. In formulating their programs, external technical assistance can be obtained from several sources—bilateral, regional, or multilateral. But this assistance can be effective only if it works within an institutional structure designed to produce operationally relevant policies and programs. Moreover, these must clearly be supported by the country's political leaders.

Donor Programs and Aid Coordination

Consultative groups, United Nations Development Programme (UNDP) roundtables, and similar meetings should aim for more explicit and monitorable

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commitments by recipient governments and donors to implement their respective responsibilities under an agreed program of action. The implementation should be monitored by the chairman of each consultative group.

Donors must be willing to provide their assistance within the framework established by government programs and in accordance with government priorities. Much foreign aid is, of course, consistent with each country's development priorities. But in the African context of severe financial constraints and declining per capita incomes, "much" is not enough. In many African countries, the pattern of development spending has become increasingly determined by the aggregation of aid programs. This pattern has arisen directly through the financing by donors of a large proportion of capital expenditure and indirectly through the recurrent cost requirements of previous donor-financed projects. The authority of core ministries—finance and planning—is often inadequate to ensure that investments proposed by line ministries to donors are consistent with the country's long-term priorities, with the immediate resource situation, and with budgetary prospects. While governments need to establish more disciplined decisionmaking processes, donors have a responsibility for supporting them. Moreover, donors must recognize that, if they allow commercial or strategic considerations to outweigh considerations of priority, efficiency, and relevance in their assistance decisions, they weaken the ability and willingness of governments to implement reforms.

The precise way for donors to ensure that they are working within a well-articulated government program will vary from country to country. The many consultative groups, UNDP roundtables, and similar meetings are an obvious starting point. They provide the government with the opportunity to describe its problems and options. It can then present its macroeconomic, budgetary, and sector programs and the role it envisages for external assistance. However, experience suggests that even the best consultative groups and similar bodies need to be supplemented by more frequent and local meetings with a narrower and more operational focus. In some instances, sector and subsector working parties have been introduced successfully, and their use should be expanded. In all cases, success depends on the government's taking responsibility for such

meetings, working closely with a lead donor, and using whatever external technical assistance it needs.

In addition, effective aid coordination requires that more explicit and monitorable agreements be reached than have been the case in the past. Recipient governments and donors should commit themselves to certain actions: detailed sector programs; changes in incentives and other key policies; changes in investment programs and in related provisions for recurrent expenditure, matched by firm pledges of amounts of assistance; and provision of specific forms of aid, such as nonproject assistance, food aid, and debt rescheduling. In this way, consultative groups will move toward the pledging concept that the Aid Consortia for South Asian countries adopted in the 1960s, when those countries faced similar economic crises. To be effective, the implementation of agreements should be monitored by the donor organization that is chairman of the consultative group.

External Support for Reform Programs

Provision of adequate, timely, and sustained external financial assistance to programs of major economic reform.

Improving the performance of the directly productive sectors, particularly agriculture, must be central to all programs to restore Africa's economic growth. Agriculture has the potential to reverse the increasing dependence on food imports, to produce the largest increase in export earnings in the short and medium term, to improve the standards of living for the bulk of the population, to provide many of the inputs for the industrial sector and much of the demand for its output, and to strengthen the domestic income and tax base to finance the education, health, and infrastructural programs that will ease the basic constraints on African development.

In most of Africa, the potential for increasing agricultural output exists. Most African farmers are producing well below the maximum imposed by existing knowledge of new seed varieties, fertilizer and insecticide use, and farming practices. Moreover, the responsiveness of farmers (particularly smallholders), given the right motivation, is not in doubt. Poor agricultural performance has resulted from the combined impact of inadequate incentives—output prices, input costs, and the supply of incen-

tive goods and services (including education and health services)—and inefficient systems of marketing, transport, extension, and other support services. Programs to reverse the decline of agriculture will not work unless they address this whole range of constraints. There are no panaceas. Policy reform does not, in particular, simply mean "getting prices right." It includes the improvement of all the institutional support, such as marketing, transportation, and finance, needed to evoke a large supply response to improved prices.

Some African governments have recognized the need to revise their agricultural policies and programs. Compared with the 1970s, there is now, for instance, more appreciation that agricultural output will not be increased without greater incentives, especially higher prices. This development is seen in the greater willingness to adjust exchange rates, the root cause of low producer prices in most of Africa. Governments are also more willing to permit diversity in marketing and transport rather than to reserve these functions for parastatal monopolies. The importance of stimulating the role of the private sector in these service activities is increasingly being recognized. But these changes are still limited to a few countries, and even they have not gone far. In particular, attempts to switch the incentive system to favor those who earn foreign exchange (primarily producers of export crops) and those who save foreign exchange (primarily food producers) against those who spend foreign exchange—that is, attempts to devalue real effective exchange rates—have been widely negated by a failure to control inflation.

The inadequacy of policy reforms reflects both the practical constraints to generating a quick supply response (such as transport bottlenecks and shortages of inputs and incentive goods) and the inability or unwillingness of governments to make hard political decisions. Cheap food, low import prices, and overstaffed state marketing authorities all benefit some social groups, and these groups can be politically powerful. However urgently it is approached, policy reform can only be introduced step by step and will only gradually yield results in the form of increased output and an improved balance of payments. But if the opposition to reform is to be managed, governments need to show results quickly. This implies a focus on policies that can yield results quickly from existing capacity and will require an increased flow

of imported goods and services, which initially have to be financed out of increased external assistance to the country.

The external assistance needed to support major policy reforms must be both adequate and sustained. It must also be immediately available in nonproject form to buy the wide range of agricultural inputs, industrial materials, spare parts, fuel, and vehicles that are required to evoke the supply response from the economy. Too little external support, provided too late and with too many administrative barriers to its disbursement, will fail to revive economic activity sufficiently quickly to make policy reform politically sustainable.

Infrastructure

Public expenditure programs should give greater emphasis to rehabilitation and maintenance of existing infrastructure in support of policy reform rather than to investment in new capacity. Investment in new projects should be very limited. This changed emphasis should also be reflected in donor programs, which have typically preferred the financing of new infrastructure projects.

Efficient transportation, energy, telecommunications, water, and sewerage services are essential components of reform programs. In most countries, however, the supply of these services is restricted by the failure to utilize existing capacity because inadequate funds have been allocated to operation and maintenance. In some instances, rehabilitation of existing capacity is now required. Any investment in new capacity should initially be confined primarily to "debottlenecking" projects. Of course, in the longer run, when the pace of economic growth has increased, very large new infrastructure projects will be required in Africa. Over the next few years, however, governments must give priority to rehabilitation and maintenance.

Financing big infrastructure projects has represented a large part of past donor programs. These programs must be reexamined. Even ongoing projects need to be reviewed with governments to ensure that their completion at this stage of extreme shortage of resources is still desirable. The funds that can be released by a restructuring of the current investment programs are urgently needed to maintain and rehabilitate infrastructure and to help meet the direct and indirect costs of policy reform.

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Basic Constraints on Development

Formulation of low-cost, efficient, and well-targeted programs in education, health, population, agricultural research, and forestry. These programs should be determined and supported on a rising and continuous basis by donors. Specific attention should be paid to the underfunding, by both donors and governments, of critical components of recurrent spending.

The crisis management of recent years has resulted in widespread neglect of programs dealing with the long-term constraints on development. Schools are increasingly unable to teach effectively because of shortages of books and other materials; clinics are frequently without medicines; deforestation, overgrazing, and other environmental hazards are not being checked. Combining these adverse developments with the relentless growth of population creates the specter of disaster that the ECA and others fear.

Although some new investment will be required, the immediate priority is to make better use of existing resources. African governments and donors continue to prefer new projects, especially new schools and hospitals, when the greatest urgency is to provide more resources to operate and maintain (and, increasingly, rehabilitate) existing projects. These needs have always been underestimated and underfunded because many critical supplies—books, medicines, and spare parts, for example—require foreign exchange that governments can ill afford. Donors should give special priority to financing them, within the context of well-formulated sectoral programs, which would include increasing self-financing by governments.

In the medium to long run, however, new investment in these basic developmental programs needs to increase markedly. Provided sectoral policies and programs have been agreed and are adhered to, donor support should be continuous and reliable. For instance, this support should not vary according to changes in government performance in addressing macropolicy issues, unless the deterioration in these policies is so great that it becomes impossible for sectoral programs to be effectively implemented. This support should be treated as a basic component of donor programs.

Typically a lead donor should be selected to work actively with governments in preparing sectoral programs and supporting policy changes. Such an arrangement will provide all donors with the framework for negotiating with governments their basic programs of external financial assistance. Chairmen of consortia, consultative groups, and roundtables should be responsible for ensuring that this process of designing and implementing programs by governments and donors is working effectively. Initial priorities are health and population, forestry, adaptive agricultural research, and education and training. Some sectoral problems may require a regional approach, such as programs to tackle desertification and to undertake basic agricultural research. It must be accepted that both national and regional programs will always be based on less than perfect knowledge. This is an unavoidable reality which should not delay their formulation and implementation. The urgency of Africa's needs demands action on the basis of the best available knowledge. Monitoring the implementation of the early stages of action and undertaking further studies should then be used to adapt the programs and formulate their subsequent stages.

Not only should both governments and donors provide dependable support for these basic programs, but they should also increase assistance to them over time. The need to develop Africa's human resources is enormous. Even if the performance of agriculture and industry is rapidly improved and thereby generates additional revenues, and even if unit costs of human resource development programs are markedly reduced, total costs of priority actions in these sectors will far exceed available domestic resources. Measures to slow population growth must be part of the basic program. Although reduction in fertility will not by itself ease Africa's economic crisis in this century, it is critical to any longer-term goal of raising real incomes. The education of women and the improvement of health facilities are key components of population programs.

It is frequently asserted that socioeconomic programs cannot quickly absorb more money. Of course, institutional weaknesses may prevent the efficient use of extra resources; these weaknesses need to be addressed through, for instance, wider use of decentralized agencies, nongovernmental organizations, and the private sector, as well as through improved staffing, training, and motivation of existing institutions. However, absorptive capacity frequently seems a constraint only because of the limited type of support that donors want to

give. If aid is increased in support of sectoral programs, much more can usually be used to good effect.

External Finance

The prospective decline in net capital flows to sub-Saharan Africa from $11 billion to $5 billion is inconsistent with the program of action for tackling the crisis in Africa, with the need for reorientation of policies, and with the resumption of sustained development. At a minimum, net capital flows should be maintained at their 1980-82 level in real terms, if there is to be any prospect of adequately supporting those countries undertaking the necessary policy reforms and restructuring their development and investment programs. For bilateral donors, this implies a combination of rescheduling of amortization payments and an increase in gross disbursements. For multilateral donors, where rescheduling is not an option, gross disbursements will have to increase. About $2 billion additional bilateral and multilateral disbursements each year will be required over the existing commitment authority of donor agencies. In view of the inflexibilities in donor programs and the uncertainties regarding the number of countries implementing reform programs and their specific needs, the additional funding should be placed in a special assistance facility to be used only when required to support reform programs.

This report emphasizes that additional external assistance is not, by itself, the solution for Africa's problems: getting better value from both internal and external resources has to be the primary focus of attention. This strategy poses political challenges to both African governments and donors. Unless major changes in African programs and policies are introduced, no amount of external assistance can generate rising levels of per capita income. On the other hand, these changes in policies and programs are unlikely to be effectively sustained unless matched by parallel reforms in donor policies. The specter of disaster that confronts Africa and the international community demands that donors provide their assistance solely in ways that support the needs of African development. Donor preferences emerging from their own commercial interests or from a view that is no longer relevant to development priorities in Africa—for example, a preference for large infrastructure and industrial projects—must be modified.

Donors must be particularly willing to make available adequate financial assistance in a

timely and suitable form to support those sub-Saharan African countries that are implementing major programs of policy reform. If these programs are to be effective, the import capacity of the countries must be quickly increased. African countries are overwhelmingly dependent on primary product exports for their foreign exchange earnings. An increase in imports is unlikely to be possible from improved export earnings from these commodities in the short run, although in the medium to longer run that has to be the objective. Moreover, these countries have to meet rising interest charges on their external debt, as well as large International Monetary Fund (IMF) charges and repurchases. There is no escaping the fact that, if these countries are to be effectively assisted in reversing the downward trend in per capita incomes, they will require large increases in net capital inflows. Yet their present prospect is for exactly the reverse (see table I.1).

For sub-Saharan countries, total amortization payments will rise from an average annual amount of $2.3 billion in 1980-82 to about $8 billion in 1985-87. In addition, IMF repurchase obligations (amounting to about $1 billion annually) will come due during the next few years. With gross capital flows from bilateral and multilateral sources stagnating at around $9 billion annually and the commercial flows declining,

Table I.1. *Sub-Saharan Africa: External Capital Flows, 1980-82 and 1985-87*
(current US$ billions)

	1980-82 (estimates) annual average	1985-87 (projections—in the absence of special action) annual average
Total		
Gross capital flows	13.1	13
Amortization	2.3	8
Net capital flows	10.8	5
Of which:		
Private		
Gross capital flows	4.2	4
Amortization	1.7	5
Net capital flows	2.5	-1
Bilateral and multilateral grants and loans		
Gross capital flows	8.9	9
Amortization	0.6	3
Net capital flows	8.3	6

Note: All figures exclude use of IMF resources and repurchases. Net use of IMF resources was, on average, $0.8 billion annually during 1980-82. Repurchases during 1985-87 are estimated to be about $1 billion annually.

present prospects are that without special action annual net capital flows to sub-Saharan Africa will decline from about $11 billion to about $5 billion over the period 1985-87.

These are, of course, alarming figures for sub-Saharan Africa as a whole. If the turnaround in African economic prospects is to be addressed as a genuinely international effort, prospects of this kind for those countries that are actively adopting domestic reform programs cannot be acceptable to the donor community. Some alleviation in the situation for these countries can come both from debt rescheduling and from reprogramming of existing aid flows. However, experience suggests that donors do not have the flexibility in their programs to generate the external support that these countries require. In any case, if this implied a reduction in the financing of basic programs in sub-Saharan Africa, it would not be desirable. There are already several countries in which domestic reform programs are threatened by inadequate external financial support. Their capacity to import needs to be markedly increased if these programs are to be effective and sustained.

Debt rescheduling is not an option for multilateral donors. If bilateral donors can be expected to roll over about half the amortization due to them, then additional annual gross capital flows from both bilateral and multilateral sources will need to be increased during the period 1985-87 by about $3.5 billion a year above their 1980-82 average annual level if the prospective fall in net capital flows to sub-Saharan Africa in real terms is to be averted. About $1.5 billion of this increase is already in prospect under present commitment authority of donor agencies.

The extent to which additional commitment authority will be required by donor agencies over the next three years will depend on what happens to private flows of capital and on the number of African countries that implement domestic reform programs. Private net flows have declined from a peak of $3.4 billion in 1980 to $1.8 billion in 1982. Even if private net flows are to level off at $2 billion a year over the next few years, this will imply that about half of the amortization payments will have to be rolled over—otherwise gross inflows will have to be increased above their 1980-82 level, which is unlikely. For the longer run, African countries must, as recommended in the 1984 ECA/ADB economic report on Africa, take action to stimu-

late private investment. Clear statements are required from governments of the areas in which private investment, particularly foreign private investment, is considered desirable; governments must also provide an appropriate legal framework for encouraging these investments. Expeditious approval procedures and consistency in policies relating to the private sector are essential.

The need for increased bilateral and multilateral assistance will also depend on the number of countries that embark on major programs of reform and the aggregation of their specific needs. This, however, will itself depend on the likely availability of adequate external assistance. To meet this uncertainty, donors should have a contingent ability to respond to countries requiring major additional assistance to support their reform programs. A special assistance facility of this kind would give governments the confidence they require that external support will be forthcoming at an adequate and sustained level if they introduce major programs of reform. By placing the additional funds outside of the regular donor programs, the special facility would also provide flexibility, which is otherwise difficult to build into donor programs. The facility would represent additional funds to present and prospective levels of bilateral and multilateral assistance. The resources of the facility would be activated only when required to give additional support to a country's reform programs. The speed with which the funds would be drawn down would, therefore, depend on the number of countries implementing such reform programs and their specific needs.

The Political Challenge

In its perspective study, *ECA and Africa's Development 1983-2008*, the ECA uses the phrase "the willed future," which is both feasible and necessary if sub-Saharan Africa is to avoid a "nightmare" by the turn of the century. This language perfectly captures the challenge. Does the will exist, both in Africa and abroad, to turn despair into hope? The potential exists for doing so, and there is an emerging consensus on what needs to be done by governments, both in sub-Saharan Africa and outside. The political decisions to be made will not be easy, but they are now urgent.

8

1. The Deepening Crisis

No list of economic or financial statistics can convey the human misery spreading in sub-Saharan Africa. A special study by the United Nations Children's Fund (UNICEF), "The Impact of Recession on Children," has documented how children have been the victims of economic decline. In Zambia's poorer northern regions, height-for-age ratios have fallen in all age categories under fifteen years. Child mortality in sub-Saharan Africa was 50 percent higher than the average of developing countries in the 1950s; now it is almost double the average. Moreover, despite the surges in food imports and food aid, an estimated 20 percent of Africa's population still eats less than the minimum needed to sustain good health. The number of severely hungry and malnourished people is estimated to have increased from close to 80 million in 1972–74 to as many as 100 million in 1984.

The illustrative scenarios in the World Bank's *World Development Report 1984* suggest that, even with some fundamental improvements in domestic economic management, per capita incomes in sub-Saharan Africa will continue to fall during 1985–95. In the more pessimistic scenario, GDP is expected to grow at 2.8 percent a year and population at 3.5 percent, involving an annual fall in per capita GDP of 0.7 percent. On this basis, real African incomes in 1995 will be so low that between 65 and 80 percent of the people will be living below the poverty line, compared with roughly 60 percent today.

Political instability is also claiming more victims. Africa now has around 2.5 million refugees; twenty years ago there were 400,000. One in every 200 Africans is a refugee. The African continent, with less than a tenth of the world's population, has more than a quarter of the world's 10 million refugees. This number does not include economic refugees or people displaced within the borders of their own country. Many women and children are often forced through circumstance to move; some children move alone to cities and do their best to survive, untended. In every case, the poor are depending on the poor.

In many African countries people are having to do without any public services, as governments concentrate their resources and energies on sheer economic and political survival. Features of modern society to which many Africans have been exposed are withering: trucks no longer run because there are no spare parts and roads have become impassable; airplanes no longer land at night in some places because there is no electricity to light the runway. While philosophically committed to self-sustaining growth, self-reliance, and regional cooperation, Africa finds itself without the means to generate and share its resources. It is against this human and political background that the economic and financial analysis which follows in this report must be read.

Of course sub-Saharan Africa is not monolithic. It has great diversity, which must be kept in mind throughout this report in which regional generalizations are inescapable. For instance, low-income semiarid countries, (Burkina Faso, Chad, The Gambia, Mali, Mauritania, Niger, and Somalia) represent only 8 percent of the population of sub-Saharan Africa. Even including other countries with difficult natural environments—such as Burundi, Lesotho, Rwanda, and Senegal—the total population is about 39 million, only 13 percent of sub-Saharan Africa's population, and less than half that of Bangladesh alone. At the other extreme, oil exporters in Africa are middle-income countries. They have a per capita income several

times the average for low-income countries and represent about 30 percent of sub-Saharan Africa's population and about 50 percent of its GDP. Another group includes countries such as Botswana, Ivory Coast, Kenya, Malawi, Mauritius, and Swaziland, representing about 10 percent of the region's population. Over the past two decades, they have achieved significantly faster growth in per capita incomes than the low-income average but since the late 1970s have run into problems. The rest (about half) of sub-Saharan Africa's people live in countries such as Benin, Ghana, Guinea, Liberia, Sierra Leone, Sudan, Tanzania, Togo, Uganda, Zaire, and Zambia. These countries are relatively well endowed with natural resources but have had low or negative per capita growth since 1970. It is important to keep such variety in mind while discussing past developments and future prospects, as well as external assistance requirements.

Accelerated Decline in Per Capita Output

Since the recession of 1980-82, the world economy has started to recover. In 1983, gross national product (GNP) in industrial countries rose 2.3 percent, after a fall of 0.1 percent in 1982; in developing countries, growth picked up from 1.1 to 1.3 percent. World trade, which had declined by 2.5 percent in 1982, grew by 2 percent in 1983; dollar prices of nonoil primary commodities, which had been falling since 1981, climbed by 7 percent in 1983.

However, while sub-Saharan countries' growth suffered along with others during 1980-82, the recent recovery seems largely to have bypassed sub-Saharan Africa, even in those countries with the best earlier records. For oil importers, per capita output fell by 0.9 percent in 1981 and 1.7 percent in 1982, but there was no recovery in 1983—per capita output fell by a further 2 percent. Neither did oil exporters benefit from the 1983 recovery. Their per capita output fell about 11 percent in the two years 1981-82 (see table 1.1) and a further 7 percent in 1983. For sub-Saharan Africa as a whole, per capita output in 1983 was 11 percent below the 1980 level, more than offsetting all of the very modest gains of the 1970s.

Agriculture fared somewhat better, until 1982.

Table 1.1. *Growth of Per Capita GDP in Sub-Saharan Africa, 1960-83*
(annual percentage change)

Country group	1960-70	1970-80	1981	1982	1983[a]
Low-income countries	1.5	-0.9	-1.9	-2.5	-0.3
Low-income semiarid	-0.1	0.6	-0.9	-2.5	-0.7
Low-income others	1.8	-1.1	-2.1	-2.5	-0.3
Middle-income oil importers	1.5	1.2	0.6	-0.7	-3.4
Middle-income oil exporters	1.1	1.6	-6.7	-4.7	-7.3
Total	1.3	0.7	-4.0	-3.3	-3.8

a. Estimated.

Between 1980 and 1982, Africa's food production is estimated to have increased by about 2 percent a year, somewhat faster than in 1970-80. The strongest growth was in wheat, sorghum, pulses, and sugar; oilseeds, with the exception of palm oil and palm kernels, continued to fall. Even at these growth rates, however, per capita food production was declining, and the accelerated pace of food imports in 1980-82 suggests that agricultural growth may have been overestimated. Cereal imports totaled 9.25 million tons in 1982, implying that one in five people in sub-Saharan Africa (the equivalent of its entire urban population) is now fed by imports. While few countries prevented a decline in per capita food production, those that did included two of the most poorly endowed countries: Niger and Rwanda. The countries with large agricultural potential, such as Nigeria, Sudan, Tanzania, and Zambia, suffered the sharpest falls in per capita food production. Imports are making many countries increasingly dependent on wheat and rice, which are difficult to grow economically in Africa.

The worst drought in fifteen years has recently hit large parts of sub-Saharan Africa. It started in 1982 in southern Africa and extended to the Sahelian zone in 1983; particularly in southern Africa, it appears to be continuing into the 1984 season. Based on estimated shortfalls in cereal production, the Food and Agriculture Organization (FAO) has identified a group of twenty-four "most seriously affected" (MSA) countries, which are the focus of current international efforts on food aid and emergency

relief.[1] Food production in the MSA countries declined by 15 percent between 1981 and 1983; preliminary estimates indicate that it may fall further in 1984. Senegal's groundnut and cereal production are estimated to have fallen 40 percent below normal levels.

Even more serious than the drought's immediate impact on food supplies are its medium-term effects on plantation crops and livestock. In Ivory Coast, coffee production in 1983 may have been less than half the normal average, and cocoa and oil (palm and coconut) production declined by 10 to 20 percent. In Ghana, cocoa production will be 17 percent lower than the recent average; bush fires, made worse by drought, may have burned about 10 percent of total cocoa acreages. Cattle losses have been substantial in Botswana, Mauritania, and Zimbabwe. Experience shows that, to rebuild cattle herds, four to five years of good rainfall are normally required.

Faced with this devastation, the international community has launched massive programs of assistance. The FAO has estimated total cereal requirements for the MSA countries at 3.3 million tons. Thirty bilateral and international agencies, including those from Australia, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, the United Kingdom, the United States, the EC, and the World Food Program (WFP), have pledged 2.3 million tons. Additional contributions, notably from the U.S. Agency for International Development (USAID), are expected to help close the gap. However, considerable problems remain over transporting and distributing the food.

Industry has suffered serious setbacks, which in many countries have come on top of years of industrial decline or stagnation. In the majority of sub-Saharan countries, manufacturing (as a percentage of GDP) was lower in 1980 than in 1970. In several cases the slide has been accelerated since then. Even among the countries that did expand industry up to 1980, several (such as Ivory Coast, Malawi, and Nigeria) have experienced setbacks. In most cases industrial weak-

nesses, partly due to poor quality of investment, have been prolonged by difficulties in macroeconomic management and by falls in imports, locally produced raw materials, construction, and domestic incomes. In several cases, industry has also been harmed by disrupted or deteriorating transport. Across the continent utilization rates in manufacturing have been falling, in extreme cases going as low as 25 to 30 percent.

Deteriorating External Environment

The international economic environment has been difficult for all developing countries during the last four years. While world trade has stagnated and commodity prices have declined, many developed countries have increased protectionist barriers for goods from developing countries; for sub-Saharan Africa restrictions on sugar and livestock imports have been particularly damaging. These external factors have aggravated the long-term economic deterioration in Africa.

For export crops, Africa's total volume expanded by about 1 percent a year over the 1980–82 period—an improvement over the decline during 1970–80. However, for most crops, the fall in world market shares that started in the 1970s continued in the 1980s. These declines have occurred in commodities in which Africa has a comparative advantage and which are likely to remain its main potential source of foreign exchange earnings. Africa's market share of oilseeds has fallen steeply, caught between rising domestic demand and inadequate incentives to export; so has that of tea, bananas, cotton, and coffee. Some progress was made in tobacco, sugar, and sorghum. Given the slow growth in world demand projected for primary exports over the next decade, African countries can expand their exports only if they can utilize their comparative advantage effectively and increase their share.

On top of stagnant or declining exports, the terms of trade also fell. Between 1980 and 1982, prices of nonoil primary commodities declined by 27 percent in current dollar terms. The loss of income due to deterioration in the terms of trade was 1.2 percent of GDP for sub-Saharan Africa; middle-income oil importers suffered

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1. These countries are Angola, Benin, Botswana, Burkina Faso, Cape Verde, Central African Republic, Chad, Ethiopia, The Gambia, Ghana, Guinea, Guinea-Bissau, Lesotho, Mali, Mauritania, Mozambique, Sao Tome and Principe, Senegal, Somalia, Swaziland, Tanzania, Togo, Zambia, and Zimbabwe.

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Table 1.2. *Changes in Terms of Trade and the Associated Loss of Income in Sub-Saharan Africa, 1980-82*

Country group	Percentage change in terms of trade between 1980 and 1982	Associated loss of income in 1982 over 1980[a] (percentage of GDP)
Low-income countries	-14.5	2.4
Low-income semiarid	-2.6	0.5
Low-income other	-16.0	2.6
Middle-income oil importers	-11.1	3.0
Middle-income oil exporters	1.8	-0.5
Total	-4.7	1.2

a. Calculated by multiplying the percentage of decline in terms of trade by the share of exports in GDP. Minus sign denotes income gain.

the biggest loss (3 percent of GDP), oil exporters had a slight gain (0.5 percent of GDP), and low-income countries a loss of 2.4 percent of GDP (see table 1.2). For 1983, preliminary data suggest no significant improvement in Africa's terms of trade.

The Debt Servicing Problem

During the last four years, debt servicing has surfaced as a major problem in sub-Saharan

Africa. During this period, twenty-three of the thirty-one reschedulings in the Paris Club were for thirteen sub-Saharan countries, and eleven countries have also restructured their commercial debt. Even countries such as Ivory Coast and Nigeria, which benefited from the commodity price boom in the 1970s and had, until recently, a high credit rating, are facing serious problems in meeting their debt service. Both bilateral and commercial debt for Ivory Coast were rescheduled recently, and discussions on converting about half of the Nigerian trade arrears to medium-term debt were started in December 1983, with a tentative agreement reached in May 1984. For sub-Saharan Africa as a whole, financial arrears (largely on trade transactions) exceeded $8 billion at the end of 1983, $5 billion of which was Nigerian.

The estimated total of Africa's disbursed public and publicly guaranteed medium- and long-term debt at the end of 1982 was over $48 billion, the majority of it on nonconcessional terms. IMF credits totaled about $4 billion and short-term credits about $7 billion (see table 1.3).

Debt servicing payments are scheduled to increase dramatically in the near future: on the existing public and publicly guaranteed medium- and long-term debt alone, they are due to rise from $4.1 billion in 1981 and $5.0 billion in 1982 to $9.9 billion in 1984 and an average $11.6 billion a year in 1985-87. These

Table 1.3. *External Public Debt and Projected Debt Service Burden in Sub-Saharan Africa*
(amounts in US$ billions)

Country group	Public and publicly guaranteed medium- & long-term debt (PPG/MLT)			Short-term credit end-1982	IMF credit end-1982	Debt service 1985-87[b]			
	Outstanding & disbursed end-1982	Annual growth (percent) 1972-82	Debt service ratio (percent) 1982[a]			PPG/MLT			
						Amortization	Interest	Total	IMF
Low-income semiarid countries	3.0	22	16	0.1	0.1	0.7	0.3	1.0	0.2
Low-income others	17.1	19	16	1.0	1.6	4.4	2.4	6.8	1.5
Middle-income oil importers	17.1	24	18	2.6	2.2	6.7	2.9	9.6	1.8
Middle-income oil exporters	10.8	24	10	3.5	(.)	12.3	5.1	17.4	..
Total	48.1	22	13	7.1	4.0	24.0	10.7	34.7	3.5
All except oil exporters	37.3	21	17	3.7	4.0	11.7	5.5	17.3	3.5

a. Debt service as a percentage of exports of goods and nonfactor services.
b. On existing debt alone.

increases will occur in a wide spectrum of countries. One of the worst affected is Sudan, where external debt at the beginning of 1983 was estimated to be $7 billion—more than seven times Sudan's export earnings in 1983. Without relief, its estimated debt service in 1983 amounted to $1.1 billion, slightly more than its total export earnings. Even if arrears currently outstanding were consolidated and rescheduled on 1983 Paris Club terms with a 10 percent interest rate, Sudan would face debt service ratios averaging 80 to 90 percent for the rest of the 1980s. Countries such as Central African Republic, Madagascar, Somalia, and Zaire face similar difficulties. At the other end, some economies, such as Nigeria, should be able to adjust in order to meet the sharp rise in their debt service burden. In between are countries such as Gabon, Kenya, and Malawi, whose debt service profile is flatter but will nonetheless be a significant burden.

There are a number of reasons for the sharp rise in debt service requirements. The reschedulings in the last few years, mostly on conventional terms, gave short-term relief, but at the expense of increasing the debt service burden from 1984 onward. For a number of major debtor countries, such as Zaire and Sudan, previously rescheduled amounts, generally not eligible for rescheduling, represent more than a third of the total payments on public debt scheduled for 1985–87. In many sub-Saharan African countries, significant increases in assistance are going to be needed to replace IMF loans falling due. Taking the IMF loans outstanding at the end of 1983, repurchases and charges will total $0.9 billion in 1984 and $3.5 billion during 1985–87.

When Africa's arrears are taken into account, its debt service outlook is even more dismal. Servicing obligations in 1984 would jump about 30 percent if all arrears were repaid in that year. Unless corrective measures are taken, the external resource position of sub-Saharan Africa is likely to become disastrous in the next few years.

External Capital Flows

External capital flows to sub-Saharan Africa have been quite high. Between 1970 and 1982,

official development assistance (ODA) per capita increased in real terms by 5 percent a year, much faster than for other developing countries. In 1982, ODA per capita was $19 for all sub-Saharan African countries and $46 per capita for the low-income semiarid countries—compared, for instance, with $4.80 per capita for South Asia. Aid finances 10 percent of gross domestic investment in Africa as a whole, but up to 80 percent for the low-income semiarid countries and over 15 percent for other low-income countries. For some countries, ODA finances not only all investment, but also some consumption. During 1980–82, however, ODA levels stagnated, even though sub-Saharan Africa's share in the total increased from 21 percent in 1980 to 24 percent in 1982. Net flows from private sources declined sharply (by about 50 percent) with the decline particularly marked for oil-importing countries.

However, import capacity did not decline by a corresponding amount, because of funding by the IMF, which provided net flows of $2 billion between 1980 and 1982, mainly to oil importers. In addition, external reserves were drawn down by $10 billion ($1 billion for oil importers). As a result, the total current account deficit increased from 3 percent of GNP in 1980 to about 9 percent in 1982 for sub-Saharan Africa (and stayed around 9 percent for oil importers). Data for 1983 are not yet available, but tentative estimates suggest that sub-Saharan Africa's import capacity declined significantly, the result of declining export earnings, falling capital inflows and export earnings, less finance from the IMF, and the exhaustion of foreign reserves.

The Long-term Nature of the Crisis

Pressing as the current problems are, it is important to emphasize that they are not short term. They are part of a long-run unfavorable trend, best illustrated by putting the current food crisis in longer perspective. Figure 1.1 shows annual grain production per capita in 1970–84 for the twenty-four countries most seriously affected by drought, together with the long-term trend. The trend line shows a fall of about 2 percent a year. It passed below what might be considered a minimum for a healthy diet (of 140 kilograms per capita, the figure

Figure 1.1. *Per Capita Grain Production in Twenty-four African Countries Affected by Drought, 1970-84*
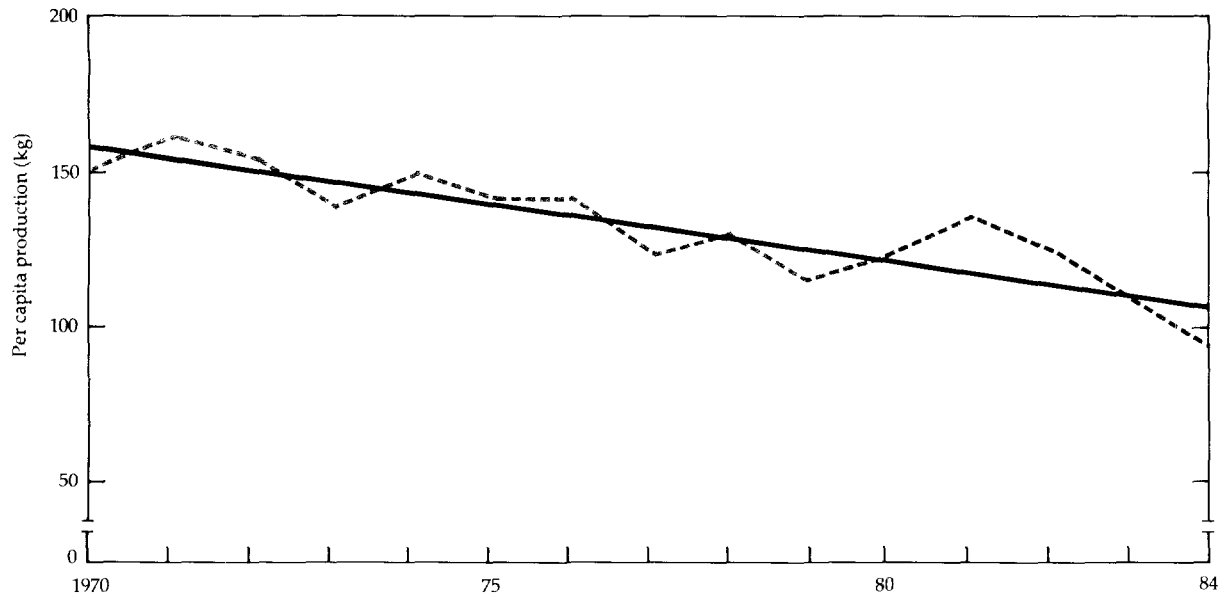
implied by current FAO estimates of consumption needs) in about 1975 and has continued falling since then. Even in the comparatively good year of 1981, production per capita was only 135 kilograms. In 1984, for the first time, production is expected to fall below 100 kilograms per capita. Yet that 1984 projection is only 12 percent below the trend line; the trend line itself will hit the projected 1984 level as early as 1988. The amount by which the 1984 estimate is below the trend line is almost exactly the same as the amount by which output in 1981 was above it. It is difficult to avoid the conclusion that Africa's food production does not deviate dramatically from the trend line; the declines of the past provide a depressing foretaste of what lies ahead.

What is true for the drought-affected countries is true for sub-Saharan Africa as a whole. Of all the major regions of the developing world, sub-Saharan Africa has had the slowest growth in food production and the fastest growth of population during the past twenty years. It is the only region where food produc-

tion is losing the race with population growth (see figure 1.2).

Such realities naturally cause pessimism. Yet analysis of development in sub-Saharan Africa and elsewhere suggests a basis for hope. A generation ago, it should be remembered, the prospects of Korea were regarded as dismal;[2] ten years ago Bangladesh was regarded as a basket case; and about twenty years ago the establishment of the International Development Agency (IDA) was inspired by tales of woe in the subcontinent. In sub-Saharan Africa, economic growth in the 1960s was quite respectable, and

2. As noted in the Pearson Commission report, published in 1969, "For nearly a decade South Korea seemed doomed to permanent dependence on foreign aid with *no possibility* of achieving a high growth rate from its own resources. Critics could point to almost every abuse in the catalogue. There was serious corruption, there was inflation, the aid dialogue was most acrimonious, and exports of the country's own products were low" (emphasis added). L. B. Pearson and others, *Partners in Development* (New York: Praeger, 1969), p. 345.

Figure 1.2. *Index of Per Capita Food Production, 1961–65 to 1983*
(1961–65 average = 100)
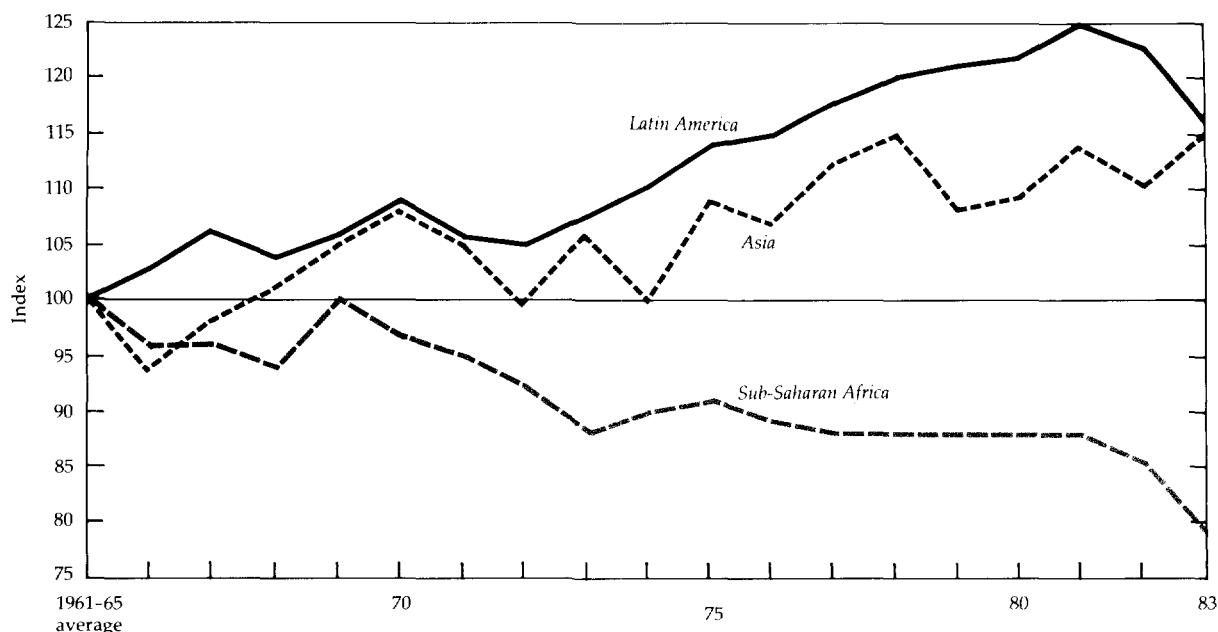
Source: Based on data provided by the U.S. Department of Agriculture.

observers saw several reasons to expect further rapid development.[3] Even in the 1970s, growth in several African countries (Botswana, Cameroon, Ivory Coast, and Malawi) was significantly faster than the world average. The history of economic development has been full of surprises. The evidence is overwhelming that, with the right combination of external assistance and domestic policies, countries can turn around, often in less than a decade. One essential step in that process is clear-headed analysis of experience, identification of

strengths and weaknesses, and designing of policies suitable to each country's circumstances.

Appendix

The tables that follow on pages 16–20 present the basic data on macroeconomic developments since 1960 and external resource flows to sub-Saharan Africa during 1979–82.

3. In *The Economics of African Development* (New York: Praeger, 1967), by Andrew M. Kamarck, it was projected that sub-Saharan Africa could grow at 7 percent a year during the 1970s and beyond: "Of the mineral producers, Gabon, Guinea, Liberia, Zambia, Nigeria, Congo (Leopoldville), and Rhodesia already clearly have the potential to reach or surpass a 7 percent GNP rate of growth. Congo (Brazzaville), with potash and possibly bauxite and iron-ore deposits; the Sudan, a very large and practically unexplored area; and Ghana, if it handles its opportunities from the

Volta power and aluminum project wisely—may also belong in this select group. Most of the other African countries depend mainly on agricultural exports, and here the external constraints apply. But this still does not mean that particular countries cannot be successful—especially if others, by mishandling their affairs, open up the opportunities to get a bigger share of a limited market. Among the more likely candidates for such success are the Ivory Coast, Kenya, Uganda, and the Sudan."

Table A.1. *Key Macroeconomic Growth Rates in Sub-Saharan Africa, 1960–83*
(annual average percent)

	1960–70	1970–80	1981	1982	1983[a]
1. GDP					
Low-income countries	4.0	1.9	1.1	0.5	2.7
Low-income semiarid	2.4	3.2	1.8	0.1	2.0
Low-income others	4.2	1.8	1.0	0.6	2.7
Middle-income oil importers	4.2	4.5	4.0	2.6	−0.1
Middle-income oil exporters	3.5	4.1	−3.7	−1.6	−4.1
Total sub-Saharan Africa	3.8	3.6	−1.0	−0.2	−0.7
All except oil exporters	4.0	2.9	2.3	1.4	1.9
2. Population					
Low-income countries	2.4	2.8	3.1	3.1	3.1
Low-income semiarid	2.5	2.6	2.7	2.7	2.7
Low-income others	2.4	2.9	3.2	3.2	3.3
Middle-income oil importers	2.7	3.3	3.4	3.4	3.6
Middle-income oil exporters	2.4	2.5	3.3	3.3	3.4
Total sub-Saharan Africa	2.4	2.8	3.2	3.2	3.2
All except oil exporters	2.4	2.9	3.2	3.2	3.2
3. Per capita GDP					
Low-income countries	1.5	−0.9	−1.9	−2.5	−0.3
Low-income semiarid	−0.1	0.6	−0.9	−2.5	−0.7
Low-income others	1.8	−1.1	−2.1	−2.5	−0.3
Middle-income oil importers	1.5	1.2	0.6	−0.7	−3.4
Middle-income oil exporters	1.1	1.6	−6.7	−4.7	−7.3
Total sub-Saharan Africa	1.3	0.7	−4.0	−3.3	−3.8
All except oil exporters	1.6	−0.4	−0.9	−1.7	−2.0
4. Export volume[b,c,d]					
Low-income countries	3.7	−2.2	−8.7	−1.7	..
Low-income semiarid	6.6	10.5	−14.9	23.4	..
Low-income others	3.5	−3.7	−8.0	−4.4	..
Middle-income oil importers	6.8	1.4	−3.5	0.0	..
Middle-income oil exporters	7.3	−0.6	−17.4	−10.4	..
Total sub-Saharan Africa	5.5	−0.6	−12.8	−6.5	..
All except oil exporters	4.9	−0.6	−6.4	−0.9	..
5. Import volume[b,c,d]					
Low-income countries	5.1	−1.6	2.9	−8.1	..
Low-income semiarid	6.5	7.7	0.5	−5.0	..
Low-income others	4.9	−3.0	3.2	−8.5	..
Middle-income oil importers	5.9	3.9	1.9	−6.7	..
Middle-income oil exporters	4.1	14.0	−2.5	−13.5	..
Total sub-Saharan Africa	5.0	7.4	−0.2	−10.6	..
All except oil exporters	5.4	0.7	2.4	−7.4	..
6. Terms of trade[b,c,e]					
Low-income countries	1.1	−0.4	−13.1	−1.5	..
Low-income semiarid	0.0	−2.0	−2.4	−0.2	..
Low-income others	1.2	−0.2	−14.3	−1.7	..
Middle-income oil importers	3.2	−0.2	−6.8	−4.3	..
Middle-income oil exporters	1.2	17.4	7.9	−6.1	..
Total sub-Saharan Africa	1.8	10.2	−0.1	−4.6	..
All except oil exporters	2.0	−0.4	−10.3	−2.8	..

Note: For definitions and sources see the technical notes.

a. Estimated.

b. Botswana, Burundi, Gabon, Guinea, Guinea-Bissau, Lesotho, Somalia, Swaziland, and Zimbabwe not included because of lack of data.

c. Based on UNCTAD data.

d. The export/import volume growth rates are calculated from quantum (volume) indexes of exports and imports. The countries within each group are weighted by country exports/imports of goods and nonfactor services for the end year of the period.

e. The ratio of average growth rate of export unit value indexes to average growth rate of import unit value indexes. The countries within each group are weighted respectively by country exports and imports of goods and nonfactor services in current dollars for the end year of the period.

Table A.2. *Key Macroeconomic Ratios in Sub-Saharan Africa, 1960–82*
(*annual average as percentage of GDP*)

	1960–70	1970–75	1975–80	1981	1982
1. Gross domestic investment					
Low-income countries	14.1	16.9	17.8	17.7	9.3
Low-income semiarid	13.5	17.8	20.5	17.9	19.0
Low-income others	14.2	16.8	17.4	17.7	8.7
Middle-income oil importers	18.1	23.3	23.2	22.7	21.9
Middle-income oil exporters	15.8	21.3	26.3	26.3	25.1
Total sub-Saharan Africa	15.6	20.1	23.2	23.2	18.2
All except oil exporters	15.5	19.2	19.9	19.7	13.0
2. Gross domestic savings					
Low-income countries	11.5	11.7	9.4	7.6	3.9
Low-income semiarid	5.1	3.2	3.4	−0.4	−1.6
Low-income others	12.3	12.6	10.3	8.6	4.3
Middle-income oil importers	21.1	22.4	17.2	11.1	10.2
Middle-income oil exporters	14.1	27.2	29.2	23.2	17.0
Total sub-Saharan Africa	14.6	20.4	21.0	16.5	12.5
All except oil exporters	14.8	15.5	12.5	9.0	6.0
3. Private consumption					
Low-income countries	75.1	73.0	75.0	76.9	84.0
Low-income semiarid	83.4	81.5	79.8	81.2	83.7
Low-income others	74.0	72.0	79.8	76.3	84.1
Middle-income oil importers	64.9	61.5	65.6	70.0	70.4
Middle-income oil exporters	76.9	63.2	59.0	62.6	73.7
Total sub-Saharan Africa	73.1	66.5	65.1	68.0	77.3
All except oil exporters	71.6	68.9	71.3	74.1	79.5
4. Public consumption					
Low-income countries	13.5	15.4	15.6	15.5	12.0
Low-income semiarid	11.6	15.3	16.8	19.2	17.9
Low-income others	13.7	15.4	15.4	15.0	11.6
Middle-income oil importers	14.1	16.1	17.2	19.0	19.4
Middle-income oil exporters	9.1	9.6	11.8	14.2	9.3
Total sub-Saharan Africa	12.4	13.1	14.0	15.5	12.0
All except oil exporters	13.7	15.6	16.2	16.9	14.5
5. Resource balance					
Low-income countries	−2.6	−5.2	−8.4	−10.1	−5.3
Low-income semiarid	−8.4	−14.5	−17.0	−18.3	−20.6
Low-income others	−1.8	−4.2	−7.2	−9.0	−4.4
Middle-income oil importers	3.0	−0.9	−5.9	−11.6	−11.7
Middle-income oil exporters	−1.8	5.9	2.8	−3.1	−8.1
Total sub-Saharan Africa	−1.0	0.3	−2.2	−6.7	−7.1
All except oil exporters	−0.7	−3.7	−7.4	−10.7	−7.0
6. Exports of goods and nonfactor services					
Low-income countries	21.4	20.9	19.2	16.7	8.9
Low-income semiarid	15.0	18.1	19.4	19.0	17.9
Low-income others	22.3	21.2	19.1	16.5	8.3
Middle-income oil importers	34.7	34.3	30.8	27.2	27.3
Middle-income oil exporters	18.9	25.6	29.2	27.6	21.1
Total sub-Saharan Africa	24.0	25.7	26.5	24.5	17.2
All except oil exporters	26.0	25.7	23.7	21.0	13.9
7. Imports of goods and nonfactor services					
Low-income countries	24.1	26.1	27.6	26.9	14.2
Low-income semiarid	23.4	32.6	36.4	37.3	38.5
Low-income others	24.2	25.4	26.3	25.5	12.7
Middle-income oil importers	31.7	35.2	36.7	38.8	39.0
Middle-income oil exporters	20.7	19.7	26.4	30.7	29.2
Total sub-Saharan Africa	25.0	25.3	28.7	31.2	24.8
All except oil exporters	26.7	29.4	31.2	31.7	20.9

Table A.2 *(continued)*
(annual average as percentage of GDP)

	1960–70	1970–75	1975–80	1981	1982
8. External debt[a]					
Low-income countries	..	18.9	21.3	23.4	23.8
Low-income semiarid	..	25.2	31.2	43.5	56.1
Low-income others	..	18.3	20.4	21.6	21.6
Middle-income oil importers	..	21.4	32.8	42.7	51.7
Middle-income oil exporters	..	6.6	7.7	9.9	11.6
Total sub-Saharan Africa	..	14.4	17.2	20.6	22.8
All except oil exporters	..	19.8	25.0	29.3	31.6
9. External debt service[a]					
Low-income countries	..	1.3	1.3	1.5	1.7
Low-income semiarid	..	0.7	0.8	1.7	3.1
Low-income others	..	1.3	1.3	1.4	1.6
Middle-income oil importers	..	2.8	3.5	4.0	5.1
Middle-income oil exporters	..	0.8	1.0	1.7	2.5
Total sub-Saharan Africa	..	1.4	1.5	2.0	2.6
All except oil exporters	..	1.8	2.0	2.2	2.7
10. Net ODA[b]					
Low-income countries	..	4.8	5.2	5.3	5.4
Low-income semiarid	..	13.9	15.8	17.7	22.9
Low-income others	..	3.9	4.2	4.2	4.2
Middle-income oil importers	..	3.1	5.1	6.2	6.5
Middle-income oil exporters	..	0.9	0.6	0.4	0.5
Total sub-Saharan Africa	..	2.9	3.1	3.3	3.4
All except oil exporters	..	4.2	5.2	5.6	5.7

Memo items:		1979	1980	1981	1982
Net disbursement of ODA (US$ billions)					
Total	..	29.0	33.8	33.1	30.1
Sub-Saharan Africa	..	6.0	7.1	7.1	7.2
(Percentage of total)	..	(20.8)	(21.1)	(21.4)	(23.9)
Dollar price index of manufactured imports of developing countries (1980 = 100)	..	92.3	100.0	95.8	94.1

Note: For definitions and sources see the technical notes.
a. Public and publicly guaranteed private medium- and long-term debt outstanding and disbursed.
b. OECD data.

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Table A.3. *External Resource Flows to Sub-Saharan Africa, 1979–82*

	1979	1980	1981	1982
1. Gross disbursements of loans and credits (US$ millions)				
Official				
Low-income countries	1,966	2,327	2,144	2,097
Low-income semiarid	370	436	509	369
Low-income others	1,596	1,891	1,635	1,728
Middle-income oil importers	1,549	1,715	1,551	1,691
Middle-income oil exporters	548	508	481	571
Total sub-Saharan Africa	4,063	4,549	4,176	4,359
All except oil exporters	3,516	4,042	3,695	3,788
Private				
Low-income countries	890	1,567	940	469
Low-income semiarid	61	89	154	103
Low-income others	829	1,479	786	365
Middle-income oil importers	1,459	1,680	1,455	1,264
Middle-income oil exporters	1,533	1,761	1,814	2,281
Total sub-Saharan Africa	3,882	5,008	4,209	4,013
All except oil exporters	2,349	3,247	2,395	1,732
Total				
Low-income countries	2,856	3,894	3,085	2,565
Low-income semiarid	431	524	663	472
Low-income others	2,425	3,370	2,422	2,093
Middle-income oil importers	3,009	3,394	3,006	2,955
Middle-income oil exporters	2,080	2,269	2,295	2,852
Total sub-Saharan Africa	7,945	9,557	8,385	8,372
All except oil exporters	5,865	7,288	6,090	5,520
2. Net flows (US$ millions)[a]				
Official loans and credits				
Low-income countries	1,730	2,001	1,788	1,651
Low-income semiarid	352	398	459	320
Low-income others	1,378	1,603	1,329	1,331
Middle-income oil importers	1,420	1,540	1,335	1,483
Middle-income oil exporters	434	385	342	380
Total sub-Saharan Africa	3,584	3,926	3,465	3,514
All except oil exporters	3,150	3,541	3,123	3,134
Private loans and credits				
Low-income countries	674	1,204	609	−2
Low-income semiarid	55	80	144	58
Low-income others	619	1,124	465	−60
Middle-income oil importers	810	894	736	591
Middle-income oil exporters	1,174	1,277	1,126	1,243
Total sub-Saharan Africa	2,658	3,375	2,471	1,832
All except oil exporters	1,484	2,098	1,345	589
Official grants				
Low-income countries	2,771	3,211	3,280	3,102
Low-income semiarid	765	895	919	993
Low-income others	2,006	2,316	2,361	2,109
Middle-income oil importers	929	1,544	1,386	1,398
Middle-income oil exporters	273	310	290	299
Total sub-Saharan Africa	3,973	5,065	4,956	4,799
All except oil exporters	3,700	4,755	4,666	4,500
Total				
Low-income countries	5,175	6,416	5,677	4,751
Low-income semiarid	1,172	1,373	1,522	1,371
Low-income others	4,003	5,043	4,155	3,380
Middle-income oil importers	3,159	3,978	3,457	3,472
Middle-income oil exporters	1,881	1,972	1,758	1,922
Total sub-Saharan Africa	10,215	12,366	10,892	10,145
All except oil exporters	8,334	10,394	9,134	8,223

(continued)

Table A.3 *(continued)*

	1979	1980	1981	1982
3. Use of IMF credit (US$ millions)[b]				
Low-income countries	807	911	1,333	1,752
Low-income semiarid	26	30	67	142
Low-income others	782	881	1,266	1,609
Middle-income oil importers	820	1,010	2,061	2,219
Middle-income oil exporters	69	36	17	11
Total sub-Saharan Africa	1,695	1,956	3,411	3,981
All except oil exporters	1,626	1,921	3,394	3,970
4. External debt (US$ millions)[b,c]				
Low-income countries	15,174	18,002	19,339	20,172
Low-income semiarid	1,950	2,430	2,827	3,027
Low-income others	13,224	15,572	16,512	17,145
Middle-income oil importers	11,861	13,913	15,514	17,095
Middle-income oil exporters	7,460	8,728	9,597	10,796
Total sub-Saharan Africa	34,495	40,643	44,450	48,063
All except oil exporters	27,035	31,915	34,853	37,267
5. Food aid (thousand tons)				
Low-income countries	813	996	1,653	1,515
Low-income semiarid	211	227	474	441
Low-income others	602	769	1,179	1,074
Middle-income oil importers	286	538	658	574
Middle-income oil exporters	25	19	36	80
Total sub-Saharan Africa	1,125	1,553	2,347	2,169
All except oil exporters	1,099	1,534	2,311	2,089
6. Gross international reserves (US$ millions)[b,d]				
Low-income countries	2,605	2,391	2,110	1,786
Low-income semiarid	291	276	264	168
Low-income others	2,314	2,115	1,847	1,618
Middle-income oil importers	1,497	1,512	1,144	1,120
Middle-income oil exporters	6,115	11,054	4,597	2,368
Total sub-Saharan Africa	10,217	14,957	7,851	5,274
All except oil exporters	4,102	3,903	3,254	2,906

Note: For definitions and sources see the technical notes.

a. Gross disbursements minus principal repayments.

b. Levels at end of the year.

c. Public and publicly guaranteed private medium- and long-term debt outstanding and disbursed.

d. Angola, Guinea, Guinea-Bissau, Lesotho, Mozambique, and Uganda not included.

2. The Roots of the Problem

A host of factors—both internal and external—has undoubtedly contributed to the declining standard of living in sub-Saharan Africa since the 1970s. However, although the situation varied from year to year and from country to country, analysis presented in this chapter shows that, in general, declining availability of resources for development (as indicated by investment as a percentage of GDP) was not a major contributory factor, at least not until 1982. The key factors were accelerating growth of population and declining returns from investment. As noted in chapter 1, since 1982 availability of resources has become an additional aggravating factor, and the resource position is likely to worsen in the next few years. We might even be observing the beginnings of a deteriorating long-term trend in the resource position. Nonetheless, the roots of Africa's problems continue to be the combination of those policies—governments' as well as donors'—that influence the efficiency of resource use. Those policies should remain the focus of action. Unless they are corrected, extra foreign exchange from whatever source—trade or capital inflow—may bring temporary relief but will have no lasting benefits. If it were to weaken the resolve of African governments to address their domestic policies, more external finance could even exacerbate the problem.

The Growth of Per Capita Incomes

The growth rate of per capita income can be broken into three parts: population growth rate, investment/income ratio, and additional income per unit of investment. Whether these influences are examined by comparing the early years of African independence with the later years, by comparing African experience with that of other developing countries, or by comparing those African countries having a good growth record with other African countries, the importance of the rate of return on investment stands out clearly. Table 2.1 shows that sub-Saharan Africa in the 1970s was not short of investment, as indicated by the investment/income ratio, either in comparison with the 1960s or with the 1970s average of low-income countries of South Asia.

Per capita GDP in sub-Saharan Africa grew by an average of 1.4 percent a year in the 1960s but then decelerated to 0.4 percent a year during 1970-81. Of this deceleration, about half was accounted for by an increase in the population growth rate. The availability of investment (as a percentage of GDP) increased during the 1970s, averaging 22 percent of GDP during 1970-81. Thus, the deceleration in the GDP growth rate was mainly due to the failure of capital investment to generate income growth comparable to the previous decade. Likewise, the per capita growth rate in sub-Saharan Africa during 1970-81 was 1.3 percentage points lower than in South Asia. About half of that difference was due to Africa's higher population growth rate. Investment as a percentage of GDP was somewhat higher in sub-Saharan Africa, but Africa experienced lower returns on investment in terms of additional income.

The importance of the efficiency with which resources are used (rather than their availability) is also suggested by the experience of countries in sub-Saharan Africa with relatively low growth rates of per capita GDP. As shown in table 2.2, thirteen countries (Benin, Central African Republic, Ethiopia, Liberia, Madagascar, Mauritania, Niger, Senegal, Sierra Leone, Tanzania, Togo, Zaire, and Zambia) accounted

Table 2.1. *Components of Per Capita Income Growth in Sub-Saharan Africa and South Asia, 1960–81*
(annual percentage change)

Region and indicator	1960–70 (1)	1970–81 (2)	Difference between (2) and (1)
(A) *Sub-Saharan Africa*			
Real GDP growth	3.8	3.2	−0.6
Population growth	2.4	2.8	0.4
Per capita income growth	1.4	0.4	−1.0
Investment as a percentage of GDP	15.6	21.8	6.2
(B) *South Asia*			
Real GDP growth	4.0	3.9	−0.1
Population growth	2.4	2.2	−0.2
Per capita income growth	1.6	1.7	0.1
Investment as a percentage of GDP	16.7	19.4	2.7
Difference between (B) and (A)			
Real GDP growth	0.2	0.7	
Population growth	0.0	−0.6	
Per capita income growth	0.2	1.3	
Investment as a percentage of GDP	1.1	−2.4	

for the bulk of the decline in per capita income in sub-Saharan Africa.[1] Six of them (Liberia, Mauritania, Niger, Togo, Zaire, and Zambia) had an investment rate of about 30 percent during the 1970s. The average for the thirteen countries was roughly 22 percent—equal to the average for sub-Saharan Africa. As a group, these thirteen countries did suffer a significant loss of income due to declining terms of trade; however, that was more than compensated by increased capital flows from abroad. Their relatively slow growth resulted from the low and declining average returns on their investment during the 1970s. Most of the cases of debt servicing difficulties have also been associated with declining returns on investment—reflecting, among other things, the use of foreign finance for low-yielding investments. High interest rates have not been the major problem. Ivory Coast and Nigeria are the only two countries with debt rescheduling in recent years that have had double digit interest rates on their external debt during the 1980s.

The Proliferation of Nonviable Projects

The expansion of investment programs (much of it in the public sector) was related to com-

1. Chad, Ghana, Uganda, and Zimbabwe also had very poor records on per capita income growth. However, they were excluded from the analysis because they were seriously unsettled politically during this period.

modity booms and increased foreign borrowing in the 1970s. Prices rose sharply in cocoa (1973–75), coffee (1976–77), groundnuts (1974), sugar (1974–75), sisal (1973–75), phosphate (1974–75), and uranium (1975–79), and then fell sharply afterward. Almost all oil-importing countries underwent this boom and bust cycle: Burundi (coffee); Ethiopia (coffee); The Gambia (groundnuts); Ghana (cocoa); Ivory Coast (coffee and cocoa); Kenya (coffee); Malawi (sugar); Niger (uranium); Senegal (phosphate and groundnuts); Tanzania (coffee and sisal), and Togo (phosphate).

Governments tended to respond to these booms by sharply increasing their spending. The higher prices were usually accompanied by increased public revenues, whether through export taxes, state marketing boards, profits, or general tax measures. Extra revenues made it difficult to resist spending more on both consumption and investment. Some countries obtained huge extra revenues from commodity booms. For example, the Ivory Coast government's share of export earnings through its Agricultural Price Stabilization Fund (Caisstab) represented a 40 percent increase in government revenues during 1976–79. Kenya's current revenues more than doubled from 1976 to 1979. Niger's direct uranium receipts rose sevenfold from 1975 to 1979, while total revenue almost tripled. In addition, expectations of continuing high export earnings encouraged governments to borrow from abroad to take advantage of

Table 2.2. *Selected Indicators of Performance, External Shocks, and Availability of Investment Resources*

| | Performance indicators | | | | | External shocks | | | Investment resources | | | | | |
| | GDP per capita average annual growth (%) 1970–81 | Incidence of debt rescheduling (years) | Growth rate of GDP (%) 5-year average ending in | | | Loss of income due to deterioration in terms of trade annual average (%) 1971–1981 with 1970 as base | Average interest rate (%) on medium- and long-term loans 1982 | | Investment (% of GDP) 5-year average ending in | | | Resource inflow (% of GDP) 5-year average ending in | | |
Countries			1971	1976	1981		New commitment	Debt outstanding	1971	1976	1981	1971	1976	1981
1. Chad	−4.6		1.4	1.9	−8.1	1.0	0.7	0.1	13	12	13	8	15	28
2. Mali	1.8		3.3	5.4	2.2	3.7	2.0	0.7	17	15	16	10	18	18
3. Burkina Faso	1.6		3.1	4.5	2.9	1.1	1.8	2.6	11	23	18	12	21	25
4. Somalia	1.0		2.7	3.8	4.6	−3.1[a]	1.7	1.2	12	18	18[b]	7	14	13[b]
5. Niger	−0.1	1983	1.3	−1.7	7.5	−2.8	5.9	7.4	15	25	32	8	15	10
6. Gambia, The	1.7		3.5	7.4	0.2	6.0	3.1	3.1	8	9	26	4	1	29
7. Ethiopia	0.6		4.0	2.6	3.0	0.2	3.8	2.7	13	11	9	2	.1	5
8. Guinea-Bissau	..		..	5.0	1.8	..	6.4	1.0	..	23	26	..	43	36
9. Zaire	−3.1	1976–81,83	3.7	0.2	0.1	2.3[c]	2.2	1.0	26	32	29	−2	13	13[d]
10. Malawi	2.6	1982–83	5.6	5.4	4.1	3.0	3.5	4.6	19	27	30	12	12	13
11. Uganda	−4.3	1981–82	4.8	−0.4	−2.5	..	2.9	2.2	14	9	4[d]	−1	−1	.1
12. Rwanda	1.8		7.4	5.6	5.3	1.1	1.2	1.1	8	12	22	6	8	11
13. Burundi	1.4		7.3	1.9	5.1	0.6	5.4	1.6	8	7	14	3	5	9
14. Tanzania	0.8		4.7	5.4	2.5	0.1[c]	4.0	2.5	20	21	22	3	8	11
15. Benin	0.6		2.6	2.3	4.1	3.4	7.2	5.0	16	16	23	10	15	24
16. Central African Republic	−0.6	1981,83	3.5	2.7	−0.3	10.8	3.5	1.1	20	17	10	16	13	14
17. Guinea	0.9		3.1	5.5	1.0	..	3.4	1.9	..	..	14	..	..	−3
18. Madagascar	−2.2	1981–84	5.1	−0.7	0.2	6.2	5.0	3.0	17	14	19	7	3	11
19. Togo	0.7	1979–81,83	6.0	3.3	3.4	−5.8	4.7	2.6	15	22	39	.1	5	22
20. Ghana	−3.2		4.9	−1.7	1.2	−1.4	3.2	2.5	13	10	6	2	−2	1
21. Kenya	2.1		7.4	6.0	6.2	4.2	6.0	6.9	22	23	28	1	3	7
22. Sierra Leone	−0.8	1977,80,84	4.4	1.2	2.4	3.2	0.7	2.5	15	14	13	3	9	10
23. Sudan	3.1	1979,81–83	2.6	6.2	4.1	1.5	3.6	0.2	13	16	16	.4	5	10
24. Mauritania	−0.6		4.3	3.0	1.9	4.0	2.6	2.9	25	32	36	−9	15	35
25. Liberia	−1.8	1980–83	6.1	1.7	0.6	5.6	4.4	2.3	25	30	32	−29	−14	4
26. Senegal	0.1	1981–84	1.4	4.0	1.2	1.1	4.3	6.7	14	19	19	6	7	15
27. Lesotho	5.7		1.0	11.9	7.3	−1.5	13.0	3.2	9	13	22	33	52	63
28. Zambia	−2.7	1983	2.9	3.4	−1.8	25.5	6.8	3.9	32	36	23	−12	−3	3
29. Zimbabwe	−0.3		7.2	4.4	4.8	..	8.9	10.1	22	26	18	.1	−1	1
30. Botswana	8.3		12.1	17.7	9.7	4.2	9.7	7.9	36	55	42	38	26	20
31. Swaziland	1.2		8.6	4.1	5.4	8.5[c]	3.2	5.4	21	26	37	−3	−15	23
32. Ivory Coast	1.1	1983–84	7.1	6.8	4.7	−5.1	13.5	10.3	19	21	27	−3	−2	2
33. Mauritius	4.4		1.3	8.4	3.1	−9.9	8.6	9.6	13	25	28	2	−.1	11
34. Nigeria	1.9	1983	10.6	6.6	0.4	−14.7	13.9	14.6	17	24	27	1	−6	−.2
35. Cameroon	4.0		4.2	4.5	9.1	2.1	9.2	5.6	15	20	25	1	2	3
36. Congo, People's Republic of the	2.5		6.7	6.6	8.6	1.0	10.4	8.1	28	35	32	25	20	7
37. Gabon	2.9	1978	6.7	21.4	−10.5	..	8.8	9.3	38	53	41	−2	−9	−21
Sub-Saharan Africa[e] (37 countries)			6.5	5.3	1.6	−5.9			18	23	21	1	−.7	3.3
Countries with below average growth in per capita income[f]	−1.0		3.8	2.3	1.6	5.0			21	23	23	−0.7	5.6	10.9

a. Average for 1971–79.

b. Five-year average ending in 1979.

c. Average for 1971–80.

d. Five-year average ending in 1980.

e. Excludes Angola and Mozambique; averages in this row relate to the countries for which data are presented in the table.

f. Consists of Niger, Ethiopia, Zaire, Tanzania, Benin, Central African Republic, Madagascar, Togo, Sierra Leone, Mauritania, Liberia, Senegal, and Zambia. Includes all countries with below average annual per capita income growth during 1970–81, excluding Chad, Uganda, Ghana, and Zimbabwe, which were severely unsettled politically during this period.

their creditworthiness. When commodity prices fell, governments were reluctant to reduce their spending and thus had to borrow even more. The Euromarket became an important new source of finance for several African governments—Kenya, Liberia, Senegal, Togo, and Zambia. Commercial bank lending, suppliers' credits, and credits from export agencies carried interest rates that looked highly attractive at the prevailing rates of inflation.

While part of these borrowings was used to maintain consumption when commodity prices fell (such as in Zambia), most of them went to finance large public investments, many of which contributed little to economic growth or to generating foreign exchange to service the debt. These projects covered a wide spectrum of sectors and countries. Examples include projects such as large conference centers, administrative buildings, university centers, hotels, and highways, as well as projects in the industrial sector, such as oil and sugar refineries, steel mills, and textile and cement factories. They occurred in low-income countries as well as in middle-income countries and most oil exporters. Clearly investment in social, economic, and political infrastructure is necessary, as is industrial investment and investment in service sectors (in hotels, for example). However, experience demonstrates that too much investment has gone into projects that have failed to generate significant increases in output. Genuine mistakes and misfortunes cannot explain the excessive number of "white elephants." Too many projects have been selected either on the basis of political prestige or on the basis of inadequate regard for their likely economic and financial rate of return. Changing the structure of an economy still requires strict adherence to criteria for project selection and design in order to maximize the return on investment. External financial agencies have shared the responsibility for this inadequate discipline over the use of investment resources.

Key Determinants of Low Returns on Investment

Africa's slow growth has been caused by some basic constraints and also by inappropriate policies. The basic constraints are partly natural—poor climate and soil. They are also

human—rapid population growth and poor standards of health, education, and institutional development. To increase the productive potential of African economies in the long term, these constraints will have to be eased. However, growth in the short and medium term is being held back by inappropriate policies and could be speeded up by changing them.

The mixture of basic constraints and policy failings varies from country to country. Although the disadvantages of nature are significant in some areas (and attract much world attention), they should not obscure the considerable potential of most African countries. However, their potential needs to be realized through investment in areas that could yield high returns.

Some of Africa's basic constraints are technical and social. Research on new seed varieties is needed; so are agricultural packages adapted to the natural conditions of individual areas, and programs to stop overgrazing, deforestation, and desertification are critical. It must be noted, however, that several countries with acute natural handicaps (Burkina Faso, Burundi, Ethiopia, Mali, and Rwanda) have achieved returns on investment significantly higher than the average for sub-Saharan Africa. By contrast, some countries with the worst economic record, accounting for a large part of the sub-Saharan African average (for example, Ghana, Nigeria, Sudan, Uganda, and Zambia), have some of the best natural resources.

Human factors have also been responsible for Africa's failure to make good use of investment. The ability of a country to invest productively in agriculture, industry, and infrastructure is closely related to the health and skills of its people. While much progress has been made, particularly in education, African countries still lag behind other developing countries in all the socioeconomic indicators. Yet, once again, it is worth noting that some of the countries with the fastest long-term economic growth (for example, Botswana, Cameroon, Ivory Coast, and Malawi) were relatively short of human skills at independence, while some of those with more skills (for example, Ghana, Sudan, and Uganda) have had much slower growth. And in sub-Saharan Africa as a whole, the average returns on investment have declined since the 1960s, even though much has been done to relieve some basic constraints. It is hard to escape the conclusion that deteriorating eco-

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nomic management has been a major—in some countries, the major—cause.

At one level, this deterioration can be described in terms of inappropriate policies and programs: emergence of large macroeconomic imbalances; erosion of incentives in agriculture; overprotection of industry; overexpansion of the public sector, especially public employment, and corresponding neglect of community activities and the private sector; poor project selection; inadequate maintenance of the capital stock; and inefficient organizations in marketing, transport, finance, and other support services.[2] At another level, there are serious weaknesses in the institutions on which development depends—central ministries losing budgetary and financial control, project agencies losing skilled staff, parastatal bodies responding to different and conflicting objectives. The capacity to formulate and implement economic policies and programs has itself deteriorated. Donors must take some responsibility: the pressures they put on governments, the inappropriate design and selection of their projects, and the lack of coordination among themselves—have all contributed to the low rates of return on investment.

These weaknesses have recently increased, as governments have been preoccupied with crisis management and their longer-term strategies and policies have become increasingly unviable. But the evidence suggests that deterioration in

most countries has been under way for more than a decade and that it has deep-seated causes. Compared with the rest of the world, African countries have been independent for a shorter time; they lack a tradition of national political organization and are more ethnically diverse. The colonial powers typically favored their own settlers or certain local groups. Independent African governments, almost irrespective of ideological preference or broad development objectives, have always had to contend with the high expectations of their people. Countries such as Mali, Rwanda, Sierra Leone, and Somalia guaranteed employment for graduates of secondary and higher schools. Many governments created projects and institutions that outstripped their capacity to be staffed and operated effectively. In countries that encouraged private enterprise, governments gave businesses too much protection through public sector contracts, "defaultable" loans, and barriers to competition, especially from imports.

The nature and extent of the basic human constraints on economic management have implications for the design of policy reform and the speed with which it can be accomplished. The evidence, however, leaves no doubt of the central importance of improving policies—of governments and donors alike—if Africa is to resume the growth it enjoyed in the 1960s.

2. The crucial link between domestic policies and returns on investment has been elaborated in several Bank documents, in particular, *Accelerated Development in Sub-Saharan Africa*, chap. 4, and *World Development Report 1983*, chaps. 4 and 6. "Economic Report on Africa, 1984," by the ADB and the ECA, also focuses on the declining returns on invest-

ment and low domestic saving rates as key problems in sub-Saharan Africa and notes the role of low (or negative) real interest rates in contributing to these problems. Moreover, available evidence suggests that these policy distortions not only inhibit growth but also adversely affect the poor.

3. Long-term Constraints

Improved policies and economic management will succeed only if, in addition to attending to short-term crises, they ease the longer-term constraints on development. The growth of population is the single greatest long-term threat to Africa's economic development. Others include the widespread existence of disease; inadequately trained manpower; the slow development of new technologies, especially in agriculture; and the erosion and deforestation of the land. Many of these basic issues have been neglected or, as in the case of education, programs to address them have often been poorly designed.

Population

The population of sub-Saharan Africa is growing faster than that of any other continent. Its growth has accelerated from 2.3 percent a year in 1960 to 3.1 percent today. Although death rates have fallen, they still exceed 15 per 1,000 in almost every African country, so they are likely to decline further as health services expand. Crude birth rates are almost uniformly high; nowhere do they appear to be falling, and in some countries they have actually risen. Total population, which rose from 270 million in 1970 to 359 million in 1980, seems set to double by the turn of the century and significantly more than triple by the year 2020. Children less than fifteen years old constitute more than 45 percent of Africa's population, compared with 37 percent in Asia and 40 percent in Latin America. Africa's labor force is growing at about 3 percent a year—and that rate is accelerating. In most sub-Saharan African countries, the urban population is between 20 and 25 percent of the total

and growing at 5 to 7 percent a year. Other developing countries with comparable per capita incomes have higher urbanization levels, but their urban populations are growing much less rapidly.

The impact of continued high fertility can best be shown by an example: the estimated population in the year 2020 of over 1,200 million could be reduced to less than 900 million—still a staggering figure—if a rapid decline in fertility were possible immediately. Even for the year 2000, when significant declines in fertility would just begin to show, the decline from projected population size would approach 100 million, which could have a marked impact on the number of people living in poverty (defined as those with per capita income below $135 in 1980 dollars). Under all projections, the number of poor is expected to rise above the current level, but this rise would be less than 20 percent if there were a rapid fall in fertility, as compared with an increase of 70 percent if fertility were to decline only at the rate in the standard projections of the United Nations.

Unfortunately, few African countries have yet committed themselves to reducing population growth (see table 3.1). Some governments are even pronatalist; Sudan, for example, recently announced its intention to introduce incentives for large families. The danger is that the modest improvements in income, health, and education foreseen for the rest of this century will probably work in favor of higher, rather than lower, fertility. Without explicit government commitment to assist those families wishing to limit family size—a commitment that would be manifested in effective public family planning programs—fertility will fall modestly, if at all. Furthermore, experience in Kenya, the first sub-Saharan country to have a national population

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Table 3.1. Population Policy Indicators for Selected Countries with Populations of 15 Million or More, 1982

Region and country	Total fertility rate 1982	Family planning index 1982	Demo-graphic data A	Politi-cal com-mitment B	Institu-tions C	D	Family planning E	F	G	H	I	Incentives & disincentives J	K	L	Birth quotas M
Sub-Saharan Africa															
Kenya	8.0	•	X	X		X	X	X							
Tanzania	6.5	•					X	X							
Nigeria	6.9	•					X								
Zaire	6.3	•													
Sudan	6.6	•	X				X								
Ethiopia	6.5	•													
Middle East and North Africa															
Egypt	4.6	•	X	X	X	X	X	X		X	X				
Morocco	5.8	•	X	X				X							
Turkey	4.1	•	X	X			X	X							
Algeria	7.0	•	X				X								
Latin America and Caribbean															
Colombia	3.6	●	X	X	X		X	X							
Mexico	4.6	●	X	X	X	X	X	X	X	X					
Brazil	3.9	●	X				X	X							
Venezuela	4.3	•	X				X	X							
Peru	4.5	•	X	X		X	X	X							
South Asia															
Sri Lanka	3.4	●	X	X	X	X	X	X	X		X				
India	4.8	●	X	X	X	X	X	X	X	X	X				
Bangladesh	6.3	●	X	X	X	X	X	X	X	X	X				
Pakistan	5.8	●	X	X	X	X	X	X							
Nepal	6.3	•	X	X	X	X	X	X	X	X	X				
East Asia															
China	2.3	●	X	X	X	X		X	X	X		X	X	X	X
Korea, Republic of	2.7	●	X	X	X	X	X	X	X	X		X	X		
Indonesia	4.3	●	X	X	X	X	X	X	X	X		X			
Malaysia	3.7	●	X		X	X	X	X	X	X					
Thailand	3.6	●	X	X	X	X	X	X	X	X					
Philippines	4.2	●	X	X	X	X	X	X	X	X		X			

Note: The following countries with populations greater than 15 million were omitted because of lack of data: Afghanistan; Argentina; Burma; Islamic Republic of Iran; Democratic Republic of Korea; South Africa; Venezuela; and Viet Nam.

Key: ● = very strong index; ● = strong; ● = moderate; • = weak; • = very weak or none. For explanation of index, see *World Development Report 1984*, Population Data Supplement, table 6 and notes.

A—Published census data and data from other household surveys less than ten years old on fertility, mortality, and contraceptive use. B—Official policy to reduce population growth expressed by high officials and in a national development plan, sometimes including specific demographic targets. C—Existence of a population planning unit that integrates demographic projections into current economic plans and considers the effect of policies on demographic parameters. D—Existence of a high-level coordinating body, such as a population commission, to set population policy, oversee implementation, and evaluate results of multisectoral policies. E—Government financial support of private family planning associations. F—Public family planning services. G—Family planning outreach, including community-based distribution systems or fieldworkers. H—Active use of mass media for information and education to promote family planning and small family norms. I—Publicly subsidized commercial sales of contraceptives. J—Elimination of all explicit and implicit subsidies that encourage large families (tax reductions for each child, family allowances, free or subsidized health and education services). K—Incentives to individuals or communities to have small families. L—Strong disincentives to discourage more than two births per woman, such as reduced services or an income tax for third and later-born children. M—Policy to set quotas on the number of births permitted annually in a community under which couples must obtain permission to have a child.

Source: World Development Report 1984, table 8.1.

program, shows that merely providing family planning services is not enough. People continue to want many children. A stronger political commitment to population control would undoubtedly boost demand for family planning. Such a commitment must also be backed by effective publicity and by action to make contraceptives more widely available at a price that is affordable by the population at large. Family planning can help to avoid unwanted births and at the same time can improve health. These benefits will help to lower infant mortality, thus reducing the fears about child survival that keep desired family size high. Family planning measures will start to satisfy the unmet demand for birth control and also to stimulate it: in many parts of Africa demand is low simply because people do not know that safe and hygienic birth control is possible. Private and community organizations have been important in providing family planning services. They can act flexibly and rapidly, are often respected and influential, and can experiment with programs and draw upon extra specialist skills and sources of money. Their activities should be encouraged and, where appropriate, supported by governments and donors.

In the short term, action aimed at better spacing of births offers the best prospects. Extended breastfeeding and sexual abstinence after childbirth are already common in Africa, so the latent demand for greater spacing of births is likely to be strong. But these traditional practices are weaker in urban areas, where adolescent pregnancy and sexually transmitted diseases have risen sharply. Education, especially of women, is critical to slowing down population growth. Legal and community action to improve the general status of women would also have an impact, by modernizing women's outlook and employment prospects in ways that would discourage high fertility. But outreach systems, to deliver family planning and improved maternal and childcare services, and health services generally are vital if the bulk of the population is to be reached. All programs that seek to change the behavior of people depend on continuous contact. Thus the funding of population and health services must be sustained and somewhat insulated from short-term budgetary pressure if they are to be effective. This has implications for donor assistance as well as governments.

Health

Sub-Saharan Africa is the only region in the developing world where nutrition has worsened in recent years. Many observers believe that general health is also declining. Comprehensive data are hard to obtain; in many countries, the system of data collection is breaking down. In most of sub-Saharan Africa life expectancy averages around fifty years, but it is as low as forty in Somalia and parts of West Africa. Infant mortality ranges from 77 per 1,000 births in Kenya to 190 in Guinea and Sierra Leone. In Zambia and Zimbabwe, more than 20 percent of children under five suffer from second- or third-degree malnutrition; in Burundi, Sudan, and Tanzania, the proportion exceeds 50 percent. In Liberia, one child in five is stunted.

Better health and nutrition are not only humanitarian imperatives. They are also basic requirements for sustained economic growth and slower population growth. Poor health reduces a person's productivity and impairs a child's learning ability. Yet most African countries have chosen systems of health care that do not meet the needs of their people. Most countries have emphasized urban health care, particularly well-equipped hospitals with highly trained medical staff. In several countries, these hospitals receive over half of public recurrent spending on health services. They are favored partly as symbols of modernity, a bias often supported by the preference of aid donors for large, capital-intensive projects. In every case, the rural areas are correspondingly neglected and preventive treatment downplayed. In some West African countries, only 10 percent of people have access to health services. In most of Africa, procurement and distribution of drugs and supplies is inefficient, services are erratic and unstable, medical education is inappropriate, and health workers are badly supported and supervised.

A few countries, especially in East Africa, have made progress in developing health care systems for rural areas. In Tanzania, for example, until the recent recession, 90 percent of the population had access to basic health services: in the late 1970s dispensaries each served four or five villages, health centers supported three or four such dispensaries, and district and regional hospitals completed the system. However, even countries that have tried to favor

rural preventive care now face difficulties, partly caused by financial constraints. The quality (and probably the coverage) of Tanzania's system has deteriorated. It now seriously needs to retrain staff, strengthen management, rehabilitate facilities, and improve transport capacity.

Access to safe water supplies is another factor affecting health. Although rural water supply programs are being encouraged during the International Water Decade, even in the best served African countries, maintenance has been a severe problem. Urban water and sanitation systems have also generally suffered from neglect and population pressure. But Burkina Faso, Ivory Coast, and Mali have recently made encouraging progress in providing affordable facilities.

Education

There is no question about the fundamental contribution of education to the development of a productive population. The role of female education in fertility reduction has already been stressed, but research shows that it may also be the best investment in health and nutrition. The widespread development and adoption of new technologies will depend on better education. In many African countries, despite heavy investment in education, shortages of middle- and high-level manpower remain a constraint on development.

The growth of education in Africa over the past two decades has been impressive. At independence, Africa had proportionately fewer skilled and trained people than other developing countries, though countries like Ghana and Uganda were relatively well endowed. Most countries depended heavily on expatriates; educational expansion was therefore bound up with Africanization and was pushed hard. Compared with other developing regions, African countries have devoted a large share of government spending to education. Despite a growing population, especially among the younger age groups, primary school enrollments have increased from 36 to 78 percent, and secondary from 3 to 15 percent, of the school-age population. The pattern has varied among countries. Francophone countries have tended to emphasize secondary and tertiary levels, while others

including Ghana, Nigeria, and Tanzania took universal primary education as their goal. Literacy rates have more than doubled, and the number of African professionals and technicians has risen sharply. Progress has also been made in providing textbooks and designing curricula and school buildings.

Education in Africa has been a ferment of new ideas and reforms—some successful, some not—in which governments, planners, teachers, communities, and donors have joined. Education policy is one of the most difficult and controversial questions facing African governments. Virtually throughout the continent the demand for education has been insatiable. While some people have clung to tradition—for example, only reluctantly allowing girls to go to school—they are the exception. Throughout Africa, parents place great store on education. Given this strong demand, the access to education and hence economic and social opportunity among different tribes, regions, and urban and rural areas, and between sexes has been a driving force behind moves to end discrimination and promote equity.

But the pattern of demand for education does not generally reflect the benefits of education for society at large. For example, high salaries in the modern sector, especially in government, have reinforced the pressure to expand and subsidize higher education, rather than basic education. University scholarships have absorbed a large share of educational expenditure in many cases, increasing the demand for university education above its sustainable level, as well as benefiting socially advantaged groups whose children tend to go to universities. Some donors have probably reinforced this distortion by concentrating their assistance programs on higher education. Yet it is a balanced education system that is required in order to meet the specialized needs of a developing economy and to create healthier and more productive people. For most African countries greater emphasis on basic education is required in order to generate the appropriate balance.

Despite rhetoric in favor of basic and nonformal education, formal schooling has continued to receive the lion's share of resources. This is one reason why, compared with those of other developing countries, the unit costs of education as a percentage of per capita GDP are high in sub-Saharan Africa. Teacher salaries are also

a major factor: primary school teachers in sub-Saharan Africa are paid, on average, six to seven times per capita GDP, compared with about 2.5 times per capita GDP in Asia and Latin America. This high ratio is more a reflection of their scarcity value at independence than today.

Such high costs make it inevitable that education suffers when government budgets are under pressure. Although governments have not typically cut spending on education any more than other sectors, the fact that its share of the budget is so high—ranging from 15 to 25 percent in most sub-Saharan African countries—makes it an inevitable victim of budget cuts. Cuts have particularly affected supplies of textbooks, classroom materials, and transportation services, especially those requiring foreign exchange. The tendency to wait until cash runs out has meant that teachers often go unpaid for several months, with obvious effects on morale and productivity. It is therefore the quality of education that suffers because of budgetary constraints, though the damage may take years to show up. However, already many observers believe that, as a consequence of the budget problem, enrollment rates are no longer increasing and may actually be falling. One (possibly extreme) example is Togo, where the number of teachers has been reduced and schools closed because of budget cuts. Primary school enrollment fell from 72 percent in 1980–81 to 63 percent in 1982–83.

Human Resources: An Agenda for Action

As financial pressures have grown, the choices and tradeoffs in all these socioeconomic programs have become harder and more pressing. Many of the best responses are common to all sectors:

- *Setting objectives and priorities.* A clear statement of objectives to be achieved under each program is required. This involves a determination of priority target groups for population, health, water supply, and education expenditures. It involves a recognition of what cannot be financed as well as what should be financed. Moreover, programs need to give far more emphasis to the design of low-cost projects that are efficient and replicable. The adoption of standards relevant to

higher-income countries is inconsistent with the need to provide services to large segments of the population.

- *Better policymaking and planning.* Both education and health employ large budgets and bureaucracies. Yet effective, policy-focused planning is weak. In particular, the links with central planning and finance ministries seldom go beyond the allocation of budget ceilings—and in recent years these have often been lowered suddenly, making a mockery of attempts to plan rationally. Equally, the spending ministries need to take financial constraints more seriously, by planning for slower but better-balanced expansion. Planning in population, health, and education, more than in other sectors, depends not only on good technical analysis but also on widespread debate and consultation among interested groups. Such planning is a continuous process of trial and feedback, which is not new to Africa but will have to intensify with the present and prospective stringency.

- *Better resource allocation.* Health services need to shift from large centralized, curative facilities, to a small, decentralized preventive approach, with more maternal, child health care, and family planning and better balance between urban and rural provision. Costs per death averted are at least five to ten times lower in the decentralized facilities. The emphasis in education generally needs to shift from university scholarships to primary and secondary education and to technical training. The vested interests are powerful, but several countries are making progress: Malawi, Niger, and Zambia have deferred plans for new hospitals, extensive renovation, and costly, specialized equipment.

- *Stronger donor coordination.* Duplication of effort, inconsistent approaches, and conflicting signals to governments have clouded efforts to support health and education programs. On critical resource allocation issues—for example, large hospital construction—and on such questions as the use of fees and private facilities, consideration of the countries' broader interests and financial position should be paramount. Efforts to improve coordination through the use of a lead donor have been encouraging in the health and population programs in Kenya and Mali. Aid coordination can frequently be most effective

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if sector programming and planning is used as a starting point.

- *Persistence.* The effectiveness of programs depends on recurrent spending, particularly for critical supplies such as textbooks and drugs. Well-managed organizations are also needed to deliver dependable services to rural communities, which requires not only the assignment of effective managers to the task but also training and the use of both governmental and nongovernmental organizations, including the private sector, where appropriate. Not only must the implications for future recurrent costs be taken into account, but also whether all involved (central and local governments, voluntary organizations, and households) are financially able to perform their roles.

- *Lower costs.* Much can be done to make better use of existing facilities—by utilizing day schools, rather than boarding schools, for example, or by simplifying classroom and clinic design, using local building materials, and sharing costs with local communities. Donors as well as governments can do far more, however, in adopting efficient but low-cost solutions to supplying services. But cost reduction cannot be viewed in isolation: where staff costs dominate, vested interests have to be confronted and overcome.

- *Decentralization.* Where communities have been organized to participate in the provision of services (as in education in Ethiopia), or where private initiatives have been encouraged (as in secondary schools in Tanzania recently), services can often be provided more cheaply and effectively. Decentralization and privatization are not panaceas, however: consistency with national policy, replicability elsewhere, and equality of access must be recognized as issues. User fees have a role in certain cases, such as where patients have a choice between ordinary or special accommodation: Zimbabwe recently started charging patients who bypass lower-level facilities to go directly to hospitals. But charges are almost certainly inappropriate for preventive services like immunization.

Spending on socioeconomic services will have to increase simply to keep up with population growth, even if costs can be contained. As regards population programs, the *World Devel-* *opment Report 1984* estimates that, to meet current demand for family planning, spending in sub-Saharan Africa should almost triple from its 1980 level of $112 million. To achieve a rapid decline in fertility, which could reduce the projected population increase by almost 100 million by the year 2000, a real increase in spending of 16 percent a year, to $2.4 billion, is needed. Clearly, at a minimum, spending on population programs should be a rising proportion of government budgets and aid programs. More generally, donors should be increasing their assistance to well-formulated programs in the socioeconomic sectors. These programs should include a full analysis of present and future financing needs. Governments must plan to meet operation and maintenance costs more effectively, including the wider use of fees, and donors will have to show more willingness to finance recurrent and local costs.

Agricultural Research

Agricultural research is failing to provide adequate support for producers of both food and export crops. Major advances like those which revolutionized wheat and rice cultivation in Asia have not been made since the 1960s, when new maize hybrids were adopted in southern and eastern Africa. No major breakthrough has been achieved in genetic improvement of rainfed millet and sorghum, which account for 80 percent of the cultivated land in the Sahel and other areas of low rainfall. Nor can rapid progress be expected. At the international level, the Consultative Group on International Agricultural Research (CGIAR) has four centers in Africa, and all thirteen centers supported by the CGIAR worldwide are supporting most aspects of African agriculture. Existing regional centers, such as the International Center for Agroforestry (ICRAF), have made important contributions. But international and regional programs do not cover such export crops as cocoa, bananas, coffee, tea, and oil palm to which other parts of the world have directed more attention and now have superior technology.

These weaknesses of agricultural research are not simply, or even mainly, a matter of staff and money. Between 1970 and 1980 the number of research scientists increased from about 1,600 to

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over 4,000—a growth rate of 9.6 percent a year, compared with a growth rate of just under 9 percent a year for South and East Asia. There are now almost half as many research scientists in Africa as in Asia. Expenditure per scientist is also high compared with those Asian and Latin American countries that are regarded as having effective agricultural research programs.

The major problem is to develop a more effective use of the existing research capacity. At the national level in many priority areas, research results have not been adequately disseminated. Even local researchers are often underemployed because programs lack focus, continuity, and coherence; research management is weak and its status low. In most African countries, researchers are isolated from farmers and extension workers, so nobody can see the direct relevance of research.

Research financed by donors has produced some useful results, but the overall record is mixed. Although some competition in ideas and research strategy is healthy, excessive duplication of effort and conflicting focus among donors have caused problems. By contrast, in the 1960s successful research in Africa mainly resulted from work promoted by or intended for users (maize research in southern Africa, tea research in Kenya, for example). This emphasizes the importance of developing strategies that raise the returns to agricultural production and give higher priority to support services; in this way, agricultural research will be more oriented toward the farmer.

A stronger regional effort should be undertaken to deal with farming problems that are common to several countries. Such an effort will involve strengthening existing regional centers, such as the International Centre of Insect Physiology and Ecology (ICIPE) and ICRAF, and developing a more focused and comprehensive work program. These regional efforts have to be supported by grants since there are no national guarantors for loans. A regional research fund could be established for this purpose.

Although more effective use of existing research capacity must be the priority, spending on research will still need to increase over the next decade. The needs of small countries and the diversity of agroclimatic zones suggest that the objective should be an approximate doubling of expenditure in real terms by 1990 over the level of $170 million in 1980. The research must be heavily adaptive, working on the

changes needed to apply existing technologies to local conditions. More attention is required to the whole system of farming and to the sustainability of the land itself: not only agronomic practices—land preparation, hybrid seed, fertilizer, and weed control—but also land tenure and farming systems. But the adaptation of existing technology will not by itself be enough, especially in the dry areas. Major research is needed on new crop varieties, techniques for soil moisture conservation, land use, livestock diseases and systems, and agroforestry.

Conservation

Recent droughts have underlined the seriousness of soil erosion, deforestation, and fuelwood shortages. They are closely related problems. In many parts of Africa, traditional farming is used to maintain soil productivity and forest cover against a background of relatively stable populations. This balance has been upset by rapid population growth and rising demand for food crops and fuelwood (particularly from urban areas). Farmers and pastoralists have damaged the land by shortening the fallow period and extending the cultivated and grazed area. In many countries, forest cover is being irretrievably damaged, with appalling consequences for household fuel supplies, soil fertility, and water supply. In the Sahel about 1 percent of the natural forest cover is being lost each year. Fuelwood consumption alone now exceeds the growth of new trees by a factor of ten in Mauritania and Rwanda, by five in Kenya, and by about two and a half in Ethiopia, Nigeria, and Tanzania.

Much can be done to reduce the demand for fuelwood by increasing the efficiency of biomass use: improved designs of cooking stoves; more economical use of firewood by industry; conversion of wood to charcoal; and greater utilization of wood wastes, surplus softwood, and crop residues. In urban areas, substitution of commercial fuels (propane, kerosene, and electricity) for fuelwood would often be economically justified. But the price of fuelwood seldom reflects replacement costs—and is unlikely to do so until available resources are used up, or until governments can collect stumpage fees to cover replacement costs. As long as their ability to influence fuelwood prices in this way remains

weak, governments can place more emphasis on community-based activities to heighten awareness of the costs and dangers of deforestation and its connection with other matters of community concern—soil protection, food supply, livestock management, and land use. In many cases, changes in land tenure arrangements may promote stronger community and individual responsibility for managing resources.

Efforts to increase the supply of fuelwood to those areas where the needs are most serious—mainly urban centers and densely populated rural areas—should focus on systematic identification and utilization of biomass supplies in remote areas, establishment of forestation programs in rural areas and around towns and cities, introduction of new tree varieties, and greater use of biomass wastes for fuels through briquetting and improved charcoal techniques.

Better surveys to provide basic data will generally be required, though action need not be delayed until these are completed.

The hardest areas for action are in the management of existing forests and reforestation. Rural awareness of the economic and ecological hazards of deforestation is only beginning. Yet given the difficulty in organizing government action (since natural forests are not under government control), community involvement is essential. Reforestation has been constrained by the same lack of community commitment and also by the inadequacy of technological packages. However, recent efforts in Ethiopia and parts of the Sahel have revealed a growing willingness to plant and maintain trees. High priority must also be given to research on improving local tree species and to integrated programs that recognize the interdependence of crops, livestock, and forestry.

4. Managing Policy Reform

There is considerable scope, even within the basic constraints on Africa's long-term development, for increasing output. Through appropriate incentives, through more efficiently operating supportive services such as transportation and marketing, and through better use of government expenditure, increased production can rapidly be generated. The need for such measures is now urgent. Without them, there is little prospect of sustained growth in sub-Saharan Africa, and without growth, resources for tackling the basic constraints on development will be grossly inadequate.

Outside Africa, many governments face the same task of increasing the efficiency of resource use. Countries as different as China, Hungary, Sri Lanka, Bangladesh, Turkey, and Jamaica are trying to develop a new vision of economic management. This vision typically embodies four major themes:

- Using pricing policy more widely in place of administrative controls to allocate resources
- Reducing the burden on governments by greater use of community efforts and the private sector, so that governments can undertake their central responsibilities more efficiently
- Giving more responsibility to managers of parastatals to operate their enterprises in a businesslike manner
- Avoiding discrimination against exporting.

There is a growing consensus on the need for such policy reforms in sub-Saharan Africa. The "Economic Report on Africa, 1984," prepared by the staff of the African Development Bank and Economic Commission for Africa, concludes that "necessary conditions for growth are the improvement of the management of the

national economies, deep reforms in the functioning of the public sector, as well as the provision of sufficient incentives to private initiative" (paragraph 122). Similar conclusions emerge from many national documents. For instance, the report of the Working Party on Government Expenditures in Kenya (the Ndegwa Report) observed that "[some of] the causes of the current fiscal situation . . . are external in nature, but the more fundamental ones represent growing weaknesses in some government operations." Similar statements are to be found in Tanzania's 1982 Structural Adjustment Program, in Zambia's recently prepared expenditure program for 1984-86, in Ghana's economic recovery program, and in several other recent plans and programs.

While the broad outlines of reform can be agreed upon, prescriptions can be generalized only up to a point. Measures must be formulated to meet the specific needs of each country, but this task must be undertaken with a recognition that implementation is urgent. Reforms are required in four main areas: the incentive system—especially in agriculture; public/private sector balance; public expenditure programming and infrastructural support; and institutional reform.

Incentives

Since African economies are typically small and dependent on world trade, and since agriculture accounts for a large share of GDP and exports, two strategic pricing policies are critical: exchange rates and agricultural prices, both for food and commodity exports. There has been a general overvaluation of exchange rates. Exports have stagnated and have been unable to

keep pace with rising imports. The internal terms of trade have shifted against agriculture during the 1970s, especially in the case of export crops. The growing scarcity of foreign exchange has been met by increasing resort to import licensing and exchange controls. By the early 1980s, many sub-Saharan African countries had active illegal markets in foreign exchange and in bartered goods. Devaluation of domestic currencies had, therefore, become an increasingly pressing need.

For virtually all African countries, scarcity of foreign exchange is a long-term fact of life. Prospects for the prices of traditional exports and for external assistance are poor, and heavy debt servicing obligations have been incurred. In addition, the pattern of consumption in African economies and the pattern of production in industry and agriculture remain heavily dependent on imports. Only by reflecting this high import intensity in the price of foreign exchange can the scarcity be eased. Devaluation rewards earners of foreign exchange and taxes users of foreign exchange. If the scarcity is not eased in this way, domestic production and income will have to be continuously held back in order to reduce import demand, and costly administrative controls over foreign exchange will remain.

Sub-Saharan African countries, along with other developing countries, sometimes face trade barriers and international trading arrangements that increase the difficulties of expanding certain traditional exports and diversifying into new fields that offer better prospects. These include the escalation of tariffs on semiprocessed products and nontariff barriers to certain agriculture and livestock products. However, the importance of these obstacles should not be exaggerated. In the medium term, there is little realistic alternative for Africa to trying to regain its former share of traditional markets by providing higher prices for exporters, more efficient production, and more aggressive marketing. Yet for many commodities Africa's market share has continued to fall. Realistic exchange rates are critical to reverse this trend. While there is always room for judgment concerning the timing and speed of exchange rate devaluation, practically all African governments will have to keep this policy issue under continuous review.

Many are showing a greater willingness to do so. Between 1980 and 1983, twenty-five sub-Saharan African countries depreciated their

nominal exchange rates, a turnaround compared with the 1970s. Of these, sixteen countries managed to devalue their real effective exchange rates (see table 4.1); for five of these (Benin, Ghana, Ivory Coast, Uganda, and Zaire) the real depreciation was 20 percent or more. In nine countries, however, the real exchange rate appreciated by more than 20 percent. Their experience underlines the need to control inflation both by augmenting the supply of goods and services and by effective demand management once an exchange rate has been devalued. Nevertheless, several countries have been able to adjust relative prices, despite high inflation rates, by depreciating their exchange rates more frequently. Of particular interest are the experiments in flexible, market-determined exchange rates in Uganda and Zaire. Although it is too early to make a definitive assessment, both countries have significantly reduced the parallel markets in their currencies. Fears that import priorities would shift toward luxury goods have not been borne out so far.

Table 4.1. *Changes in Real Effective Exchange Rates in Sub-Saharan Africa, 1980–83*

Percentage change between 1980 and 1983	Country
Appreciation	
20 percent and above	Burundi (40), Liberia (27), Mauritania (34), Nigeria (38), Rwanda (41), Sierra Leone (53), Tanzania (77), Chad (22), Ethiopia (20)
0–20 percent	Madagascar (15), Zimbabwe (14), Central African Republic (0.4), Congo (7), Niger (2), Somalia (6), Zambia (3)
Depreciation	
0–20 percent	Cameroon (−2), The Gambia (−5), Malawi (−1), Mauritius (−6), Senegal (−9), Sudan (−6), Togo (−3), Botswana (−3), Kenya (−11), Mali (−12), Burkina Faso (−14)
20 percent and above	Benin (−24), Ivory Coast (−20), Zaire (−20), Ghana (−37), Uganda (−78)

Note: The real effective exchange rate (EER) is defined as the import-weighted exchange rate adjusted by the ratio of the domestic consumer price index to the import-weighted combination of consumer price indexes in the trading partners. Figures in parentheses are percentage changes in real effective exchange rates. Minus sign denotes depreciation.

Source: International Monetary Fund, Research Department (1984).

The critical need to improve incentives to agriculture in sub-Saharan Africa through exchange rate adjustments and other measures has made very limited progress. Apart from inadequate adjustments in exchange rates, the reason lies with domestic inflation, which has often reduced the real value of producer prices, and with the decline in international prices of primary products. A sample of twenty-nine sub-Saharan countries shows a reduction of between 10 and 60 percent in real producer prices of export crops between 1979 and 1983. The position of food crops has been different: their real prices were generally maintained or increased, except in Burundi, Ethiopia, The Gambia, Guinea, Madagascar, Senegal, Somalia, and Tanzania. Incentives to farmers have also deteriorated because of changes in input prices in relation to output prices. Reduced subsidies have contributed to a steep increase in input prices, particularly for fertilizers. In most of eastern Africa and in several western African countries, prices of inputs rose more than the prices of food and export crops. The exceptions have been those countries where food prices for producers have risen significantly (Ivory Coast, Liberia, Mali, and Niger) and those where oil revenues allowed the government to hold down input prices (Cameroon and Nigeria) or where the government refused to sanction increases in the price of fertilizers that were needed to cover the industry's costs (Zimbabwe).

Changes in real producer prices and in output/input price ratios provide only a guide to agricultural incentives and are no substitute for a case-by-case approach to agricultural pricing policy. Equally important are the availability of inputs and consumer goods and the efficiency of marketing, including the size of marketing margins and the extent of unofficial markets. Also significant is the return to farmers from alternative activities—as revealed, for instance, by average urban real incomes. When the real economy is contracting or growing slowly, a shift in the terms of trade to agriculture can only be accomplished by compressing the government budget and urban incomes. In most of sub-Saharan Africa, urban incomes and employment have already suffered seriously from the recession, and governments perceive limits to the extent that further sacrifices can be imposed. Nevertheless, several governments, such as Ethiopia, Mali, Togo, and Zambia, have imposed salary freezes. Zambia has also placed a 10 percent limit on nominal wage adjustments in the nongovernment sector. In these circumstances, whatever the merits of a rapid removal of major price distortions, frequent exchange rate adjustments over several years will often be a more effective policy. What is vital is that governments recognize the critical importance of these price adjustments and, by making them more regularly, reduce their political impact.

Outside agriculture, price distortions have been reduced in recent years. Most countries have cut or eliminated subsidies on utilities, and some (including Tanzania, Uganda, and Zambia) have abolished or greatly loosened price controls. However, the distortions resulting from price controls and relatively high levels of industrial protection remain severe in most of sub-Saharan Africa, both discouraging output expansion by relatively efficient plants and protecting inefficient ones. Several countries have increased nominal interest rates, though seldom enough to make them positive in real terms. In all but a few countries, retail petroleum prices are close to or above import costs, though subsidies often remain on fuels used by low-income groups. However, given the persistence of overvalued exchange rates and the slow progress in improving the agricultural terms of trade, these positive moves have been of limited effect.

In the longer term, the greater use of exchange rates and a more open trading environment are essential preconditions for successful industrialization and regional integration in sub-Saharan Africa. Many of the most wasteful manufacturing investments have been oriented toward sluggish (or declining) and heavily protected domestic markets. Those that have been export oriented have often been made unsuccessful by overvalued exchange rates. In a period of structural adjustment, those that have no future, even in an environment of improved foreign exchange availability and other incentives, should be the first to go. Industrialization in time will be an engine of growth in Africa, as it has been elsewhere. But this will require clearer recognition that the capability to supply domestic, African, and world markets efficiently is central to success. Otherwise, industry becomes a burden on the more efficient and dynamic parts of the economy. Similarly, greater regional integration will follow from more open trade and currency arrangements, such as exist already in Francophone central and western Africa and are now being intro-

duced through the Preferential Trade Area in eastern and southern Africa. Much trade already takes place unofficially among African countries; this trade should be encouraged rather than restricted if the goal of regional integration is to be served. Flexible exchange rates will frequently be necessary to stimulate more open trade and currency arrangements within Africa. For landlocked countries, better physical infrastructure is sometimes required, but secure and dependable routes and fewer border restrictions are the more immediate priorities. Past efforts at regional integration, such as the EAC, have emphasized regional institutions that depend on political cohesion. More recent efforts, such as the Southern African Development Coordination Conference (SADCC), have instead stressed the assessment of needs on a regional basis, but investment on a national basis. Even so, progress has been slow because of weak national institutions.

Public Sector Reforms

In most African countries, public sector responsibilities and employment have become unmanageably large. While the public sector's responsibilities for easing Africa's basic constraints are set to grow, some of them can be carried out more efficiently by community efforts and the private sector. This applies particularly to marketing (not only crops, but also the full range of rural trade), transport (especially trucking), aspects of education and health, and subcontracting of maintenance work in construction. The issue is not whether to favor the public or the private sector in the abstract; it is how to reduce the burden on the public sector and encourage the private sector in a way that provides the services more efficiently and is consistent with national priorities. The coexistence of public and private entities will often be desirable so as to provide the necessary stimulus to efficiency, particularly in the case of services such as marketing and transport. Moreover, governments need to reform the framework of taxation, tariffs, and administrative controls (on foreign exchange, investment licenses, and so on) to give more equitable treatment to artisans and small businesses. Such reforms would not involve favoritism toward small businesses; they would merely remove

existing biases against them and establish a framework for the private sector that will maximize national benefits.

In starting to reform their public sectors, several countries—Burundi, Kenya, Lesotho, Liberia, Malawi, Mali, Sierra Leone, and Uganda—have banned or severely limited growth in public employment. Some countries—Benin, Kenya, Liberia, Malawi, and Uganda—are attempting to rationalize their existing public enterprises through merger, liquidation, or privatization and to establish better defined relations between governments and enterprises (like the *contrat-plan* in Senegal). Although there are several examples of long-standing successful parastatal organizations in sub-Saharan Africa (TANESCO in Tanzania, the GEZIRA Board in Sudan, among others), clear signs of recent progress are few.

Given the large marketing margin appropriated by agricultural parastatals, it is particularly important for governments to relax controls on prices and movements of crops and to avoid giving the parastatals a monopoly. While progress in this area is patchy and tentative, there are some signs of progress. In Mali, liberalization of coarse grain marketing is being pursued despite increases in domestic prices induced by the drought. Although it still has the monopoly for rice, the marketing parastatal (OPAM) no longer monopolizes coarse grain purchases and only handles food aid or stocks bought in competition with private traders. Producer prices for coarse grain have increased. In Sudan, Uganda, and Zaire, parastatal control of food crop marketing has been eliminated, while Ivory Coast, Madagascar, Senegal, Somalia, and Zambia are reducing government intervention.

Public Expenditure Programs

Reducing public expenditure is essential in most African countries today since it is at an unsustainable level: the question is whether the contraction can be managed in such a way as to improve efficiency. The Bank has reviewed many public investment and expenditure programs in recent years, frequently in the context of aid group meetings. These reviews indicate that twelve of eighteen countries have pruned financially unviable or low-priority investments, redesigned projects or programs to begin

reflecting resource constraints and national priorities, and shifted spending toward operation, maintenance, and rehabilitation. There are grounds for believing that the overall quality of investment is improving. But almost without exception, these reviews show that much more improvement is needed.

- The starting point has to be a realistic assessment of expected resources, both domestic and foreign exchange, over the next two to three years. If the program is unrealistically large, activities will be initiated that cannot be completed.
- The next step is to assess the extent of underfunding for operation and maintenance of viable ongoing projects. Rehabilitation becomes more expensive if deferred, particularly for transport, urban infrastructure, and public utilities projects. In Nigeria, for example, the 1981-85 highway program identified 9,000 kilometers of trunk roads as needing substantial strengthening or reconstruction, but by 1984 only half this program had been achieved. Priority should be given to these needs.
- Once they make realistic allowance for operation and maintenance, governments usually find that "free resources" are limited. The initiation of new projects must therefore be subject to more careful scrutiny. Even ongoing projects should be reexamined critically. Some projects that are good in isolation will collectively overstretch managerial resources and deserve only low priority under present circumstances.
- Almost without exception, the Bank's reviews have revealed that a good deal of the pressure to undertake new investment or continue with low-priority projects derives from the inflexibility of foreign donors. The more the program is externally financed, the harder it has been to maintain national control over priorities. However, several countries, including Liberia, Sierra Leone, Sudan, Tanzania, Zaire, and Zambia, have succeeded in sharply reducing the number of new investments. In Sierra Leone only 137 of 400 existing projects are active.
- Administrative services, especially the most employment-intensive ones, tend to be protected from budget cuts. In many cases (for example, regional administration and basic

law and order), such protection may be justified, but too often, higher-priority expenditures are being sacrificed while administrative staff escape.
- There are serious imbalances between wage and salary expenditures and other charges: payrolls often remain high while there are shortages of schoolbooks, medicines, transport fuel, small tools, and spare parts needed to make existing levels of service effective. These shortages are often caused by foreign exchange constraints.
- Broad sector priorities for determining expenditure are often misleading. For instance, although infrastructure and industry are not priority sectors for new investment, expenditure for maintenance and operation of existing capacity is usually a priority. Similarly, although health and education are priorities for addressing the long-term constraints on development, within these sectors many areas of waste and low priority exist. Agriculture is a priority sector, but its priorities do not include subsidies to inefficient marketing parastatals or large, high-cost irrigation schemes.
- The imaginative redesign of programs and projects has often yielded dramatic results. A major urban highway system in Ivory Coast, for example, was scrutinized and then abandoned in favor of a cheaper, yet more effective, traffic management system. In sectors such as urban development, where finance constraints have become particularly severe, the strengthening of urban management and revenue raising has become a more important theme, which has been successfully pursued in Kenya, Mali, and Mauritius. Although public investment in infrastructure and shelter in Bamako fell by nearly half during the 1970s, the city upgraded its site-and-services scheme for 40,000 people and improved drainage, water supply, and garbage collection. Its municipal revenues in 1984 are expected to be double what they were in 1980. The authorities made their cuts in high-cost and high-income housing schemes.

Institutions

Recent reform efforts have, without exception, highlighted the importance of institu-

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tions—especially finance and planning ministries and central banks and their coordination with key sector ministries. Yet the systemic weakness in African governmental institutions has often worked against the imperative of coordinating policy reforms. Improvements in incentive systems, as well as changes in allocation criteria, investment decisions, and management structures, have to be handled as a package; corrections in one area (for example, reducing a subsidy on fertilizers) may bring no benefit unless other connected changes are made (for example, increasing producer prices).

Moreover, policy reform is a continuous process, not a once-and-for-all change. The need for flexibility and adaptability is the single most important lesson of experience. Economic institutions should be responsive to fast-changing circumstances: prescriptions and policy signals need to be assessed, analyzed, and internalized in the country's decisionmaking process. Governments need to focus their attention on building such policy-planning institutions and strengthening their management information systems to provide up-to-date policy analysis. As chapter 5 will note, donors can help both by building a system that regularly monitors developments in major policy variables and by providing high quality technical assistance to those governments interested in building up such capacity.

Institutional reform is, of course, a long-term affair and is particularly difficult to monitor. However, there are signs of progress in several countries. In Ivory Coast, oil revenues have been integrated into the budget, and the public investment programming and monitoring system has improved. Liberia, Madagascar, Mauritius, Nigeria, Sierra Leone, Somalia, Sudan, Uganda, Zaire, and Zambia have recently introduced two- or three-year investment programs as a first step in restoring stronger economic management. Kenya has begun improving its forward budgeting system, to provide a multiyear framework to include the parastatal organizations. Kenya, like Ivory Coast, Malawi, and Sudan, is also seeking to improve its system of external debt management. Guinea-Bissau, Mali, and Niger are instituting basic facilities and simple management systems to overcome serious deterioration. Several countries are overcoming a longstanding reluctance to confront the basic issue of public service management.

Aid administration is a particularly important area for institutional reform. Basic information on aid flows is often lacking; responsibility for donor contact and negotiation is unclear; links seldom exist between the plan, the budget, sector ministries, project entities, and donor activities. Substantive national control over development efforts will not be obtained until these activities are strengthened and coordinated by the governments themselves.

Institutional reform should often mean experimenting, particularly when it comes to delivering services in agriculture, education, health, and utilities. Established administrative models have often turned out to be costly and ineffective and frequently to have regressive impact on distribution. More could be achieved through a mixture of government, private, and community institutions. The Training and Visit system of agricultural extension is being tried in Burkina Faso and Kenya, for example. It may prove effective in tightening management and overcoming the notorious weaknesses of extension services in many countries.

Despite the scarcity of trained manpower in Africa, skilled and trained people are often as underutilized as physical capital, at least in the public sector. The key to the problem is the management of local and expatriate manpower. Typically, local staff are poorly motivated and lack leadership and direction; appointments in senior positions are often political; and rewards and punishments are unrelated to performance. Not surprisingly, expatriate technical assistance is no more successful in this context. Botswana, however, has managed technical assistance successfully by relating requirements to a national program, rather than to a project-by-project determination of needs, and by including technical assistance in national policies of personnel management. Expatriates have been used in line positions as well as advisory ones; they are included in the same system of evaluation, performance monitoring, and training as local staff. Some other countries have also made encouraging progress in project-related training, with rapid payoffs from focused, practical training in specific skills.

Recent Progress Assessed

There are definite signs of greater willingness of African governments to consider policy

reforms. There can be little doubt that this willingness is primarily the result of tighter financial constraints, which have prompted a reassessment of development strategy and a focus on the efficiency of resource use. The growing consensus on policy issues among external donors and international organizations has also contributed. However, actual progress in reform and in performance has been very limited. Four factors seem important.

- Implementation of policy reforms has been limited, particularly for key prices such as exchange rates and agricultural prices. Although there is a growing consensus about the need for and general direction of reform, agreement on the extent and urgency of the change needed and the precise content of programs has been limited. There are some genuine concerns—especially the impact of policy reform on the poor. The urban poor have lost out through higher food prices and deteriorating services; rural dwellers in areas of low potential have not benefited, except indirectly, from strategies that provide improved incentives to cash crop farmers on better land. The earlier policies of sub-Saharan African governments, however, were redistributive only in the sense that they redistributed poverty, not growth. Moreover, some recent reform efforts have demonstrated that they can be designed to protect the poor. In any case, failure to reform policies ostensibly to protect the poor has too often in practice been to protect others.

- The potential beneficial effects of reforms in areas such as agriculture have been neutralized (or overwhelmed) by drought, as well as deterioration in infrastructure services, particularly transport and marketing. In several countries, insecurity and political instability have also threatened serious reform efforts.

- Policy reforms must form part of a strategic design covering all the critical areas. During the last four years, however, reforms have been patchy and piecemeal. They have typically been more evident on the demand side—in terms of fiscal and monetary restraint—than on the supply side, in such areas as parastatal reform and strengthening of public sector management. While bold and decisive reforms are urgently needed, the implementation of reform will initially be a step-by-step process.

- Inadequate donor support for policy reforms has meant growing scarcities of vital inputs (such as fertilizer) and vital services (like transport), which have frustrated the supply side response to more flexible prices. In some areas, external donors have also contributed to the difficulties that African governments face. While only governments can initiate and sustain policy reform, donor support is essential. This will require reforms in donor policies to match the reforms of domestic policies in Africa.

5. Supporting Policy Reform

Previous chapters have examined Africa's underlying trends, recent developments, and future prospects. They provide the basis for considering how donor strategies and programs can best be modified. Of course, any changes can be considered only in general terms. Each donor has its own objectives and legislative procedures, while—whatever their similarities—each African country faces a different set of problems. However, some issues are common to aid programs in Africa, and their resolution by donors is essential to achieving a concerted and effective response to African efforts to end stagnation and retrogression and to restart rapid sustainable growth.

- How can donor coordination be improved to ensure that aid is used more effectively to support country programs?
- How can donors best assist African governments in introducing and sustaining policy reforms?
- How can donors most effectively support expanded programs of agricultural research, reforestation, education and training, and health and population?
- How can donors relieve Africa's growing debt servicing difficulties?
- How can donors best support effective economic management of countries within constrained resources?

Aid Coordination

The heart of Africa's economic crisis is the low rate of return on its capital investment. Much of this failure comes from investment programs that have been extensively financed from external sources. This concern at the aggregate level also exists at the project level. Many donor financed projects have taken much longer to complete and have been much more expensive than anticipated. These startup problems have frequently been followed by disappointing operational performance due to a lack of inputs (staff, equipment, materials), poor maintenance, and various administrative weaknesses. In the worst cases, new aid has been needed to rehabilitate projects completely.

Reform of donor strategy should begin with measures to improve the effectiveness of existing aid. Such measures cannot be separated from the wider issue of making better use of resources in general. Many of the failings of aid programs stem from the failings of domestic policy described in earlier chapters. In particular, foreign assistance poses a critical challenge for the management of public investment; in some countries, the public investment program has become little more than the aggregation of projects that donors wish to finance. These projects have not always been consistent with the priorities necessary for achieving national development objectives. Donors finance the projects that spending ministries and agencies want, but these wants are seldom coordinated by the core ministries. As a consequence, public investment programs are rarely determined by a realistic assessment of available resources. Too many projects are started; governments make inadequate allowance for local costs and underestimate how costs might overrun; and they do not budget for all the recurrent expenditure that new investments will involve—teachers, salaries, books, medical supplies, fuel for extension workers, and so on—most of which must be financed domestically. The realization is dawning only slowly that even grant financed projects are not free.

In formulating their strategies donors have,

therefore, to start with the government's own medium-term spending plans, paying attention to two features in particular. The first is whether medium-term programs are based on a realistic assessment of available finance for the economy as a whole and for the public sector and are consistent with sectoral priorities. The second is whether the medium-term plans are the effective operational program of the government. They must not be a planning exercise that is independent of the budgetary process. Too often spending ministries proceed with projects simply because they are included in a plan. Having established these two points, donors need to direct their aid more deliberately toward supporting the government's program; otherwise they will aggravate the lack of coordination that results from inadequate domestic management. No amount of aid coordination will help unless donors are working within well-formulated macroeconomic and sectoral government programs.

The way this result can be achieved will vary from country to country. Some countries already have the technical capacity to prepare their development program, plus an executive structure to ensure that spending bodies and foreign donors operate within the program. Many other countries require help to make their planning and budgetary systems more efficient and to implement the results more decisively.

Technical assistance for preparing plans and budgets is available from many national and international sources. It covers areas such as public revenue and expenditure projections, classification of public expenditure, budget preparation and control, and other specialized areas of public sector financial management. Donors should continue to provide and adapt their assistance in all these areas. However, certain gaps remain—for example, the management of external public debt and public enterprises. In recent years the World Bank, among others, has increased its assistance to African governments in these areas.

A bigger challenge to donors is the assistance that some African governments need in executing their spending programs. It is little use improving the technical capacity of ministries to prepare expenditure programs if donors then provide part of their own aid outside this framework. They need to collaborate much more closely with the core ministries when the latter are attempting to discipline the government's

spending program. They must be willing to modify their policies and procedures so as to conform to the program. This involves recognizing that African institutions are still being developed and the process for controlling expenditure is in many countries still very fragile. For example, spending ministries and other government agencies often arrange external financing for their projects independently of core ministries. Sometimes they do so in the context of a five-year planning exercise, or they assume that the aid offered for a project will be additional to what has already been agreed or that the external financing is not fungible so would be lost if they refused the project, even though the project may impose excessive burdens on their budgets or managerial skills.

The weaknesses of uncoordinated aid are increasingly recognized by African governments and donors. More consultative groups, UNDP sponsored roundtable meetings, and other arrangements have been set up to coordinate aid. There are at present nine active consultative groups for sub-Saharan African countries, seven of which have met during the 1984 fiscal year. Proposed consultative groups for three additional countries are at an advanced stage of discussion and preparation. UNDP roundtables are planned for twenty countries, of which twelve have already been held. One common feature of all these meetings is a presentation by the government of its medium-term program (particularly, its public investment program) and supporting policy measures. This is a valuable exercise for governments and donors alike, but to be useful as a guide for donor decisions the aggregate and sectoral programs must be more defined and the priorities more explicitly established.

In a few cases, governments and donors have made big changes to their procedures as a result of consultative group meetings: Sudan has been the most striking example. And Mali's efforts to reform its grain pricing and marketing were supported by a food aid group, chaired by the World Food Program. It used the counterpart finance of food aid to ease the transition to full market pricing.

However, such achievements serve to highlight the fact that consultative groups have generally suffered from two major weaknesses. First, the commitments made by both governments and donors on program content and financial support have not been firm enough.

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Second, the groups have failed to specify a mechanism for monitoring such commitments. In general, they need to get more involved in detail—priorities and assistance for particular sectors, programs, and projects or specific changes in pricing and other incentive policies. Agreement between governments and donors might include, for instance, decisions to discontinue the funding of certain projects; to provide more nonproject assistance or debt rescheduling; to provide extra money and a higher priority for rural, rather than urban, health services; to provide schoolbooks and other educational materials, and so on. Many of these agreements, particularly on sector programs, are likely to emerge from local meetings between governments and donors rather than from the regular consultative groups. The involvement of donors in helping to formulate and to finance sector programs should often be coordinated by a lead donor. This arrangement will ease the burden on government officials of having to deal with several donors, each with its own concerns and procedures. Meetings of this kind have already been organized to mobilize donors behind Kenya's agricultural program, for instance, and Mali's reform of food policies. In some instances (for example, agricultural research, forestry, and population programs), a formal cofinancing arrangement might be considered. It could take the form of cofinancing particular projects within these sectors, where the project might represent a few years of the total program. Another possibility is the creation of special funds from contributions by several donors, for the preparation and financing of projects and programs within these sectors.

These approaches for improving the coordination of efforts of governments and donors will be enhanced by effective monitoring of the agreements reached by aid groups. This is a far-reaching issue that will require changes in the attitudes and responsibilities of donors, recipient governments, and the agency that chairs each coordination group. Traditionally all three have paid most attention to negotiating on commitments and have done little to coordinate efforts in the design and implementation of programs. For instance, integrating food aid into domestic agriculture programs, or determining the right balance between nonproject assistance, debt rescheduling, and project finance, requires (but seldom gets) specific and continuous attention. A notable exception is Botswana,

where aid coordination is an integral part of development planning and administration.

All the parties also need to treat aid coordination as critical to short-term macroeconomic management. Any tendency to limit it to medium- and long-term issues, independent of short-term monetary and fiscal policies, is doomed to fail. Coordination with the International Monetary Fund is therefore crucial. To perform this role, planning and finance ministries require political support at home to control individual programs, as well as the help of donors to reinforce this control.

The task of aid coordination is time consuming and administratively demanding. The agencies chairing the aid coordination groups will need to provide much more technical assistance to governments for preparing their public investment and recurrent expenditure programs, as well as for designing the supporting policy changes. They will need to pay special attention to integrating donor assistance into government programs.

World Bank experience already shows that chairmanship of consultative groups is a very staff intensive activity. Strengthening the Bank's role would require additional manpower to work closely with governments and other donors, including staff in the recipient country. Consideration should also be given to sharing the costs of the secretariat among all members of the aid coordinating group. Arrangements of this nature would, of course, have to be coordinated with UNDP responsibilities and other donors.

Aid coordination in Africa has, therefore, to be modified in both form and substance. Governments must take full responsibility for undertaking the task with whatever support they need initially. It must not be a "ganging up" of donors "against" the government—it must be the government's assuming the leadership role in defining priorities. In too many cases, this responsibility has slipped out of government's control. And the substance of coordination must move toward firm and monitorable commitments. Chairmen of aid groups, whether general or sectoral, should ensure that the commitments for action by the recipient government are clearly specified and agreed. Equally, donors must specify their aid pledges for the coming year or longer, including the content of their assistance and the amount of nonproject assistance. The joint responsibilities of

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governments and donors should be clearly spelled out. It is unrealistic to expect African governments to commit themselves to programs and policies while the essential decisions on resource availability are kept to vague promises.

Support for Reform

Distorted incentives and inefficient institutions are central to Africa's poor return on investment and therefore to its economic performance. These failings have deep roots in African societies, and to improve economic performance requires governments to have the political will to overcome these interests. Political reality dictates that the process will take time, and donors have to gear their support accordingly.

Evidence from other countries shows that reforms of the kind required in Africa need large and sustained external support. Unless an economy is able to expand its capacity to import, any reform program is jeopardized. If farmers are to produce more they will immediately need more fertilizer, tractor spares, and so forth. They then need to be able to spend their higher incomes on consumer goods—which will be available only if industry can buy the raw materials, equipment, and spares to increase output. The availability of infrastructure services (such as electricity, transport, and water) needs to be made more dependable; such an effort requires maintenance, rehabilitation, and debottlenecking expenditures, followed by expansion programs. The stocks of goods required to make an economy operate with reasonable efficiency need to be replenished. And, politically, governments need to be able to offer rising real incomes to their people; otherwise they cannot sustain the reforms against the opposition of those who are adversely affected.

A growing number of African countries are at a turning point in their willingness to implement major policy reforms. Unless enough external financial support is forthcoming, they may go no further. In particular, they need financial support that is quickly available to buy imports, to help achieve a rapid supply-side response to improved incentives. Nonproject finance should therefore be as freely usable as possible; experience suggests that its objectives

can often be frustrated by the procurement requirements and administrative delays of donors, which aggravate the licensing and other requirements of the recipients.

Individually and collectively, donors should examine their programs to see how they can respond to this need for fast disbursement for producer inputs and rehabilitation. This response should be large enough to provide both immediate support and the continuing assistance needed while reforms are taking effect. Only then will governments have the confidence to sustain their program. In turn, donors can make their continuing support dependent on the reforms' being maintained.

Only a few African countries will initially be eligible for substantial, fast-disbursing assistance. And such support needs to be provided only until the supply response is established. Aid programs should therefore be more flexible and selective, so that external support can be rapidly mobilized for a country implementing major reform programs. Such flexibility is much easier to achieve when aid programs are increasing, because the extra finance can be used to meet new priorities. When, as now, aid programs are barely growing, an adequate donor response is unlikely to be forthcoming. For instance, the World Bank and the IMF have been able to provide assistance to Ghana, Uganda, and Togo in support of their reform programs, but the extra support mobilized for these countries from bilateral sources has not been enough to ensure that their reforms are maintained and extended.

Food aid can be an important part of donor support for domestic policy reforms. Although food aid can undermine the purpose of these reforms if it has adverse effects on producer prices, this result is not inevitable. Farmers must be offered adequate prices and guarantees that such prices will be maintained. This strategy has been followed in other parts of the developing world, leaving food aid to increase supplies to urban consumers while agricultural reforms were becoming effective. In particular, these objectives can be achieved effectively if donors use food aid to promote intra-African trade in food. The Council of Ministers of the EC has emphasized the importance of these "triangular operations" in its "Resolution on Food Aid" (November 1983). Such operations allow the needs of food deficit countries to be

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met, whether their deficits are structural or caused by short-term factors such as drought. Given in this form, food aid raises the share of African food needs that is met internally and can therefore be integrated into programs to bolster producer prices in surplus countries. Moreover, such aid encourages the integration of African economies.

Some donors are concerned that, whatever the immediate humanitarian objective of food aid, it risks undermining the longer-term goal of increased food self-sufficiency in Africa. However, this risk should be as much a concern about aid in general as about food aid. External assistance can weaken the resolve of governments to tackle developmental problems in general, as much as food aid can weaken their will on agriculture in particular. To the extent this happens, aid of any kind becomes counterproductive. Aid is no substitute for domestic programs that provide the incentives and create the efficient institutions required to increase domestic production more rapidly. This is increasingly recognized in Africa, but policy reform will be a long and politically difficult process. Unless donors sustain their support for governments when they embark on this difficult process, reform may be short lived. It might also be a long time before a government again takes up the challenge.

Support for "Basic Programs"

The basic constraints on Africa's development are the rapid rise in population; low levels of education and training; the need for new technologies in agriculture and elsewhere; widespread disease, which undermines physical and intellectual development; and the environmental hazards of desertification and erosion arising out of population growth, overgrazing, and deforestation. Programs to address all these issues are being threatened by the declining trend in per capita incomes and the widespread atmosphere of crisis management. But the shortage of resources is unlikely to be eased in the next several years. Therefore programs are urgently required to address the longer-term constraints on development on a sustainable basis.

Donors should work with African governments to develop realistic programs in these sectors. For each sector this goal will require considerable coordination of donor efforts, probably under a lead donor and primarily undertaken in the field. As chapter 3 emphasized, programs in the socioeconomic sectors need to be designed and implemented in ways that make them well targeted, low cost, and replicable. In formulating efficient strategies for any sector, a funding program is of central importance. It should be determined in a way that will achieve the program's objectives, rather than being constrained by the lending procedures and requirements of donors. The adequate funding of recurrent expenditures—and particularly of nonwage and nonsalary items (schoolbooks, medicines, fuel, and so on)—is essential. Yet this spending has been the most vulnerable to budget stringency. Moreover, a widely expressed concern of donors about the constraint on absorptive capacity in African economies is partly a constraint on the particular financing that donors wish to make available—most obviously, support for new projects rather than for operating and maintaining existing activities. When there is a reasonable stock of schools and clinics, as there is in most African countries at present, there are few absorptive limits to the productive use of aid for schoolbooks or medicines. Within well-formulated macroeconomic and sectoral programs, which should include plans to ensure that recurrent expenditures will be adequately funded, donor assistance should be used in ways that will not distort the balance between new physical capacity and its operation and maintenance.

Both governments and donors have to commit themselves to providing long-term support to these programs. These programs should not be the residual legatees of domestic funds. Likewise donors should treat their support to these programs as their basic program of assistance to a country. This external support should be steady and reliable, providing the program of sectoral policy measures is being implemented as agreed. Without such commitments from both governments and donors, the basic impediments to further economic growth and the alleviation of poverty—uneducated, unskilled, and physically weak people; inadequate agricultural research; and so on—will remain.

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Debt Servicing

Africa's debt servicing difficulties reflect the underlying weakness of its economy and particularly its inefficient use of investment. But attempts to improve economic performance will be frustrated unless countries are relieved of some of their immediate debt service obligations. In the case of the oil-importing African countries, relief raises somewhat different issues from the rescheduling of Latin America's debt.

- First, for almost all African countries, the basic economic need is to raise real per capita incomes, which have been falling for a decade or more. The debt service problem primarily reflects this declining trend. Reversing the trend will, however, take several years to achieve, even in countries such as Ivory Coast, Kenya, and Malawi, which (until recently) had relatively favorable records.
- Second, in Africa, ODA is the main source of foreign capital. Debt rescheduling can, therefore, only be seen as part of a total donor strategy for meeting the total resource requirements of a country.
- Third, for a number of African countries, a large and growing proportion of debt service is ineligible for rescheduling. This includes the servicing of loans from the World Bank and other preferred multilateral creditors. The servicing of previously rescheduled debt is also ineligible for rescheduling, although there have already been several exceptions to this rule. For many countries, trade credit (and arrears of trade credit) now represents a significant part of their debt servicing burden. Not only is payment of these obligations critical for maintaining trade, but the interest component is not eligible for rescheduling. The wide range of obligations that cannot be rescheduled means that the burden of rescheduling lies on a falling proportion of the total debt service.
- Fourth, many African countries have large and growing obligations falling due to the IMF in the remainder of the decade as a result of the large increases in IMF assistance at its start. For instance, in 1983 IMF charges and repurchases amounted to 44 percent of Zambia's total debt service, including obligations to the IMF, and 26 percent of its export earn-

ings. Liberia and Sudan are two other countries facing similar constraints.

To handle these features of Africa's debt servicing difficulties, donors will have to reexamine their strategies—especially in countries carrying through policy reforms and major programs of structural adjustment. Debt relief can support these programs, because it releases foreign exchange that can immediately be used for imports. However, debt relief is most valuable if it stretches over several years. Where monitorable programs exist, multiyear debt relief and longer grace periods should be part of the package of financial support to the program.

Annual rescheduling negotiations strain the administrative capacity of African finance ministries and central banks, diverting them from keeping their reform program on course. Furthermore, although rescheduling provides immediately available foreign exchange, medium-term planning is impossible if negotiations must be repeated (as at present) at least every two years and the payments are bunched in the near term. Any relief obtained on private commercial debt makes extra foreign exchange available to a country. This is not necessarily so when public debt is involved. If donors treat the rescheduling of public debt as part of their overall financial support for a country, it merely substitutes for other forms of ODA. Donors should, therefore, examine a country's total foreign exchange needs for supporting policy reform and then decide how much of that will come from rescheduling.

External Finance

This report emphasizes that additional external assistance is not, by itself, the solution for Africa's problems: getting better value from both internal and external resources has to be the primary focus of attention. This strategy poses political challenges to both African governments and donors. Unless major changes in African programs and policies are introduced, no amount of external assistance can generate rising levels of per capita income. On the other hand, these changes in policies and programs are unlikely to be effectively sustained unless matched by parallel reforms in donor policies. The specter of disaster that confronts Africa and

the international community demands that donors provide their assistance solely in ways that support the needs of African development. Donors preferences emerging from their own commercial interests or from a view that is no longer relevant to development priorities in Africa—for example, a preference for large infrastructure and industrial projects—must be modified.

Donors must be particularly willing to make available adequate financial assistance in a timely and suitable form to support those sub-Saharan African countries that are implementing major programs of policy reform. If these programs are to be effective, the import capacity of the countries must be quickly increased. African countries are overwhelmingly dependent on primary product exports for their foreign exchange earnings. An increase in imports is unlikely to be possible from improved export earnings from these commodities in the short run, although in the medium to longer run that has to be the objective. Moreover, these countries have to meet rising interest charges on their external debt, as well as large IMF charges and repurchases. There is no escaping the fact that, if these countries are to be effectively assisted in reversing the downward trend in per capita incomes, they will require large increases in net capital inflows. Yet their present prospect is for exactly the reverse (see table 5.1).

For sub-Saharan countries, total amortization payments will rise from an average annual amount of $2.3 billion in 1980–82 to about $8 billion in 1985–87. In addition, IMF repurchase obligations (amounting to about $1 billion annually) will come due during the next few years. With gross capital flows from bilateral and multilateral sources stagnating at around $9 billion annually and the commercial flows declining, present prospects are that without special action annual net capital flows to sub-Saharan Africa will decline from about $11 billion to about $5 billion over the period 1985–87.

These are, of course, alarming figures for sub-Saharan Africa as a whole. If the turnaround in African economic prospects is to be addressed as a genuinely international effort, prospects of this kind for those countries that are actively adopting domestic reform programs cannot be acceptable to the donor community. Some alleviation in the situation for these countries can come both from debt rescheduling and from reprogramming of existing aid flows. However,

Table 5.1. *Sub-Saharan Africa: External Capital Flows, 1980–82 and 1985–87*
(current US$ billions)

	1980–82 (estimates) annual average	1985–87 (projections—in the absence of special action) annual average
Total		
Gross capital flows	13.1	13
Amortization	2.3	8
Net capital flows	10.8	5
Of which:		
Private		
Gross capital flows	4.2	4
Amortization	1.7	5
Net capital flows	2.5	−1
Bilateral and multilateral grants and loans		
Gross capital flows	8.9	9
Amortization	0.6	3
Net capital flows	8.3	6

Note: All figures exclude use of IMF resources and repurchases. Net use of IMF resources was, on average, $0.8 billion annually during 1980–82. Repurchases during 1985–87 are estimated to be about $1 billion annually.

experience suggests that donors do not have the flexibility in their programs to generate the external support that these countries require. In any case, if this implied a reduction in the financing of basic programs in sub-Saharan Africa, it would not be desirable. There are already several countries in which domestic reform programs are threatened by inadequate external financial support. Their capacity to import needs to be markedly increased if these programs are to be effective and sustained.

Debt rescheduling is not an option for multilateral donors. If bilateral donors can be expected to roll over about half the amortization due to them, then additional annual gross capital flows from both bilateral and multilateral sources will need to be increased during the period 1985–87 by about $3.5 billion a year above their 1980–82 average annual level if the prospective fall in net capital flows to sub-Saharan Africa in real terms is to be averted. About $1.5 billion of this increase is already in prospect under present commitment authority of donor agencies.

The extent to which additional commitment authority will be required by donor agencies over the next three years will depend on what happens to private flows of capital, and on the number of African countries that implement

domestic reform programs. Private net flows have declined from a peak of $3.4 billion in 1980 to $1.8 billion in 1982. Even if private net flows are to level off at $2 billion a year over the next few years, this will imply that about half of the amortization payments will have to be rolled over—otherwise gross inflows will have to be increased above their 1980–82 level, which is unlikely. For the longer run, African countries must, as recommended in the 1984 ECA/ADB economic report on Africa, take action to stimulate private investment. Clear statements are required from governments of the areas in which private investment, particularly foreign private investment, is considered desirable; governments must also provide an appropriate legal framework for encouraging these investments. Expeditious approval procedures and consistency in policies relating to the private sector are essential.

The need for increased bilateral and multilateral assistance will also depend on the number of countries that embark on major programs of reform and the aggregation of their specific needs. This, however, will itself depend on the likely availability of adequate external assistance. To meet this uncertainty, donors should have a contingent ability to respond to countries requiring major additional assistance to support their reform programs. A special assistance facility of this kind would give governments the confidence they require that external support will be forthcoming at an adequate and sustained level if they introduce major programs of reform. By placing the additional funds outside of the regular donor programs, the special facility would also provide flexibility, which is otherwise difficult to build into donor programs. The facility would represent additional funds to present and prospective levels of bilateral and multilateral assistance. The resources of the facility would be activated only when required to give additional support to a country's reform programs. The speed with which the funds would be drawn down would, therefore, depend on the number of countries implementing such reform programs and their specific needs.

The task before donors is therefore clear and urgent. If donors increase their support for policy reforms and basic programs, they will help Africa to overcome its immediate economic and financial crisis. They will also be building the prospect of a better and more hopeful future.

Statistical Annex

Contents

Social Indicators

Key

In the country tables, economies are listed in their group in ascending order of GNP per capita except for Angola and Mozambique, for which no GNP per capita can be calculated. These two countries are listed in italics at the end of their groups. The reference numbers below reflect the order of the tables.

The letters **w, m,** and **t** indicate weighted averages, medians, and totals, respectively. The following conventions apply: .. not available and (.) less than half the unit shown.

Angola	39	Malawi	10
Benin	15	Mali	2
Botswana	31	Mauritania	25
Burkina Faso	3	Mauritius	34
Burundi	13	*Mozambique*	23
Cameroon	36	Niger	5
Central African Republic	16	Nigeria	35
Chad	1	Rwanda	12
Congo, People's Democratic Republic of the	37	Senegal	27
Ethiopia	7	Sierra Leone	22
Gabon	38	Somalia	4
Gambia, The	6	Sudan	24
Ghana	20	Swaziland	32
Guinea	17	Tanzania	14
Guinea-Bissau	8	Togo	19
Ivory Coast	33	Uganda	11
Kenya	21	Zaire	9
Lesotho	28	Zambia	29
Liberia	26	Zimbabwe	30
Madagascar	18		

Introduction

The statistical annex provides information on the main variables affecting social and economic development in sub-Saharan Africa, including: basic indicators; production; trade; aid, debt, and capital flows; agriculture; social indicators; and fiscal data. Within low-income countries, defined as those with a per capita income of less than or equal to $410 in 1982, a distinction is made between (1) low-income semiarid countries and (2) all other low-income countries. For middle-income countries, defined as those with a per capita income exceeding $410, a distinction is made between (1) oil importers and (2) oil exporters (there are no low-income oil exporters). Worldwide averages or median values for low-income, lower middle-income, upper middle-income, and industrialized countries are usually included for comparison.

The countries included in these four groups of worldwide averages are as follows:

Low-income countries

Afghanistan	Guinea	Niger
Bangladesh	Haiti	Pakistan
Benin	India	Rwanda
Bhutan	Kampuchea, Democratic	Sierra Leone
Burkina Faso	Kenya	Somalia
Burma	Lao People's Democratic	Sri Lanka
Burundi	Republic	Tanzania
Central African Republic	Madagascar	Togo
Chad	Malawi	Uganda
China	Mali	Viet Nam
Ethiopia	Mozambique	Zaire
Ghana	Nepal	

Lower middle-income countries

Angola	Indonesia	Paraguay
Bolivia	Ivory Coast	Peru
Cameroon	Jamaica	Philippines
Colombia	Korea, Democratic Republic of	Senegal
Congo, People's Republic of the	Lebanon	Sudan
Costa Rica	Lesotho	Thailand
Cuba	Liberia	Tunisia
Dominican Republic	Mauritania	Turkey
Ecuador	Mongolia	Yemen Arab Republic
Egypt, Arab Republic of	Morocco	Yemen, People's
El Salvador	Nicaragua	Democratic Republic of
Guatemala	Nigeria	Zambia
Honduras	Papua New Guinea	Zimbabwe

Upper middle-income countries

Algeria	Israel	Singapore
Argentina	Jordan	South Africa
Brazil	Korea, Republic of	Syrian Arab Republic
Chile	Malaysia	Trinidad and Tobago
Greece	Mexico	Uruguay
Hong Kong	Panama	Venezuela
Iran, Islamic Republic of	Portugal	Yugoslavia
Iraq		

Industrialized countries (industrial market economies)

Australia	Germany, Federal Republic of	Norway
Austria	Ireland	Spain
Belgium	Italy	Sweden
Canada	Japan	Switzerland
Denmark	Netherlands	United Kingdom
Finland	New Zealand	United States
France		

The country tables include thirty-nine countries of sub-Saharan Africa with population exceeding one half million in 1982. 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. The alphabetical list of countries in the key shows the reference number of each country.

Summary measures—totals, median values, or weighted averages—were calculated for the economy groups only if data were adequate and meaningful statistics could be obtained.

The weights used in computing the summary measures are described in the technical notes. The letter **w** after a summary measure indicates that it is a weighted average; the letter **m**, that it is a median value; the letter **t**, that it is a total. The median is the middle value of a data set arranged in order of magnitude. Because the coverage of economies is not uniform for all indicators and because the variation around central tendencies can be large, readers should be cautious in comparing the summary measures for different indicators, groups, years, or periods.

Every effort has been made to standardize concepts, definitions, coverage, timing, and other characteristics of the basic data to ensure the greatest possible degree of comparability. Nevertheless, care must be taken in how the indicators are interpreted. Although the statistics are drawn from sources generally considered the most authoritative and reliable, many of them are subject to considerable margins of error. Because of variations in national statistical practices, most data are not strictly comparable. In addition, the quality of statistics is weaker in Africa than in most other parts of the world, and many of the statistics presented here are very approximate. The data should be construed only as indicating trends and characterizing major differences among economies.

The technical notes that follow the tables outline concepts, definitions, and specific data problems. Readers are urged to refer to the technical notes when using the data. The bibliography gives details of the data sources which contain comprehensive definitions and descriptions of concepts used.

Table 1. Basic Indicators

	Population (millions) mid–1982	Area (thousands of square kilometers)	GNP per capita[a] Dollars 1982	GNP per capita[a] Average annual growth rate (percent) 1960–82[b]	Average annual rate of inflation (percent) 1960–70	Average annual rate of inflation (percent) 1970–82[c]	Life expectancy at birth (years) 1982	Index of food production per capita (1969–71 = 100) average for 1980–82
Low-income economies	213.5 t	12,992 t	249 w	0.7 w	2.6 m	10.8 m	49 w	86 w
Low-income semiarid	29.3 t	4,714 t	218 w	−0.1 w	3.4 m	9.8 m	44 w	85 w
1 Chad	4.6	1,284	80	−2.8	4.6	7.8	44	95
2 Mali	7.1	1,240	180	1.6	5.0	9.8	45	83
3 Burkina Faso	6.5	274	210	1.1	1.3	9.7	44	95
4 Somalia	4.5	638	290	−0.1	4.5	12.6	39	60
5 Niger	5.9	1,267	310	−1.5	2.1	12.1	45	88
6 Gambia, The	0.7	11	360	2.5	2.2	9.7	36	74
Low-income other	184.2 t	8,278 t	254 w	0.9 w	2.6 m	11.7 m	49 w	86 w
7 Ethiopia	32.9	1,222	140	1.4	2.1	4.0	47	82
8 Guinea-Bissau	0.8	36	170	−1.7	. .	7.1	38	88
9 Zaire	30.7	2,345	190	−0.3	29.9	35.3	50	87
10 Malawi	6.5	118	210	2.6	2.4	9.5	44	99
11 Uganda	13.5	236	230	−1.1	3.2	47.4	47	86
12 Rwanda	5.5	26	260	1.7	13.1	13.4	46	105
13 Burundi	4.3	28	280	2.5	2.8	12.5	47	96
14 Tanzania	19.8	945	280	1.9	1.8	11.9	52	88
15 Benin	3.7	113	310	0.6	1.9	9.6	48	100
16 Central African Rep.	2.4	623	310	0.6	4.1	12.6	48	104
17 Guinea	5.7	246	310	1.5	1.5	3.3	38	89
18 Madagascar	9.2	587	320	−0.5	3.2	11.5	48	94
19 Togo	2.8	57	340	2.3	1.3	8.8	47	89
20 Ghana	12.2	239	360	−1.3	7.5	39.5	55	72
21 Kenya	18.1	583	390	2.8	1.6	10.1	57	88
22 Sierra Leone	3.2	72	390	0.9	. .	12.2	38	81
23 *Mozambique*	12.9	802	. .	. .	. .	. .	51	68
Middle-income oil importers	56.1 t	5,959 t	634 w	0.9 w	2.4 m	11.4 m	49 w	91 w
24 Sudan	20.2	2,506	440	−0.4	3.9	15.2	47	87
25 Mauritania	1.6	1,031	470	1.4	2.1	8.7	45	73
26 Liberia	2.0	111	490	0.9	1.9	8.5	54	88
27 Senegal	6.0	196	490	(.)	1.8	7.9	44	93
28 Lesotho	1.4	30	510	6.5	2.7	11.4	53	84
29 Zambia	6.0	753	640	−0.1	7.6	8.7	51	87
30 Zimbabwe	7.5	391	850	1.5	1.1	8.4	56	87
31 Botswana	0.9	600	900	6.8	2.4	11.5	60	73
32 Swaziland	0.7	17	940	4.2	2.4	12.8	54	107
33 Ivory Coast	8.9	322	950	2.1	2.8	12.4	47	107
34 Mauritius	0.9	2	1,240	2.1	2.2	15.0	66	110
Middle-income oil exporters	110.3 t	3,256 t	889 w	3.2 w	4.5 m	12.6 m	50 w	92 w
35 Nigeria	90.6	924	860	3.3	4.0	14.4	50	92
36 Cameroon	9.3	475	890	2.6	4.2	10.7	53	102
37 Congo, People's Rep.	1.7	342	1,180	2.7	4.7	10.8	60	81
38 Gabon	0.7	268	4,000	4.4	5.4	19.5	49	93
39 *Angola*	8.0	1,247	. .	. .	. .	. .	43	77
Sub-Saharan Africa	380.0 t	22,207 t	491 w	1.5 w	2.7 m	11.4 m	49 w	88 w
All low-income countries	2,266.5 t	29,097 t	280 t	3.0 w	3.2 m	11.5 m	59 w	110 w
All lower middle-income countries	669.6 t	20,952 t	840 w	3.2 w	2.9 m	11.7 m	56 w	108 w
All upper middle-income countries	488.7 t	22,079 t	2,490 w	4.1 w	3.0 m	16.4 m	65 w	115 w
Industrial market economies	722.9 t	30,935 t	11,070 w	3.3 w	4.3 m	9.9 m	75 w	114 w

Note: For data comparability and coverage see the technical notes.
a. See the technical notes.
b. Because data for the early 1960s are not always available, figures in italics are for periods other than that specified.
c. Figures in italics are for 1970–81, not 1970–82.

Table 2. Growth of Production

| | Average annual growth rate (percent) | | | | | | | | | |
| | GDP | | Agriculture | | Industry | | Manufacturing[a] | | Services | |
	1960–70[b]	1970–82[c]	1960–70[b]	1970–82[c]	1960–70[b]	1970–82[c]	1960–70[b]	1970–82[c]	1960–70[b]	1970–82[c]
Low-income economies	**4.0 w**	**1.8 w**	..	**1.6 m**	..	**2.3 m**	..	**0.5 m**	..	**4.3 m**
Low-income semiarid	**2.4 w**	**2.6 w**	..	**1.4 m**	..	**2.9 m**	..	**0.1 m**	..	**5.4 m**
1 Chad	0.5	−2.6	..	−1.0	..	−2.0	..	−3.2	..	−5.5
2 Mali	3.3	4.3	..	3.8	..	2.1	..	..	..	5.4
3 Burkina Faso	3.0	3.4	..	1.4	..	2.9	..	3.4	..	5.4
4 Somalia	1.0	3.8	−0.6	..	3.4	..	4.0	..	4.2	..
5 Niger	2.9	3.4	3.3	−2.4	13.9	10.8	..	..	(.)	6.9
6 Gambia, The	6.2	4.5	6.2	3.2	6.1	7.4	..	..	6.2	4.6
Low-income other	**4.2 w**	**1.7 w**	..	**1.7 m**	..	**2.0 m**	..	**0.5 m**	..	**4.0 m**
7 Ethiopia	4.4	2.2	2.2	0.9	7.4	2.0	8.0	2.9	7.8	4.1
8 Guinea-Bissau	..	3.1	..	0.5	..	2.4	..	..	..	8.4
9 Zaire	3.4	−0.2	..	1.5	..	−0.9	..	−2.3	..	−0.4
10 Malawi	4.9	5.1	..	4.1	..	5.4	..	5.4	..	6.0
11 Uganda	5.6	−1.5	..	−0.6	..	−8.7	..	−8.9	..	1.3
12 Rwanda	2.7	5.3	..	..	..	..	..	..	..	..
13 Burundi	4.4	3.5	..	2.3	..	8.6	..	6.4	..	4.0
14 Tanzania	6.0	4.0	..	2.8	..	1.5	..	0.5	..	5.8
15 Benin	2.6	3.3	..	..	..	..	..	..	..	..
16 Central African Rep.	1.9	1.4	0.8	2.3	5.4	4.0	..	−4.3	1.8	0.3
17 Guinea	3.5	3.8	..	..	..	..	..	..	..	..
18 Madagascar	2.9	0.2	..	0.3	..	−0.7	..	..	..	0.4
19 Togo	8.8	3.0	..	1.7	..	5.5	..	−10.0	..	2.9
20 Ghana	2.2	−0.5	..	−0.2	..	−2.4	..	−1.5	..	−7.5
21 Kenya	5.9	5.5	..	4.1	..	8.1	..	9.0	..	5.6
22 Sierra Leone	4.3	2.0	..	2.5	..	−3.1	..	3.9	..	4.5
23 *Mozambique*	..	..	..	..	..	..	..	..	..	..
Middle-income oil importers	**4.2 w**	**3.7 w**	..	**3.4 m**	..	**5.8 m**	..	**4.8 m**	..	**5.2 m**
24 Sudan	0.7	6.3	..	4.1	..	5.8	..	6.0	..	8.5
25 Mauritania	6.7	2.0	1.4	3.4	14.1	−3.5	9.2	5.2	7.4	5.2
26 Liberia	5.1	0.9	..	3.5	..	−0.7	..	4.5	..	1.0
27 Senegal	2.5	2.9	2.9	2.3	4.1	3.8	6.2	0.8	1.8	2.8
28 Lesotho	5.2	6.6	..	0.3	..	21.1	..	13.4	..	5.5
29 Zambia	5.0	0.9	..	1.9	..	0.4	..	1.4	..	1.3
30 Zimbabwe	4.5	2.2	..	1.8	..	−1.9	..	−4.1	..	2.9
31 Botswana	5.7	12.6	1.6	3.7	12.6	16.0	..	..	7.6	15.2
32 Swaziland	7.7	4.4	6.3	11.4	10.8	15.7	..	..	5.9	−0.5
33 Ivory Coast	8.0	5.7	4.2	4.5	11.5	8.6	11.6	5.4	9.7	5.4
34 Mauritius	1.7	5.8	..	−2.6	..	8.1	..	..	..	9.7
Middle-income oil exporters	**3.5 w**	**4.1 w**	..	**1.9 m**	..	**12.0 m**	..	**8.4 m**	..	**6.7 m**
35 Nigeria	3.1	3.8	−0.4	−0.6	14.7	4.8	9.1	12.0	2.3	6.7
36 Cameroon	3.7	7.0	..	3.4	..	12.2	..	8.4	..	7.2
37 Congo, People's Rep.	3.5	6.8	1.8	1.9	7.4	12.0	..	3.3	2.8	5.1
38 Gabon	4.4	2.0	..	..	..	..	..	..	..	..
39 *Angola*	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	**3.8 w**	**3.0 w**	..	**2.1 m**	..	**3.9 m**	..	**3.4 m**	..	**4.9 m**
All low-income countries	**4.5 w**	**4.5 w**	**2.2 m**	**2.3 m**	**6.6 m**	**4.2 m**	**5.5 m**	**3.4 m**	**4.2 m**	**4.5 m**
All lower middle-income countries	**4.9 w**	**5.3 w**	**3.0 m**	**3.1 m**	**6.2 m**	**5.8 m**	**6.5 m**	**5.5 m**	**5.2 m**	**5.4 m**
All upper middle-income countries	**6.4 w**	**5.4 w**	**4.0 m**	**2.6 m**	**9.1 m**	**5.7 m**	**8.4 m**	**5.8 m**	**7.2 m**	**6.3 m**
Industrial market economies	**5.1 w**	**2.8 w**	**1.4 m**	**1.8 m**	**5.9 m**	**2.3 m**	**5.9 m**	**2.4 m**	**4.5 m**	**3.2 m**

Note: For data comparability and coverage see the technical notes.

a. Manufacturing is a part of the industrial sector, but its share of GDP is shown separately because it typically is the most dynamic part of the industrial sector.

b. Figures in italics are for 1961–70, not 1960–70.

c. Figures in italics are for 1970–81, not 1970–82.

Table 3. Structure of Production

| | GDP[a] (US$ millions) | | Distribution of gross domestic product (percent) | | | | | | | |
| | | | Agriculture | | Industry | | Manufacturing[b] | | Services | |
	1960	1982[c]	1960	1982[c]	1960	1982[c]	1960	1982[c]	1960	1982[c]
Low-income economies			**51 w**	**50 w**	**12 w**	**13 w**	**6 w**	**6 w**	**37 w**	**37 w**
Low-income semiarid			**60 w**	**39 w**	**11 w**	**19 w**	**5 w**	**8 w**	**29 w**	**42 w**
1 Chad	180	*400*	52	*64*	11	*7*	4	*4*	37	*29*
2 Mali	270	1,030	55	43	10	10	5	5	35	47
3 Burkina Faso	200	1,000	55	41	16	16	9	12	31	43
4 Somalia	160	. .	71	. .	8	. .	3	. .	21	. .
5 Niger	250	1,560	69	31	9	30	4	8	22	39
6 Gambia, The	27	213	39	26	11	. .	. .	. .	50	. .
Low-income other			**49 w**	**50 w**	**12 w**	**12 w**	**6 w**	**6 w**	**39 w**	**38 w**
7 Ethiopia	900	4,010	65	49	12	16	6	11	23	36
8 Guinea-Bissau	. .	132	. .	. .	. .	. .	. .	. .	. .	. .
9 Zaire	130	5,380	30	32	27	24	13	3	43	44
10 Malawi	160	1,320	50	. .	10	. .	5	. .	40	. .
11 Uganda	540	8,630	52	82	12	4	9	4	36	14
12 Rwanda	120	*1,260*	80	*46*	6	*22*	1	*16*	14	*32*
13 Burundi	190	1,110	. .	56	. .	17	. .	10	. .	27
14 Tanzania	550	4,530	57	52	11	15	5	9	32	33
15 Benin	160	830	55	44	8	13	3	7	37	43
16 Central African Rep.	110	660	51	35	11	19	3	8	38	46
17 Guinea	400	1,750	. .	41	. .	23	. .	2	. .	36
18 Madagascar	540	*2,900*	37	*41*	10	*15*	4	. .	53	*44*
19 Togo	120	800	55	23	15	29	8	6	30	48
20 Ghana	1,220	31,220	41	51	10	8	. .	5	49	41
21 Kenya	730	5,340	38	33	18	22	9	13	44	45
22 Sierra Leone	. .	1,130	. .	32	. .	20	. .	5	. .	48
23 *Mozambique*	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Middle-income oil importers			**24 w**	**25 w**	**32 w**	**25 w**	**10 w**	**14 w**	**44 w**	**50 w**
24 Sudan	1,160	9,290	. .	36	. .	14	. .	7	. .	50
25 Mauritania	90	640	44	29	21	25	3	8	35	46
26 Liberia	220	950	. .	36	. .	28	. .	7	. .	36
27 Senegal	610	2,510	24	22	17	25	12	15	59	53
28 Lesotho	30	300	. .	23	. .	22	. .	6	. .	55
29 Zambia	680	3,830	11	14	63	36	4	19	26	50
30 Zimbabwe	780	5,900	18	15	35	35	17	25	47	50
31 Botswana	35	*949*	54	. .	11	. .	. .	. .	35	. .
32 Swaziland	34	*522*	32	. .	24	. .	. .	. .	44	. .
33 Ivory Coast	570	7,560	43	26	14	23	7	12	43	51
34 Mauritius	134	929	15	15	24	25	. .	. .	61	60
Middle-income oil exporters			**60 w**	**21 w**	**12 w**	**40 w**	**5 w**	**6 w**	**28 w**	**39 w**
35 Nigeria	3,150	71,720	63	22	11	39	5	6	26	39
36 Cameroon	550	7,370	. .	27	. .	31	. .	11	. .	42
37 Congo, People's Rep.	130	2,170	23	6	17	52	10	5	60	42
38 Gabon	140	3,254	32	7	34	62	. .	. .	34	31
39 *Angola*	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Sub-Saharan Africa			**47 w**	**33 w**	**17 w**	**27 w**	**7 w**	**8 w**	**36 w**	**40 w**
All low-income countries			**49 w**	**37 w**	**26 w**	**32 w**	**13 w**	**14 w**	**25 w**	**31 w**
All lower middle-income countries			**37 w**	**23 w**	**22 w**	**35 w**	**15 w**	**17 w**	**41 w**	**42 w**
All upper middle-income countries			**18 w**	**11 w**	**33 w**	**41 w**	**25 w**	**22 w**	**49 w**	**48 w**
Industrial market economies			**6 w**	**3 w**	**40 w**	**36 w**	**30 w**	**24 w**	**54 w**	**61 w**

Note: For data comparability and coverage see the technical notes.
a. See the technical notes.
b. Manufacturing is a part of the industrial sector, but its share of GDP is shown separately because it typically is the most dynamic part of the industrial sector.
c. Figures in italics are for 1981, not 1982.

Table 4. Growth of Consumption and Investment

	Average annual growth rate (percent)					
	Public consumption		Private consumption		Gross domestic investment	
	1960–70	*1970–82*[a]	*1960–70*	*1970–82*[a]	*1960–70*[b]	*1970–82*[a]
Low-income economies	**4.8 m**	**5.0 m**	**3.6 m**	**3.0 m**	**5.2 m**	**2.6 m**
Low-income semiarid	**4.4 m**	**6.5 m**	**2.8 m**	**2.8 m**	**4.3 m**	**3.2 m**
1 Chad	4.4	−3.8	−0.7	−1.8	2.3	−5.4
2 Mali	6.2	6.5	2.8	4.4	4.9	3.1
3 Burkina Faso	. .	8.7	. .	2.8	. .	3.2
4 Somalia	3.7	. .	0.4	. .	4.3	. .
5 Niger	2.0	2.4	3.9	3.4	3.0	6.6
6 Gambia, The	4.9	7.5	5.5	2.5	6.2	26.9
Low-income other	**6.7 m**	**4.2 m**	**3.7 m**	**3.1 m**	**5.7 m**	**2.0 m**
7 Ethiopia	8.1	7.7	4.3	2.7	5.7	0.7
8 Guinea-Bissau	. .	1.4	. .	−1.5	. .	−2.1
9 Zaire	8.5	1.0	3.5	−3.3	9.6	5.7
10 Malawi	4.6	8.0	3.7	4.1	15.4	2.0
11 Uganda	—[c]	—[c]	5.6	−4.0	7.5	−8.0
12 Rwanda	1.1	11.8	4.3	3.2	3.5	14.9
13 Burundi	19.2	4.2	3.2	3.3	4.3	15.0
14 Tanzania	—[c]	—[c]	6.6	4.4	9.8	3.4
15 Benin	1.7	2.6	4.9	3.1	4.2	12.2
16 Central African Rep.	2.2	−2.9	3.0	2.7	1.3	−7.5
17 Guinea	. .	. .	. .	. .	. .	. .
18 Madagascar	3.0	2.0	1.9	−0.5	5.4	−1.4
19 Togo	6.7	9.4	7.6	4.0	11.1	6.3
20 Ghana	7.2	5.7	1.7	−0.4	−3.1	−5.1
21 Kenya	10.0	8.4	2.9	5.9	10.3	2.1
22 Sierra Leone	. .	−2.2	. .	3.5	. .	−1.1
23 *Mozambique*	. .	. .	. .	. .	. .	. .
Middle-income oil importers	**6.5 m**	**8.1 m**	**4.9 m**	**5.3 m**	**4.7 m**	**6.6 m**
24 Sudan	12.1	2.3	−2.5	7.8	3.2	9.0
25 Mauritania	(.)	8.1	2.6	3.1	−2.0	6.6
26 Liberia	5.6	2.5	0.7	3.1	−3.9	2.1
27 Senegal	−0.2	6.4	3.3	3.3	1.1	1.8
28 Lesotho	(.)	15.5	6.5	8.0	20.7	19.6
29 Zambia	11.0	1.0	6.8	3.0	10.6	−10.5
30 Zimbabwe	. .	9.9	. .	2.9	. .	2.5
31 Botswana	10.8	14.2	6.9	10.3	25.3	7.4
32 Swaziland[d]	7.4	5.6	14.9	5.6	6.1	10.8
33 Ivory Coast	11.8	9.8	8.0	5.3	12.7	10.1
34 Mauritius	2.1	8.1	2.4	7.5	−6.7	5.7
Middle-income oil exporters	**7.3 m**	**6.6 m**	**2.3 m**	**5.9 m**	**4.3 m**	**9.1 m**
35 Nigeria	10.0	11.7	0.6	5.6	7.4	8.8
36 Cameroon	6.1	4.7	2.7	6.1	9.3	9.4
37 Congo, People's Rep.	5.4	6.3	1.9	0.3	1.1	12.2
38 Gabon	8.5	6.9	8.8	7.3	−2.1	8.0
39 *Angola*	. .	. .	. .	. .	. .	. .
Sub-Saharan Africa	**5.9 m**	**6.4 m**	**3.4 m**	**3.3 m**	**5.2 m**	**5.7 m**
All low-income countries	**4.5 m**	**5.0 m**	**3.2 m**	**3.3 m**	**4.9 m**	**3.3 m**
All lower middle-income countries	**5.9 m**	**6.4 m**	**4.8 m**	**4.8 m**	**7.6 m**	**6.6 m**
All upper middle-income countries	**7.0 m**	**6.3 m**	**5.5 m**	**6.1 m**	**7.6 m**	**7.3 m**
Industrial market economies	**4.2 m**	**3.2 m**	**4.3 m**	**2.7 m**	**5.8 m**	**0.6 m**

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1970–81, not 1970–82.
b. Figures in italics are for 1961–70, not 1960–70.
c. Separate figures are not available for public consumption, which is therefore included in private consumption.
d. Swaziland data are for 1970–80, not 1970–82.

Table 5. Structure of Demand

	Distribution of gross domestic product (percent)											
	Public consumption		Private consumption		Gross domestic investment		Gross domestic saving		Exports of goods and nonfactor services		Resource balance	
	1960	1982[a]	1960	1982[a]	1960	1982[a]	1960	1982[a]	1960	1982[a]	1960	1982[a]
Low-income economies	**11 w**	**12 w**	**77 w**	**86 w**	**15 w**	**10 w**	**12 w**	**5 w**	**21 w**	**11 w**	**−3 w**	**−5 w**
Low-income semiarid	**11 w**	**17 w**	**83 w**	**84 w**	**11 w**	**19 w**	**6 w**	**−1 w**	**14 w**	**20 w**	**−5 w**	**−20 w**
1 Chad	13	23	82	102	11	9	5	−25	23	35	−6	−34
2 Mali	12	25	79	79	14	15	9	−4	12	19	−5	−19
3 Burkina Faso	10	20	94	89	9	15	−4	−9	9	14	−13	−24
4 Somalia	8	..	86	..	10	..	6	..	13	..	−4	..
5 Niger	9	9	79	79	12	26	12	12	9	21	(.)	−14
6 Gambia, The	15	..	79	..	7	..	6	..	45	..	−1	..
Low-income other	**11 w**	**12 w**	**76 w**	**86 w**	**16 w**	**9 w**	**13 w**	**5 w**	**22 w**	**10 w**	**−3 w**	**−4 w**
7 Ethiopia	8	16	81	81	12	11	11	3	9	12	−1	−8
8 Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..
9 Zaire	18	—[b]	61	90	12	16	21	10	55	29	9	−6
10 Malawi	17	16	87	71	10	20	−4	13	18	21	−14	−7
11 Uganda	9	b	75	95	11	8	16	5	26	5	5	−3
12 Rwanda	10	17	82	75	6	22	8	8	12	12	2	−14
13 Burundi	3	13	92	86	6	14	5	1	13	9	−1	−13
14 Tanzania	9	22	72	70	14	20	19	8	30	11	5	−12
15 Benin	16	13	75	87	15	37	9	(.)	12	30	−6	−37
16 Central African Rep.	19	12	72	97	20	9	9	−9	23	18	−11	−18
17 Guinea	..	17	..	66	..	13	..	17	..	28	..	4
18 Madagascar	20	15	75	81	11	14	5	4	12	13	−6	−10
19 Togo	8	17	88	78	11	26	4	5	19	28	−7	−21
20 Ghana	10	7	73	92	24	1	17	1	28	2	−7	(.)
21 Kenya	11	19	72	64	20	22	17	17	31	25	−3	−5
22 Sierra Leone	..	9	..	92	..	12	..	−1	..	14	..	−13
23 *Mozambique*	..	..	..	..	..	..	..	..	..	..	..	..
Middle-income oil importers	**11 w**	**19 w**	**69 w**	**71 w**	**18 w**	**21 w**	**20 w**	**10 w**	**33 w**	**26 w**	**2 w**	**−11 w**
24 Sudan	8	13	81	89	9	16	11	−2	15	9	2	−18
25 Mauritania	25	31	71	64	38	41	4	5	15	43	−34	−36
26 Liberia	7	23	58	57	28	22	35	20	39	46	7	−2
27 Senegal	17	20	68	74	16	20	15	6	40	31	−1	−14
28 Lesotho	17	31	108	146	2	29	−25	−77	12	14	−27	−106
29 Zambia	11	30	48	65	25	17	41	5	56	27	16	−12
30 Zimbabwe	11	20	67	59	23	27	22	21	..	..	−1	−6
31 Botswana	15	..	88	..	8	..	−3	..	23	..	−11	..
32 Swaziland	21	..	49	..	17	..	30	..	44	..	13	..
33 Ivory Coast	10	18	73	58	15	24	17	24	37	39	2	(.)
34 Mauritius	13	13	82	69	26	21	6	18	27	46	−20	−3
Middle-income oil exporters	**7 w**	**13 w**	**86 w**	**68 w**	**16 w**	**26 w**	**8 w**	**18 w**	**15 w**	**21 w**	**−8 w**	**−8 w**
35 Nigeria	6	13	87	71	13	25	7	16	14	19	−6	−9
36 Cameroon	..	8	..	65	..	25	..	27	..	31	..	2
37 Congo, People's Rep.	15	15	97	37	53	56	−12	48	21	55	−65	−8
38 Gabon	10	14	40	30	50	35	50	..	32	..	(.)	..
39 *Angola*	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	**10 w**	**14 w**	**77 w**	**75 w**	**16 w**	**19 w**	**13 w**	**12 w**	**23 w**	**17 w**	**−3 w**	**−7 w**
All low-income countries	**8 w**	**11 w**	**78 w**	**73 w**	**19 w**	**24 w**	**18 w**	**21 w**	**7 w**	**9 w**	**−1 w**	**−3 w**
All lower middle-income countries	**10 w**	**13 w**	**76 w**	**70 w**	**15 w**	**23 w**	**14 w**	**17 w**	**15 w**	**20 w**	**−1 w**	**−6 w**
All upper middle-income countries	**12 w**	**15 w**	**67 w**	**67 w**	**22 w**	**24 w**	**21 w**	**23 w**	**18 w**	**24 w**	**−1 w**	**−1 w**
Industrial market economies	**15 w**	**18 w**	**63 w**	**62 w**	**21 w**	**20 w**	**22 w**	**20 w**	**12 w**	**19 w**	**1 w**	**(.) w**

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1981, not 1982.
b. Separate figures are not available for public consumption, which is therefore included in private consumption.

Table 6. Commercial Energy

	Average annual growth rate (percent)				Energy consumption per capita (kilograms of oil equivalent)		Energy imports as a percentage of merchandise exports	
	Energy production		Energy consumption					
	1960–74[a]	1974–81	1960–74[a]	1974–81	1960[b]	1981	1960	1981[c]
Low-income economies	**6.1 w**	**9.4 w**	**8.5 w**	**1.5 w**	**39 w**	**61 w**	**9 w**	**39 w**
Low-income semiarid	**41.2 w**	**7.0 w**	**9.8 w**	**12.4 w**	**7 w**	**35 w**	**14 w**	**22 w**
1 Chad	..	..	9.8	3.8	7	20	23	..
2 Mali	*41.2*	7.0	6.3	5.1	10	21	13	..
3 Burkina Faso	..	..	7.8	13.1	3	22	38	71
4 Somalia	..	..	10.2	19.2	11	90	4	*2*
5 Niger	..	..	15.1	10.9	3	31	6	23
6 Gambia, The	..	..	9.0	13.9	16	78	..	..
Low-income other	**5.9 w**	**9.4 w**	**8.4 w**	**1.1 w**	**44 w**	**65 w**	**9 w**	**43 w**
7 Ethiopia	14.1	5.6	14.2	6.2	7	23	11	44
8 Guinea-Bissau	..	..	7.2	2.0	11	35	..	..
9 Zaire	3.0	12.2	5.0	2.0	65	76	3	..
10 Malawi	32.8	9.5	..	4.5	..	46	..	*15*
11 Uganda	5.2	−3.2	9.2	−8.0	27	23	5	..
12 Rwanda	23.7	2.3	..	7.0	*10*	18	..	..
13 Burundi	..	30.5	..	10.6	6	15	..	..
14 Tanzania	10.6	6.7	10.8	2.4	30	50	..	*50*
15 Benin	..	..	10.0	−1.5	26	38	16	..
16 Central African Rep.	14.1	3.7	7.7	7.3	20	33	12	*1*
17 Guinea	*15.9*	(.)	3.4	1.3	35	54	7	..
18 Madagascar	7.2	−5.8	11.4	−5.4	27	41	9	13
19 Togo	..	24.2	13.2	16.1	15	125	10	18
20 Ghana	..	3.0	12.3	−0.1	72	161	7	..
21 Kenya	9.6	15.0	6.4	2.5	114	147	18	63
22 Sierra Leone	..	..	6.8	−0.5	74	121	11	..
23 *Mozambique*	3.2	29.5	6.4	−0.5	76	85	11	..
Middle-income oil importers	**15.8 w**	**0.8 w**	**11.4 w**	**0.7 w**	**100 w**	**239 w**	..	..
24 Sudan	29.7	9.6	13.1	−3.9	40	70	8	44
25 Mauritania	..	..	20.9	4.2	12	131	39	..
26 Liberia	31.9	−0.9	19.8	1.6	66	373	3	24
27 Senegal	..	..	1.9	−2.0	381	206	8	77
28 Lesotho	..	..	..	..	..	..	..	..
29 Zambia	..	4.5	..	0.2	..	443	..	..
30 Zimbabwe	..	−2.5	..	1.4	..	578	..	..
31 Botswana	8.0	8.8	7.2	8.1	157	337	..	..
32 Swaziland	11.3	4.7	8.0	5.7	139	283	..	..
33 Ivory Coast	9.7	35.1	14.9	7.9	50	191	5	21
34 Mauritius	3.6	5.9	12.0	1.2	103	312	..	..
Middle-income oil exporters	**19.4 w**	**10.2 w**	**13.1 w**	**11.6 w**	**27 w**	**146 w**	**7 w**	**11 w**
35 Nigeria	36.6	−2.3	9.2	17.2	20	143	7	..
36 Cameroon	1.1	55.4	4.7	8.5	61	122	7	*13*
37 Congo, People's Rep.	15.8	9.3	5.9	18.5	89	139	25	*7*
38 Gabon	..	..	31.2	0.6	82	..	..	..
39 *Angola*	35.5	−1.8	13.0	5.2	46	210	..	..
Sub-Saharan Africa	**14.8 w**	**5.6 w**	**10.6 w**	**3.6 w**	**42 w**	**111 w**	**8 w**	**30 w**
All low-income countries	**6.2 w**	**5.7 w**	**5.8 w**	**5.5 w**	**140 w**	**253 w**	**11 w**	**61 w**
All lower middle-income countries	**21.8 w**	**2.3 w**	**8.4 w**	**5.5 w**	**146 w**	**362 w**	**8 w**	**27 w**
All upper middle-income countries	**9.3 w**	**−5.9 w**	**7.8 w**	**5.3 w**	**540 w**	**1,209 w**	**10 w**	**27 w**
Industrial market economies	**4.0 w**	**2.2 w**	**5.3 w**	**1.1 w**	**3,141 w**	**4,985 w**	**12 w**	**30 w**

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1961-74, not 1960-74.
b. Figures in italics are for 1961, not 1960.
c. Figures in italics are for 1980, not 1981.

Table 7. Growth of Merchandise Trade

| | Merchandise trade (US$ millions) | | Average annual growth rate[a] (percent) | | | |
| | Exports 1982[b] | Imports 1982[b] | Exports | | Imports | |
			1960–70	1970–82	1960–70	1970–82
Low-income economies	**6,736 t**	**11,045 t**	**6.0 m**	**−2.5 m**	**6.2 m**	**0.0 m**
Low-income semiarid	**997 t**	**1,727 t**	**6.0 m**	**7.9 m**	**5.6 m**	**6.5 m**
1 Chad	101	132	6.0	−8.6	5.1	−3.6
2 Mali	146	332	2.9	6.6	−0.4	6.6
3 Burkina Faso	56	346	14.5	9.1	8.1	6.7
4 Somalia	317	378	2.5	9.1	2.7	3.8
5 Niger	333	442	5.9	20.8	12.1	11.0
6 Gambia, The	44	97	6.4	−1.7	6.1	6.4
Low-income other	**5,739 t**	**9,318 t**	**5.7 m**	**−4.0 m**	**6.2 m**	**−2.1 m**
7 Ethiopia	404	787	3.7	1.3	6.2	0.2
8 Guinea-Bissau	12	50	..	..	..	..
9 Zaire	569	480	−1.7	−5.6	5.4	−12.4
10 Malawi	262	314	11.7	5.1	7.6	1.2
11 Uganda	371	339	6.9	−9.2	6.2	−7.9
12 Rwanda	90	286	16.0	2.4	8.2	11.5
13 Burundi	88	214	..	..	..	..
14 Tanzania	480	1,046	3.8	−5.8	6.0	−1.5
15 Benin	34	889	5.2	−4.4	7.5	5.2
16 Central African Rep.	106	91	9.6	2.6	4.5	−0.2
17 Guinea	411	296	..	..	..	..
18 Madagascar	433	522	5.4	−3.6	4.1	−3.4
19 Togo	213	526	10.5	0.3	8.6	8.6
20 Ghana	873	705	0.1	−4.7	−1.5	−4.8
21 Kenya	979	1,683	7.5	−3.3	6.5	−2.7
22 Sierra Leone	111	298	2.5	−6.6	1.9	−2.6
23 *Mozambique*	303	792	6.0	−13.3	7.9	−14.5
Middle-income oil importers	**6,058 t**	**7,097 t**	**4.1 m**	**−0.1 m**	**2.9 m**	**3.0 m**
24 Sudan	499	1,285	2.1	−5.1	0.5	3.5
25 Mauritania	232	273	53.8	−0.1	4.6	3.0
26 Liberia	*531*	*477*	18.5	0.5	2.9	−2.4
27 Senegal	477	974	1.4	−1.8	2.3	1.3
28 Lesotho	..	..	..	..	..	..
29 Zambia	1,059	831	2.3	−0.5	9.7	−6.8
30 Zimbabwe	*663*	*704*	..	..	..	..
31 Botswana	..	..	..	..	..	..
32 Swaziland	..	..	..	..	..	..
33 Ivory Coast	2,235	2,090	8.9	2.6	10.0	4.6
34 Mauritius	362	463	4.1	5.2	−0.2	5.5
Middle-income oil exporters	**25,296 t**	**24,721 t**	**7.1 m**	**−1.1 m**	**7.9 m**	**9.7 m**
35 Nigeria	*19,484*	*20,821*	6.6	−1.6	1.5	17.2
36 Cameroon	998	1,205	7.1	4.0	9.2	5.2
37 Congo, People's Rep.	923	970	6.4	1.4	−1.0	9.1
38 Gabon	2,161	724	11.1	−1.1	7.9	10.2
39 *Angola*	1,730	1,001	9.7	−15.8	11.5	0.0
Sub-Saharan Africa	**38,090 t**	**42,863 t**	**6.2 m**	**−0.8 m**	**6.0 m**	**3.0 m**
All low-income countries	**42,619 t**	**56,205 t**	**5.4 m**	**0.3 m**	**5.4 m**	**1.2 m**
All lower middle-income countries	**97,855 t**	**119,668 t**	**5.3 m**	**1.6 m**	**6.8 m**	**3.3 m**
All upper middle-income countries	**231,703 t**	**260,541 t**	**5.4 m**	**7.1 m**	**5.5 m**	**7.4 m**
Industrial market economies	**1,148,808 t**	**1,212,975 t**	**8.5 m**	**5.6 m**	**9.5 m**	**4.3 m**

Note: For data comparability and coverage see the technical notes.
a. See the technical notes.
b. Figures in italics are for 1981, not 1982.

Table 8. Structure of Merchandise Exports

	Percentage share of merchandise exports									
	Fuels, minerals, and metals		Other primary commodities		Textiles and clothing		Machinery and transport equipment		Other manufactures	
	1960[a]	1981[b]	1960[a]	1981[b]	1960[a]	1981[b]	1960[a]	1981[b]	1960[a]	1981[b]
Low-income economies										
Low-income semiarid										
1 Chad	3	..	94	..	0	..	0	..	3	..
2 Mali	0	..	96	..	1	..	1	..	2	..
3 Burkina Faso	0	(.)	100	85	0	2	0	6	(.)	7
4 Somalia	0	5	88	94	0	(.)	8	(.)	4	1
5 Niger	..	81	100	17	0	1	0	(.)	0	1
6 Gambia, The	..	..	..	..	..	..	..	..	..	..
Low-income other										
7 Ethiopia	0	8	100	91	0	(.)	0	(.)	0	1
8 Guinea-Bissau	..	..	..	..	..	..	..	..	..	..
9 Zaire	42	..	57	..	0	..	0	..	1	..
10 Malawi	..	(.)	..	93	..	5	..	(.)	..	2
11 Uganda	8	..	92	..	0	..	0	..	(.)	..
12 Rwanda	..	..	..	..	..	..	..	..	..	..
13 Burundi	..	..	..	..	..	..	..	..	..	..
14 Tanzania	(.)	10	87	76	0	9	0	(.)	13	5
15 Benin	10	..	80	..	7	..	(.)	..	3	..
16 Central African Rep.	12	(.)	86	74	(.)	(.)	1	(.)	1	26
17 Guinea	42	..	58	..	0	..	0	..	0	..
18 Madagascar	4	13	90	79	1	4	1	1	4	3
19 Togo	3	52	89	33	3	1	0	1	5	13
20 Ghana	7	..	83	..	0	..	0	..	10	..
21 Kenya	1	36	87	52	0	(.)	0	1	12	11
22 Sierra Leone	15	..	20	..	0	..	0	..	65	..
23 *Mozambique*	0	..	100	..	0	..	0	..	0	..
Middle-income oil importers										
24 Sudan	0	5	100	94	0	1	0	(.)	0	(.)
25 Mauritania	4	..	69	..	1	..	20	..	6	..
26 Liberia	45	67	55	31	0	(.)	0	1	0	1
27 Senegal	3	52	94	29	1	4	1	4	1	11
28 Lesotho	..	..	..	..	..	..	..	..	..	..
29 Zambia	..	..	..	..	..	..	..	..	..	..
30 Zimbabwe	71	..	25	..	1	..	(.)	..	3	..
31 Botswana	..	..	..	..	..	..	..	..	..	..
32 Swaziland	..	..	..	..	..	..	..	..	..	..
33 Ivory Coast	1	8	98	82	0	3	(.)	2	1	5
34 Mauritius	..	..	..	..	..	..	..	..	..	..
Middle-income oil exporters										
35 Nigeria	8	..	89	..	0	..	0	..	3	..
36 Cameroon	19	33	77	64	0	1	2	(.)	2	2
37 Congo, People's Rep.	7	90	84	4	(.)	(.)	5	(.)	4	6
38 Gabon	..	..	..	..	..	..	..	..	..	..
39 *Angola*	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa										
All low-income countries	9 w	19 w	70 w	31 w	15 w	21 w	(.) w	4 w	6 w	25 w
All lower middle-income countries	20 w	43 w	76 w	39 w	1 w	6 w	(.) w	2 w	3 w	10 w
All upper middle-income countries	38 w	29 w	46 w	18 w	4 w	12 w	2 w	14 w	10 w	27 w
Industrial market economies	11 w	12 w	23 w	15 w	7 w	4 w	29 w	37 w	30 w	32 w

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1961, not 1960.
b. Figures in italics are for 1980, not 1981.

Table 9. Structure of Merchandise Imports

	Percentage share of merchandise imports									
	Food		Fuels		Other primary commodities		Machinery and transport equipment		Other manufactures	
	1960[a]	1981[b]	1960[a]	1981[b]	1960[a]	1981[b]	1960[a]	1981[b]	1960[a]	1981[b]
Low-income economies										
Low-income semiarid										
1 Chad	19	..	12	..	4	..	19	..	46	..
2 Mali	20	..	5	..	4	..	18	..	53	..
3 Burkina Faso	21	25	4	16	1	3	24	24	50	32
4 Somalia	27	33	4	1	0	4	18	35	51	27
5 Niger	24	23	5	15	4	4	18	26	49	32
6 Gambia, The	..	..	..	..	..	..	..	..	..	..
Low-income other										
7 Ethiopia	..	9	..	23	..	4	..	35	..	29
8 Guinea-Bissau	..	..	..	..	..	..	..	..	..	..
9 Zaire	..	..	..	..	..	..	..	..	..	..
10 Malawi	..	8	..	15	..	2	..	34	..	41
11 Uganda	6	..	8	..	8	..	25	..	53	..
12 Rwanda	..	..	..	..	..	..	..	..	..	..
13 Burundi	..	..	..	..	..	..	..	..	..	..
14 Tanzania	..	13	..	21	..	3	..	35	..	28
15 Benin	17	..	10	..	1	..	18	..	54	..
16 Central African Rep.	15	21	9	2	2	3	26	34	48	40
17 Guinea	..	..	..	..	..	..	..	..	..	..
18 Madagascar	17	14	6	11	3	3	23	40	51	32
19 Togo	16	26	6	8	3	3	32	21	43	42
20 Ghana	19	..	5	..	4	..	26	..	46	..
21 Kenya	12	8	11	34	8	2	27	28	42	28
22 Sierra Leone	23	..	12	..	5	..	15	..	45	..
23 *Mozambique*	..	..	..	..	..	..	..	..	..	..
Middle-income oil importers										
24 Sudan	17	19	8	19	3	3	14	22	58	37
25 Mauritania	5	..	3	..	3	..	39	..	50	..
26 Liberia	16	22	4	27	7	2	34	25	39	24
27 Senegal	30	28	5	30	2	1	19	18	44	23
28 Lesotho	..	..	..	..	..	..	..	..	..	..
29 Zambia	..	..	..	..	..	..	..	..	..	..
30 Zimbabwe	..	..	..	..	..	..	..	..	..	..
31 Botswana	..	..	..	..	..	..	..	..	..	..
32 Swaziland	..	..	..	..	..	..	..	..	..	..
33 Ivory Coast	18	20	6	22	2	2	27	22	47	34
34 Mauritius	..	..	..	..	..	..	..	..	..	..
Middle-income oil exporters										
35 Nigeria	14	..	5	..	6	..	24	..	51	..
36 Cameroon	20	9	8	12	3	2	17	34	52	43
37 Congo, People's Rep.	18	19	6	14	1	2	31	23	44	42
38 Gabon	..	..	..	..	..	..	..	..	..	..
39 *Angola*	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa										
All low-income countries	22 w	14 w	7 w	21 w	18 w	12 w	26 w	22 w	27 w	31 w
All lower middle-income countries	16 w	14 w	7 w	21 w	9 w	5 w	28 w	29 w	40 w	31 w
All upper middle-income countries	15 w	11 w	9 w	22 w	15 w	7 w	28 w	29 w	33 w	31 w
Industrial market economies	22 w	11 w	11 w	28 w	24 w	9 w	16 w	23 w	27 w	31 w

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1961, not 1960.
b. Figures in italics are for 1980, not 1981.

Table 10. Origin and Destination of Merchandise Exports

Origin	Destination of merchandise exports (percentage of total)							
	Industrial market economies		East European nonmarket economies		High-income oil exporters		Developing economies	
	1960	1982[a]	1960	1982[a]	1960	1982[a]	1960	1982[a]
Low-income economies	**76 w**	**67 w**					**22 w**	**26 w**
Low-income semiarid	**72 w**	**50 w**					**28 w**	**27 w**
1 Chad	73	44	0	0	0	7	27	49
2 Mali	93	62	0	1	(.)	(.)	7	37
3 Burkina Faso	4	64	0	0	0	0	96	36
4 Somalia	85	16	. .	(.)	(.)	68	15	16
5 Niger	74	76	0	0	0	0	26	24
6 Gambia, The	. .	. .	. .	. .	. .	. .	. .	. .
Low-income other	**76 w**	**70 w**					**22 w**	**26 w**
7 Ethiopia	69	66	1	3	6	7	24	24
8 Guinea-Bissau	. .	. .	. .	. .	. .	. .	. .	. .
9 Zaire	89	92	(.)	(.)	(.)	(.)	11	8
10 Malawi	. .	74	. .	0	. .	0	. .	26
11 Uganda	62	88	0	0	0	2	38	10
12 Rwanda	. .	61	. .	0	. .	(.)	. .	39
13 Burundi	. .	76	. .	0	. .	0	. .	24
14 Tanzania	74	57	1	4	0	1	25	38
15 Benin	90	82	2	(.)	0	0	8	18
16 Central African Rep.	83	83	0	(.)	0	(.)	17	17
17 Guinea	63	87	8	(.)	(.)	(.)	19	13
18 Madagascar	79	57	1	6	0	(.)	20	37
19 Togo	74	63	0	1	0	(.)	26	36
20 Ghana	88	77	7	10	(.)	(.)	5	13
21 Kenya	77	53	0	1	(.)	4	23	42
22 Sierra Leone	99	80	0	0	0	(.)	1	20
23 *Mozambique*	29	54	(.)	0	(.)	3	71	43
Middle-income oil importers	**73 w**	**66 w**					**21 w**	**30 w**
24 Sudan	59	38	8	7	4	22	29	33
25 Mauritania	89	95	0	0	0	(.)	11	5
26 Liberia	100	64	0	1	0	(.)	(.)	35
27 Senegal	89	65	0	(.)	0	(.)	11	35
28 Lesotho	. .	. .	. .	. .	. .	. .	. .	. .
29 Zambia	. .	74	. .	1	. .	0	. .	25
30 Zimbabwe	. .	49	. .	1	. .	1	. .	49
31 Botswana	. .	. .	. .	. .	. .	. .	. .	. .
32 Swaziland	. .	. .	. .	. .	. .	. .	. .	. .
33 Ivory Coast	84	71	0	3	0	(.)	16	26
34 Mauritius	. .	. .	. .	. .	. .	. .	. .	. .
Middle-income oil exporters	**88 w**	**87 w**					**11 w**	**11 w**
35 Nigeria	95	89	1	2	0	(.)	4	9
36 Cameroon	93	89	1	(.)	(.)	(.)	6	11
37 Congo, People's Rep.	93	81	0	(.)	0	(.)	7	19
38 Gabon	. .	. .	. .	. .	. .	. .	. .	. .
39 *Angola*	64	67	2	(.)	0	0	34	33
Sub-Saharan Africa	**79 w**	**80 w**					**18 w**	**17 w**
All low-income countries	**51 w**	**52 w**	**21 w**	**5 w**	**1 w**	**4 w**	**27 w**	**39 w**
All lower middle-income countries	**73 w**	**69 w**	**7 w**	**2 w**	**1 w**	**2 w**	**19 w**	**27 w**
All upper middle-income countries	**67 w**	**63 w**	**6 w**	**4 w**	**(.) w**	**4 w**	**28 w**	**29 w**
Industrial market economies	**67 w**	**66 w**	**3 w**	**3 w**	**(.) w**	**4 w**	**30 w**	**27 w**

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1981, not 1982.

Table 11. Terms of Trade

	Terms of trade (1980 = 100)				Average annual growth rate of terms of trade (percent) 1970–82
	1970	1979	1981	1982	
Low-income economies					
Low-income semiarid					
1 Chad	81	100	103	99	1.5
2 Mali	118	107	107	102	−1.5
3 Burkina Faso	133	113	106	97	−2.5
4 Somalia	154	116	105	111	−3.4
5 Niger	169	112	82	89	−5.1
6 Gambia, The	141	122	126	108	−2.4
Low-income other					
7 Ethiopia	156	139	68	74	−4.9
8 Guinea-Bissau	..	..	..	..	..
9 Zaire	196	113	85	81	−5.9
10 Malawi	137	111	105	106	−2.7
11 Uganda	92	103	75	74	0.5
12 Rwanda	79	88	64	63	0.8
13 Burundi	..	..	..	..	..
14 Tanzania	107	105	86	86	−1.3
15 Benin	175	115	95	75	−6.3
16 Central African Rep.	105	99	91	90	−0.6
17 Guinea	..	..	..	..	..
18 Madagascar	112	103	78	80	−2.3
19 Togo	72	108	101	112	3.7
20 Ghana	109	136	68	61	0.2
21 Kenya	99	108	87	87	−0.4
22 Sierra Leone	144	121	82	84	−3.3
23 *Mozambique*	111	104	95	84	−2.0
Middle-income oil importers					
24 Sudan	96	98	100	85	−0.6
25 Mauritania	175	101	92	97	−5.1
26 Liberia	188	121	91	92	−6.0
27 Senegal	100	110	101	89	−0.3
28 Lesotho	..	..	..	..	..
29 Zambia	262	118	80	72	−9.0
30 Zimbabwe	..	81	111	105	..
31 Botswana	..	..	..	..	..
32 Swaziland	..	..	..	..	..
33 Ivory Coast	109	119	91	91	0.6
34 Mauritius	106	109	96	91	−2.1
Middle-income oil exporters					
35 Nigeria	19	67	110	103	15.7
36 Cameroon	103	119	76	71	0.3
37 Congo, People's Rep.	18	74	115	110	17.4
38 Gabon	17	68	113	111	17.6
39 *Angola*	24	74	108	104	14.2
Sub-Saharan Africa					

Note: For data comparability and coverage see the technical notes.

Table 12. Commodity Trade: Volume and Prices

	Volume (annual average growth rate in percent)				Price (annual average growth rate in percent)	
	Sub-Saharan Africa		World			
	1961–70	1970–82	1961–70	1970–82	1961–70	1970–82
Fuels						
Petroleum	32.9	3.3	12.1	1.5	−2.6	20.1
Minerals and metals						
Copper	2.7	−0.3	3.2	2.6	9.5	−7.2
Iron ore	25.8	−5.1	8.5	0.7	−4.4	−4.6
Bauxite	18.5	20.5	6.4	1.8	6.1	1.8
Phosphate rock	20.1	2.2	8.0	1.3	−2.3	1.7
Manganese ore	11.4	−3.4	5.9	−1.2	−6.4	−0.6
Zinc	−1.6	−2.9	5.6	0.9	2.7	−3.9
Tin	3.8	−8.5	1.9	−0.1	3.0	4.1
Lead	17.4	1.5	9.4	−12.8	5.1	−0.9
Food and beverages						
Coffee	4.3	−1.0	2.3	0.9	0.3	1.8
Cocoa	−0.4	−1.2	0.5	−0.2	4.9	3.0
Sugar	4.4	1.2	1.2	3.1	−5.3	−2.7
Tea	9.5	4.0	2.4	2.1	−4.5	−2.8
Groundnuts (meal)	6.3	−4.6	1.1	−6.4	0.6	−4.1
Groundnut oil	5.4	−7.1	3.3	−0.4	0.1	−4.0
Beef	9.8	−7.0	5.6	4.6	6.8	−4.1
Palm oil	−9.7	−6.7	4.1	11.5	−2.3	−3.2
Bananas	−2.2	−6.6	4.9	1.0	0.1	−1.1
Maize	8.1	−6.9	7.1	8.6	−0.2	−4.2
Nonfood						
Timber	5.1	−2.3	6.0	1.8	0.6	3.6
Cotton	6.0	−4.0	0.8	0.9	−1.7	−1.9
Tobacco	−6.0	4.7	1.6	2.6	3.0	−1.2
Rubber	2.7	−3.8	2.9	0.9	−4.6	0.0
Hides and skins	0.5	1.5	3.9	2.6	0.3	..
Sisal	−1.8	−9.7	−1.7	−9.8	−8.4	0.1

Table 13. Balance of Payments, Debt Service, and International Reserves

	Current account balance (US$ millions)		Interest payment on external public debt (US$ millions)		Debt service As percentage of GNP		As percentage of exports of goods & services		Gross international reserves Amount (US$ millions)		In months of import coverage
	1970	1982ª	1970	1982	1970	1982ª	1970	1982ª	1970	1982ª	1982ª
Low-income economies					1.3 w	1.7 w	4.9 w	12.4 w			1.7 w
Low-income semiarid					0.5 w	2.9 w	2.9 w	4.8 w			0.6 w
1 Chad	2	19	(.)	(.)	1.0	0.1	3.9	0.4	2	18	2.0
2 Mali	−2	−113	(.)	5	0.2	0.8	1.2	3.5	1	25	0.7
3 Burkina Faso	9	..	(.)	7	0.6	1.7	4.0	..	36	67	..
4 Somalia	−6	−177	(.)	10	0.3	1.6	2.1	7.2	21	15	0.3
5 Niger	(.)	..	1	44	0.6	7.3	3.8	..	19	35	..
6 Gambia, The	1	−47	(.)	4	..	3.4	0.6	6.5	8	8	0.3
Low-income other					1.4 w	1.5 w	5.0 w	13.4 w			1.8 w
7 Ethiopia	−32	−196	6	22	1.2	1.2	11.4	9.5	72	277	3.6
8 Guinea-Bissau	..	..	..	1	..	1.9	..	..	..	..	..
9 Zaire	−64	−375	9	72	2.1	2.6	4.4	..	189	312	1.8
10 Malawi	−35	−78	3	32	2.1	4.5	7.1	22.8	29	29	0.9
11 Uganda	20	−256	4	10	0.6	0.9	2.7	22.3	57	73	0.1
12 Rwanda	7	−90	(.)	2	0.2	0.2	1.3	3.2	8	128	4.3
13 Burundi	..	..	(.)	2	0.3	0.4	..	..	15	37	..
14 Tanzania	−36	−268	6	33	1.2	1.1	4.9	5.1	65	19	0.2
15 Benin	−1	..	(.)	28	0.7	4.8	2.2	..	16	10	..
16 Central African Rep.	−12	−39	1	2	1.7	0.7	4.8	2.9	1	52	2.3
17 Guinea	..	..	4	24	2.2	4.9	..	..	..	..	..
18 Madagascar	10	−369	2	42	0.8	4.1	3.5	..	37	20	0.3
19 Togo	3	−152	1	22	0.9	4.3	2.9	..	35	173	5.6
20 Ghana	−68	83	12	27	1.1	0.2	5.0	6.8	58	318	4.0
21 Kenya	−49	−509	12	147	1.8	5.4	5.4	20.3	220	248	1.4
22 Sierra Leone	−16	−158	2	2	2.9	0.9	9.9	20.8	39	8	0.4
23 *Mozambique*	..	..	..	..	..	..	..	..	..	..	..
Middle-income oil importers					2.0 w	5.6 w	6.2 w	16.9 w			1.1 w
24 Sudan	−42	−248	13	11	1.7	0.8	10.7	7.5	22	21	0.2
25 Mauritania	−5	−252	(.)	24	1.7	5.8	3.1	11.8	3	144	2.7
26 Liberia	..	−79	6	14	5.5	3.5	..	5.1	..	8	0.2
27 Senegal	−16	..	2	64	0.8	4.2	2.7	..	22	25	..
28 Lesotho	..	−50	(.)	3	0.4	1.2	..	2.0	..	48	1.2
29 Zambia	108	−252	26	88	3.5	5.1	5.9	17.4	515	157	1.5
30 Zimbabwe	..	−706	5	95	0.6	2.3	..	9.2	59	320	1.7
31 Botswana	..	−61	(.)	10	..	1.6	..	1.4	..	293	3.1
32 Swaziland	..	−69	2	9	..	3.9	..	3.6	..	76	1.9
33 Ivory Coast	−38	15	11	476	2.8	14.9	6.8	36.9	119	23	0.1
34 Mauritius	8	−43	2	34	..	6.0	2.9	12.4	46	55	1.1
Middle-income oil exporters					0.7 w	2.5 w	4.2 w	10.9 w			1.0 w
35 Nigeria	−368	−7,324	20	722	0.6	1.9	4.2	9.5	223	1,927	1.1
36 Cameroon	−30	−525	4	121	0.8	3.7	3.1	15.6	81	81	0.5
37 Congo, People's Rep.	..	−320	3	92	3.3	13.4	..	22.6	9	42	0.3
38 Gabon	−3	680	3	97	..	10.1	5.5	12.6	15	318	1.1
39 *Angola*	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa					1.2 w	2.7 w	5.1 w	12.6 w			1.1 w
All low-income countries					1.1 w	1.1 w	11.3 w	8.8 w			7.3 w
All lower middle-income countries					1.6 w	3.7 w	9.2 w	16.8 w			3.9 w
All upper middle-income countries					1.5 w	4.4 w	10.7 w	16.9 w			5.1 w
Industrial market economies					..	..	..	..			5.6 w

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for 1981, not 1982.

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Table 14. External Public Debt and Debt Service

External public and publicly guaranteed debt outstanding and disbursed
(US$ millions)

	Official sources		Private sources		Total		Debt service	
	1970	1982	1970	1982	1970	1982	1970	1982
Low-income economies	1,950.1 t	15,408.4 t	827.8 t	4,763.6 t	2,777.9 t	20,172.0 t	188.4 t	1,475.0 t
Low-income semiarid	387.6 t	2,666.4 t	16.5 t	360.4 t	404.1 t	3,026.8 t	8.6 t	165.3 t
1 Chad	24.6	157.5	7.5	31.8	32.1	189.3	2.7	0.2
2 Mali	231.5	807.8	6.1	14.2	237.6	822.0	0.7	8.1
3 Burkina Faso	20.2	308.0	0.3	26.8	20.5	334.8	1.9	20.0
4 Somalia	74.9	884.5	2.2	59.5	77.1	944.0	0.9	19.8
5 Niger	31.2	390.6	0.5	212.0	31.7	602.6	2.3	110.2
6 Gambia, The	5.1	117.9	..	16.1	5.1	134.0	0.1	7.0
Low-income other	1,562.4 t	12,742.0 t	811.3 t	4,403.2 t	2,373.7 t	17,145.2 t	179.8 t	1,309.6 t
7 Ethiopia	140.2	792.4	28.7	82.2	168.9	874.6	21.1	54.8
8 Guinea-Bissau	..	101.2	..	24.6	..	125.8	..	2.5
9 Zaire	95.3	2,750.0	215.8	1,290.3	311.1	4,040.3	36.8	81.2
10 Malawi	89.1	494.1	33.3	197.7	122.4	691.8	5.9	64.3
11 Uganda	107.8	552.9	29.7	40.9	137.5	593.8	7.9	132.1
12 Rwanda	1.5	189.3	0.4	..	1.9	189.3	0.3	5.2
13 Burundi	5.8	196.3	1.5	4.6	7.3	200.9	0.6	5.2
14 Tanzania	152.7	1,550.5	95.8	81.1	248.5	1,631.6	15.7	112.6
15 Benin	29.2	252.9	11.3	303.5	40.5	556.4	1.7	46.4
16 Central African Rep.	17.8	160.4	6.1	61.6	23.9	222.0	2.9	4.5
17 Guinea	277.4	1,045.3	36.7	184.6	314.1	1,229.9	14.5	78.5
18 Madagascar	85.0	1,002.9	7.6	561.9	92.6	1,564.8	6.9	112.2
19 Togo	32.0	546.2	7.8	272.8	39.8	819.0	2.3	33.7
20 Ghana	264.3	949.3	225.1	166.3	489.4	1,115.6	23.7	65.1
21 Kenya	232.0	1,572.7	84.3	828.9	316.3	2,401.6	27.4	376.2
22 Sierra Leone	32.4	229.8	27.0	73.1	59.4	302.9	12.0	40.6
23 *Mozambique*	..	356.0	..	229.0	..	585.0	..	94.4
Middle-income oil importers	909.9 t	10,285.1 t	894.9 t	6,810.3 t	1,804.8 t	17,095.4 t	176.3 t	1,683.3 t
24 Sudan	272.5	3,772.8	46.2	1,320.7	318.7	5,093.5	34.6	79.3
25 Mauritania	19.4	890.8	7.9	109.9	27.3	1,000.7	3.3	39.7
26 Liberia	124.0	498.1	33.9	143.1	157.9	641.2	17.6	33.2
27 Senegal	78.4	1,082.1	19.6	246.4	98.0	1,328.5	6.7	101.9
28 Lesotho	7.6	128.9	0.5	9.7	8.1	138.6	0.5	8.0
29 Zambia	119.4	1,732.5	503.1	648.1	622.5	2,380.6	59.0	184.3
30 Zimbabwe	88.1	276.5	144.6	944.3	232.7	1,220.8	9.4	145.8
31 Botswana	14.1	174.8	0.6	34.2	14.7	209.0	0.6	13.4
32 Swaziland	20.9	165.4	16.1	12.3	37.0	177.7	3.3	17.7
33 Ivory Coast	144.1	1,343.9	112.0	3,193.4	256.1	4,537.3	38.5	996.7
34 Mauritius	21.4	219.1	10.3	148.3	31.7	367.4	2.9	63.1
Middle-income oil exporters	683.2 t	3,474.6 t	153.0 t	7,321.4 t	836.2 t	10,796.0 t	84.5 t	2,305.7 t
35 Nigeria	383.4	1,144.0	96.2	4,940.7	479.6	6,084.7	55.7	1,339.5
36 Cameroon	119.6	1,310.1	11.6	601.8	131.2	1,911.9	8.6	264.2
37 Congo, People's Rep.	113.8	618.9	20.8	751.0	134.6	1,369.9	8.8	272.9
38 Gabon	66.4	321.5	24.4	549.9	90.8	871.4	11.3	288.1
39 *Angola*	..	80.0	..	478.0	..	558.0	..	141.0
Sub-Saharan Africa	3,543.1 t	29,168.0 t	1,875.7 t	18,895.4 t	5,418.8 t	48,063.4 t	449.1 t	5,464.0 t
Sub-Saharan Africa as a percentage of all developing countries	9.7	15.3	9.6	7.9	10.0	11.3	6.8	8.1

Table 15. Outstanding External Debt of Sub-Saharan Africa

	Debt outstanding and disbursed (US$ millions)												
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
A. Total concessional bilateral	**2,377**	**2,816**	**3,111**	**3,761**	**4,699**	**5,319**	**6,056**	**7,068**	**7,971**	**8,961**	**10,173**	**10,906**	**11,566**
Of which:													
DAC governments	1,654	1,923	2,019	2,362	2,819	3,162	3,491	3,930	4,269	4,477	5,099	5,170	5,464
OPEC governments	70	78	107	146	261	378	584	819	1,049	1,607	2,022	2,579	3,006
CPE governments	585	736	896	1,157	1,493	1,630	1,828	2,131	2,406	2,597	2,758	2,888	2,812
Other bilateral	68	78	90	96	126	148	153	188	247	280	293	270	285
B. Total official export credits	**324**	**345**	**374**	**479**	**674**	**927**	**1,439**	**1,791**	**2,300**	**4,159**	**5,505**	**5,606**	**6,187**
Of which:													
DAC governments	285	304	330	415	520	606	895	1,147	1,533	2,859	3,852	3,851	4,205
OPEC governments	0	0	0	14	96	187	400	488	559	696	856	887	924
CPE governments	21	27	33	34	42	54	64	72	93	325	404	463	448
Other bilateral	18	15	12	16	16	81	80	84	116	279	393	404	610
C. Total multilateral loans	**842**	**1,018**	**1,321**	**1,620**	**1,997**	**2,529**	**3,157**	**4,048**	**5,446**	**6,735**	**8,443**	**9,752**	**11,414**
Of which:													
IBRD	590	681	832	924	1,041	1,261	1,493	1,725	2,017	2,262	2,549	2,854	3,327
IDA	226	288	396	547	679	880	1,157	1,487	1,801	2,156	2,573	3,090	3,728
Regional banks (concessional)	15	23	42	69	88	99	123	202	341	452	611	719	854
Regional banks (nonconcessional)	11	25	51	74	105	126	148	222	347	417	543	623	717
Other multilateral (concessional)	0	0	(.)	2	78	159	232	387	848	1,265	1,835	2,044	2,220
Other multilateral (nonconcessional)	0	0	0	3	5	5	5	26	92	184	333	423	569
D. Total private publicly guaranteed loans	**1,876**	**2,048**	**2,321**	**3,426**	**4,261**	**5,330**	**6,096**	**7,933**	**11,802**	**14,640**	**16,521**	**18,185**	**18,895**
Of which:													
Suppliers credits	746	907	1,023	1,286	1,605	2,170	2,470	3,076	3,535	3,722	3,544	3,459	3,397
Financial institutions	307	453	701	1,361	1,889	2,607	3,371	4,606	7,794	10,370	12,310	14,204	15,120
Bonds	387	398	333	321	310	260	204	212	435	532	654	520	369
Other	436	289	265	458	457	292	51	39	38	15	14	3	10
E. Total public and publicly guaranteed loans	**5,419**	**6,227**	**7,127**	**9,285**	**11,631**	**14,104**	**16,747**	**20,840**	**27,518**	**34,495**	**40,643**	**44,450**	**48,063**
F. Total private nonguaranteed debt	**331**	**360**	**430**	**636**	**832**	**990**	**1,139**	**1,278**	**1,839**	**2,296**	**2,722**	**3,031**	**3,251**
G. Total public and private debt	**5,749**	**6,587**	**7,558**	**9,921**	**12,463**	**15,093**	**17,886**	**22,118**	**29,357**	**36,790**	**43,364**	**47,480**	**51,315**
Of which:													
Total bilateral	2,701	3,161	3,485	4,240	5,373	6,245	7,494	8,859	10,270	13,120	15,678	16,512	17,754
Total official	3,543	4,179	4,806	5,859	7,370	8,774	10,651	12,907	15,716	19,855	24,122	26,264	29,168
Total private source	2,206	2,408	2,751	4,061	5,093	6,319	7,235	9,210	13,641	16,936	19,243	21,216	22,147
Total concessional	2,618	3,127	3,549	4,379	5,544	6,456	7,567	9,143	10,961	12,833	15,192	16,759	18,368
Total nonconcessional	3,132	3,460	4,009	5,542	6,919	8,637	10,319	12,975	18,396	23,957	28,173	30,721	32,947

Note: E is the sum of A, B, C, and D. G is the sum of E and F. Components of G do not add to total because of overlapping. The abbreviation CPE denotes centrally planned economies.

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Table 16. Gross Disbursements of External Loans to Sub-Saharan Africa

	Gross disbursements (US$ millions)												
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
A. Total concessional bilateral	**395**	**413**	**530**	**568**	**874**	**1,018**	**899**	**977**	**1,104**	**1,564**	**1,634**	**1,549**	**1,502**
Of which:													
DAC governments	261	282	301	327	440	601	475	459	632	749	1,013	791	748
OPEC governments	3	6	35	38	118	128	209	241	229	566	437	540	532
CPE governments	119	113	184	193	282	251	206	239	179	215	167	205	178
Other bilateral	13	12	10	10	35	38	10	38	64	34	17	13	44
B. Total official export credits	**50**	**39**	**67**	**144**	**228**	**353**	**469**	**368**	**386**	**1,098**	**943**	**798**	**728**
Of which:													
DAC governments	19	29	55	116	130	166	220	252	256	553	598	538	502
OPEC governments	..	..	..	14	82	101	213	92	71	135	131	90	34
CPE governments	17	10	12	7	14	17	27	16	21	245	86	94	10
Other bilateral	14	..	..	6	2	69	9	7	38	165	129	77	182
C. Total multilateral loans	**150**	**206**	**316**	**291**	**418**	**616**	**701**	**947**	**1,430**	**1,401**	**1,972**	**1,829**	**2,129**
Of which:													
IBRD	75	124	185	131	154	274	284	291	363	346	400	433	620
IDA	61	63	84	108	133	204	281	336	324	363	427	559	669
Regional banks (concessional)	12	7	19	23	17	19	27	72	120	105	201	187	189
Regional banks (nonconcessional)	3	13	28	19	34	37	35	78	116	83	178	167	196
Other multilateral (concessional)	..	..	(.)	2	76	81	73	150	443	411	607	326	258
Other multilateral (nonconcessional)	..	..	..	8	4	..	..	21	66	93	159	159	198
D. Total private loans	**483**	**415**	**578**	**1,162**	**1,168**	**1,701**	**1,788**	**2,224**	**4,181**	**3,882**	**5,008**	**4,209**	**4,013**
Of which:													
Suppliers' credits	136	228	248	356	491	727	680	821	680	673	1,045	642	665
Financial institutions	37	179	321	793	676	974	1,106	1,402	3,240	3,114	3,900	3,567	3,339
Bonds	9	3	1	9	..	..	2	2	261	95	64	..	..
Other	301	6	8	4	1	..	..	..	..	..	..	..	9
E. Total public and publicly guaranteed loans	**1,078**	**1,073**	**1,491**	**2,164**	**2,688**	**3,688**	**3,857**	**4,516**	**7,102**	**7,945**	**9,557**	**8,385**	**8,372**
F. Total nonguaranteed private sector credit	**130**	**103**	**155**	**307**	**338**	**304**	**312**	**432**	**761**	**800**	**1,077**	**962**	**1,054**
G. Total public and private disbursements	**1,208**	**1,176**	**1,646**	**2,471**	**3,026**	**3,992**	**4,169**	**4,948**	**7,862**	**8,745**	**10,635**	**9,347**	**9,426**
Of which:													
Total bilateral	445	452	597	711	1,102	1,371	1,368	1,345	1,490	2,663	2,577	2,347	2,230
Total official	595	658	913	1,003	1,520	1,987	2,068	2,292	2,920	4,063	4,549	4,176	4,359
Total private source	612	518	733	1,468	1,506	2,005	2,101	2,656	4,942	4,682	6,086	5,170	5,067
Total concessional	468	482	633	701	1,100	1,323	1,280	1,535	1,990	2,443	2,869	2,620	2,617
Total nonconcessional	740	694	1,013	1,770	1,926	2,670	2,889	3,413	5,873	6,302	7,766	6,727	6,809

Note: E is sum of A, B, C, and D. G is sum of E and F. Components of G do not add to totals because of overlapping.

Table 17. Average Terms of Borrowing for Sub-Saharan Africa

	Average terms for commitments of public and publicly guaranteed debt												
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total public debt													
Interest rate (percent)	3.6	4.2	4.4	5.5	5.2	5.6	5.4	5.6	6.6	8.1	7.5	10.5	8.6
Maturity (years)	24.2	22.3	20.5	20.2	19.9	19.9	18.6	18.1	16.5	15.0	18.2	15.5	18.9
Grace period (years)	6.6	6.6	5.8	5.6	6.0	5.2	5.1	4.7	4.7	4.4	4.9	4.3	5.0
Grant element (percent)	46.1	41.5	37.1	32.0	34.1	30.0	30.3	28.5	23.3	14.6	21.3	4.8	15.2
Total official debt													
Interest rate (percent)	2.0	3.0	3.1	2.8	3.2	4.1	3.4	4.1	3.8	4.2	3.7	5.1	4.4
Maturity (years)	31.7	27.8	27.7	29.1	25.8	26.4	27.2	24.8	25.0	22.8	25.3	25.3	28.7
Grace period (years)	9.3	8.2	7.8	8.0	7.8	6.7	7.0	6.3	6.5	6.1	6.6	6.1	6.9
Grant element (percent)	63.9	53.8	52.0	55.4	50.7	43.6	49.6	42.9	44.9	40.2	45.5	36.0	43.5
Bilateral debt													
Interest rate (percent)	1.3	2.0	2.6	1.8	3.0	3.2	3.3	4.0	4.1	4.8	4.3	4.8	4.4
Maturity (years)	31.3	26.4	23.2	25.6	22.4	23.0	22.5	21.3	22.9	18.2	21.1	20.1	24.8
Grace period (years)	9.7	9.2	7.8	8.1	7.8	6.6	6.7	5.9	6.2	5.4	6.1	5.3	6.4
Grant element (percent)	69.5	61.0	52.9	60.5	50.3	47.4	47.4	41.1	42.3	32.9	40.0	34.4	41.9
Multilateral debt													
Interest rate (percent)	4.4	5.0	3.9	4.2	3.7	5.0	3.6	4.2	3.4	3.4	3.1	5.3	4.4
Maturity (years)	33.1	30.4	35.5	34.2	32.7	30.2	33.5	29.4	27.8	28.5	29.6	29.4	32.1
Grace period (years)	7.8	6.5	7.7	7.9	7.8	6.8	7.5	6.7	6.8	6.9	7.0	6.7	7.3
Grant element (percent)	46.0	39.9	50.4	48.0	51.5	39.4	52.6	45.3	48.6	49.0	51.1	37.3	44.9
Total private debt													
Interest rate (percent)	6.7	7.3	6.7	8.7	8.7	8.4	7.8	7.8	9.4	11.2	12.6	14.5	12.7
Maturity (years)	10.1	8.5	8.3	9.7	9.5	8.1	8.5	8.6	8.1	8.8	8.5	8.2	9.4
Grace period (years)	1.7	2.4	2.6	2.7	2.9	2.4	2.8	2.6	2.8	3.1	2.7	3.0	3.1
Grant element (percent)	12.7	10.4	11.9	4.3	4.8	5.5	7.5	8.4	1.7	−5.7	−11.5	−18.8	−12.5

Table 18. Indicators of Aid and Total Resource Flow, 1982

			Net official development assistance (disbursements)				
	Population (millions)	Total recorded net flow of resources per capita (dollars)	Per capita (dollars)	As % of GNP	As % of gross domestic investment	Net bilateral as % of total	From OPEC as % of total bilateral net ODA
Low-income economies	**213.5 t**	**26.1 w**	**21.4 w**	**5.9 w**	**32.3 w**	**66.3 w**	**11.2 w**
Low-income semiarid	**29.3 t**	**51.0 w**	**42.4 w**	**24.1 w**	**107.9 w**	**68.7 w**	**32.9 w**
1 Chad	4.6	13.7	14.0	20.1	235.9	60.4	9.7
2 Mali	7.1	28.9	27.4	18.8	106.9	62.2	20.4
3 Burkina Faso	6.5	39.5	32.8	18.6	134.6	70.8	2.6
4 Somalia	4.5	137.9	102.7	38.4	. .	65.3	53.1
5 Niger	5.9	50.3	42.7	16.8	59.5	82.6	40.7
6 Gambia, The	0.7	75.0	79.5	23.2	91.4	57.0	12.9
Low-income other	**184.2 t**	**22.2 w**	**18.0 w**	**4.4 w**	**23.8 w**	**65.4 w**	**3.2 w**
7 Ethiopia	32.9	6.7	6.1	4.5	42.0	38.5	0.1
8 Guinea-Bissau	0.8	86.4	85.1	52.1	284.9	60.6	18.6
9 Zaire	30.7	13.9	11.3	6.8	. .	73.7	2.2
10 Malawi	6.5	19.9	18.7	8.6	41.2	53.8	0.2
11 Uganda	13.5	12.4	9.9	1.5	. .	40.5	2.0
12 Rwanda	5.5	28.0	27.4	10.4	. .	65.7	0.1
13 Burundi	4.3	36.5	29.5	10.7	76.6	64.1	7.4
14 Tanzania	19.8	39.2	36.0	13.0	. .	73.0	4.7
15 Benin	3.7	51.5	21.7	8.3	24.9	51.0	0.0
16 Central African Rep.	2.4	42.5	37.5	14.0	159.9	77.9	1.7
17 Guinea	5.7	15.1	11.5	4.1	. .	46.5	11.8
18 Madagascar	9.2	40.3	26.5	8.7	62.8	67.2	2.7
19 Togo	2.8	35.2	27.6	9.8	37.0	70.2	7.0
20 Ghana	12.2	12.6	11.6	0.5	8.2	48.4	4.4
21 Kenya	18.1	31.2	26.8	8.1	. .	69.9	1.7
22 Sierra Leone	3.2	23.2	22.2	6.7	49.1	68.1	0.5
23 *Mozambique*	12.9	26.7	15.9	4.1	. .	79.9	2.0
Middle-income oil importers	**56.1 t**	**70.5 w**	**38.7 w**	**6.8 w**	**23.4 w**	**74.3 w**	**18.7 w**
24 Sudan	20.2	41.1	37.4	9.8	. .	70.6	31.7
25 Mauritania	1.6	144.0	110.4	25.9	65.5	73.6	52.5
26 Liberia	2.0	240.3	54.6	11.2	51.6	79.4	1.5
27 Senegal	6.0	80.8	46.8	11.6	54.8	71.5	5.7
28 Lesotho	1.4	66.9	64.1	14.4	. .	59.6	0.0
29 Zambia	6.0	51.0	40.1	7.8	. .	78.3	0.0
30 Zimbabwe	7.5	55.5	28.8	3.1	. .	86.2	23.6
31 Botswana	0.9	117.6	101.4	13.0	. .	88.0	7.0
32 Swaziland	0.7	68.7	40.3	5.1	. .	67.0	0.0
33 Ivory Coast	8.8	100.8	15.5	1.7	8.8	74.8	0.0
34 Mauritius	0.9	67.4	47.8	4.6	21.0	68.2	5.5
Middle-income oil exporters	**110.3 t**	**29.3 w**	**4.3 w**	**0.5 w**	**1.6 w**	**71.8 w**	**1.7 w**
35 Nigeria	90.6	19.5	0.4	0.1	0.2	45.2	0.6
36 Cameroon	9.3	50.3	24.1	3.2	11.8	71.4	−1.6
37 Congo, People's Rep.	1.7	278.8	54.9	5.3	15.3	71.3	10.2
38 Gabon	0.7	252.1	89.1	2.2	5.5	94.1	1.2
39 *Angola*	8.0	43.7	7.5	. .	. .	67.6	1.2
Sub-Saharan Africa	**380.0 t**	**33.6 w**	**19.0 w**	**3.8 w**	**13.1 w**	**69.1 w**	**12.9 w**

Note: For data comparability and coverage see the technical notes.

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Table 19. Disbursements of Official Development Assistance

	Net disbursements (US$ millions)							Grants as a percentage of net ODA (1981/82 average)	
	1976	1977	1978	1979	1980	1981	1982	Total grants	Technical assistance
Low-income economies	**1,845.1 t**	**2,316.2 t**	**2,972.9 t**	**3,716.9 t**	**4,503.6 t**	**4,384.2 t**	**4,549.4 t**	**71.4 w**	**28.3 w**
Low-income semiarid	**485.5 t**	**717.0 t**	**849.7 t**	**872.3 t**	**1,171.1 t**	**1,149.9 t**	**1,234.2 t**	**80.3 w**	**27.1 w**
1 Chad	62.3	83.1	125.0	85.8	35.4	59.8	64.6	110.3	25.8
2 Mali	89.0	112.8	162.6	196.4	251.8	229.5	194.4	74.6	27.8
3 Burkina Faso	84.1	110.3	159.4	198.3	212.6	217.2	213.0	84.7	33.9
4 Somalia	108.8	292.5	210.7	181.3	446.9	374.0	462.3	78.2	23.3
5 Niger	129.4	96.8	156.5	174.1	170.1	201.1	252.2	78.0	28.1
6 Gambia, The	11.9	21.5	35.5	36.4	54.3	68.3	47.7	75.5	26.9
Low-income other	**1,359.6 t**	**1,599.2 t**	**2,123.2 t**	**2,844.6 t**	**3,332.5 t**	**3,234.3 t**	**3,315.2 t**	**68.1 w**	**28.7 w**
7 Ethiopia	140.5	115.6	139.7	174.5	216.2	241.1	199.9	82.4	26.5
8 Guinea-Bissau	22.5	37.7	50.1	52.8	59.5	65.4	68.1	78.1	20.9
9 Zaire	193.6	260.6	316.9	416.4	427.8	393.6	348.4	61.7	38.5
10 Malawi	63.3	79.4	98.5	141.7	143.5	137.6	121.6	73.6	29.1
11 Uganda	25.2	22.2	21.3	42.3	113.6	135.9	133.0	81.6	23.5
12 Rwanda	79.3	95.9	125.3	148.3	155.3	153.7	150.9	82.5	33.7
13 Burundi	44.5	48.2	74.5	94.8	117.4	121.8	126.7	73.6	36.6
14 Tanzania	267.6	340.1	424.1	588.4	666.5	673.4	695.5	72.9	26.1
15 Benin	54.5	49.3	61.1	84.7	90.5	81.7	80.4	70.7	32.7
16 Central African Rep.	38.1	42.1	51.3	83.7	111.1	101.6	90.0	80.3	33.8
17 Guinea	12.0	22.4	60.3	60.9	89.5	81.5	65.4	56.8	28.5
18 Madagascar	63.2	61.1	90.9	127.9	200.3	184.3	243.7	46.4	20.7
19 Togo	43.0	64.2	102.5	109.6	90.9	63.1	77.2	63.9	43.3
20 Ghana	64.0	91.2	113.9	168.9	191.8	145.2	141.6	49.0	26.8
21 Kenya	161.7	162.7	247.5	350.6	396.5	449.6	485.4	60.0	26.1
22 Sierra Leone	15.1	26.2	40.2	53.2	92.9	61.2	82.1	54.7	30.0
23 *Mozambique*	71.5	80.3	105.1	145.9	169.2	143.6	205.3	81.1	27.5
Middle-income oil importers	**990.7 t**	**907.8 t**	**1,347.7 t**	**1,828.9 t**	**2,144.8 t**	**2,267.2 t**	**2,167.4 t**	**63.0 w**	**26.6 w**
24 Sudan	383.0	231.3	318.1	570.4	620.1	681.0	740.2	64.3	17.5
25 Mauritania	167.5	160.2	222.9	172.4	216.0	217.4	176.7	52.1	18.1
26 Liberia	26.9	33.7	48.0	80.8	98.1	108.6	109.1	63.6	21.6
27 Senegal	126.8	123.0	226.0	307.5	263.2	400.2	280.7	54.8	32.4
28 Lesotho	30.1	38.8	50.1	64.3	90.4	100.9	89.8	82.1	33.3
29 Zambia	62.1	108.5	184.6	277.2	295.3	231.1	240.8	61.7	31.9
30 Zimbabwe	6.3	6.7	9.2	12.6	162.5	212.5	215.9	61.6	27.4
31 Botswana	47.6	47.5	69.0	99.6	106.1	96.8	101.4	94.5	45.8
32 Swaziland	15.1	29.4	44.6	50.4	49.7	36.7	28.2	87.4	64.1
33 Ivory Coast	108.2	106.3	131.4	161.5	210.5	123.8	136.8	53.1	45.6
34 Mauritius	17.1	22.4	43.8	32.2	32.9	58.2	47.8	55.5	16.4
Middle-income oil exporters	**333.4 t**	**342.3 t**	**392.4 t**	**475.7 t**	**500.3 t**	**415.6 t**	**466.7 t**	**66.0 w**	**43.2 w**
35 Nigeria	53.4	42.8	42.7	26.9	35.7	40.9	36.7	129.6	116.0
36 Cameroon	134.2	175.6	177.7	274.1	264.3	200.4	214.1	48.3	33.6
37 Congo, People's Rep.	73.4	48.6	81.1	90.8	92.0	69.7	93.4	57.3	37.6
38 Gabon	34.0	27.6	43.9	36.8	55.7	43.6	62.4	80.1	53.2
39 *Angola*	38.4	47.7	47.0	47.1	52.6	61.0	60.1	88.5	31.2
Sub-Saharan Africa	**3,169.2 t**	**3,566.3 t**	**4,713.0 t**	**6,021.5 t**	**7,148.7 t**	**7,067.0 t**	**7,183.5 t**	**68.5 w**	**28.7 w**

Note: For data comparability and coverage see the technical notes.

Table 20. Food Aid Imports

	Thousands of metric tons, grain equivalent					Kilograms per capita				
	1978	1979	1980	1981	1982	1978	1979	1980	1981	1982
Low-income economies	**806.1 t**	**813.2 t**	**995.7 t**	**1,652.6 t**	**1,514.5 t**	**4.1 w**	**4.2 w**	**5.0 w**	**8.0 w**	**7.1 w**
Low-income semiarid	**240.5 t**	**211.4 t**	**227.2 t**	**473.8 t**	**440.6 t**	**9.1 w**	**7.8 w**	**8.2 w**	**16.7 w**	**15.1 w**
1 Chad	47.2	22.8	16.2	14.0	24.7	11.0	5.2	3.6	3.1	5.3
2 Mali	32.8	21.5	21.8	50.2	66.5	5.2	3.3	3.3	7.3	9.4
3 Burkina Faso	50.5	49.1	36.5	51.2	82.4	8.5	8.1	5.9	8.1	12.7
4 Somalia	72.5	87.4	136.8	330.2	174.7	17.9	21.0	32.0	75.2	38.7
5 Niger	19.9	23.2	9.1	11.0	71.3	3.8	4.3	1.6	1.9	12.1
6 Gambia, The	17.6	7.4	6.8	17.2	21.0	30.6	12.8	11.5	28.5	34.0
Low-income other	**565.6 t**	**601.9 t**	**768.5 t**	**1,178.8 t**	**1,073.9 t**	**3.3 w**	**3.6 w**	**4.4 w**	**6.6 w**	**5.8 w**
7 Ethiopia	76.0	162.5	111.4	227.9	177.8	2.5	5.3	3.6	7.2	5.5
8 Guinea-Bissau	23.3	16.5	17.6	26.2	25.8	0.0	21.8	22.8	33.2	32.0
9 Zaire	29.8	76.3	69.3	77.0	93.4	1.1	2.7	2.4	2.6	3.0
10 Malawi	3.2	2.2	4.7	16.7	2.0	0.6	0.4	0.8	2.7	0.3
11 Uganda	0.0	0.0	16.7	56.9	49.2	0.0	0.0	1.3	4.4	3.7
12 Rwanda	14.6	10.3	14.3	14.8	12.7	3.0	2.1	2.8	2.8	2.3
13 Burundi	4.2	16.0	8.2	11.7	9.0	1.1	4.0	2.0	2.8	2.1
14 Tanzania	101.6	53.6	89.3	236.8	254.0	6.0	3.1	4.9	12.7	13.1
15 Benin	11.5	5.0	5.0	11.1	8.3	3.5	1.5	1.4	3.1	2.2
16 Central African Rep.	2.5	1.2	3.0	2.5	2.1	1.1	0.5	1.3	1.1	0.9
17 Guinea	36.9	28.4	24.2	33.8	40.5	7.2	5.4	4.5	6.1	7.1
18 Madagascar	6.2	8.6	13.6	25.7	78.1	0.8	1.0	1.6	2.9	8.5
19 Togo	20.9	8.1	7.4	4.2	4.6	8.5	3.2	2.9	1.6	1.7
20 Ghana	84.4	73.3	110.0	94.3	46.2	7.7	6.5	9.6	8.0	3.8
21 Kenya	10.7	9.4	86.4	172.8	115.0	0.7	0.6	5.2	10.0	6.3
22 Sierra Leone	7.0	5.5	36.4	11.8	28.8	2.1	1.6	10.5	3.3	7.8
23 *Mozambique*	132.8	125.0	151.0	154.6	126.4	12.3	10.9	12.5	12.4	9.8
Middle-income oil importers	**406.2 t**	**286.3 t**	**538.2 t**	**658.4 t**	**574.3 t**	**9.5 w**	**6.5 w**	**11.8 w**	**12.2 w**	**11.9 w**
24 Sudan	111.8	90.9	212.3	194.5	184.5	6.4	5.0	11.4	10.1	9.3
25 Mauritania	51.0	31.1	22.9	106.0	86.3	35.1	20.9	15.0	67.9	54.0
26 Liberia	1.3	1.1	3.2	26.3	42.2	0.7	0.6	1.7	13.5	21.0
27 Senegal	166.7	59.9	60.7	152.6	77.1	30.9	10.8	10.6	26.0	12.8
28 Lesotho	23.6	37.8	28.6	44.0	34.2	18.5	28.9	21.3	32.1	24.4
29 Zambia	31.2	50.0	166.5	84.4	100.1	5.9	9.1	29.5	14.4	16.6
30 Zimbabwe	0.0	0.0	0.0	17.7	0.0	0.0	0.0	0.0	2.5	0.0
31 Botswana	8.4	8.8	20.0	11.3	6.6	10.0	10.1	22.2	12.2	6.9
32 Swaziland	0.4	0.7	0.5	0.9	0.0	0.7	1.2	0.8	1.4	0.0
33 Ivory Coast	0.6	0.3	2.0	0.0	0.7	0.1	0.0	0.2	0.0	0.1
34 Mauritius	11.2	5.7	21.5	20.7	42.6	12.1	6.1	22.5	21.3	43.2
Middle-income oil exporters	**24.9 t**	**25.3 t**	**18.7 t**	**35.7 t**	**79.8 t**	**0.3 w**	**0.3 w**	**0.2 w**	**0.3 w**	**0.7 w**
35 Nigeria	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
36 Cameroon	5.1	7.8	3.6	9.3	10.5	0.6	0.9	0.4	1.1	1.2
37 Congo, People's Rep.	3.2	4.2	4.2	1.7	0.4	2.1	2.7	2.6	1.0	0.2
38 Gabon	0.4	2.6	0.0	0.0	0.0	0.6	4.0	0.0	0.0	0.0
39 *Angola*	16.2	10.7	10.9	24.7	67.5	2.2	1.4	1.4	3.2	8.4
Sub-Saharan Africa	**1,237.2 t**	**1,124.9 t**	**1,552.6 t**	**2,346.7 t**	**2,168.6 t**	**3.7 w**	**3.3 w**	**4.4 w**	**6.4 w**	**5.8 w**

Note: For data comparability and coverage see the technical notes.

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Table 21. Growth of Agriculture

	Average annual growth rate of volume of production (percent)				Average annual growth rate of total production per capita (percent)			
	Food		Total agriculture		Food		Total agriculture	
	1960–70	1970–82	1960–70	1970–82	1960–70	1970–82	1960–70	1970–82
Low-income economies	3.2 w	1.0 w	3.1 w	0.7 w	1.0 w	−1.2 w	0.9 w	−1.4 w
Low-income semiarid	2.1 w	2.8 w	2.3 w	2.8 w	−0.5 w	−0.1 w	−0.2 w	−0.1 w
1 Chad	−0.3	2.4	0.2	2.1	−2.2	0.4	−1.7	0.1
2 Mali	1.3	2.5	1.6	2.7	−1.2	−0.2	−0.9	0.0
3 Burkina Faso	3.2	2.4	3.5	2.5	1.2	0.4	1.5	0.5
4 Somalia	2.8	1.0	2.8	1.0	0.0	−1.8	0.0	−1.8
5 Niger	2.7	4.1	2.7	4.0	−0.7	0.8	−0.7	0.7
6 Gambia, The	4.3	−1.0	4.3	−1.0	2.1	−4.1	2.1	−4.1
Low-income other	3.3 w	0.9 w	3.2 w	0.6 w	1.2 w	−1.4 w	1.1 w	−1.6 w
7 Ethiopia	2.9	1.7	3.0	1.5	0.5	−0.3	0.6	−0.5
8 Guinea-Bissau	. .	0.7	. .	0.7	. .	. .	. .	. .
9 Zaire	4.3	1.3	4.1	1.2	2.3	−1.7	2.1	−1.7
10 Malawi	4.9	2.9	4.7	3.5	2.0	−0.1	1.8	0.5
11 Uganda	3.4	1.7	3.4	0.5	0.4	−1.0	0.4	−2.1
12 Rwanda	4.5	3.5	4.5	3.7	1.9	0.1	1.9	0.3
13 Burundi	4.6	1.6	4.6	1.7	3.2	−0.6	3.2	−0.5
14 Tanzania	5.5	2.1	5.0	1.0	2.7	−1.3	2.2	−2.3
15 Benin	3.2	2.6	3.8	2.4	0.6	−0.1	1.2	−0.3
16 Central African Rep.	0.8	1.9	1.3	1.8	−0.8	−0.2	−0.3	−0.3
17 Guinea	2.7	1.5	2.7	1.4	1.2	−0.5	1.2	−0.6
18 Madagascar	2.7	1.7	2.7	1.6	0.5	−0.9	0.5	−1.0
19 Togo	5.5	2.3	5.4	2.3	2.4	−0.3	2.3	−0.3
20 Ghana	2.6	−0.2	2.6	−0.2	0.3	−3.1	0.3	−3.1
21 Kenya	3.6	2.0	3.3	2.7	0.4	−1.9	0.1	−1.2
22 Sierra Leone	3.7	1.2	3.6	1.2	2.0	−0.8	1.9	−0.8
23 *Mozambique*	2.3	−1.0	2.0	−1.4	0.2	−5.1	−0.1	−5.5
Middle-income oil importers	3.7 w	3.3 w	3.8 w	2.5 w	0.7 w	−0.6 w	0.7 w	−1.2 w
24 Sudan	5.4	2.9	5.4	1.6	3.1	−0.3	3.1	−1.6
25 Mauritania	2.1	1.4	2.1	1.3	−0.2	−0.9	−0.2	−1.0
26 Liberia	0.4	3.0	3.3	2.1	−2.7	−0.5	0.1	−1.4
27 Senegal	−0.4	1.5	−0.3	1.3	−2.6	−1.2	−2.5	−1.4
28 Lesotho	0.1	0.2	0.4	−0.2	−1.9	−2.1	−1.6	−2.5
29 Zambia	3.5	1.8	3.1	1.7	0.9	−1.3	0.5	−1.4
30 Zimbabwe	1.5	1.6	0.6	2.2	−2.0	−1.6	−2.9	−1.0
31 Botswana	0.9	−2.0	0.9	−2.0	−1.7	−6.0	−1.7	−6.0
32 Swaziland	8.8	3.9	8.6	4.5	5.9	0.7	5.7	1.3
33 Ivory Coast	5.2	6.0	5.5	5.0	1.4	1.0	1.7	0.1
34 Mauritius	1.5	0.8	1.5	0.9	−0.7	−0.6	−0.7	−0.5
Middle-income oil exporters	1.1 w	2.4 w	1.1 w	2.3 w	−1.4 w	−0.3 w	−1.4 w	−0.7 w
35 Nigeria	0.5	2.5	0.4	2.4	−2.0	−0.1	−2.0	−0.2
36 Cameroon	4.6	2.1	4.8	2.0	2.5	−0.9	2.7	−1.0
37 Congo, People's Rep.	−2.8	0.9	−2.7	0.9	−5.1	−2.0	−5.0	−2.0
38 Gabon	3.3	0.7	3.3	0.6	2.9	−0.7	2.9	−0.8
39 *Angola*	2.8	0.4	3.0	−3.0	0.7	−2.0	0.9	−5.4
Sub-Saharan Africa	2.5 w	1.7 w	2.5 w	1.4 w	0.2 w	−0.9 w	0.2 w	−1.1 w

Note: For data comparability and coverage see the technical notes.

Table 22. Production of Major Crops

Crop[a]	Average annual volume (thousands of metric tons)			Average annual change in volume (percent)[b]		
	1969-71	1977-79	1980-82	1969-71 to 1977-79	1977-79 to 1980-82	1969-71 to 1980-82
Cereals						
Maize						
Sub-Saharan Africa	12,132	13,438	13,774	1.3	0.8	1.2
Oil exporters	1,691	1,814	1,904	0.9	1.6	1.1
Other countries	10,441	11,624	11,870	1.4	0.7	1.2
Millet						
Sub-Saharan Africa	8,875	9,178	9,615	0.4	1.6	0.7
Oil exporters	2,870	3,083	3,299	0.9	2.3	1.3
Other countries	6,005	6,095	6,316	0.2	1.2	0.5
Rice (paddy)						
Sub-Saharan Africa	4,735	5,936	6,248	2.9	1.7	2.5
Oil exporters	380	856	1,268	10.7	14.0	11.6
Other countries	4,335	5,080	4,980	1.9	-0.7	1.3
Sorghum						
Sub-Saharan Africa	8,591	9,768	10,834	1.6	3.5	2.1
Oil exporters	3,632	3,768	3,783	0.5	0.1	0.4
Other countries	4,959	6,000	7,051	2.4	5.5	3.2
Wheat						
Sub-Saharan Africa	1,243	1,220	1,369	-0.2	3.9	0.9
Oil exporters	33	31	35	-0.8	4.1	0.6
Other countries	1,210	1,189	1,334	-0.2	3.9	0.9
Total cereals						
Sub-Saharan Africa	35,576	39,550	41,840	1.3	1.9	1.5
Oil exporters	8,606	9,552	10,289	1.3	2.5	1.6
Other countries	26,970	29,998	31,551	1.3	1.7	1.4
Oil and oilseeds						
Coconuts						
Sub-Saharan Africa	1,451	1,563	1,528	0.9	-0.8	0.5
Oil exporters	86	90	90	0.6	0.0	0.4
Other countries	1,365	1,473	1,438	1.0	-0.8	0.5
Groundnuts (in shell)						
Sub-Saharan Africa	5,194	4,826	4,325	-0.9	-3.6	-1.7
Oil exporters	1,699	503	625	-14.1	7.5	-8.7
Other countries	3,495	4,323	3,700	2.7	-5.1	0.5
Palm kernels						
Sub-Saharan Africa	711	664	743	-0.9	3.8	0.4
Oil exporters	306	310	362	0.2	5.3	1.6
Other countries	405	354	381	-1.7	2.5	-0.5
Palm oil						
Sub-Saharan Africa	1,112	1,321	1,372	2.2	1.3	2.0
Oil exporters	579	718	734	2.7	0.7	2.2
Other countries	533	603	638	1.6	1.9	1.7
Other crops						
Pulses						
Sub-Saharan Africa	3,861	4,207	4,709	1.1	3.8	1.8
Oil exporters	925	923	963	0.0	1.4	0.4
Other countries	2,936	3,284	3,746	1.4	4.5	2.2
Roots and tubers						
Sub-Saharan Africa	66,694	77,026	81,026	1.8	1.7	1.8
Oil exporters	27,674	31,488	32,056	1.6	0.6	1.4
Other countries	39,020	45,538	48,970	1.9	2.4	2.1
Seed cotton						
Sub-Saharan Africa	2,279	1,867	1,705	-2.5	-3.0	-2.6
Oil exporters	268	195	113	-3.9	-16.6	-7.6
Other countries	2,011	1,672	1,592	-2.3	-1.6	-2.1
Sugar						
Sub-Saharan Africa	2,303	2,806	3,203	2.5	4.5	3.0
Oil exporters	179	109	139	-6.0	8.4	-2.3
Other countries	2,124	2,697	3,064	3.0	4.3	3.4

a. Major crops that are totally or nearly totally exported (such as coffee, tea, cocoa, and rubber) are shown in table 24, which covers exports of agricultural commodities.
b. End point growth rate.

Table 23. Agricultural Imports

Commodity	Average annual volume (thousands of metric tons)			Average annual change in volume (percent)[a]		Average annual value (US$ millions)		
	1961–63	1969–71	1980–82	1961–63 to 1969–71	1969–71 to 1980–82	1961–63	1969–71	1980–82
Rice								
Sub-Saharan Africa	464	680	2,456	4.9	12.4	63	91	961
Oil exporters	6	8	548	3.7	46.9	1	1	291
Other countries	458	672	1,909	4.9	10.0	62	90	670
Wheat								
Sub-Saharan Africa	394	1,043	3,267	12.9	10.9	30	81	648
Oil exporters	52	347	1,341	26.8	13.1	7	28	253
Other countries	342	696	1,926	9.3	9.7	23	53	395
Maize								
Sub-Saharan Africa	197	385	1,686	8.7	14.4	12	32	381
Oil exporters	(.)	6	383	. .	45.9	(.)	1	106
Other countries	197	379	1,303	8.5	11.9	12	31	275
Cereals not elsewhere stated								
Sub-Saharan Africa	123	239	244	8.7	0.2	9	21	58
Oil exporters	30	58	31	8.6	−5.5	2	6	6
Other countries	93	181	213	8.7	1.5	7	15	52
Cereals, total								
Sub-Saharan Africa	1,177	2,346	8,709	9.0	12.7	114	225	2,321
Oil exporters	88	419	2,564	21.5	17.9	10	36	716
Other countries	1,089	1,927	6,145	7.4	11.1	104	189	1,605
Dairy products								
Sub-Saharan Africa	. .	. .	. .	7.2[b]	. .	44	109	670
Oil exporters	. .	. .	. .	. .	. .	13	27	318
Other countries	. .	. .	. .	9.8[b]	. .	31	82	352
Sugar								
Sub-Saharan Africa	670	816	1,632	2.5	6.5	84	109	836
Oil exporters	68	108	996	6.0	22.4	9	17	474
Other countries	602	708	636	2.1	−1.0	75	92	362
Meat								
Sub-Saharan Africa	38	42	128	1.3	10.7	20	24	267
Oil exporters	5	6	72	2.3	25.3	3	3	162
Other countries	33	36	56	1.1	4.1	17	21	106
Animal and vegetable oils								
Sub-Saharan Africa	71	155	710	10.3	14.9	20	48	465
Oil exporters	4	7	352	7.3	43.0	3	5	233
Other countries	67	147	358	10.3	8.4	17	43	232
Total agricultural imports[c]								
Sub-Saharan Africa	. .	. .	. .	(4.3)[d]	. .	749	1,137	6,833
Oil exporters	. .	. .	. .	(1.5)[d]	. .	151	207	2,738
Other countries	. .	. .	. .	(5.1)[d]	. .	598	930	4,095

a. End point growth rate.
b. See technical notes.
c. Includes products not listed above.
d. Estimated from an average of price increases for the imports shown in the table and applied to the value of total agricultural imports.

Table 24. Major Agricultural Exports: Growth and Shares

Commodity	Average annual volume (thousands of metric tons) 1980–82	Average annual change in volume (percent)[a]		Sub-Saharan exports as percentage of total exports					
		1961–63 to 1969–71	1969–72 to 1980–82	Of developing countries			Of the world		
				1961–63	1969–71	1980–82	1961–63	1969–71	1980–82
Beverages									
Cocoa									
Sub-Saharan Africa	821	0.2	−0.3	81.2	76.7	72.8	79.9	75.9	69.3
Oil exporters	131	1.7	−4.6						
Other countries	690	−0.3	0.8						
Coffee									
Sub-Saharan Africa	975	3.4	−0.2	26.0	30.0	27.4	25.6	29.3	25.9
Oil exporters	51	3.5		−11.2					
Other countries	924	3.4	1.2						
Tea									
Sub-Saharan Africa	169	9.0	4.1	10.0	17.4	10.7	8.7	14.4	9.3
Oil exporters	0	23.0	0.0						
Other countries	169	9.0	4.1						
Cereals									
Maize									
Sub-Saharan Africa	300	−1.9	−5.1	7.9	3.9	2.2	2.5	1.4	0.4
Oil exporters	0	2.5	0.0						
Other countries	300	−3.9	−2.3						
Wheat									
Sub-Saharan Africa	5	1.2	−16.2	1.4	1.4	0.1	0.1	0.1	0.0
Oil exporters	0	0.0	0.0						
Other countries	5	1.2	−16.2						
Rice									
Sub-Saharan Africa	16	0.7	−12.5	1.4	1.8	0.2	0.9	0.8	0.1
Oil exporters	0	−3.5	−28.2						
Other countries	16	0.8	−12.2						
Cereals not elsewhere stated									
Sub-Saharan Africa	343	−6.0	13.3	16.7	3.6	6.9	4.1	1.4	2.5
Oil exporters	0	−2.9	0.0						
Other countries	343	−6.1	13.5						
Oils and oilseeds									
Groundnut oil									
Sub-Saharan Africa	112	2.2	−6.0	61.2	70.2	35.9	53.8	57.6	27.8
Oil exporters	0	3.2	0.0						
Other countries	112	1.7	−2.3						
Groundnuts (shelled)									
Sub-Saharan Africa	139	−6.1	−13.9	88.0	77.3	26.6	85.5	69.1	18.0
Oil exporters	0	−6.8	0.0						
Other countries	139	−5.5	−9.2						
Oilseed cake and meal									
Sub-Saharan Africa	599	5.3	−3.8	15.9	17.1	4.1	9.5	8.3	2.2
Oil exporters	62	8.8	−9.3						
Other countries	537	4.6	−2.7						
Palm kernel oil									
Sub-Saharan Africa	87	8.9	−1.3	91.7	81.8	23.2	55.2	54.8	21.6
Oil exporters	43	31.8	2.5						
Other countries	44	3.9	−3.9						

Table 24 *(continued)*

Commodity	Average annual volume (thousands of metric tons) 1980–82	Average annual change in volume (percent)[a]		Sub-Saharan exports as percentage of total exports					
		1961–63 to 1969–71	1969–72 to 1980–82	Of developing countries			Of the world		
				1961–63	1969–71	1980–82	1961–63	1969–71	1980–82
Oils and oilseeds *(continued)*									
Palm kernels									
Sub-Saharan Africa	125	−6.2	−9.6	90.8	82.4	76.8	90.4	82.2	75.8
Oil exporters	75	−8.0	−9.2						
Other countries	50	−3.1	−10.2						
Palm oil									
Sub-Saharan Africa	105	−8.6	−5.1	57.0	17.1	3.1	55.0	16.4	3.0
Oil exporters	0	−21.2	0.0						
Other countries	105	−2.9	−3.9						
Sesame seed									
Sub-Saharan Africa	79	3.8	−6.2	72.8	78.1	41.7	68.6	75.3	40.7
Oil exporters	0	−5.6	0.0						
Other countries	79	5.3	−5.4						
Other									
Bananas									
Sub-Saharan Africa	212	−1.7	−5.4	11.3	7.1	3.2	10.9	6.5	3.0
Oil exporters	0	40.0	0.0						
Other countries	212	−2.8	−4.5						
Cotton									
Sub-Saharan Africa	415	5.6	−3.5	18.4	23.1	20.8	10.8	15.5	9.2
Oil exporters	0	1.5	−36.9						
Other countries	415	6.0	−2.8						
Rubber									
Sub-Saharan Africa	141	3.0	−2.9	7.6	7.0	4.5	6.8	6.8	4.4
Oil exporters	21	−1.0	−8.7						
Other countries	120	5.1	−1.3						
Sisal									
Sub-Saharan Africa	120	−2.1	−8.7	65.4	61.1	60.9	60.7	59.7	60.4
Oil exporters	7	−0.8	−17.2						
Other countries	113	−2.4	−7.6						
Sugar									
Sub-Saharan Africa	1,406	3.2	1.4	11.4	12.8	11.1	4.7	5.6	4.8
Oil exporters	7	8.1	−21.2						
Other countries	1,399	2.9	2.2						
Tobacco									
Sub-Saharan Africa	168	−3.1	6.6	22.2	14.6	20.3	12.1	8.2	11.8
Oil exporters	2	6.9	−1.8						
Other countries	166	−3.3	6.7						

a. End point growth rate.

Table 25. Population Growth and Projections

	Average annual growth of population (percent)			Population (millions)			Hypothetical size of stationary population (millions)	Assumed year of reaching net reproduction rate of 1	Population momentum 1980
	1960–70	1970–82	1980–2000	1982	1990ᵃ	2000ᵃ			
Low-income economies	**2.4 w**	**2.8 w**	**3.3 w**	**217 t**	**278 t**	**386 t**			
Low-income semiarid	**2.5 w**	**2.6 w**	**2.7 w**	**31 t**	**37 t**	**48 t**			
1 Chad	1.9	2.0	2.5	5	6	7	22	2040	1.8
2 Mali	2.5	2.7	2.8	7	9	12	42	2040	1.8
3 Burkina Faso	2.0	2.0	2.4	7	8	10	35	2040	1.7
4 Somalia	2.8	2.8	2.4	5	5	7	23	2045	1.8
5 Niger	3.4	3.3	3.3	6	8	11	40	2040	1.9
6 Gambia, The	2.2	3.2	2.3	1	1	1	3	2045	1.9
Low-income other	**2.4 w**	**2.9 w**	**3.4 w**	**186 t**	**241 t**	**338 t**			
7 Ethiopia	2.4	2.0	3.1	33	42	57	231	2045	1.9
8 Guinea-Bissau	..	..	2.3	1	1	1	4	2045	1.8
9 Zaire	2.0	3.0	3.3	31	40	55	172	2030	1.9
10 Malawi	2.8	3.0	3.4	7	8	12	48	2040	1.9
11 Uganda	3.0	2.7	3.4	14	17	25	89	2035	2.0
12 Rwanda	2.6	3.4	3.6	6	7	11	47	2040	1.9
13 Burundi	1.4	2.2	3.0	4	5	7	27	2040	1.9
14 Tanzania	2.7	3.4	3.5	20	26	36	117	2030	2.0
15 Benin	2.6	2.7	3.3	4	5	7	23	2035	2.0
16 Central African Rep.	1.6	2.1	2.8	2	3	4	13	2040	1.9
17 Guinea	1.5	2.0	2.4	6	7	9	28	2045	1.8
18 Madagascar	2.2	2.6	3.2	9	12	16	54	2035	1.9
19 Togo	3.0	2.6	3.3	3	4	5	17	2035	2.0
20 Ghana	2.3	3.0	3.9	12	17	24	83	2030	2.0
21 Kenya	3.2	4.0	4.4	18	26	40	153	2030	2.1
22 Sierra Leone	1.7	2.0	2.4	3	4	5	16	2045	1.9
23 *Mozambique*	2.1	4.3	3.4	13	17	24	82	2035	2.0
Middle-income oil importers	**2.7 w**	**3.3 w**	**3.3 w**	**57 t**	**74 t**	**101 t**			
24 Sudan	2.2	3.2	2.9	20	25	34	112	2035	1.8
25 Mauritania	2.3	2.3	2.6	2	2	3	8	2035	1.8
26 Liberia	3.2	3.5	3.5	2	3	4	12	2030	1.8
27 Senegal	2.3	2.7	3.1	6	8	10	36	2040	1.9
28 Lesotho	2.0	2.4	2.8	1	2	2	7	2030	1.8
29 Zambia	2.6	3.1	3.6	6	8	11	37	2030	2.0
30 Zimbabwe	3.6	3.2	4.4	8	11	16	62	2030	2.1
31 Botswana	2.6	4.3	3.6	1	1	2	6	2025	1.9
32 Swaziland	2.7	3.2	3.9	1	1	1	5	2030	2.0
33 Ivory Coast	3.7	4.9	3.7	9	12	17	58	2035	2.0
34 Mauritius	2.2	1.4	1.6	1	1	1	2	2010	1.8
Middle-income oil exporters	**2.4 w**	**2.6 w**	**3.4 w**	**111 t**	**144 t**	**203 t**			
35 Nigeria	2.5	2.6	3.5	91	119	169	618	2035	2.0
36 Cameroon	2.0	3.0	3.5	9	12	17	65	2035	1.9
37 Congo, People's Rep.	2.4	3.0	3.8	2	2	3	10	2025	1.9
38 Gabon	0.4	1.4	2.6	1	1	1	3	2035	1.7
39 *Angola*	2.1	2.5	2.8	8	10	13	44	2040	1.9
Sub-Saharan Africa	**2.4 w**	**2.8 w**	**3.3 w**	**385 t**	**496 t**	**690 t**			
All low-income countries	**2.3 w**	**1.9 w**	**1.7 w**	**2,269 t**	**2,621 t**	**3,097 t**			
All lower middle-income countries	**2.5 w**	**2.5 w**	**2.4 w**	**673 t**	**816 t**	**1,023 t**			
All upper middle-income countries	**2.6 w**	**2.3 w**	**2.1 w**	**490 t**	**588 t**	**718 t**			
Industrial market economies	**1.1 w**	**0.7 w**	**0.4 w**	**723 t**	**749 t**	**780 t**			

Note: For data comparability and coverage see the technical notes.
a. For the assumptions used in the projections see the technical notes.

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Table 26. Demographic and Fertility-related Indicators

	Crude birth rate per thousand population		Crude death rate per thousand population		Child death rate (age 1-4)		Percentage change		Total fertility rate	
							In crude birth rate	In crude death rate		
	1960	1982	1960	1982	1960	1982	1960–82	1960–82	1982	2000
Low-income economies	**50 w**	**49 w**	**26 w**	**18 w**	**40 w**	**24 w**	**−2.0 w**	**−30.4 w**	**6.7 w**	**6.2 w**
Low-income semiarid	**49 w**	**48 w**	**28 w**	**22 w**	**57 w**	**34 w**	**−1.8 w**	**−21.6 w**	**6.4 w**	**6.0 w**
1 Chad	45	42	29	21	60	37	−6.6	−27.7	5.5	5.6
2 Mali	50	48	27	21	45	27	−3.2	−23.0	6.5	6.0
3 Burkina Faso	49	48	27	21	71	36	−1.5	−20.1	6.5	6.0
4 Somalia	48	48	29	25	61	47	0.2	−12.3	6.5	6.1
5 Niger	52	52	27	20	45	27	0.7	−24.5	7.0	6.4
6 Gambia, The	47	49	33	27	54	46	5.6	−18.0	6.5	5.8
Low-income other	**50 w**	**49 w**	**25 w**	**17 w**	**37 w**	**22 w**	**−2.0 w**	**−32.0 w**	**6.8 w**	**6.2 w**
7 Ethiopia	51	47	28	18	42	25	−7.0	−35.9	6.5	6.1
8 Guinea-Bissau	50	50	35	28	44	31	0.2	−19.8	6.5	5.9
9 Zaire	48	46	24	16	32	20	−4.1	−34.2	6.3	5.8
10 Malawi	56	56	27	23	58	29	0.2	−15.7	7.8	7.1
11 Uganda	49	50	21	19	28	22	1.4	−11.6	7.0	6.4
12 Rwanda	53	54	27	20	40	25	0.9	−27.4	8.3	7.6
13 Burundi	45	47	25	19	31	24	2.9	−23.7	6.5	6.0
14 Tanzania	47	47	22	15	31	18	0.8	−33.4	6.5	5.8
15 Benin	51	49	27	18	42	23	−2.5	−32.2	6.5	5.9
16 Central African Rep.	43	41	26	17	41	23	−3.9	−35.4	5.5	5.6
17 Guinea	48	49	35	27	65	50	1.8	−22.6	6.5	6.1
18 Madagascar	47	47	27	18	45	23	−0.1	−33.0	6.5	5.9
19 Togo	51	49	23	19	55	25	−2.7	−17.6	6.5	5.9
20 Ghana	50	49	20	13	27	15	−1.8	−35.7	7.0	6.3
21 Kenya	55	55	24	12	21	13	0.2	−47.9	8.0	7.1
22 Sierra Leone	49	49	34	27	72	50	−0.2	−20.6	6.5	6.1
23 *Mozambique*	..	49	..	16	..	..	..	..	6.5	5.9
Middle-income oil importers	**49 w**	**47 w**	**23 w**	**17 w**	**34 w**	**20 w**	**−3.5 w**	**−29.3 w**	**6.8 w**	**6.2 w**
24 Sudan	47	45	25	18	40	23	−3.4	−29.9	6.6	6.0
25 Mauritania	51	43	27	19	45	27	−14.3	−28.3	6.0	5.9
26 Liberia	50	50	21	14	42	16	−0.3	−30.6	6.9	6.2
27 Senegal	48	48	26	21	45	34	(.)	−22.5	6.5	6.0
28 Lesotho	42	42	23	15	29	17	(.)	−35.8	5.8	5.2
29 Zambia	51	50	24	16	38	20	−2.2	−36.5	6.8	6.1
30 Zimbabwe	55	54	17	12	19	14	−1.8	−25.0	8.0	7.1
31 Botswana	52	44	20	11	23	13	−14.3	−44.6	6.5	5.4
32 Swaziland	52	51	21	13	33	27	−1.9	−39.4	7.0	6.1
33 Ivory Coast	49	48	24	17	40	23	−2.7	−28.2	7.0	6.4
34 Mauritius	41	26	9	7	11	3	−36.7	−25.8	2.9	2.3
Middle-income oil exporters	**50 w**	**49 w**	**25 w**	**16 w**	**49 w**	**21 w**	**−2.1 w**	**−34.8 w**	**6.8 w**	**6.3 w**
35 Nigeria	52	50	25	16	50	20	−4.7	−35.6	6.9	6.3
36 Cameroon	38	46	21	15	28	16	21.2	−30.7	6.5	6.4
37 Congo, People's Rep.	40	43	18	10	23	10	6.8	−46.0	6.0	5.7
38 Gabon	32	35	27	17	34	22	7.7	−37.0	4.5	4.0
39 *Angola*	50	49	31	22	63	39	−1.8	−28.6	6.5	6.0
Sub-Saharan Africa	**50 w**	**49 w**	**25 w**	**17 w**	**42 w**	**23 w**	**−2.2 w**	**−31.6 w**	**6.8 w**	**6.2 w**
All low-income countries	**44 w**	**30 w**	**24 w**	**11 w**	**27 w**	**11 w**	**−34.2 w**	**−54.7 w**	**4.1 w**	**3.2 w**
All lower middle-income countries	**46 w**	**37 w**	**20 w**	**12 w**	**29 w**	**13 w**	**−21.2 w**	**−42.0 w**	**5.0 w**	**3.9 w**
All upper middle-income countries	**40 w**	**31 w**	**13 w**	**8 w**	**15 w**	**6 w**	**−23.2 w**	**−36.4 w**	**4.2 w**	**3.1 w**
Industrial market economies	**20 w**	**14 w**	**10 w**	**9 w**	**2 w**	**(.) w**	**−31.4 w**	**−5.4 w**	**1.7 w**	**2.0 w**

Note: For data comparability and coverage see the technical notes.

Table 27. Labor Force

	Percentage of population of working age (15–64 years)		Percentage of labor force						Average annual growth of the labor force (percent)		
			In agriculture		In industry		In services				
	1960	1982	1960	1980	1960	1980	1960	1980	1960–70	1970–82	1980–2000
Low-income economies	**54 w**	**52 w**	**86 w**	**78 w**	**6 w**	**10 w**	**8 w**	**13 w**	**1.9 w**	**2.3 w**	**3.2 w**
Low-income semiarid	**54 w**	**52 w**	**93 w**	**81 w**	**3 w**	**10 w**	**4 w**	**9 w**	**2.0 w**	**2.2 w**	**2.7 w**
1 Chad	57	54	95	85	2	7	3	8	1.5	1.8	2.6
2 Mali	54	51	94	73	3	12	3	15	2.1	2.1	2.9
3 Burkina Faso	54	52	92	82	5	13	3	5	1.6	1.6	2.5
4 Somalia	54	54	88	82	4	8	8	10	2.1	2.9	2.0
5 Niger	53	51	95	91	1	3	4	6	3.0	3.0	3.4
6 Gambia, The	54	53	85	79	7	9	8	12	1.6	2.8	2.2
Low-income other	**54 w**	**52 w**	**85 w**	**77 w**	**6 w**	**10 w**	**9 w**	**13 w**	**1.9 w**	**2.3 w**	**3.2 w**
7 Ethiopia	53	52	88	80	5	7	7	13	2.0	1.7	3.0
8 Guinea-Bissau	59	56	91	83	4	6	5	11	. .	. .	2.5
9 Zaire	53	52	83	75	9	13	8	12	1.4	2.3	3.2
10 Malawi	52	50	92	86	3	5	5	9	2.4	2.5	3.2
11 Uganda	54	52	89	83	4	6	7	11	2.6	2.1	3.5
12 Rwanda	53	52	95	91	1	2	4	7	2.2	3.2	3.5
13 Burundi	55	53	90	84	3	5	7	11	0.9	1.6	2.8
14 Tanzania	54	51	89	83	4	6	7	11	2.1	2.6	3.4
15 Benin	53	51	54	46	9	16	37	38	2.1	2.1	2.8
16 Central African Rep.	58	55	94	88	2	4	4	8	1.1	1.5	2.4
17 Guinea	55	53	88	82	6	11	6	7	1.1	1.3	2.3
18 Madagascar	55	53	93	87	2	4	5	9	1.7	2.1	3.0
19 Togo	53	51	80	67	8	15	12	18	2.5	1.8	3.2
20 Ghana	53	51	64	53	14	20	22	27	1.6	2.3	3.9
21 Kenya	50	47	86	78	5	10	9	12	2.7	3.3	4.2
22 Sierra Leone	55	53	78	65	12	19	10	16	1.0	1.6	2.4
23 *Mozambique*	56	53	81	66	8	18	11	16	1.8	3.4	3.1
Middle-income oil importers	**53 w**	**52 w**	**83 w**	**74 w**	**6 w**	**10 w**	**11 w**	**17 w**	**2.4 w**	**2.8 w**	**3.2 w**
24 Sudan	53	53	86	78	6	10	8	12	2.1	2.8	3.0
25 Mauritania	53	51	91	69	3	8	6	23	1.9	2.0	2.4
26 Liberia	52	51	80	70	10	14	10	16	2.4	3.0	3.5
27 Senegal	54	52	84	77	5	10	11	13	1.7	2.0	2.7
28 Lesotho	57	55	93	87	2	4	5	9	1.6	1.9	2.7
29 Zambia	53	50	79	67	7	11	14	22	2.1	2.3	3.2
30 Zimbabwe	52	50	69	60	11	15	20	25	3.1	2.3	4.5
31 Botswana	51	47	92	78	3	8	5	14	1.8	3.5	3.5
32 Swaziland	54	52	89	74	4	9	7	17	2.2	2.5	3.4
33 Ivory Coast	54	53	89	79	2	4	9	17	3.6	4.1	3.3
34 Mauritius	51	62	40	29	26	24	34	47	2.5	2.6	2.2
Middle-income oil exporters	**53 w**	**51 w**	**72 w**	**57 w**	**10 w**	**18 w**	**18 w**	**25 w**	**1.7 w**	**1.8 w**	**3.4 w**
35 Nigeria	52	50	71	54	10	19	19	27	1.8	1.8	3.5
36 Cameroon	57	54	87	83	5	7	8	10	1.5	2.2	3.2
37 Congo, People's Rep.	56	52	52	34	17	26	31	40	1.8	2.2	3.9
38 Gabon	62	61	85	77	7	11	8	12	(.)	0.7	2.2
39 *Angola*	55	53	69	59	12	16	19	25	1.6	2.0	2.9
Sub-Saharan Africa	**53 w**	**51 w**	**82 w**	**72 w**	**7 w**	**12 w**	**11 w**	**17 w**	**1.9 w**	**2.2 w**	**3.2 w**
All low-income countries	**55 w**	**59 w**	**77 w**	**72 w**	**9 w**	**13 w**	**14 w**	**15 w**	**1.7 w**	**2.0 w**	**2.0 w**
All lower middle-income countries	**54 w**	**55 w**	**71 w**	**56 w**	**11 w**	**16 w**	**18 w**	**28 w**	**1.9 w**	**2.4 w**	**2.6 w**
All upper middle-income countries	**55 w**	**57 w**	**49 w**	**30 w**	**20 w**	**28 w**	**31 w**	**42 w**	**2.3 w**	**2.3 w**	**2.5 w**
Industrial market economies	**63 w**	**66 w**	**18 w**	**6 w**	**38 w**	**38 w**	**44 w**	**56 w**	**1.2 w**	**1.2 w**	**0.6 w**

Note: For data comparability and coverage see the technical notes.

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Table 28. Urbanization

	Urban population				Percentage of urban population				Number of cities of over 500,000 persons	
	As percentage of total population		Average annual growth rate (percent)		In largest city		In cities of over 500,000 persons			
	1960ª	1982ª	1960-70	1970-82	1960	1980	1960	1980	1960	1980
Low-income economies	**9 w**	**19 w**	**5.6 w**	**6.4 w**	**29 w**	**40 w**	**4 w**	**36 w**	**1 t**	**12 t**
Low-income semiarid	**9 w**	**18 w**	**5.9 w**	**5.7 w**	**32 w**	**35 w**	**0 w**	**0 w**	**0 t**	**0 t**
1 Chad	7	19	6.8	6.4	..	39	0	0	0	0
2 Mali	11	19	5.4	4.7	32	24	0	0	0	0
3 Burkina Faso	5	11	5.7	6.0	..	41	0	0	0	0
4 Somalia	17	32	5.7	5.4	..	34	0	0	0	0
5 Niger	6	14	7.0	7.2	..	31	0	0	0	0
6 Gambia, The	12	19	4.2	5.7	..	100	0	0	0	0
Low-income other	**9 w**	**19 w**	**5.5 w**	**6.5 w**	**28 w**	**41 w**	**4 w**	**41 w**	**1 t**	**12 t**
7 Ethiopia	6	15	6.5	5.6	30	37	0	37	0	1
8 Guinea-Bissau	14	25	2.6	7.3	..	..	0	0	0	0
9 Zaire	16	38	5.2	7.6	14	28	14	38	1	2
10 Malawi	4	10	6.6	6.4	..	19	0	0	0	0
11 Uganda	5	9	7.1	3.4	38	52	0	52	0	1
12 Rwanda	2	5	5.4	6.4	..	0	0	0	0	0
13 Burundi	2	2	1.3	2.5	..	..	0	0	0	0
14 Tanzania	5	13	6.3	8.5	34	50	0	50	0	1
15 Benin	10	15	5.4	4.4	..	63	0	63	0	1
16 Central African Rep.	23	37	4.7	3.5	40	36	0	0	0	0
17 Guinea	10	20	4.9	5.2	37	80	0	80	0	1
18 Madagascar	11	20	5.0	5.2	44	36	0	36	0	1
19 Togo	10	21	5.8	6.6	..	60	0	0	0	0
20 Ghana	23	37	4.6	5.0	25	35	0	48	0	2
21 Kenya	7	15	6.4	7.3	40	57	0	57	0	1
22 Sierra Leone	13	23	4.9	3.9	37	47	0	0	0	0
23 *Mozambique*	4	9	6.5	8.1	75	83	0	83	0	1
Middle-income oil importers	**15 w**	**30 w**	**6.5 w**	**6.4 w**	**38 w**	**40 w**	**0 w**	**35 w**	**0 t**	**5 t**
24 Sudan	10	23	6.8	5.8	30	31	0	31	0	1
25 Mauritania	3	26	15.5	8.1	..	39	0	0	0	0
26 Liberia	21	34	5.6	5.7	..	..	0	0	0	0
27 Senegal	23	34	4.9	3.7	53	65	0	65	0	1
28 Lesotho	2	13	7.5	15.4	..	..	0	0	0	0
29 Zambia	23	45	5.2	6.5	..	35	0	35	0	1
30 Zimbabwe	13	24	6.7	6.0	40	50	0	50	0	1
31 Botswana	2	22	21.9	11.8	..	47	0	0	0	0
32 Swaziland	4	15	9.7	10.5	..	..	0	0	0	0
33 Ivory Coast	19	42	7.3	8.2	27	34	0	34	0	1
34 Mauritius	33	54	4.7	3.6	50	30	0	0	0	0
Middle-income oil exporters	**13 w**	**23 w**	**4.9 w**	**5.4 w**	**18 w**	**23 w**	**18 w**	**51 w**	**2 t**	**11 t**
35 Nigeria	13	21	4.7	4.9	13	17	22	58	2	9
36 Cameroon	14	37	5.8	8.0	26	21	0	21	0	1
37 Congo, People's Rep.	30	46	5.0	4.4	77	56	0	0	0	0
38 Gabon	17	38	4.4	4.7	..	68	0	0	0	0
39 *Angola*	10	22	5.7	5.8	44	64	0	64	0	1
Sub-Saharan Africa	**11 w**	**22 w**	**5.5 w**	**6.1 w**	**26 w**	**34 w**	**8 w**	**40 w**	**3 t**	**28 t**
All low-income countries	**17 w**	**21 w**	**4.1 w**	**4.4 w**	**10 w**	**16 w**	**31 w**	**55 w**	**55 t**	**145 t**
All lower middle-income countries	**24 w**	**34 w**	**4.4 w**	**4.4 w**	**27 w**	**32 w**	**28 w**	**47 w**	**22 t**	**58 t**
All upper middle-income countries	**45 w**	**63 w**	**4.4 w**	**3.9 w**	**28 w**	**29 w**	**38 w**	**51 w**	**32 t**	**70 t**
Industrial market economies	**68 w**	**78 w**	**1.9 w**	**1.3 w**	**18 w**	**18 w**	**48 w**	**55 w**	**104 t**	**152 t**

Note: For data comparability and coverage see the technical notes.
a. See the technical notes.

Table 29. Health-related Indicators

	Population				Daily calorie supply per capita	
	Per physician		Per nursing person		Total	As percentage of requirement
	1960[a]	1980[a]	1960[a]	1980[a]	1981[a]	1981[a]
Low-income economies	**54,347 w**	**27,607 w**	**7,367 w**	**3,404 w**	**2,001 w**	**86 w**
Low-income semiarid	**68,212 w**	**33,987 w**	**5,315 w**	**3,620 w**	**2,003 w**	**88 w**
1 Chad	72,190	*47,530*	*5,780*	*3,850*	1,818	76
2 Mali	64,130	*22,130*	*4,710*	*2,380*	1,621	72
3 Burkina Faso	81,650	48,510	*3,980*	4,950	*2,008*	*95*
4 Somalia	36,570	14,290	*4,810*	*2,330*	*2,119*	*100*
5 Niger	82,170	*38,790*	*8,460*	*4,650*	2,489	102
6 Gambia, The	24,930	*12,310*	*1,590*	*1,770*	*2,260*	88
Low-income other	**52,048 w**	**26,585 w**	**7,707 w**	**3,370 w**	**2,001 w**	**86 w**
7 Ethiopia	100,470	*58,490*	*14,920*	*5,440*	*1,758*	*76*
8 Guinea-Bissau	21,600	*8,840*	*4,810*	*980*	*2,282*	*70*
9 Zaire	79,620	*14,780*	*3,510*	*1,920*	*2,135*	*94*
10 Malawi	35,250	*40,950*	*12,940*	*3,830*	2,138	*94*
11 Uganda	15,050	*26,810*	*10,030*	*4,180*	1,778	*80*
12 Rwanda	*143,290*	31,510	*11,620*	9,840	*2,194*	*88*
13 Burundi	98,900	45,020	*4,640*	*6,180*	2,152	*95*
14 Tanzania	18,220	*17,560*	*11,890*	*2,980*	*1,985*	*83*
15 Benin	23,030	16,980	*2,700*	*1,660*	2,284	*101*
16 Central African Rep.	51,170	*26,430*	*3,410*	*1,720*	*2,164*	*96*
17 Guinea	33,770	*17,110*	*4,040*	*2,570*	1,877	*75*
18 Madagascar	8,900	*10,170*	*3,110*	*3,660*	*2,474*	*109*
19 Togo	47,060	*18,100*	*5,340*	*1,430*	1,889	*83*
20 Ghana	21,600	*7,630*	*5,430*	*780*	*1,995*	*88*
21 Kenya	10,690	*7,890*	*2,270*	*550*	*2,056*	*88*
22 Sierra Leone	20,070	*16,220*	*2,880*	*1,890*	2,053	*101*
23 *Mozambique*	20,390	39,110	*4,720*	5,600	*1,881*	*70*
Middle-income oil importers	**23,838 w**	**11,223 w**	**3,675 w**	**1,522 w**	**2,369 w**	**100 w**
24 Sudan	33,230	8,930	*3,010*	1,430	*2,406*	*99*
25 Mauritania	40,420	*14,350*	*5,430*	*2,080*	*2,082*	*97*
26 Liberia	*12,600*	*9,610*	*1,410*	*1,420*	2,510	114
27 Senegal	24,990	*13,800*	*3,150*	*1,400*	2,434	*101*
28 Lesotho	23,490	*18,640*	*6,540*	*4,330*	2,535	111
29 Zambia	9,540	*7,670*	*9,920*	*1,730*	*2,094*	*93*
30 Zimbabwe	4,790	*6,580*	*1,000*	*1,190*	2,025	*90*
31 Botswana	22,250	*9,480*	*4,790*	*1,250*	2,222	*85*
32 Swaziland	10,150	*7,670*	*3,710*	*1,010*	2,527	*98*
33 Ivory Coast	*29,190*	*21,040*	*2,920*	*1,590*	2,670	*112*
34 Mauritius	4,680	*2,000*	*2,100*	*610*	2,812	*125*
Middle-income oil exporters	**65,293 w**	**13,327 w**	**4,085 w**	**2,878 w**	**2,348 w**	**91 w**
35 Nigeria	73,710	*12,550*	*4,040*	*3,010*	*2,361*	*91*
36 Cameroon	*45,230*	*13,990*	*3,080*	*1,950*	*2,439*	*102*
37 Congo, People's Rep.	16,100	*5,510*	*1,300*	*790*	2,199	*94*
38 Gabon	9,770	*3,030*	*1,060*	. .	2,725	*97*
39 *Angola*	14,910	. .	*6,650*	. .	*2,096*	*83*
Sub-Saharan Africa	**53,407 w**	**21,234 w**	**5,869 w**	**2,978 w**	**2,156 w**	**90 w**
All low-income countries	**12,088 w**	**5,772 w**	**7,226 w**	**4,841 w**	**2,219 w**	**97 w**
All lower middle-income countries	**28,478 w**	**7,765 w**	**4,697 w**	**2,462 w**	**2,454 w**	**107 w**
All upper middle-income countries	**2,532 w**	**2,021 w**	**2,752 w**	**1,024 w**	**2,816 w**	**117 w**
Industrial market economies	**816 w**	**554 w**	**470 w**	**180 w**	**3,396 w**	**132 w**

Note: For data comparability and coverage see the technical notes.
a. Figures in italics are for years other than specified.

Table 30. Education

| | Number enrolled in primary school as percentage of age group | | | | | | Number enrolled in secondary school as percentage of age group | | Number enrolled in higher education as percentage of population aged 20–24 | |
| | Total | | Male | | Female | | | | | |
	1960	1981[a]	1960	1981[a]	1960	1981[a]	1960	1981[a]	1960	1981[a]
Low-income economies	**32 w**	**69 w**	**45 w**	**79 w**	**20 w**	**58 w**	**2 w**	**13 w**		
Low-income semiarid	**10 w**	**27 w**	**15 w**	**36 w**	**5 w**	**19 w**	**1 w**	**7 w**		
1 Chad	17	35	29	*51*	4	19	..	3	..	(.)
2 Mali	10	27	14	35	6	20	1	9	..	1
3 Burkina Faso	8	20	12	26	5	15	1	3	..	(.)
4 Somalia	9	30	13	*38*	5	21	1	11	(.)	1
5 Niger	5	23	7	29	3	17	..	6	..	(.)
6 Gambia, The	12	52	17	67	8	37	3	14	..	..
Low-income other	**36 w**	**76 w**	**50 w**	**86 w**	**23 w**	**64 w**	**3 w**	**14 w**		
7 Ethiopia	7	46	11	60	3	33	..	12	(.)	1
8 Guinea-Bissau	25	101	35	141	15	61	3	20		
9 Zaire	60	90	88	*104*	32	75	3	23	(.)	1
10 Malawi	..	62	..	73	..	51	1	4	..	(.)
11 Uganda	49	54	65	62	32	46	3	5	(.)	1
12 Rwanda	49	72	68	75	30	69	2	2	..	(.)
13 Burundi	18	32	27	40	9	25	1	3	(.)	1
14 Tanzania	25	102	33	107	18	98	2	3	..	(.)
15 Benin	27	65	38	88	15	42	2	18	..	1
16 Central African Rep.	32	68	53	89	12	49	1	13	..	1
17 Guinea	30	33	44	44	16	22	2	16	..	5
18 Madagascar	52	100	58	..	45	..	4	14	(.)	3
19 Togo	44	111	63	135	24	87	2	31	..	2
20 Ghana	38	69	52	*77*	25	60	5	36	(.)	1
21 Kenya	47	109	64	*114*	30	101	2	19	(.)	1
22 Sierra Leone	23	39	30	45	15	30	2	12	(.)	1
23 *Mozambique*	48	90	60	102	36	78	2	6	..	(.)
Middle-income oil importers	**42 w**	**74 w**	**52 w**	**82 w**	**32 w**	**65 w**	**4 w**	**17 w**		
24 Sudan	25	52	35	61	14	43	3	18	(.)	2
25 Mauritania	8	33	13	43	3	23	..	10	..	..
26 Liberia	31	66	45	82	18	50	2	20	(.)	2
27 Senegal	27	48	36	58	17	38	3	12	1	3
28 Lesotho	83	104	63	84	102	123	3	17	(.)	2
29 Zambia	42	96	51	*102*	34	90	2	16	..	2
30 Zimbabwe	96	126	107	130	86	121	6	15	(.)	(.)
31 Botswana	42	102	35	94	48	110	1	23	..	..
32 Swaziland	58	110	58	111	58	109	5	40	..	..
33 Ivory Coast	46	76	68	92	24	60	2	17	(.)	3
34 Mauritius	98	107	103	107	93	106	24	51	..	..
Middle-income oil exporters	**39 w**	**101 w**	**50 w**	**98 w**	**28 w**	**75 w**	**4 w**	**17 w**		
35 Nigeria	36	98	46	94	27	70	4	16	(.)	3
36 Cameroon	65	107	87	117	43	97	2	19	..	2
37 Congo, People's Rep.	78	156	103	163	53	148	4	69	1	6
38 Gabon	100	202	124	207	76	198	5	34	..	..
39 *Angola*	21	..	28	..	13	..	2	..	(.)	(.)
Sub-Saharan Africa	**36 w**	**78 w**	**47 w**	**85 w**	**24 w**	**64 w**	**3 w**	**15 w**		
All low-income countries	**80 w**	**94 w**	**69 w**	**107 w**	**34 w**	**81 w**	**18 w**	**34 w**	**2 w**	**4 w**
All lower middle-income countries	**66 w**	**101 w**	**76 w**	**106 w**	**56 w**	**91 w**	**10 w**	**34 w**	**3 w**	**9 w**
All upper middle-income countries	**88 w**	**104 w**	**93 w**	**107 w**	**83 w**	**101 w**	**20 w**	**51 w**	**4 w**	**14 w**
Industrial market economies	**114 w**	**101 w**	**107 w**	**103 w**	**112 w**	**103 w**	**64 w**	**90 w**	**16 w**	**37 w**

a. Figures in italics are for years other than those specified. See the technical notes.

Table 31. Central Government Expenditure

	Defense		Education		Health		Housing and community amenities, social security and welfare		Economic services		Other[a]		Total expenditure (percent of GNP)		Overall surplus/deficit (percent of GNP)	
	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]
Low-income economies	11.5 w	8.9 w	16.8 w	18.0 w	6.2 w	6.3 w	4.8 w	3.8 w	25.6 w	27.7 w	35.1 w	35.4 w	22.2 w	16.6 w	−4.8 w	−5.5 w
Low-income semiarid	24.0 w	6.8 w	10.3 w	17.1 w	5.7 w	3.7 w	1.8 w	3.5 w	21.7 w	23.9 w	36.4 w	45.1 w	15.6 w	22.4 w	−1.1 w	−6.2 w
1 Chad	24 6	..	14.8	..	4.4	..	1.7	..	21.8	..	32 7	..	18 1	..	−3.2	..
2 Mali	..	11.1	..	15.7	..	3.1	..	3.0	..	11.4	..	55.6	..	25.9	.	−5.6
3 Burkina Faso	.	..	..	..	..	.	..	..	..	.	..	..	..	14 6	.	.
4 Somalia	23.3	..	5.5	..	7.2	..	1.9	.	21.6	..	40.5	..	13 5	.	0 6	..
5 Niger	.	3.8	..	18.0	..	4.1	.	3.8	..	32 4	..	38.0	.	25.9	.	−6 6
6 Gambia, The	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	.
Low-income other	10.8 w	9.1 w	17.2 w	18.0 w	6.2 w	6.5 w	5.0 w	3.8 w	25.8 w	28.0 w	35.0 w	34.5 w	22.6 w	16.3 w	−5.0 w	−5.5 w
7 Ethiopia	14.3	..	14.4	.	5.7	..	4.4	..	22.9	..	38.3		13.8	..	−1.4	.
8 Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	.	..	..	..	.	.
9 Zaire	..	..	..	..	..	..	..	..	..	..	.	..	38.6	33.8	−7 5	−5.9
10 Malawi	3.1	8.4	15.8	11.1	5.5	5.2	5.8	2.9	33.1	38.2	36.8	34.3	22.1	35.3	−6 2	−12 0
11 Uganda	23.1	34 5	15.3	10.9	5.3	4 0	7.3	2.8	12.4	13.7	36.6	34.1	21.8	3.2	−8.1	−2.5
12 Rwanda	..	13.1	..	18.8	..	4.5	..	4.1	..	41.4	..	18.0	..	14.4	..	−1.8
13 Burundi	..	..	..	..	..	..	..	..	..	..	..	..	..	21 2	..	−5.0
14 Tanzania	11.9	11.2	17 3	12.1	7.2	5 5	2.1	2.4	39.0	37.4	22.6	31 5	19.7	33.3	−5.0	..
15 Benin	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16 Central African Rep.	.	9.3	.	16.9	..	4.9	..	6.1	..	18.8	.	43.9	.	23 5	..	−4.5
17 Guinea	..	..	.	..	..	..	..	.	..	..	..	..	..	..	.	..
18 Madagascar	3 6	..	9.1	.	4.2	..	9.9	..	40 5	..	32.7	.	20.8	.	−2.5	..
19 Togo	..	..	..	..	..	..	..	..	..	..	..	..	..	35.3	.	−2.2
20 Ghana	8.0	3.7	20.1	22.0	6 2	7.0	4.1	6.8	15.0	20.7	46.6	39.8	19.5	10.1	−5.8	−6.2
21 Kenya	6.0	10.7	21.9	20.6	7.9	7.8	3.9	0.8	30.1	30 0	30.2	30.0	21.0	28.4	3.9	6 8
22 Sierra Leone	.	..	.	..	..	..	..	..	..	..	..	..	..	27.2	.	−9.2
23 *Mozambique*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..
Middle-income oil importers	24.1 w	12.2 w	14.9 w	15.7 w	6.6 w	4.7 w	2.2 w	4.8 w	22.3 w	19.7 w	44.6 w	44.6 w	24.2 w	28.5 w	−5.6 w	−7.2 w
24 Sudan	24.1	13 2	9.3	9.8	5.4	1.4	1 4	0.9	15.8	19 8	44.1	54.9	19.2	19.1	−0.8	−3.2
25 Mauritania	.	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..
26 Liberia	..	11.3	..	16 0	..	7 6	..	3.3	.	33.0	..	28 8	..	33.7	..	−11.5
27 Senegal	..	15 6	..	21.3	..	4.3	..	9 9	.	20.6	..	28.1	17 4	29.3	−0.8	−3 3
28 Lesotho	.	.	19.5	.	8.0	.	6.5	..	24 5	..	41 5		16.6	..	−0.9	.
29 Zambia	..	..	19.0	11 9	7.4	6.1	1 3	0.6	26 7	21 9	45.7	59 6	35.4	39.8	−14 4	−14.0
30 Zimbabwe	..	19.9	.	19.5	..	6 9	.	7.5	..	19.5	.	26.6	.	31.3	..	−7.3
31 Botswana	..	8 7	10.0	21.2	6.0	5.9	21.7	6.9	28.0	26 9	34.5	30.4	33.7	38.4	−23.8	−2.3
32 Swaziland	..	14.4	20.5	23.7	8 4	5.5	3 8	11.5	23.0	29 6	44.3	15.3	21 4	30.2	−4.2	−7.5
33 Ivory Coast	..	3.9	.	16 3	..	3.9	..	4.3	..	13 4	..	58.1	.	32 2	.	−11 0
34 Mauritius	..	2.2	..	15.4	..	7.0	..	14.0	..	20.2	..	41.2	..	29.4	..	−12.9
Middle-income oil exporters	40.2 w	5.1 w	4.5 w	7.5 w	3.6 w	2.7 w	0.8 w	5.1 w	19.6 w	10.0 w	31.4 w	69.6 w	9.9 w	27.9 w	−0.9 w	−3.9 w
35 Nigeria	40.2	..	4.5	..	3.6	.	0.8	..	19.6	..	31.4		9.9	..	−0.9	.
36 Cameroon	..	5.1	..	7.5	..	2.7	..	5.1	.	10.0	.	69 6	..	21.6	.	−3 4
37 Congo, People's Rep	..	..	..	..	..	..	..	..	..	..	..	..	.	54.6	..	−5.8
38 Gabon	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..
39 *Angola*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	22.9 w	10.0 w	12.7 w	16.0 w	5.5 w	5.2 w	3.0 w	4.4 w	23.0 w	22.4 w	36.3 w	42.5 w	17.3 w	21.1 w	−3.3 w	−5.9 w
All low-income countries	11.4 w	18.3 w	16.4 w	5.9 w	6.2 w	2.9 w	4.7 w	5.0 w	26.8 w	25.7 w	34.5 w	42.2 w	21.0 w	15.4 w	−4.4 w	−5.6 w
All lower middle-income countries	17.4 w	14.1 w	18.8 w	14.2 w	4.8 w	4.2 w	5.1 w	4.9 w	30.2 w	26.3 w	23.7 w	36.3 w	16.6 w	20.8 w	−2.3 w	−3.6 w
All upper middle-income countries	14.6 w	8.8 w	10.8 w	14.3 w	7.0 w	5.5 w	24.2 w	15.4 w	23.0 w	27.1 w	20.4 w	28.9 w	15.0 w	20.6 w	−2.4 w	−3.1 w
Industrial market economies	23.4 w	13.6 w	4.3 w	5.1 w	9.9 w	11.4 w	36.4 w	41.7 w	11.6 w	9.9 w	14.4 w	18.2 w	21.7 w	28.3 w	−0.9 w	−2.7 w

Note: For data comparability and coverage see the technical notes.
a. See the technical notes.
b. Figures in italics are for 1980, not 1981.

Table 32. Central Government Current Revenue

	Tax revenue (percent of total current revenue)										Current nontax revenue (percent of total current revenue)		Total current revenue (percent of GNP)	
	Taxes on income, profit, and capital gain		Social security contributions		Domestic taxes on goods and services		Taxes on international trade and transactions		Other taxes[a]					
	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]	1972	1981[b]
Low-income economies	23.7 w	28.6 w	..	..	23.0 w	32.9 w	38.7 w	24.9 w	2.2 w	1.8 w	11.3 w	10.9 w	17.0 w	10.2 w
Low-income semiarid	12.8 w	22.2 w	..	..	17.8 w	25.0 w	47.4 w	31.3 w	10.9 w	6.0 w	11.0 w	12.8 w	13.6 w	17.9 w
1 Chad	16.7	..	..	..	12.3	..	45.2	..	20.5	..	5.3	..	13.1	..
2 Mali	..	18.8	..	..	..	39.7	..	20.7	..	13.2	..	7.6	..	14.4
3 Burkina Faso	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4 Somalia	10.7	..	..	..	24.7	..	45.3	..	5.2	..	14.0	..	13.7	..
5 Niger	..	23.8	..	4.0	..	18.0	..	36.4	..	2.6	..	15.3	..	20.3
6 Gambia, The	7.5	..	..	..	1.9	..	70.7	..	0.4	..	19.4	..	16.3	..
Low-income other	24.2 w	29.1 w	..	..	23.2 w	33.6 w	38.2 w	24.4 w	1.8 w	1.4 w	11.3 w	10.7 w	17.2 w	9.8 w
7 Ethiopia	23.0	..	..	..	27.8	..	32.5	..	5.6	..	11.1	..	10.5	..
8 Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9 Zaire	22.2	34.9	2.2	1.0	12.7	15.3	57.9	30.1	1.4	3.7	3.7	15.0	27.9	21.5
10 Malawi	31.4	28.5	..	..	24.2	30.3	20.0	23.1	0.5	0.4	23.8	17.8	16.0	19.5
11 Uganda	22.1	19.7	..	..	32.9	36.6	36.2	37.8	0.3	0.3	8.5	5.7	13.7	0.7
12 Rwanda	..	17.8	..	4.1	..	19.3	..	42.4	..	2.4	..	14.0	..	12.9
13 Burundi	..	22.4	..	2.9	..	28.7	..	24.0	..	11.2	..	10.8	..	11.9
14 Tanzania	29.9	31.1	..	..	29.1	50.6	21.7	10.2	0.5	0.9	18.8	7.2	15.8	19.6
15 Benin	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16 Central African Rep.	..	16.1	..	6.4	..	20.8	..	39.8	..	7.8	..	9.1	..	16.9
17 Guinea	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18 Madagascar	13.0	..	7.2	..	29.8	..	33.6	..	5.4	..	10.9	..	18.4	..
19 Togo	..	34.4	..	5.8	..	15.3	..	31.8	..	-1.7	..	14.4	..	34.8
20 Ghana	18.2	24.8	..	..	29.1	39.1	40.8	27.9	0.4	0.1	11.4	8.2	15.1	4.2
21 Kenya	35.6	29.1	..	..	19.9	38.2	24.3	22.0	1.4	0.6	18.8	10.0	18.0	23.1
22 Sierra Leone	..	23.9	..	..	..	20.4	..	44.4	..	1.5	..	9.8	..	16.8
23 *Mozambique*	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middle-income oil importers	27.9 w	27.3 w	..	..	23.7 w	26.6 w	25.4 w	28.0 w	4.7 w	4.6 w	13.9 w	11.9 w	19.8 w	24.6 w
24 Sudan	11.8	14.4	..	..	30.4	26.0	40.5	42.6	1.5	0.7	15.7	16.3	18.0	13.4
25 Mauritania	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26 Liberia	..	32.4	..	..	..	24.2	..	36.3	..	3.3	..	3.8	..	22.7
27 Senegal	17.6	17.4	..	3.9	24.5	18.8	30.9	18.9	23.8	24.4	3.2	16.6	16.8	25.9
28 Lesotho	14.3	..	..	..	2.0	..	62.9	..	9.5	..	11.3	..	11.7	..
29 Zambia	49.7	35.2	..	..	20.2	46.8	14.3	7.7	0.1	3.3	15.6	6.9	24.2	25.1
30 Zimbabwe	..	47.7	..	..	..	30.5	..	9.1	..	1.2	..	11.5	..	26.3
31 Botswana	19.9	37.1	..	..	2.4	1.0	47.2	38.6	0.4	0.3	30.0	23.1	30.7	34.8
32 Swaziland	35.7	31.2	..	..	4.8	2.0	49.7	54.7	1.2	0.9	8.6	11.2	19.5	24.9
33 Ivory Coast	..	12.9	..	5.7	..	25.0	..	42.8	..	6.0	..	7.5	..	23.4
34 Mauritius	..	17.6	..	..	..	17.7	..	47.9	..	4.3	..	12.5	..	20.5
Middle-income oil exporters	35.6 w	35.1 w	..	..	30.6 w	13.2 w	20.3 w	27.0 w	2.1 w	3.8 w	11.3 w	15.3 w	11.5 w	22.3 w
35 Nigeria	43.0	..	..	..	26.3	..	17.5	..	0.2	..	13.0	..	11.3	..
36 Cameroon	..	28.2	..	6.2	..	16.0	..	34.1	..	4.4	..	11.2	..	18.3
37 Congo, People's Rep.	19.3	48.7	..	4.4	40.3	7.6	26.5	13.0	6.4	2.7	7.4	23.5	18.4	39.0
38 Gabon	..	..	..	..	..	..	..	..	..	..	..	..	..	..
39 *Angola*	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	25.7 w	28.8 w	..	..	23.7 w	27.5 w	33.5 w	26.6 w	2.9 w	3.3 w	12.1 w	11.9 w	15.1 w	14.8 w
All low-income countries	21.6 w	19.8 w	..	..	24.1 w	38.6 w	35.2 w	25.3 w	7.4 w	0.9 w	11.7 w	15.4 w	18.4 w	14.3 w
All lower middle-income countries	27.5 w	38.4 w	..	..	29.3 w	25.3 w	20.5 w	17.5 w	10.5 w	5.6 w	12.2 w	13.2 w	15.9 w	21.8 w
All upper middle-income countries	23.8 w	46.4 w	20.4 w	10.3 w	26.9 w	21.0 w	11.5 w	10.6 w	0.3 w	-2.8 w	17.1 w	14.5 w	20.7 w	27.0 w
Industrial market economies	45.2 w	41.2 w	26.8 w	30.8 w	17.1 w	15.8 w	2.0 w	1.5 w	2.6 w	2.0 w	6.3 w	8.7 w	24.6 w	30.1 w

Note: For data comparability and coverage see the technical notes.
a. See the technical notes.
b. Figures in italics are for 1980, not 1981.

Technical Notes

This statistical annex provides economic indicators for periods of years and social indicators for selected years in a form suitable·for comparing economies and groups of economies. The statistics and measures have been carefully chosen to give a comprehensive picture of development. Considerable effort has been made to standardize the data; nevertheless, statistical methods, coverage, practices, and definitions differ widely. In addition, the statistical systems in most of the African countries still are weak, which affects the availability and reliability of the data. Readers are urged to exercise caution and to take these limitations into account in interpreting the indicators, particularly when making comparisons across economies.

All growth rates shown are in real terms and, unless otherwise noted, have been computed by using the least-squares method. The least-squares growth rate, γ, is calculated by regressing the annual values of the variable in the relevant period using the logarithmic form:

$$\log X_t = a + bt + e_t,$$

where X_t is the variable, a is the intercept, b is the slope coefficient, t is time, and e_t is the error term. Then γ is equal to [antilog b] − 1, the least-squares estimate of the growth rate.

Table 1. Basic Indicators

The estimates of *population* for mid-1982 are primarily based on data from the UN Population Division. In many cases the data take into account the results of recent population censuses. The data on *area* are from the computer tape for FAO *Production Yearbook, 1982*.

Gross national product (GNP) measures the total domestic and foreign output claimed by residents. It comprises gross domestic product (see the note for table 2) and factor incomes (such as investment income, labor income, and workers' remittances) accruing to residents from abroad, less the income earned in the domestic economy accruing to persons abroad. It is calculated without making deductions for depreciation.

The *GNP per capita* figures were calculated according to the *World Bank Atlas* method, under which the conversion of GNP proceeds in the following manner. The first step is to convert the GNP series in constant market prices and national currency units to one measured in constant average 1980–82 prices. This is done by multiplying the original constant price series by the weighted average domestic GNP deflator for the base period (that is, by the ratio of total GNP in current prices to total GNP in constant prices for the 1980–82 period). The second step is to convert the series measured in constant average 1980–82 prices in national currency to one in U.S. dollars by dividing that series by the weighted average exchange rate for the base period. The weighted average exchange rate is the ratio of the sum of GNP in current prices to the sum of GNP divided by the annual average exchange rate in national currency per U.S. dollar for 1980, 1981, and 1982. The third step is to convert the series measured in constant average 1980–82 U.S. dollars to one measured in current U.S. dollars by multiplying that series by the implicit U.S. GNP deflator for 1980–82. This procedure was followed for most economies.

The *GNP per capita* figures were obtained by dividing GNP at market prices in U.S. dollars by the population in mid-1982. The use of the three-year base period is intended to smooth the impact of fluctuations in prices and exchange rates.

The World Bank, for its own operational purposes, attempts to estimate internationally comparable and consistent GNP per capita figures.

This task is made difficult, however, by conceptual and coverage differences as well as quality differences in the basic data and because prevailing exchange rates do not fully reflect the rate at which transactions take place. Recognizing that these shortcomings affect the comparability of the GNP per capita estimates, the World Bank recently initiated a process aimed at revision of the *World Bank Atlas* methodology described above. It systematically evaluates the GNP estimates of its member countries, focusing on the coverage and concepts employed, and where appropriate, will make adjustments to increase comparability. This evaluation of national accounts data will be based on documentation on the sources and methods underlying the compilations, obtained either directly from national governments or from other international agencies such as the UN Statistical Office, the OECD, and the Statistical Office of the European Communities.

The World Bank is also undertaking a systematic review to improve the conversion factors. From 1983 on, GNP per capita for a specified year in U.S. dollars will be estimated by converting GNP in national currencies using a mean of the official exchange rate for that year and the two preceding years, adjusted for relative price changes between the economy in question and the United States. An alternative conversion factor will be used when the official exchange rate is judged to be egregiously different from the rate effectively applied to foreign transactions.

GNP per capita estimates calculated using the new methodology will be published in subsequent editions of the *World Bank Atlas* and the World Development Indicators, together with detailed technical notes.

Because of the data and conversion factor considerations discussed above, this year's GNP per capita figures must be interpreted with great caution.

The *average annual rate of inflation* is the least-squares growth rate of the implicit gross domestic product (GDP) deflator for each of the periods shown. The GDP deflator is first calculated by dividing, for each year of the period, the value of GDP in current market prices by the value of GDP in constant market prices, both in national currency. The least-squares method is then used to calculate the growth rate of the GDP deflator for the period. This measure of inflation has limitations, in particular for the oil-producing countries during the period of sharp increases in oil prices. It is used as an indicator of inflation because it is the most broadly based deflator, showing annual price movements for all goods and services produced in an economy.

Life expectancy at birth indicates the number of years newborn children would live if subject to the mortality risks prevailing for the cross section of population at the time of their birth. Data are from the UN Population Division and are supplemented by World Bank estimates.

The *index of food production per capita* shows the average annual quantity of food produced per capita in 1980–82 in relation to that in 1969–71. The estimates were derived from those of the FAO, which are calculated by dividing indexes of the quantity of food production by indexes of total population. For this index, food is defined as comprising cereals, starchy roots, sugar cane, sugar beets, pulses, edible oils, nuts, fruits, vegetables, livestock, and livestock products. Quantities of food production are measured net of animal feed, seeds for use in agriculture, and food lost in processing and distribution. Because of weaknesses in the agricultural production statistics, caution should be exercised in interpreting them.

The averages in this table are weighted by population.

Tables 2 and 3. Growth and Structure of Production

Most of the definitions used are those of the UN *System of National Accounts.*

Gross domestic product (GDP) measures the total final output of goods and services produced by an economy—that is, by residents and nonresidents, regardless of the allocation to domestic and foreign claims. It is calculated without making deductions for depreciation. For many countries, GDP by industrial origin is measured at factor cost; for other countries without complete national accounts series at factor cost, market price series were used. GDP at factor cost is equal to GDP at market prices, less indirect taxes net of subsidies. The figures for GDP are dollar values converted from domestic currency by using the average annual official exchange rate for the year in question: that is, they were not calculated by using the *World Bank Atlas* method described in the note for table 1. Because of these differences in concept and in method of conversion, the figures in

these tables are not comparable with the numbers based on GNP in table 1.

The *agricultural sector* comprises agriculture, forestry, hunting, and fishing. In developing countries with high levels of subsistence farming, much of the agricultural production is either not exchanged or not exchanged for money. Because of difficulties in assigning subsistence farming its proper value, the share of agriculture in GDP may be underestimated. The *industrial sector* comprises mining, *manufacturing*, construction, and electricity, water, and gas. All other branches of economic activity are categorized as *services*.

National accounts series in domestic currency units were used to compute the indicators in these tables. The growth rates in table 2 were calculated from constant price series; the sectoral shares of GDP in table 3, from current price series.

The average growth rates for the summary measures in table 2 are weighted by country GDP in 1970 dollars. The average sectoral shares in table 3 are weighted by GDP in current dollars for the years in question.

Tables 4 and 5. *Growth of Consumption and Investment; Structure of Demand*

GDP is defined in the note for table 2.

Public consumption (or general government consumption) includes all current expenditure for purchases of goods and services by all levels of government. Capital expenditure on national defense and security is regarded as consumption expenditure.

Private consumption is the market value of all goods and services purchased or received as income in kind by households and nonprofit institutions. It includes imputed rent for owner-occupied dwellings.

Gross domestic investment consists of the outlays for additions to the fixed assets of the economy, plus changes in the net value of inventories.

Gross domestic saving shows the amount of gross domestic investment financed from domestic output. Comprising public and private saving, it is gross domestic investment plus the net exports of goods and nonfactor services.

Exports of goods and nonfactor services represent the value of all goods and nonfactor services sold to the rest of the world; they include mer-

chandise, freight, insurance, travel, and other nonfactor services. The value of factor services, such as investment income, labor income, and workers' remittances from abroad, is excluded.

The *resource balance* is the difference between exports and imports of goods and nonfactor services.

National accounts series in domestic currency units were used to compute the indicators in these tables. The growth rates in table 4 were calculated from constant price series; the shares of GDP in table 5, from current price series.

The summary measures in table 4 are weighted by country GDP in 1970 dollars; those in table 5 are weighted by GDP in current dollars for the years in question.

Table 6. *Commercial Energy*

The data on energy generally are from UN sources. They refer to commercial forms of primary energy: petroleum and natural gas liquids, natural gas, solid fuels (coal, lignite, and so on), and primary electricity (nuclear, geothermal, and hydroelectric power)—all converted into oil equivalents. Figures on liquid fuel consumption include petroleum derivatives that have been consumed in nonenergy uses. For converting primary electricity into oil equivalents, a notional thermal efficiency of 34 percent has been assumed. The use of firewood and other traditional fuels, though substantial in some developing countries, is not taken into account because reliable and comprehensive data are not available.

The summary measures of growth rates of *energy production* are weighted by volumes of production in 1974; those of growth rates of *energy consumption*, by volumes of consumption in 1974; those of *energy consumption per capita*, by population in 1974.

Energy imports refer to the dollar value of energy imports—Section 3 in the Revised Standard International Trade Classification (SITC)—and are expressed as a percentage of earnings from merchandise exports. The summary measures are weighted by merchandise exports in current dollars.

Because data on energy imports do not permit a distinction between petroleum imports for fuel and for use in the petrochemicals industry, these percentages may overestimate the dependence on imported energy.

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Table 7. Growth of Merchandise Trade

The statistics on merchandise trade are from UN publications and the UN trade data system, supplemented by statistics from the UN Conference on Trade and Development (UNCTAD), the IMF, and in a few cases World Bank country documentation.

Merchandise exports and imports cover, with some exceptions, all international changes in ownership of merchandise passing across the customs borders. Exports are valued f.o.b. (free on board), imports c.i.f. (cost, insurance, and freight), unless otherwise specified in the foregoing sources. These values are in current dollars. Note that they do not include trade in services.

The *growth rates of merchandise exports and imports* are in real terms and calculated from quantum (volume) indexes of exports and imports. Quantum indexes are the ratios of the export or import value index to the corresponding unit value index. For most developing economies these indexes are from the UNCTAD *Handbook of International Trade and Development Statistics* and supplementary data. For industrial economies the indexes are from the UN *Yearbook of International Trade Statistics* and *Monthly Bulletin of Statistics*. The summary measures are median values. Note again that these values do not include trade in services.

Tables 8 and 9. Structure of Merchandise Trade

The shares in these tables are derived from trade values in current dollars reported in UN trade tapes and the UN *Yearbook of International Trade Statistics*, supplemented by other regular statistical publications of the UN and the IMF.

Merchandise exports and imports are defined in the note for table 7. The categorization of exports and imports follows the SITC.

In table 8, *fuels, minerals, and metals* are the commodities in SITC Section 3, Divisions 27 and 28 (minerals, crude fertilizers, and metalliferous ores), and Division 68 (nonferrous metals). *Other primary commodities* comprise SITC Sections 0, 1, 2, and 4 (food and live animals, beverages and tobacco, inedible crude materials, oils, fats, and waxes) less Divisions 27 and 28. *Textiles and clothing* represent SITC Divisions 65 and 84 (textiles, yarns, fabrics, and clothing). *Machinery and transport equipment* are

the commodities in SITC Section 7. *Other manufactures*, calculated as the residual from the total value of manufactured exports, represent SITC Sections 5 to 9 less Section 7 and Divisions 65, 68, and 84.

In table 9, *food* commodities are those in SITC Sections 0, 1, and 4 and in Division 22 (food and live animals, beverages and tobacco, oils, and fats). *Fuels* are the commodities in SITC Section 3 (mineral fuels, lubricants, and related materials). *Other primary commodities* comprise SITC Section 2 (crude materials excluding fuels), less Division 22 (oilseeds and nuts) plus Division 68 (nonferrous metals). *Machinery and transport equipment* are the commodities in SITC Section 7. *Other manufactures*, calculated as the residual from the total value of manufactured imports, represent SITC Sections 5 to 9 less Section 7 and Division 68.

The summary measures in table 8 are weighted by merchandise exports in current dollars; those in table 9, by merchandise imports in current dollars.

Table 10. Origin and Destination of Merchandise Exports

Merchandise exports are defined in the note for table 7. Trade shares in this table are based on statistics on the value of trade in current dollars from the UN and the IMF. Unallocated exports are distributed among the economy groups in proportion to their respective shares of allocable trade. *Industrial market economies* also include Gibraltar, Iceland, and Luxembourg. The summary measures are weighted by merchandise exports in current dollars.

Table 11. Terms of Trade

The *terms of trade*, or the net barter terms of trade, measure the relative level of export prices compared to import prices. Calculated as the ratio of a country's export unit value index to the import unit value index, this indicator shows changes over time in the level of export prices as a percentage of import prices. The terms of trade indexes are shown for 1970, 1979, 1981, and 1982, with 1980 = 100. The unit value indexes are from the same sources cited in table 7 for the growth rates of exports and imports.

Table 12. Commodity Trade: Volume and Prices

The *price series* are derived from the ratio of international prices to the index of prices of manufactured exports from industrialized countries. Both series are expressed in dollars; inflationary trends common to both sets of prices are consequently eliminated.

Table 13. Balance of Payments, Debt Service, and International Reserves

The *current account balance* is the difference between (a) exports of goods and services plus inflows of unrequited official and private transfers and (b) imports of goods and services plus unrequited transfers to the rest of the world. The current account estimates are primarily from IMF data files.

Interest payments are those on the disbursed and outstanding public and publicly guaranteed debt in foreign currencies, goods, or services; they include commitment charges on undisbursed debt if information on those charges was available.

Debt service is the sum of interest payments and repayments of principal on external public and publicly guaranteed debt. The ratio of debt service to exports of goods and services is one of several rules of thumb commonly used to assess the ability to service debt. The average ratios of debt service to GNP for the economy groups are weighted by GNP in current dollars. The average ratios of debt service to exports of goods and services are weighted by exports of goods and services in current dollars.

Gross international reserves comprise holdings of gold, special drawing rights (SDRs), the reserve position of IMF members in the Fund, and holdings of foreign exchange under the control of monetary authorities. The data on holdings of international reserves are from IMF data files. The gold component of these reserves is valued throughout at year-end London prices: that is, $37.37 an ounce in 1970 and $456.90 an ounce in 1982. The reserve levels for 1970 and 1982 refer to the end of the year indicated and are in current dollars at prevailing exchange rates. Because of differences in the definition of international reserves, in the valuation of gold, and in reserve management practices, the levels of reserve holdings published in national sources do not have strictly comparable significance. Reserve holdings at the end of 1982

are also expressed in terms of the number of months of imports of goods and services they could pay for, with imports at the average level for 1981 or 1982. The summary measures are weighted by imports of goods and services in current dollars.

Table 14. External Public Debt and Debt Service

The data on debt in this and successive tables are from the World Bank's Debtor Reporting System. This system is concerned solely with developing economies and does not collect data on external debt for other groups of borrowers.

External debt is defined as debt that has an original or extended maturity of more than one year, that is owed to nonresidents, and that is repayable in foreign currency, goods, or services. A distinction is made among (a) public debt, which is an external obligation of a public debtor, including the national government, a political subdivision (or an agency of either), and autonomous public bodies, (b) publicly guaranteed debt, which is an external obligation of a private debtor that is guaranteed for repayment by a public entity, and (c) private nonguaranteed external debt, which is an external obligation of a private debtor that is not guaranteed for repayment by a public entity.

The tables showing public and publicly guaranteed debt do not include data for (a) transactions with the IMF with the exception of Trust Fund Loans, (b) debt repayable in local currency, (c) direct investment, and (d) short-term debt (that is, debt with original maturity of one year or less).

External public debt outstanding and disbursed represents the amount of public and publicly guaranteed loans that have been drawn by the borrower at the end of the year, net of repayments of principal and writeoffs at year-end.

Debt from official sources comprises: (a) loans from international organizations (multilateral loans)—loans and credits from the World Bank, regional development banks, and other multilateral and intergovernmental agencies (excluded are loans from funds administered by an international organization on behalf of a single donor government, which are classified as loans from governments); and (b) loans from governments (bilateral loans)—loans from governments and their agencies (including central banks), and loans from autonomous public bodies.

Debt from private sources comprises loans from (a) suppliers (credits from manufacturers, exporters, or other suppliers of goods), (b) financial markets (loans from private banks and other private financial institutions, and publicly issued and privately placed bonds), and (c) other (external liabilities on account of nationalized properties and unclassified debts to private creditors).

Debt service is defined in the note for table 13.

Tables 15, 16, and 17. External Debt and Loans

The loans referred to in all three tables are medium- and long-term loans whose maturities exceed one year.

Interest rates, maturities, and *grace periods* are averages weighted by the amounts of loans. Interest is the major charge levied on a loan and is usually computed on the amount of principal drawn and outstanding. The maturity of a loan is the interval between the agreement date, when a loan agreement is signed or bonds are issued, and the date of final repayment of principal. The grace period is the interval between the agreement date and the date of the first repayment of principal.

Loans with a grant element of 25 percent or more are defined as *concessional*. The *grant element* of a loan is the grant equivalent expressed as a percentage of the amount committed. It is used as a measure of the overall cost of borrowing. The *grant equivalent* of a loan is its commitment value, less the discounted present value of its contractual debt service; conventionally, future debt service payments are discounted at 10 percent annually.

Tables 18 and 19. Foreign Assistance and Other Resources

Official development assistance (ODA) consists of loans and grants made at concessional financial terms by official agencies of the members of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) and members of the Organization of Petroleum Exporting Countries (OPEC) with the objective of promoting economic development and welfare. Net disbursements equal gross disbursements less payments to donors for amortization. Both bilateral ODA and disbursements from multilateral institutions are included in table 19.

Total recorded net flow of resources includes ODA grants from private agencies (private aid) and transactions at commercial terms: export credits, bilateral portfolio investment (including bank lending) by residents or institutions in DAC countries, direct investment (including reinvested earnings), and purchases of securities of international organizations active in development. Net bilateral flows exclude unallocated bilateral flows and all disbursements to multilateral institutions.

Grants, including the value of technical cooperation and assistance, are gifts in money or in kind for which no repayment is required.

The summary measures in table 18 are weighted by country population for net resource flow and ODA per capita. ODA as a percentage of GNP and ODA as a percentage of gross domestic investment are weighted by country GNP. Net bilateral ODA as a percentage of total ODA and ODA from OPEC as a percentage of net bilateral are weighted by total country ODA.

The summary measures in table 19 for total grants and technical assistance as a percentage of total ODA are weighted by total country ODA.

Table 20. Food Aid Imports

Food aid includes cereals only, and is expressed in metric tons grain equivalent. The data are for the fiscal year, extending from July 1 of the preceding calendar year and ending on June 30 of the current calendar year. The summary measures for per capita food aid are weighted by country population for the appropriate year.

Tables 21 and 22. Growth of Agriculture and Crop Production

Food includes commodities that are considered edible and contain nutrients. Nonfood comprises all inedible and/or nonnutritive agricultural commodities. Accordingly, coffee and tea are classified as nonfood because, although edible, they have virtually no nutritive value. (Note that the definition of food used here is not the same as that used in tables 8 and 9, where all beverages, regardless of nutritive value, are considered as food items.)

In table 21, summary measures for average

annual growth rate of volume of agricultural production are weighted by value added in agriculture for the end year of each period; those of growth rate of total production per capita are weighted by country population for the end year of each period.

Tables 23 and 24. Agricultural Imports and Exports

Subcategories of dairy imports are sporadically reported from one time period to the next. Thus, the corresponding rates of growth pertain only to those subcategories of dairy imports for which data are reported, and must be interpreted with caution. All data are for the calendar year.

Table 25. Population Growth and Projections

The *growth rates of population* are period averages calculated from midyear populations. The summary measures are weighted by population in 1970.

The estimates of *population* for mid-1982 are primarily based on data from the UN Population Division. In many cases the data take into account the results of recent population censuses.

The *projections of population* for 1990 and 2000, and to the year in which it will eventually become stationary, were made for each economy separately. Starting with information on total population by age and sex, fertility rates, mortality rates, and international migration rates in the base year 1980, these parameters were projected at five-year intervals on the basis of generalized assumptions until the population became stationary. The base year estimates are from updated computer printouts of the UN, *World Population Prospects by Country, 1950-2025,* and from the World Bank, the Population Council, the U.S. Bureau of the Census, and recent national censuses.

The *net reproduction rate* (NRR) indicates the number of daughters that a newborn girl will bear during her lifetime, assuming fixed age-specific fertility rates and a fixed set of mortality rates. The NRR thus measures the extent to which a cohort of newborn girls will reproduce themselves under given schedules of fertility and mortality. An NRR of 1 indicates that fertility is at replacement level: at this rate childbearing women, on the average, bear only enough daughters to replace themselves in the population.

A *stationary population* is one in which age- and sex-specific mortality rates have not changed over a long period, while age-specific fertility rates have simultaneously remained at replacement level (NRR=1). In such a population, the birth rate is constant and equal to the death rate, the age structure also is constant, and the growth rate is zero.

Population momentum is the tendency for population growth to continue beyond the time that replacement-level fertility has been achieved; that is, even after NRR has reached unity. The momentum of a population in the year *t* is measured as a ratio of the ultimate stationary population to the population in the year *t*, given the assumption that fertility remains at replacement level from the year *t* onward.

A population tends to grow even after fertility has declined to replacement level because past high growth rates will have produced an age distribution with a relatively high proportion of women in, or still to enter, the reproductive ages. Consequently, the birth rate will remain higher than the death rate, and the growth rate will remain positive for several decades. A population takes fifty to seventy-five years, depending on the initial conditions, before its age distribution fully adjusts to the changed fertility rates.

To make the projections, assumptions about future mortality rates were made in terms of female life expectancy at birth (that is, the number of years a newborn girl would live if subject to the mortality risks prevailing for the cross section of population at the time of her birth). Economies were first divided according to whether their primary school enrollment ratio for females was above or below 70 percent. In each group a set of annual increments in female life expectancy was assumed, depending on the female life expectancy in 1980-85. For a given life expectancy at birth, the annual increments during the projection period are larger in economies having a higher primary school enrollment ratio and a life expectancy of up to 62.5 years. At higher life expectancies, the increments are the same.

To project the fertility rates, the first step was to estimate the year in which fertility would reach replacement level. These estimates are speculative and are based on information on trends in crude birth rates (defined in the note

for table 26), total fertility rates (also defined in the note for table 26), female life expectancy at birth, and the performance of family planning programs. For most countries in sub-Saharan Africa total fertility rates were assumed to remain constant until 1990–95 and then to decline until replacement level was reached; for a few they were assumed to increase until 1990–95 and then to decline.

International migration rates are based on past and present trends in migration flow. The estimates of future net migration are speculative. For most economies the net migration rates were assumed to be zero by 2000, but for a few they were assumed to be zero by 2025.

The estimates of the hypothetical size of the stationary population and the assumed year of reaching replacement-level fertility are speculative. They should not be regarded as predictions. They are included to provide a summary indication of the long-run implications of recent fertility and mortality trends on the basis of highly stylized assumptions. A fuller description of the methods and assumptions used to calculate the estimates is available from the Population, Health, and Nutrition Department of the World Bank.

Table 26. Demographic and Fertility-related Indicators

The crude birth and death rates indicate the number of live births and deaths per thousand population in a year. They are from the same sources mentioned in the note for table 25. Percentage changes are computed from unrounded data.

The child death rate is the number of deaths of children (aged one to four years) per thousand children in the same age group in a given year. Estimates were based on the data on infant mortality and on the relation between the infant mortality rate and the child death rate implicit in the appropriate Coale-Demeny model life tables; see Ansley J. Coale and Paul Demeny, Regional Model Life Tables and Stable Populations (Princeton, N.J.: Princeton University Press, 1966).

The total fertility rate represents the number of children that would be born per woman, if she were to live to the end of her childbearing years and bear children at each age in accord with prevailing age-specific fertility rates. The rates

given are from the same sources mentioned in the note for table 25.

The summary measures in this table are weighted by population.

Table 27. Labor Force

The population of working age refers to the population aged fifteen to sixty-four years. The estimates are based on the population estimates of the World Bank for 1981 and previous years. The summary measures are weighted by population.

The labor force comprises economically active persons aged ten years and over, including the armed forces and the unemployed, but excluding housewives, students, and other economically inactive groups. Agriculture, industry, and services are defined in the same manner as in table 2. The estimates of the sectoral distribution of the labor force are from the International Labour Office (ILO), Labour Force Estimates and Projections, 1950–2000, and from the World Bank. The summary measures are weighted by labor force.

The labor force growth rates were derived from the Bank's population projections and from ILO data on age-specific activity rates in the source cited above. The summary measures for 1960–70 and 1970–82 are weighted by labor force in 1970; those for 1980–2000, by estimates of labor force in 1980.

The application of ILO activity rates to the Bank's latest population estimates may be inappropriate for some economies in which there have been important changes in unemployment and underemployment, in international and internal migration, or in both. The labor force projections for 1980–2000 should thus be treated with caution.

Table 28. Urbanization

The data on urban population as a percentage of total population are from the UN Patterns of Urban and Rural Population Growth, 1980, supplemented by data from the World Bank and from various issues of the UN Demographic Yearbook.

The growth rates of urban population were calculated from the World Bank's population estimates; the estimates of urban population shares were calculated from the sources cited above. Data on urban agglomeration are also from the United Nations. Because the estimates in this

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table are based on different national definitions of what is "urban," cross-country comparisons should be interpreted with caution.

The summary measures for urban population as a percentage of total population are weighted by population; the other summary measures in this table are weighted by urban population.

Table 29. Health-related Indicators

The estimates of *population per physician and nursing person* were derived from World Health Organization (WHO) data, some of which have been revised to reflect new information. They also take into account revised estimates of population. Nursing persons include graduate, practical, assistant, and auxiliary nurses; the inclusion of auxiliary nurses enables a better estimation of the availability of nursing care. Because definitions of nursing personnel vary— and because the data shown are for a variety of years, generally not more than two years distant from those specified—the data for these two indicators are not strictly comparable across countries.

The *daily calorie supply per capita* was calculated by dividing the calorie equivalent of the food supplies in an economy by the population. Food supplies comprise domestic production, imports less exports, and changes in stocks; they exclude animal feed, seeds for use in agriculture, and food lost in processing and distribution. The *daily calorie requirement per capita* refers to the calories needed to sustain a person at normal levels of activity and health, taking into account age and sex distributions, average body weights, and environmental temperatures. Both sets of estimates are from the Food and Agriculture Organization (FAO).

The summary measures in this table are weighted by population.

Table 30. Education

The data in this table refer to a variety of years, generally not more than two years distant from those specified, and are mostly from Unesco.

The data on *number enrolled in primary school* refer to estimates of total, male, and female enrollment of students of all ages in primary school; they are expressed as percentages of the total, male, or female populations of primary school age to give gross primary enrollment ratios. Although primary school age is generally considered to be six to eleven years, the differences in country practices in the ages and duration of schooling are reflected in the ratios given. For countries with universal primary education, the gross enrollment ratios may exceed 100 percent because some pupils are below or above the official primary school age.

The data on *number enrolled in secondary school* were calculated in the same manner, with secondary school age generally considered to be twelve to seventeen years.

The data on *number enrolled in higher education* are from Unesco.

The summary measures in this table are weighted by population.

Table 31. Central Government Expenditure

The data on central government finance in tables 31 and 32 are from the IMF *Government Finance Statistics Yearbook*, IMF data files, and World Bank country documentation. The accounts of each country are reported using the system of common definitions and classifications found in the IMF *Draft Manual on Government Finance Statistics*. Because of differences in coverage of available data, the individual components of central government expenditure and current revenue shown in these tables may not be strictly comparable across all economies. The shares of total expenditure and revenue by category are calculated from national currencies.

The inadequate statistical coverage of state, provincial, and local governments has dictated the use of central government data only. This may seriously understate or distort the statistical portrayal of the allocation of resources for various purposes, especially in large countries where lower levels of government have considerable autonomy and are responsible for many social services.

It must be emphasized that the data presented, especially those for education and health, are not comparable for a number of reasons. In many economies private health and education services are substantial; in others, public services represent the major component of total expenditure but may be financed by lower levels of government. Great caution should therefore be exercised in using the data for comparing economies.

Central government expenditure comprises the expenditure by all government offices, depart-

ments, establishments, and other bodies that are agencies or instruments of the central authority of a country. It includes both current and capital (development) expenditure.

Defense comprises all expenditure, whether by defense or other departments, for the maintenance of military forces, including the purchase of military supplies and equipment, construction, recruiting, and training. Also falling under this category is expenditure for strengthening the public services to meet wartime emergencies, for training civil defense personnel, and for foreign military aid and contributions to military organizations and alliances.

Education comprises public expenditure for the provision, management, inspection, and support of preprimary, primary, and secondary schools; of universities and colleges; and of vocational, technical, and other training institutions by central governments. Also included is expenditure on the general administration and regulation of the education system; on research into its objectives, organization, administration, and methods; and on such subsidiary services as transport, school meals, and medical and dental services in schools.

Health covers public expenditure on hospitals, medical and dental centers, and clinics with a major medical component; on national health and medical insurance schemes; and on family planning and preventive care. Also included is expenditure on the general administration and regulation of relevant government departments, hospitals and clinics, health and sanitation, and national health and medical insurance schemes.

Housing and community amenities, and social security and welfare cover (a) public expenditure on housing, such as income-related schemes; on provision and support of housing and slum clearance activities; on community development; and on sanitary services; and (b) public expenditure for compensation to the sick and temporarily disabled for loss of income; for payments to the elderly, the permanently disabled, and the unemployed; and for family, maternity, and child allowances. The second category also includes the cost of welfare services such as care of the aged, the disabled, and children, as well as the cost of general administration, regulation, and research associated with social security and welfare services.

Economic services comprise public expenditure associated with the regulation, support, and

more efficient operation of business, economic development, redress of regional imbalances, and creation of employment opportunities. Research, trade promotion, geological surveys, and inspection and regulation of particular industry groups are among the activities included. The five major categories of economic services are fuel and energy, agriculture, industry, transport and communication, and other economic affairs and services.

Other covers expenditure for the general administration of government not included elsewhere; for a few economies it also includes amounts that could not be allocated to other components.

Overall surplus/deficit is defined as current and capital revenue and grants received less total expenditure less lending minus repayments.

The summary measures for the components of central government expenditure are weighted by central government expenditure in current dollars, those for total expenditure as a percentage of GNP and for overall surplus/deficit as a percentage of GNP are weighted by GNP in current dollars.

Table 32. Central Government Current Revenue

Information on data sources and comparability is given in the note for table 31. Current revenue by source is expressed as a percentage of total current revenue, which is the sum of tax revenue and current nontax revenue, and is calculated from national currencies.

Tax revenue is defined as all government revenue from compulsory, unrequited, nonrepayable receipts for public purposes, including interest collected on tax arrears and penalties collected on nonpayment or late payment of taxes. Tax revenue is shown net of refunds and other corrective transactions. *Taxes on income, profit, and capital gain* are taxes levied on the actual or presumptive net income of individuals, on the profits of enterprises, and on capital gains, whether realized on land sales, securities, or other assets. *Social Security contributions* include employers' and employees' social security contributions as well as those of self-employed and unemployed persons. *Domestic taxes on goods and services* include general sales, turnover, or value added taxes, selective excises on goods, selective taxes on services, taxes on the use of goods or property, and profits of fiscal monopolies. *Taxes on international trade and trans-*

actions include import duties, export duties, profits of export or import marketing boards, transfers to government, exchange profits, and exchange taxes. *Other taxes* include employers' payroll or manpower taxes, taxes on property, and other taxes not allocable to other categories.

Current nontax revenue comprises all current government revenue that is not a compulsory nonrepayable payment for public purposes.

Proceeds of grants and borrowing, funds arising from the repayment of previous lending by governments, incurrence of liabilities, and proceeds from the sale of capital assets are not included.

The summary measures for the components of current revenue are weighted by total current revenue in current dollars; those for current revenue as a percentage of GNP are weighted by GNP in current dollars.

Bibliography of Data Sources

National accounts and economic indicators	*A System of National Accounts*. New York: UN Department of International Economic and Social Affairs, 1968. *Statistical Yearbook*. New York: UN Department of International Economic and Social Affairs, various issues. *Draft Manual on Government Finance Statistics*. Washington, D.C.: IMF, 1974. *Production Yearbook*, 1973 and 1982. Rome: Food and Agriculture Organization, 1975 and 1984. World Bank data files. FAO, IMF, and UNIDO data files. National sources.
Energy	*World Energy Supplies*. UN Statistical Papers, Series J, various numbers. New York: UN Department of International Economic and Social Affairs, various years. World Bank data files.
Trade	*Direction of Trade*. Washington, D.C.: IMF, various issues. *International Financial Statistics*. Washington, D.C.: IMF, various issues. *Handbook of International Trade and Development Statistics*. New York: UN Conference on Trade and Development, various issues. *Monthly Bulletin of Statistics*. New York: UN Department of International Economic and Social Affairs, various issues. *Yearbook of International Trade Statistics*. New York: UN Department of International Economic and Social Affairs, various issues. United Nations trade tapes.
Balance of payments, capital flows, and debt	*Balance of Payments Manual*. 4th ed. Washington, D.C.: IMF, 1977. IMF balance of payments data files. *Development Co-operation*. Paris: OECD, various annual issues. *Geographical Distribution of Financial Flows to Developing Countries*, 1970–79 and 1979–82. Paris: OECD, 1980 and 1984. World Bank Debt Reporting System.

Population   *Demographic Yearbook*. New York: UN Department of International Economic and Social Affairs, Statistical Office, various issues.

Population and Vital Statistics Report. New York: UN, various quarterly issues.

Preliminary Report 1983. New York: UN Department of International Economic and Social Affairs, Population Division, 1983.

World Population: 1983. Washington, D.C.: U.S. Bureau of the Census, International Statistical Programs Center, 1983.

World Bank data files.

Labor force   *Labour Force Estimates and Projections, 1950–2000*. 2d ed. Geneva: ILO, 1977.

International Labour Office tapes.

World Bank data files.

Social indicators   *Demographic Yearbook*. New York: UN Department of International Economic and Social Affairs, various issues.

Statistical Yearbook. New York: UN Department of International Economic and Social Affairs, various issues.

Statistical Yearbook. Paris: Unesco, various issues.

World Health Statistics Annual. Geneva: WHO, various issues.

World Health Statistics Report. Special Issue on Water and Sanitation, vol. 29, no. 10. Geneva: WHO, 1976.

Government Finance Statistics Yearbook, vol. 7, 1983. Washington, D.C.: IMF, 1983.

World Bank data files.

The World Bank

Headquarters:
1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

Telephone: (202) 477-1234
Telex: WUI 64145 WORLDBANK
       RCA 248423 WORLDBK
Cable address: INTBAFRAD
               WASHINGTONDC

European Office:
66, avenue d'Iéna
75116 Paris, France

Telephone: (1) 723-54.21
Telex: 842-620628

Tokyo Office:
Kokusai Building
1-1, Marunouchi 3-chome
Chiyoda-ku, Tokyo 100, Japan

Telephone: (03) 214-5001
Telex: 781-26838

0-8213-0423-2