

SUMMARY

African Development Report 1999

Introduction

The *African Development Bank Report 1999* reviews the recent economic developments in Africa at both the macroeconomic and sectoral levels, and provides an African perspective of the impact of the global financial crisis on the continent. This year's report focuses on the role of infrastructure in economic development and explores the strategies and policies needed to improve infrastructure services so as to pursue the twin goals of accelerating economic growth and reducing poverty. In addition, it provides the main economic and social statistics

on Africa. The summary highlights the main aspects of the report.

The African Economy in 1998

In 1998, the world suffered a financial crisis. Despite this, economic growth in Africa was estimated at 3.2 per cent, compared with 3.4 per cent in 1997 and the recent 1996 peak of 5.5 per cent (Table 1, Figure 1). Africa's major commodity exports were adversely affected by the slowdown in the global economy emanating from the Asian

Table 1: Africa: Macroeconomic Indicators, 1990- 1998

Indicators	1990	1995	1996	1997	1998
1. Real GDP Growth Rate	2.5	2.9	5.5	3.4	3.2
2. Real Per Capita GDP Growth Rate	-0.3	0.2	2.7	0.7	0.6
3. Inflation (%)	17.0	33.0	25.1	13.7	12.0
4. Investment Ratio (% of GDP)	22.0	20.0	18.9	18.7	20.0
5. Fiscal Balance (% of GDP)	-4.3	-3.0	-2.5	-1.8	-2.7
6. Growth of Money Supply (%)	20.1	22.6	18.4	15.8	12.4
7. Export Growth, volume (%)	4.8	9.2	8.1	4.4	-0.7
8. Import Growth, volume (%)	4.8	7.3	3.2	7.9	4.8
9. Terms of Trade (%)	5.0	-0.6	2.5	1.5	-5.7
10. Trade Balance (\$ billion)	7.1	-4.6	4.4	2.2	-11.4
11. Current Account (\$ billion)	-8.9	-13.5	-4.4	-4.2	-19.0
12. Current Account (% of GDP)	-1.9	-2.7	-0.8	-0.8	-3.4
13. Debt Service (% of Exports)	21.9	23.0	22.2	18.8	22.5

Source: ADB Statistics Division and IMF.

Figure 1: Africa: Major Economic Indicators, 1990-1998



financial crisis in 1997, and deepened as a result of economic difficulties in Russia and Brazil in 1998. Slowed African economic growth resulted from reduced export volumes and particularly from lower prices.

The global financial and economic crisis coincided with signs of economic recovery in Africa from the stagnation of the early 1990s. The recovery had been driven partly by the significant progress towards greater macroeconomic stability, and by improved resource allocation thanks to the implementation of macroeconomic policy and structural reforms in most countries of the region.

Although real output growth barely kept pace with the population increase in 1998, the positive trend in per capita income since the mid-1990s was sustained. Most African countries have experienced positive per capita growth of 1-2 per cent a year and more than half have recorded per capita income growth above 2.5 per cent. This marginal increase notwithstanding, the substantial income losses and impoverishment of the preceding two decades were not redressed.

Diverse Economic Performance

Although the region as a whole grew, the 53 member countries experienced unequal growth. Energy and metal exporters suffered the brunt of the Asian crisis, however oil is the continent's main export commodity and oil exporters were particularly hard hit by the 32 per cent fall in fuel prices. Ten major or significant net oil exporters — Algeria, Angola, Cameroon, Congo Brazzaville, Egypt, Gabon, Equatorial Guinea, Libya, Nigeria and Tunisia — account for 42 per cent of regional GDP although their dependence on oil exports varies from as little as 10 per cent in Tunisia to 98 per cent in Nigeria.

The terms of trade for the oil exporters deteriorated some 25 per cent during 1998, reflecting weak demand and the steep price drop. Oil revenues were, therefore, down 25 to 30 per cent. Although net oil-importing African countries benefited from falling import costs, the region was a net loser in terms of output and revenue.

A difficult domestic economic environment in some countries compounded the severity of petroleum export losses. Economic growth of just 1.5 per cent in Nigeria, Africa's second largest economy, was only half that of the previous year reflecting political uncertainty and continued domestic energy crisis, which seriously hampered the transport and industrial sectors. The prospects for improved governance in Nigeria's economic management and political reforms, which began in the second half of the year, are expected to remove uncertainties that dissuade investors and to facilitate higher economic growth once energy prices recover.

The poor performance of the major oil exporters coupled with the near-stagnation in South Africa, the region's largest economy (over 23 per cent of total GDP) weighed heavily on overall regional growth. South Africa's GDP rose only 0.2 per cent compared with 1.7 per cent in 1997. Its relatively greater financial integration into the global economy meant that South Africa was more seriously affected by the financial crisis in emerging markets. Authorities were forced to increase interest rates to try and stem capital outflows and to support the South African *rand*. Prime overdraft rates soared to 25.5 per cent but were reduced at the end of the year. The scope for further reductions will be limited by a weak balance of payments in 1999, however. Exports fell 14 per cent in dollar terms during the first nine months of 1998, reflecting weak international demand and

falling prices for commodities, including gold. Manufactured exports, which constitute more than a third of total exports, about 20 per cent of which go to Asian countries, were adversely affected by the currency depreciation in Asia and by slower regional growth and currency weakness in Southern Africa. Mining production was adversely affected by the fall in metal prices, and gold production continued to contract.

Several countries continued to reap the benefits of economic policy reforms, which have propelled growth rates higher than the regional average. Those countries which have consistently grown at 5 per cent a year or more in the past four years include: Botswana, Côte d'Ivoire, Egypt, Equatorial Guinea, Mali, Mauritius, Mozambique, Senegal, Tunisia and Uganda. The payoff from recent policy reforms has enabled Egypt, the largest economy in the group, to maintain a GDP growth rate of 5 per cent annually for the past three years while Cote d'Ivoire grew at 6 per cent annual rate during the same period.

Conversely, countries with domestic policy slippage experienced slower growth. In Zimbabwe, real GDP growth slowed from 7.3 per cent in 1996, and from 3.2 per cent in 1997 to 0.8 per cent in 1998. Sharply increased interest rates, and a falling exchange rate negatively affected investment and consumption. In Zambia, the erosion of confidence caused by ongoing delays in privatizing the remaining state-owned copper mines, together with sharp falls in copper prices, affected investment and growth.

Societal conflicts continued to undermine economic performance in Congo (DRC), Eritrea, Ethiopia, Guinea Bissau, Lesotho, and Sierra Leone. A broadened conflict in Congo (DRC) became a major concern given the broader impli-

cations for regional stability. Conflicts have resulted in massive exoduses, associated refugee problems, lost productive capacity and dilapidated socio-economic infrastructure: their social and economic costs in these and surrounding countries are huge. Economic recovery and sustained growth can only begin once political and social stability are restored, life and property are secure, and good governance is established. Mozambique's robust economic performance since the end of its protracted civil war highlights the economic and social benefits of peace and stability.

Domestic Savings and Investment

Sustained economic growth in the region depends on more robust investment performance. The median investment ratio in 1998 was 20 per cent, virtually the same level in 1997. But investment is recovering slowly from the prolonged trough of the 1980s: 24 countries had investment ratios of 20 per cent and above, compared with less than 15.7 per cent at the beginning of the decade. More significantly, 15 of these countries had investment ratios of over 25 per cent in 1998 — double the number reported in 1990.

Regional investment and growth continue to be constrained by very low domestic savings rates which averaged 17 per cent (of GDP) in the late 1990s, compared with an average of 20 per cent in 1990. However, despite this broadly weak savings performance, some countries — Algeria, Angola, Botswana, Mauritius, Equatorial Guinea, Gabon, Lesotho, Namibia and Tunisia — recorded better-than-average performance.

Macroeconomic Policy Developments

The macroeconomic environment, a major deterrent to past investment and growth, has improved significantly. Budget deficits remain below 3 per cent on average, although the mean deficit increased to 2.7 per cent of GDP in 1998, compared with 1.8 per cent in 1997. Shortfalls in export revenues largely explain this drop. However, the recent overall improvement in fiscal and monetary policies held up well across the region, and many countries recorded single-digit inflation rates. In South Africa, despite the weak currency, inflation remained at 6.1 per cent. Zimbabwe and Malawi experienced major reversals, however, consumer prices rose 27 and 17.5 per cent respectively.

Angola's fiscal deficit rose from 16.8 per cent to 20.3 per cent of GDP as a result of sharply lower oil prices, a resumed civil war and the conflict in the neighboring DRC. Today, Angola spends no less than 40 per cent of its budget on defense. Security expenditure was also very high in conflict-affected Burundi (23 per cent of budget), Rwanda (16 per cent) and Lesotho (11 per cent). In Congo (DRC), the budget deficit remained at an unsustainably high 11 per cent of GDP, again reflecting the impact of military spending. Nonetheless, fiscal consolidation generally continues in the region.

Money supply rose by only 12.4 per cent in 1998, a remarkable policy development despite the severe pressure on the fiscal balance from adverse revenue shocks. Growth in broad money supply (M2) was less than half the 35.5 per cent recorded in 1994 under more favorable revenue conditions. Central banks in most African countries have put an end to the stereotype of loose monetary policy

that characterized most African economies during the 1980s and early 1990s. However, to consolidate the recent monetary policy gains illustrated by reduced excess liquidity in the economy and other financial market reforms, central banks in the region must have greater independence to effectively fulfil their monetary functions.

Currency depreciation in nominal terms ranged from almost 2 per cent in Algeria to 64 per cent in Malawi, with only marginal drops in North African countries and in the CFA franc. Zimbabwe, Sierra Leone, and Burundi recorded large exchange rate falls of 63, 58 and 32 per cent respectively. Despite the fierce mid-year attack on the South African *rand* as a result of the crisis in emerging markets, the currency lost only 10 per cent of its value against the dollar during 1998. The Nigerian *naira* remained stable for most of the year, but is expected to weaken in 1999 because of weak oil prices and the abolition of the dual exchange rate, a policy move which will bring greater transparency to government accounts and pave the way for resumed lending by International Financial institutions. The launch of the Euro will impact on foreign exchange markets, trade and financial transactions in the region, and even more so in the CFA Zone and North Africa because of closer EU economic and business links [Box 1].

External Trade and Finance

After rapid growth in the mid-1990s, export expansion lost momentum in 1998 as a result of weakened global demand for primary commodities, particularly oil, linked to the East Asian crisis. Merchandise exports fell 9.1 per cent to \$117.8 billion contrasted with the robust expansion of 1994-1997, when exports increased by an average

Box 1: Africa and the Euro-Zone

Africa has traditionally had strong economic and business ties with Europe which is the continent's main trading partner, buying 57 per cent of Africa's exports and supplying 60 per cent of its imports. EU states are also the main source of capital inflows — foreign direct investment and bilateral aid. The introduction of the Euro on January 1, 1999, is set to further deepen these relationships. Strong growth in Europe as a result of a stable Euro will boost Africa's exports and therefore growth. Faster growth in Europe will increase the demand for Africa's produce, which includes a variety of primary agricultural and mineral commodities to Europe, such as cocoa, coffee, oil and other minerals.

Europe is the principal source of investment flows to Africa, mostly due to reasons of geographical proximity, historical ties — most African countries are former colonies of European countries — and recent trade agreements such as Lomé, EU-Morocco and EU-Tunisia Trade Pacts, and the on-going discussions between South Africa and the EU. France and the UK are principal investors in Africa, accounting for 88 per cent of West European investment to Africa. The development of a single financial market may push investment towards emerging markets, including Africa, as European investors try to diversify beyond Europe's single borders. The currency area will create a much larger, deeper and more liquid capital market, which should reduce the costs of borrowing capital for those countries wishing to raise Euro-denominated funds. It will also simplify the international payment mechanism by providing one foreign exchange rate where previously there were eleven.

The advent of the Euro has particular significance for Franc Zone countries which, because of their special relationship with France, stand to benefit from increased trade and investment. The establishment of a fixed parity link between the CFA franc and the Euro, via the existing link between the French franc and the CFA franc, may well have positive implications for both trade and investment flows:

- An enlarged and dynamic EU market, which already accounts for some 50 per cent of CFA Zone exports, would increase the demand for Franc Zone products.
- The link with the Euro will mean a more stable CFA exchange rate thereby reducing price volatility and inflation, encouraging increased foreign investment by

European companies and improving access to global capital markets by broadening the freedom of capital movement that already exists between the Franc Zone and France to all EU states.

- A strong Euro should reduce the stock of debt of Franc Zone countries, which is denominated in US dollars.

The main potential disadvantage of a fixed parity link with the Euro is the relative appreciation of the CFA franc that would occur should the Euro harden against other major currencies such as the dollar and the yen. This could have seriously adverse implications for Franc Zone exporters should competitor currencies depreciate against the Euro. The CFA countries might find themselves struggling to compete with lower-cost exports from developing countries with more competitive exchange rates. This is a particular danger in the light of the steep devaluation by Asian economies in 1997/98.

To remain competitive while being tied to the Euro, Franc Zone economies will have to ensure that inflation is relatively similar to that in the EU and that similar rates of productivity growth are achieved. If inflation rates exceed those in the EU and productivity growth is significantly lower — both of which are very real possibilities — the fixed link with the Euro could undermine Franc Zone competitiveness in global markets.

While a strong Euro would help reduce inflation in the Franc Zone by keeping import costs down, it will tend to encourage imports and discourage exports, which will impact negatively on the trade and current account balances.

The emergence of the Euro as a major currency in which foreign exchange reserves can be held has ramifications on reserve composition and on foreign exchange management by African central banks. At present the US dollar is the main currency in which most central banks hold their foreign exchange reserves. As the Euro gains ground to become an international currency, African countries, given their close trade relationship with Europe, are likely to diversify their foreign exchange reserves. While such a diversification may not have apparent economic effects, it means that African central banks need to prepare for it by strengthening their foreign reserve and portfolio management.

of 8.6 per cent. Export volumes were down marginally (0.7 per cent) after increases of almost 4 per cent in 1997, and a peak of 9 per cent in 1995. Imports grew slightly to \$129.18 billion; lower domestic economic growth accounts for much of the weakened import demand.

The terms of trade deteriorated significantly by 5.7 per cent compared with an improvement of 1.5 per cent in 1997 and a recent peak of 2.5 per cent in 1996. The poor showing resulted in a trade deficit of \$11.4 billion after a surplus of \$2.2 billion in 1997. The current account deficit, estimated at \$19.0 billion or 3.4 per cent of GDP reflects the widening trade gap and an increased deficit in net services. It was financed by non-debt-creating capital inflows that rose by 8.2 per cent to \$14.3 billion in 1998, while capital transfers almost doubled to \$7.0 billion. Net external borrowing almost tripled to \$4.3 billion, while net borrowing from official creditors at \$3 billion reversed the net outflow of \$2.9 billion in 1997 (Table 2).

Africa's external debt stock, the bulk of which is owed to official creditors, decreased to \$309 billion from \$314.7 billion in 1997. External indebtedness remains high: the external debt averages half of GDP, and almost two and half times exports. Approximately one quarter of total export proceeds was devoted to servicing external debt. Some low-income African countries could increase their indebtedness because of due to declining terms of trade and the possible loss of market shares in primary commodities after East Asian countries adjust their exchange rates to make them more competitive.

The Heavily Indebted Poor Country (HIPC) initiative, sponsored by the international community, is designed to promote far-reaching economic and social reforms in eligible countries and to al-

low a reduction of debt burdens to sustainable levels. The initiative is addressing the debt problem in some measure. It is particularly significant for the African Development Bank Group, as 33 of the 41 heavily indebted poor countries are in Africa. Uganda reached its completion point in 1998 and ADB delivered debt relief of US\$22 million. The Bank also committed debt relief on reaching completion point to Burkina Faso, Côte d'Ivoire, Mozambique and Mali.

Although Africa was largely bypassed by the 1990s surge in private capital flows to developing countries and although the continent's share remains small, the climate for foreign direct investment (FDI) has improved in recent years. In 1998, FDI flows grew by some \$200 million to \$7.1 billion. Moreover, with the exception of South Africa, and to a lesser extent Egypt, and Zimbabwe, other African stock markets avoided the worst of the financial crisis and attracted foreign and local investors for a substantial part of the year [Box 2]. Ghana's stock exchange index more than doubled in dollar terms in the first quarter of the year. Although equity prices fell back subsequently, dollar returns on the Ghana market were up 63 per cent over the year while *cedi* returns rose 70 per cent. Botswana's stock exchange index rose 32 per cent at its peak but profit taking resulted in selling pressures on both markets in the second half of the year. Investors were also attracted to the new regional market that opened in Abidjan in the second half of 1998. Returns on the Moroccan stock exchange rose 26 per cent in dollar terms. In Mauritius and Tunisia they were up 6 per cent.

Kenya's market was down 3.5 per cent in dollar terms, little changed over the year. Nigeria, however, suffered from combined weak oil prices and the political uncertainties concerning the return to civilian rule. Dollar returns were down

Table 2: Africa: Balance of Payments Summary and Current Account Financing, 1990-1998
(\$ billion)

	1990	1995	1996	1997	1998 ^{a/}
Balance of Payments Transactions					
Exports (f.o.b.)	104.7	115.0	125.7	129.6	117.8
Imports (f.o.b.)	97.6	119.6	121.2	127.4	129.2
Trade Balance	7.1	-4.6	4.4	2.2	-11.4
Net Services	-8.9	-8.6	-6.7	-7.1	-8.6
Net Factor Income	-22.5	-15.9	-17.1	-15.3	-15.5
Current Transfers	15.4	15.6	15.0	16.0	16.4
Balance on Current Account^{b/}	-8.9	-13.5	-4.4	-4.2	-19.0
Balance on Capital Account ^{c/}	15.5	2.0	5.8	3.6	7.0
Balance on Financial Account ^{d/}	1.7	12.3	4.3	-2.5	14.2
Current Account Financing					
Current Account Balance ^{b/}	-8.9	-13.6	-4.4	-4.2	-19.0
Capital Outflows ^{e/}	-14.2	-6.6	-12.2	-9.7	0.7
Financing Requirements	23.1	20.1	16.5	13.9	18.3
Non-Debt Creating Flows, Net	16.9	7.8	12.2	13.2	14.3
Capital Transfers	15.5	2.0	5.8	3.6	7.0
Direct Investment	2.7	4.9	5.7	8.0	7.2
Net Credit and Loans from IMF	-0.6	0.7	0.5	-0.5	-0.4
Net External Borrowing	6.8	11.7	3.9	1.2	4.3
From Official Creditors	-1.1	6.9	6.1	-2.9	3.0
From Banks	0.1	1.4	-1.3	-0.4	3.2

- Notes:
- a/ Estimates.
 - b/ Current Account refers to trade balance, net services, net factor income, and current transfers payments.
 - c/ Capital Account refers to capital transfers and acquisition/disposal of non-produced, nonfinancial assets.
 - d/ Financial Account refers to direct investment, portfolio investment and other investment transactions.
 - e/ Recorded asset transactions, which pertain mostly to export credits, and errors and omissions, which are taken to be a measure of capital flight.

Source: Adapted from IMF Research Department, December (1998), and based on the methodology of the fifth edition of the Balance of Payments Manual.

Box 2: Global Financial Crisis: An African Perspective

In 1998, the world economy continued to suffer from the financial crisis that started in Asia, but later spread to other parts of the globe. The impact of the global financial crisis on African economies operated through two main channels: finance and trade.

On the trade side, the main brunt of the financial crisis was felt by energy and metal exporters, with oil exporters being particularly hard hit by the 28 per cent fall in fuel prices. Oil-exporter terms of trade deteriorated some 25 per cent during 1998, reflecting weak demand and the steep fall in energy prices. As a consequence, revenues from oil exports were down 25 to 30 per cent. Although net oil-importing African countries benefited from the falling import costs, overall the region was a net loser in terms of output and revenue.

In particular, Africa's exports to Asia - mainly minerals, fuels and related material, which account for 38 per cent of total African exports to Asia; food, beverages and tobacco, accounting for 19 per cent; and crude materials excluding oil with a share of 18 per cent - have suffered a decline. Between June 1997 and January 1998 copper prices fell 33 per cent, mainly reflecting reduced demand in Asian markets with adverse implications for countries such as Zambia which depend on copper for foreign exchange earnings.

Also as a result of, among other factors, the depreciation of Asian currencies, Africa's export market share is under threat from the intensified price competition in third markets for primary products arising from the Asian crisis. African countries encounter fierce competition from Asian producers in key primary commodity markets such as cocoa beans, timber, rubber, coffee and tea. In cocoa beans, Africa's global market share fell 20 percentage points between 1970 and 1993 while Asia increased its share by virtually the same amount. As a result of the major depreciation of their currencies, Asian countries have become even more price-competitive, increasing their exports and export market shares at Africa's expense.

On the finance side, the financial crisis has also led to a reduction in net private capital flows to emerging markets as a whole, estimated at about 30 per cent. Within Africa, South Africa bore the brunt of the decline, with non-resident holders of South African bonds pulling out of the foreign exchange market as from the second quarter of 1998. Moreover, with several countries forced to raise their interest rates to curtail capital outflows, offshore borrowing in international capital markets will become both more difficult and more expensive, especially in countries like Egypt, Morocco and South Africa.

While South Africa, and to a lesser extent Egypt and Morocco, followed the trend in other emerging markets, many securities exchanges in Africa avoided the worst of the financial crisis and attracted investors for a substantial part of the year. Sub-Saharan African equity markets, excluding South Africa, declined by 14 percent compared to a 22 percent decline in the IFC merging markets global index.

Although Africa is less integrated to the world financial system compared with other regions, the crisis erupted at a time when Asian investment flows to Africa, especially in telecommunications, mining and energy, were beginning to increase. For example, Telekom Malaysia recently bought a 30 per cent of its stake for \$38 million in Ghana Telephone Company. And in South Africa, Telekom Malaysia also teamed up with SBC Communications of the United States to form a joint venture to buy a 30 per cent share in the state-owned Telkom for \$1.3 billion. However, as a result of the crisis, there is concern that the economic crisis in Asia might cause Asia's major investors in Africa to look inward in an attempt to consolidate their financial position and, hence reduce their business with Africa. Overall, Africa remains vulnerable because FDI flows to the continent are concentrated in primary commodity sectors such as oil, minerals and metals, which have been particularly hard hit by the crisis.

As private capital comes to play a greater role in African economic development, macroeconomic policy will have to heed the lessons of the Asian crisis. Four main lessons stand out in the financial sector:

- Sound debt management is paramount. The Asian crisis could prove beneficial to the extent that it encourages sovereign states to pursue more disciplined debt policies to safeguard their credit standing and minimize uncertainty.
- Financial institutions must be strengthened. Asia's recent experience underscores the need for greater transparency and effectiveness in supervising and regulating banks and financial institutions.
- A weak, poorly supervised domestic financial sector can have adverse repercussions on sovereign credit ratings and national creditworthiness.
- The strength of local financial institutions and the adequacy of regulatory supervision and transparency are important for financial and macroeconomic stability. In this regard, Kenya, Nigeria, Uganda, Zambia and Zimbabwe have taken measures to close down some underperforming financial institutions to prevent a systemic banking crisis.

21 per cent. In South Africa, the Asian contagion and sharply higher interest rates lowered local returns by 12 per cent. The Namibian stock exchange dropped by 35 per cent in local currency, and by 47 per cent in dollar terms. Deterioration in macroeconomic fundamentals weighed heavily on the stock exchange in Zimbabwe, which in 1996 had been one of the best performing emerging markets. Local currency returns fell 11 per cent, but dollar returns declined 55 per cent. Despite these declines, the region was ahead of the emerging markets sector as a whole. Sub-Saharan African equity markets, excluding South Africa, declined by 14 per cent compared with a 22 per cent drop in the IFC emerging markets global index.

Sectoral Developments

Agriculture accounts for more than a third of regional GDP. It remains the dominant influence on economic performance in most African economies. Moreover, most poor people live in rural areas, and depend on the rural economy for their livelihood. Agricultural performance therefore has far-reaching implications for food security, poverty reduction and income generation. Thanks to favorable weather conditions, agriculture was the main contributor to growth during the year. Agricultural value-added increased by 3.9 per cent, a major improvement on the meager 0.9 per cent growth in 1997. The threat posed early in the year by the El Nino did not materialize: the broad-based agricultural production expanded by 2.4 per cent in 1998.

Industrial production remained weak. Manufacturing continuing to contribute less than 15 per cent of GDP in most countries. Sector restructuring and recent regional reform measures have led to some deindustrialization and the continent's

share of global manufacturing value-added (MVA) continues to decline. Growth in manufacturing production slowed to 2.9 per cent, down from 3.7 per cent in 1997. The process of industrial modernization continues, but African industrial production performance remains weak and inadequate to achieve the rapid growth needed to rapidly reduce poverty and unemployment.

Africa's major mining products include gold, diamonds, copper, nickel, zinc, bauxite, lead and cobalt. Their output fell in 1998 due to weak demand for minerals particularly, in the major consuming countries of East Asia. This adversely affected output and investment prospects in the major mineral-producing countries of South Africa, Zimbabwe, Congo (DRC), Zambia, Botswana, Namibia and Ghana. Mineral and metal prices fell by 12.1 per cent to their lowest levels since the late 1980s.

International mining groups nevertheless continue to show enormous interest in the region as more than 30 African countries have made sweeping improvements to their mining codes in recent years. Many countries have streamlined or abolished foreign ownership restrictions that previously deterred investors and developers. Privatization has also opened the door to enhanced foreign participation and investment. Spending on mining exploration in the region has accelerated rapidly in the 1990s. In 1998, Africa was the second most favored region, having obtained approximately 17.4 per cent of the estimated \$3.5 billion spent on non-ferrous mineral exploration worldwide. South Africa, Tanzania and Ghana together received more than one-third of the total regional exploration spending.

The world oil market crisis forced Africa's major oil exporters to cut back on production and exports. Despite the short-term gloomy market outlook, investment in the sector is picking up in

both old and new areas. Over the next two decades, an estimated \$40-60 billion may be spent in the region. Algeria plans also to increase the value-added of its hydrocarbons output by diversifying into petrochemicals.

Investment in upstream development in oil and gas has increased dramatically in Angola. New deepwater offshore discoveries in the past two years have added 7 billion barrels to recoverable reserves. Gas exploration and development is also increasing in a number of countries. Nigeria's long-awaited 5.7 billion metric-tons-per-year LNG project is expected to yield annual export revenues of \$1 billion after it comes on stream in 1999. This plant finally brings to completion a project that has been on the drawing board for 30 years.

In the services sector, value-added increased by 3.5 per cent. Tourism is becoming increasingly important in a handful of countries, mostly in East, North and Southern Africa. The leisure industry is one of the fastest-growth sectors in the global economy and many African economies are increasingly well positioned to exploit this situation. Egypt, Morocco, Tunisia, the Indian Ocean islands, Kenya, Tanzania, Namibia, Mozambique, South Africa and Zimbabwe constitute the continent's principal tourist centers.

The medium-term outlook

The African economy is projected to grow at about 3.4 per cent in 1999, although the medium term performance is expected to improve. This projection is contingent on a favorable external environment and a resumption of moderate growth in Japan and other Asian countries. It is, however, subject to several downside risks: adverse climatic conditions, the failure to recapitalize Africa, policy reversals, and ongoing civil conflicts.

Improved performance is welcome but it still falls well short of the continent's needs and potential. Africa approaches the turn of the century with almost half of its population living in absolute poverty, and about 30 per cent classified as extremely poor, living on less than \$1 a day. Moreover, Africa is one of the few regions where per capita incomes have fallen over the past 20 years. In 1980, Africa's GNP per capita was \$770; by 1997, despite three years of economic recovery, it stood at only \$677. As the population grows by 2.8 per cent annually, the number of people living in poverty continues to increase.

Given current rates of population growth, studies indicate that Africa needs to achieve sustained economic growth of some 7 per cent a year to arrest and reverse the spread of unemployment and poverty. Clearly, the minimum growth necessary to reduce poverty far exceeds the growth rates achieved by all but a few African countries, even during the current recovery. Achieving such growth would require enhancing the magnitude and productivity of investment, especially by deepening reforms; promoting the development of the private sector to generate sustained investments; building human capital; and addressing the foundations of development including gender mainstreaming, environmental care and the pursuit of good governance.

Infrastructure and Development

Africa's major development challenges relate to the acceleration of economic growth and to the reduction of poverty. The potential significance of economic infrastructure in the process of economic growth has long been recognized. Infrastructure is both a final good providing services directly to consumers and an intermediate input

that enters into the production of other sectors and raises the productivity of factors employed there. The availability of an efficient infrastructure network can stimulate new investment in other sectors. By efficiently moving goods and services to where they can be used most effectively, transport adds value and spurs growth. The provision of power makes it possible to use modern technologies and processes. Developing regionally-focused infrastructure projects assists in increasing project size. Larger scale economies will attract private investment and make it possible to develop transport networks, telecommunication, power, and markets that sustain an expanding private sector.

Regional and international trade are central to the process of economic growth. This cannot be overemphasized. Export performance determines the limit to which investments and growth can expand without encountering balance of payments and debt repayment problems. But regional and international competition depends especially on the availability of adequate and efficient infrastructure. Infrastructure development is a major determinant of price and non-price competitiveness in international markets. It is an intermediate input, so the low cost and high quality of any form of infrastructure service will tend to improve price competitiveness. In addition, by improving communication between exporters and importers, and allowing the timely and safe delivery of goods, infrastructure can improve non-price competitiveness.

High transport costs for moving goods between countries means that there are significant natural barriers to regional trade within the region. Prices for similar goods can therefore differ significantly from country to country, even after import tariffs on intra-regional trade have been lowered. Geography explains this to some measure:

Africa has many large landlocked economies. The slow, high cost transport network explains another part of this problem. Additionally, there is evidence for relatively high transit transport costs across, which represent a barrier to exports, and also high international transport costs paid by African exporters. For instance, a study on exports to the US found that freight charges as a proportion of *cif* value are higher by about 20 per cent on average for African exports than for similar goods from other low-income countries. In effect, the international freight charges facing African exporters are a significantly greater source of protection for US producers than are the remaining US import tariffs.

Power supply in many African countries is known for its unreliability and high cost. This is yet another constraint on production efficiency and competitiveness since unreliable power can lead to production interruptions, loss of perishable goods, damage to sensitive equipment, and lost orders. A survey of small firms in Ghana in the early 1990s cited power outages, transportation costs, and other infrastructure problems among the top four problems of operation by small firms. A survey of manufacturing establishments in Nigeria also reported that total expenditure on all types of infrastructure averaged 9 per cent of variable costs: electric power took half of this share.

There is also strong evidence that Africa's inadequate export performance is closely related to weak price and non-price competition in international markets, due mainly to high transportation costs and inefficient export-servicing facilities. These, together with other factors, resulted in the displacement of Africa's exports by newly and relatively efficient suppliers from other regions. Africa's total share in international trade declined from 5.9 per cent in 1980 to an estimated 2 per cent in the late 1990s. About 25 per cent of this

decline was attributed to weak price competitiveness, and the remainder to non-price factors, that affect a country's market share, including infrastructure services and the flow of trade information.

The competition for private capital in the face of declining public flows is yet another dimension of global competitiveness. Regions and countries that attract and hold private investors are those with stable political and economic environments, open markets, minimal regulation, and low production costs. In addition, the state of infrastructure plays a demonstrably important role in determining the direction and magnitude of private capital flows. A recent survey of selected African firms shows that they consider that infrastructure is very important in their business decisions and operations. Indeed, infrastructure inadequacies rank high on the list of complaints for all businesses and third for foreign-owned firms.

Infrastructure has a direct effect on investment, trade, and growth. It also has a direct relationship with poverty reduction because it contributes to the process of pro-poor growth. This requires identifying and financing a significant number of projects for which a high proportion of the beneficiaries will be below the poverty line for the country concerned. Some, if not all infrastructure projects, display this characteristic and this is the route through which infrastructure activity can contribute significantly to the process of reducing poverty. Water supply and sanitation, and rural transportation projects are among the most likely infrastructure activities to help in the process of pro-poor growth.

Despite its demonstrable importance for economic growth and reducing poverty, Africa's infrastructure trails the world in both extent and quality. What follows is a brief account of the state of public provision of infrastructure, the

future challenges, and the needed strategies and policies to achieve accelerated growth and poverty reduction.

Public Sector Provisions

In the decade immediately following independence, the public sector in Africa made important contributions to promoting infrastructure development. Apart from a broader ideological orientation, the primary rationale for public sector involvement in infrastructure was to address what were perceived as pervasive market failures in African economies. At independence, creating employment and providing a regionally distributed socio-economic infrastructure were perceived to be the most important means of improving national welfare. However, extensive infrastructure developments demanded huge investment. The risk inherent in large economic ventures made these projects unattractive to foreign investors, especially given the size of the domestic markets. On the other hand, local investors were considered too few, too poor, and too technically limited for undertaking major investments. Capital markets were underdeveloped and could not be relied upon to provide sufficient credit. For many countries, state involvement alone could realize the aspirations for rapid growth and development through expanded infrastructure coverage. Similarly, the assumption was that the public utilities sector would best be kept in government hands to prevent their exploitation as natural monopolies.

Despite the justifications for an expanded Public Enterprise (PE) sector, disillusionment with the performance of public enterprises grew during the decades following the 1960s. Poor management, inadequate capital structures, poor investment decisions and the bureaucratization of

the decision-making process meant that the PEs were ill-prepared to address the rapidly-changing conditions of African economies. As a result of economic downturn, fiscal drain, and poor cost recovery, operational inefficiencies, infrastructure expansion and quality lagged behind population growth and the demand for infrastructure services.

By mid-1990s, infrastructure had typically low network penetration rates, outmoded equipment, and long waiting lists in some sectors. In 1996, there were 1.8 telephone lines per 100 people compared to 30.4 in the Americas, 6.0 in Asia, 30.6 in Europe, and 40.4 in Oceania. There were 78.1 average faults per 100 main telephone lines compared with an average rate of 8.9 for America, 19.9 for Europe, 43.7 for Asia, and 47.8 for Oceania. The region's electricity generation, transmission, and distribution systems tend to be old and inefficient, resulting often in as much as 40 per cent energy losses, as for example in Uganda. Water supply and treatment are also deficient. In 1995, only about 60 and 40 per cent of the region's urban and rural population, respectively, had access to safe water. In 1995, only 36.6 per cent of the population had access to sanitation, compared to 51 per cent in South East Asia, 64.1 per cent in Latin America, and 96.7 per cent in OECD countries. Only 24.2 per cent of the total road network in Africa was paved in 1996. Road density per km² is generally much lower than that of Asia and Latin America.

Infrastructure Development Partnerships

Given the dismal record of infrastructure provision, it became apparent that the challenge of rehabilitation and development was too huge for a single sector. A form of partnership, involving

private sector participation, a redefined role for the public sector, local community participation, and broadened, international donor involvement are all requisite ingredients. What progress has been made in effecting this form of partnership? What challenges remain?

Private Sector Participation

Modalities for private participation in infrastructure include corporatization, leasing, build-operate-transfer (BOT), build-own-operate (BOO) and de-monopolization and new entry. These are well suited to monopoly infrastructure sectors where full divestiture — the strongest form of commitment to private sector provision of infrastructure services, involving privatizing existing assets — is either untenable or undesirable. Under these modalities, the government delegates the right to participate to the private sector, yet retains some control by setting terms and conditions in contractual arrangements. Commercialization through these modalities can help to insulate infrastructure from excessive political influence and create a constituency for tariff reform. It can also improve the selection of service providers, and strengthen incentives within infrastructure enterprises.

During the 1980s and early 1990s, many African governments embarked upon infrastructure sector reform by introducing cost recovery and commercialization. The reform process intensified in the late 1990s with increased private sector participation in the provision of infrastructure services. In more general terms, the sectoral composition of private participation in African infrastructure resembles that of the transition economies of Eastern Europe to some degree. In both regions, private participation is greater in the tele-

communications sector, followed by the electric power sector. By contrast, the electric power sector led the way in Asia, followed by transport, whilst in Latin America, transport and power have been the leading sectors for private participation. The method of private sector participation often varies according to the characteristics of the infrastructure sector. In telecommunications, the major methods include concessions for wireless services and the acquisition of a strategic investor for the facilities-based network operator. In airports, seaports and railways, a combination of concession agreements and public offerings is the preferred method.

Telecommunications

Since the early 1990s, the telecommunications sector in Africa has been undergoing restructuring to increase overall access to telephone service to at least the ITU-recommended minimum of 10 mainlines per 1,000 persons in developing countries. Restructuring telecommunications has involved an effort to involve the private sector in its provision. The sector provides scope for controlled competition and is the focus of foreign investor interest, especially in the competitive segments of the market. There are also increasing opportunities for substantial profits from value-added services. The telecommunications sector is a learning experience for other sectors primarily because control can be relinquished gradually, with phased-in privatization.

Apart from the initial management contract approach that typified earlier private participation in telecommunications, the process has broadly taken two major routes. The first was the opening-up of segments to private participation; the second was acquiring a strategic investor with

management responsibility for the network provider. Licensing a second national operator in both Ghana and Uganda evidenced a novel approach. Private participation began on the basis of investments in the provision of new and cellular mobile telephone services. Access to telecommunications services can be increased without relinquishing control of the facilities-based national network or adding public investment, by licensing private cellular providers.

Recent major divestments include the partial privatization of Telkom of South Africa, the biggest sell-off in African history. Telekom Malaysia and SBC International (US) acquired a 30 per cent strategic stake for \$1.5 billion. Telekom Malaysia also has a 30 per cent equity in Ghana Telecom. In 1997, Senegal sold a 33.3 per cent stake in Société Nationale de Télécommunications (SONATEL) to France Telecom which has a 20-year management contract, and is committed to installing 300,000 new lines. The government raised \$85 million through a public offering of 27.66 per cent of SONATEL. In Congo-Brazzaville and Côte d'Ivoire, telecom privatization has raised \$50 million and \$200 million respectively. Nigeria announced a long-awaited privatization program inviting bids for stakes in a variety of state enterprises, including the Nigerian Telecommunications (NITEL) and power utilities, National Electric Power.

The scope for competition would need to be extended well beyond the current practice of allowing private participation only in the cellular and enhanced-services segments of the industry, based on redistribution and other social considerations. Experiences in Asia and Latin America suggest that tele-density is more likely to increase in competitive markets than in monopoly markets. In addition, employment in the industry is likely to increase when there is competition. By restricting

competition in the sector, the government is arguably limiting employment opportunities.

Electricity

The electric power sector presents a smaller scope for segmentation of services. There is a greater requirement for sunk capital here than in telecommunications. While power generation can be privately produced, investment in power generating facilities requires a long-term commitment, especially where new investment is sought under BOT schemes. Moreover, the electric power sector is a more natural monopoly, although advances in technology are making this less so. Therefore, the only segment that has been opened up for private participation thus far in Africa is the generation segment. Another obstacle to private participation is the likely restriction on the amount of power that the utility is allowed to sell. At any given tariff, fixed costs are recoverable only after the sale of a given quantity. The utility must therefore be allowed to sell the required quantity at a predetermined tariff to recover its fixed costs. Where quantity restrictions or restricted access to the supply of essential materials or services exist the utility needs to be guaranteed compensation if it cannot achieve the required level of sales. This is a major concern when the new facility is an "add-on" to a publicly owned and controlled system. Therefore, only an environment conducive to the level of investment required in the sector will stimulate more than minimal private investment.

Private participation entails substantial sunk capital. Electricity investments therefore usually involve high predevelopment costs because intense negotiations and related preparations are often needed. Past experience suggests a distinct risk of unsuccessful negotiations because of differing objectives and/or differences in risks and risk

management perceptions. Discussions on issues such as labor redundancy or accounts receivable often serve to block successful transactions. Nevertheless, BOT appears to have a large potential for meeting the increasing demand for electricity in Africa. In Morocco, for instance the Jorf Lasfar power project which reached financial closing in the third quarter of 1997, represents a model for other countries of overcoming the difficulties associated with private participation in electricity sub-sector.

Water

The general unwillingness of private investors to participate in the water sector in low-income countries has been attributed to the nature of the industry and the risk associated with capital recovery. In addition, transaction costs are high, and it is difficult to internalize both positive and negative externalities. For example, water contamination is a major issue in urban areas because of poor sanitation and inadequate wastewater disposal. Waste disposal upstream also impairs the rights of downstream users. Despite these difficulties however, several countries have recognized the need for effective water management and have begun to address the issues of water misuse by introducing private participation in the sector, even though such participation appears to be narrowly focused as management contracts and leases. The experience of African countries with this modality indicates that leasing has the advantage of introducing some elements of commercial discipline into infrastructure management. It suffers, however, from two shortcomings. The lessee is responsible for operations and maintenance while the government is responsible for new infrastructure investment. This often makes it difficult to coordinate operating and investment decisions, and

consequently to identify causes of and responsibilities for inadequate performance.

Budget constraints might also tend to limit government's capacity to undertake new investments in the infrastructure. This in turn leads to deterioration in the quality of services and in the ability of the operator to meet increased demand. The government needs to work closely with the private operator if the utility is to work more efficiently. Successful leasing arrangements also need to have governments adhere to the terms of the contract, particularly for determining infrastructure tariffs according to fair and consistent procedures. Some African countries have adopted the concession approach, however, to allow for market competition where private companies bid for the franchise to supply and to manage and expand the country's existing water system. Cameroon, Côte d'Ivoire, Gabon, Tunisia and Morocco have all privatized their water sectors on the basis of competition for concessions (competition for the market).

Transport

Private participation in Africa's transport sector has been limited in the past. During the last two years, however, private interest in the sector has grown. In roads, uncertain cost recovery has kept private investment minute. Some form of government guaranteed cost recovery for socially motivated road projects is required to stimulate private investors. The key determinant is user willingness to pay. Where the cost recovery toll is high, a toll-road operator could charge a lower toll and the government could provide a per-vehicle subsidy on a declining basis based on expected increases in usage over time. In this case, the incentives for private operator performance should remain high.

In addition to private participation in investment, road maintenance, road and culvert construction, and other road works such as cleaning also provide opportunities for private participation on a competitive basis. A long-standing practice of contracting out road maintenance in Kenya preceded its adoption in other African countries in the 1990s. Moreover, the Agency for the Execution of Works in the Public Interest (AGETIP) model, first used in Senegal to improve the efficiency of public works projects, has been widely adopted in other countries. AGETIP and similar agencies serve to promote capacity building, increase local employment, and reduce costs by employing private sector management practices.

In the railways sector, reforms prior to 1995 mainly took the form of contracting out system management and operations. However, recent reform modalities have expanded to include restructuring through unbundling and divestment of non-core services, concessions, and divestiture. The Abidjan-Ouagadougou railway line is privately run, for example, and is the first concession of its kind. In Tunisia, the railway system is being modernized as a first step to attracting the private sector. The Tanzania Railway Corporation divested itself of non-core operations and is under private sector management. In Mozambique, the southern region railway is to be upgraded and managed under a joint venture consortium.

Private participation in seaports and airport infrastructure is emerging even in the industrialized countries. However, where new facilities are being constructed, as in Hong Kong's new airport, BOT is an approach being pursued to involve the private sector. Several countries in Africa have begun restructuring their seaport and airport facilities, unbundling services, modernizing and rehabilitating equipment and inviting private participation in the form of leases, management con-

tracts, and concessions. South Africa recently announced that 20 per cent of the Airports Company of SA (ACSA), which operates 9 airports of which 3 are international, will be awarded to Aeroporti di Roma operator of Rome's airports. The government intends to divest itself of 49 per cent of its overall stake, including a further 10 per cent to black institutional investors, 9 per cent to the management, and 10 per cent to the National Empowerment Fund. In Kenya, the sale of Kenya Airways is the largest single sale to date, a split between a 26 per cent strategic sale to KLM and flotation of 51 per cent shares to other foreign and domestic portfolio investors.

The scope for competition in this sector is mainly one of competition for the market. The unbundling of services allows private providers to compete for the supply of handling services or for operating specialist port facilities such as dredging, piloting, towing, and other similar services. On the other hand, storage, stevedoring, and container handling could be opened up to competition. Facility maintenance could also be contracted out as a separate service. The proposed port reform in Cameroon involves privatization of dredging and handling on the basis of specific and separate concession agreements.

Mobilizing Domestic Resources

Growing private sector participation in Africa's infrastructure notwithstanding, funding for infrastructure remains far below the projected needs for regional rehabilitation and development. Africa's needs, although difficult to ascertain precisely, are huge. So is the potential for future growth. For example, it has recently been estimated that some \$18 billion needs to be mobilized over the next decade in just 21 countries for

the power sector alone. Most estimates suggest that Africa's infrastructure investment needs range between 5-6 per cent of GDP. A 1997 International Finance Corporation study made a conservative estimate of \$7 billion for the minimum annual infrastructure investment requirements.

Despite an apparent scarcity of resources in many African countries, there is considerable potential for mobilizing capital for financing private sector infrastructure projects from domestic sources. It is essential to meet the preconditions, particularly for macroeconomic stability and efficient financial intermediaries, before any significant progress can be expected. Coupled with these, establishing institutional investors, such as insurance companies, and taking new measures to attract the return of flight capital, can also contribute to mobilizing local resources. Infrastructure private projects themselves will facilitate this mobilization by providing profitable investment opportunities. They can also help local entrepreneurs who are currently providing small-scale, informal, infrastructure services to make the transition toward formal and larger projects.

Two broad sources of local financing for infrastructure projects can be tapped: internal cash generation and mobilizing local equity. Internal cash generation is an important source of funds for financing private infrastructure projects. In sectors such as telecommunications, where there is an excess demand for services in many African countries, telephone lines can be allocated and sold before operations begin. Internal cash generation can contribute significantly to financing a new infrastructure enterprise. The same might apply to water supply and electricity projects. In other sectors, retained earnings are also essential for operation, maintenance, debt service, replacements and possible extensions.

Redefining the Role of the State

More private sector participation must be attracted to help bridge infrastructure deficits. However, the state still has a crucial role to play. The government would need to regulate private sector competition, preserve the environment in the face of infrastructure development, and protect consumer interests. In addition, market failures or the non-existent markets may utterly tarry private provision of infrastructure. In this case, the government must correct for market failures by designing plans and programs to fill the gap and to solicit international assistance in infrastructure development. Infrastructure rehabilitation and development in war-torn countries is a case in point.

The general precepts guiding government regulation can be outlined as follows. The consumer has as much right to receive services bargained for as the enterprise has to recover its costs in providing the service, including a fair return on its investment. The legal framework for commercial infrastructure should aim at protecting property rights and promoting investor confidence and therefore willingness to become involved. Individual property rights would need to be defined clearly, and the laws enforcing them would need to be fair, and equally clear. Laws protecting such relationships must be fully enforceable by a credible legal system that is beyond reproach. Contract law, laws governing ownership and laws governing responsibility are most often referred to in this context.

The regulatory framework must be simple, yet address its fundamental objective: to correct for market failure. Such a framework typically includes rules governing entry, exit, scope of participation, and cost recovery. The framework should also provide performance criteria against which franchise operations can be assessed. This is espe-

cially important where non-performance is sanctioned by revoking a franchise, and taking uncompensated control of the assets. To be effective, therefore, regulations must strike the right balance between removing restrictions on private participation in providing infrastructure services and safeguarding the country's socio-economic objectives.

Where the service is provided under a concession agreement, the key elements of a regulatory framework are usually defined in the concession contract or operating license. For instance, cellular mobile telephone operating licenses issued by several African countries clearly specify the level of competition (by designating service areas), investment obligations, performance targets, tariff regimes, public-service obligations, and interconnection rights of the licensee. Regulation becomes a matter of monitoring and enforcing the terms of these essentially transaction-specific agreements. The same is generally true for concession contracts that embody a regulatory framework as an integral part of the concession arrangement.

The regulator must address such social questions as universal service, universal access, and ability-to-pay for all services. In South Africa, for instance, the government regards an effective telecommunications infrastructure, built upon the basic principle of universal service, as essential to achieving the goals of its reconstruction and development program. To this end, regulatory reforms were essentially tailored to develop the sector, correct previous imbalances in accessibility, and create employment opportunities. In contrast, regulatory reforms in Mauritius, which has the highest tele-density in Africa and virtual full employment, were not specifically aimed at achieving universal service but were tailored to stimulate excellent service by monitoring the industry, intensifying competition through flexible entry

regulation, and protecting the consumer by ensuring fair pricing. The regulatory framework should also encourage the private sector to consider the impact of infrastructure on the environment. This can often be negative. The highly visible effects of certain large scale facilities — dams and roads in sensitive ecological areas or where unsatisfactory resettlement options — have attracted understandable public attention. The damage or loss of potential benefits to the environment are equally serious and more pervasive because of the failure to control unnecessary emissions and wasteful consumption of water, spawned by under-pricing of power, vehicle fuels, and inadequate maintenance.

Once the rules of the game have been determined, the remaining issues concern the institutions responsible for their implementation and how they will administer them. In general, regulatory institutions are single and/or multi-industry. The choice between multi-industry and a single-industry regulatory institution has been posed as an issue for African countries. The reasons vary from effective regulatory decisions to the absence of the required technical skills, the size of the industry, and the cost of regulation. In the case of African countries, however, the argument can be made that it is not cost-effective to have as many regulatory agencies as there are utility sectors. Indeed, where the primary function of the regulatory institution is to address issues of income distribution, empowerment, quality of service and cost recovery, the need for consistency and universality in regulatory approaches and decisions is paramount. Moreover, a single source of regulatory decisions provides private investors with a better reading on the government's position on issues of concern to at a time when sending the right signals is an important determinant of private capital flows.

Rules and regulations are useless without enforcement mechanisms. These are embodied in the authority of the agency, the appeal process, and in the judicial support established within a credible legal framework. All these, separately or collectively, raise the issue of independence of the agency. Regulatory independence is relative, however, statute creating lends status to the agency which can be free of political control in its decision-making process. It can have binding power, or can be required to refer to a government ministry for prior approval. It is generally accepted that an agency that can freely make decisions within its statutory policy guidelines is likely to be more effective in achieving explicit policy objectives. It is also generally accepted that regulation is a difficult and costly business, and wherever possible, competition is preferable. However, where necessary, the proper design of the regulatory rules and institutions is critical for increasing private participation in the provision of infrastructure services and for mitigating against non-commercial risk.

Grassroots and Local Participation

Local participation in infrastructure construction, management, and maintenance constitutes a major component of a successful infrastructure policy. Projects that are centrally planned and executed without input from local beneficiaries often have a higher probability of failure and are usually poorly maintained. Local participation is a key element in the development process. It not only increases efficiency but also strengthens the sense of community ownership of projects and ensures transparency and accountability in project planning and implementation. Centrally planned and executed projects tend to be uniform and allow for little local variation where local participation

allows projects to be customized to users' needs. Greater local participation can therefore be seen as a tool for mobilizing the collective action of a community, empowering project users or beneficiaries, and therefore make them willing to contribute to project operations and maintenance costs. Local participation ensures that the local community claims ownership at the planning, construction, and maintenance stages of the project. To be effective, it should touch all users of infrastructure services to ensure that the project meets their requirements, uses local materials and technologies, and is provided and maintained at lower costs.

Local participation can be made effective by encouraging people to contribute to the construction, management and maintenance of infrastructure either in cash or in kind. When stakeholders bear part of the cost of providing infrastructure services, they are more committed to the success of the project. In some instances, local people have been encouraged to supply their labor in return for food, cash or materials. An effective way of involving the local community in building and maintaining infrastructure is to devolve some of the decision-making from the central authority to lower levels. Decentralized planning and implementation produce better targeted social uplift programs, and thus allow for efficiently allocated infrastructure services. Local authorities, NGOs, grassroots groups and other community-based organizations have a better handle on what and how much their localities require.

International Development Partnerships

International partnerships are needed to recapitalize Africa, especially in low-income countries. Africa has a much lower capital stock per worker than any other region, reflecting both the

continent's failure to attract foreign capital and the loss of private African wealth to other regions. Under-capitalization is more severe in low-income countries where gross investment accounts for only 17 per cent of GDP, with private investment accounting for less than 10 per cent. Weak investment means that low-income countries are caught up in a low-equilibrium growth trap and will require increased foreign resource flows to fund new investment projects and rehabilitate existing ones. Donor support will be required in those countries where private investment is not forthcoming.

The challenges of infrastructure development, growth acceleration and poverty reduction are even greater in war-affected countries, not least because poverty and war are closely linked. Poverty is a cause and a consequence of civil war. Angola, Burundi, Democratic Republic of Congo (formerly Zaire), Djibouti, Eritrea, Ethiopia, Liberia, Mozambique, Rwanda, Sierra Leone, Somalia and Sudan all suffer from civil wars, some of which are very protracted. Mozambique, Angola and Sudan, for example, plunged into civil war soon after their struggles to gain independence.

In conflict-affected countries human life and physical infrastructure have been the major casualties. Roads, bridges, irrigation systems and homes have been destroyed. In these countries, deficient or non-existent infrastructure services typically result from direct destruction and/or policy failure. Reconstruction and rehabilitation must be accompanied by economic reform. Reforms should help the country to build the institutions that foster harmony among its peoples, and facilitate orderly settlement of disputes without resort to violence. All this will require the active support of the international community through increased financial and technical assistance. Affected countries will also depend on international development partners to provide support for programs and

projects in irrigation rehabilitation and water management, land rehabilitation, development of agricultural systems, and programs for sustainable recovery.

The Role of the Bank Group

The Bank Group finances infrastructure projects that are designed to promote economic growth by providing a favorable environment for productive activities; integrating national markets to spread the benefits of economic growth; and commercializing and diversifying the region's economies. The wide-ranging benefits that accrue to the economy as a whole and to the private sector, together with the Bank's role as a catalyst, justify this priority in energy, telecommunications, water supply and transport infrastructure projects. Between 1967 and 1997, Bank Group loan and grant approvals to the transport sector and public utilities represented 37.5 per cent of total loans and grants. A roads project in Botswana and a power supply project in Cameroon (Boxes 3 and 4) exemplify these projects and their developmental impacts.

The Bank Group also finances policy-based operations that focus on promoting private sector development, emphasize privatization, divestiture and rationalization of state-owned enterprises. The Bank make resources available or mobilize funds for the scheme in order to help governments establish the legal framework for privatization, create and strengthen privatization agencies, develop accounting and valuations systems; arrange financing for privatization projects in the forms of loans, equity participation or underwriting. To promote infrastructure projects, Bank assistance will take the form of:

Box 3: Linking Rural Communities in Botswana

The Nata-Maun road project aimed at providing a reliable and safe all-weather road linking eastern Botswana to the North-West region (including the Okavango Delta), and reducing road maintenance and vehicle operating costs. The components of the project included upgrading a 305 km gravel-surfaced road, linking the towns of Nata and Maun, into a two-lane all weather bitumen-coated road. The road, originally planned to have a carriageway of 6.7 m, has been constructed as a two-lane bitumen-surfaced road with 7.0 m carriageway and 1.0m sealed shoulders.

Despite an overall implementation delay of 15 months, the objectives of the project were, nevertheless, fully achieved, in part owing to adequate project preparation which minimized technical problems during implementation. Thus, road maintenance and vehicle operating costs have been significantly reduced. The road has provided reliable and safe all-weather access between the two important towns (Nata and Maun) as well as the Okavango Swamps. It has opened up the North-West region, promoting its integration with the rest of the country. It has also significantly increased traffic in response to the agricultural, industrial and tourism opportunities in the North-West region, and Maun has emerged as an important administrative, social and economic pole. The road has provided the catalyst for fast-paced socio-economic development in the Maun area. These outcomes demonstrate that the objectives of the project were achieved.

The road serves a total population of 9,000 people in its immediate vicinity, as well as the populations in Maun (about 26,500) and Ngamiland (about 94,000) to the North-West of Maun. The project has enhanced women's productive activities and the marketing of agricultural products and other goods. Moreover, it has facilitated women's access to city markets and to health facilities. The project also defined measures to resolve potential conflicts in road use among human settlements, livestock and wildlife in the project area.

Source: ADB (1997), Bank Group Annual Report.

Box 4: Helping Meet Electricity Demand in Cameroon

The Mope Dam project was designed to contribute to the socio-economic development of Cameroon by meeting the electricity demand of the interconnected southern grid till the year 2000 and regularizing the course of the Sanaga River with an additional flow of 270 m³/s.

The components of the project included: the creation of a 3.2 billion m³ reservoir and the production of additional 400 GWh of electricity per annum. The Bank approved participation in the project in 1985 with a loan of UA 10.62 million, while total project cost at completion amounted to UA 64.88 million. According to the Project Performance Audit Report, despite slight modifications to the project's initial design and supplementary works, project implementation started in 1985 and was completed in 1988, with its components satisfactorily implemented.

With respect to performance, the objective of meeting the country's electricity demand by year 2000 and improving the productivity of SONEL (Electricity Authority) staff and the rate of electricity distribution in the country are already being met. The project has also made it possible to meet the people's electricity needs up to 1997, and, given

the current demand growth rate, the year 2000 target should be easily attainable.

The project's socio-economic impact is satisfactory since its implementation has enhanced the welfare of the people by facilitating their access to electricity. For instance, two villages around the dam area have been electrified and 190,474 additional connections have been carried out on the southern network. These helped a few villages to spring up next to SONEL's base camp and economic activities comprising fishing and craftsmanship now flourish in the area.

The project has also had a positive impact on women. The improved household access to electricity has increased the use of electric appliances and lightened women's domestic chores. Economically, the project contributed to the development of productive activities generally undertaken by women such as market gardening, fish sorting, drying and smoking. The project's environmental performance was deemed satisfactory; conditions laid down by the Bank for the protection of nature in the catchment area have made it possible to reduce the project's potential negative impact.

- financial support through direct equity investment and loan provision;
- advice and support to governments to establish a conducive legal and regulatory framework;
- strengthened credit rating agency co-operation in publicizing the positive developments in Africa;
- providing support for cross-border infrastructure projects.

Support through Equity Investment and Loans

Bank financing may be modest in relation to the total financing needs of these projects. However, Bank association will instill lenders and investors with confidence and overcome hesitations to duly perceived risk or lack of familiarity with host country conditions. In 1998, the Bank Group provided 24 loan and grant approvals to finance infrastructure projects in Africa. In transport, it approved 7 projects to rehabilitate road networks in Ghana,

Guinea Bissau, Mozambique and Tunisia; projects for road maintenance in Burkina Faso, and Mali; and road development and upgrading projects in Chad, Malawi and Tanzania. Electricity projects were approved in Benin, Cameroon, Mauritius, Morocco and Zimbabwe. Other public utility projects approved in 1998 were in water supply and telecommunications.

The Bank also approved direct equity investments for the South Africa Infrastructure Fund, which covers investment projects in South Africa and the SADC countries. It also approved a line of credit to the Development Bank of Southern Africa (DBSA). The DBSA could then provide loans and other developmental services to local institutions, public corporations, and private sector entities to improve infrastructure services in water supply and sanitation, power transmission and distribution, rural electrification, and municipal road networks.

Policy Advice and Building Legal and Regulatory Institutions

Many African countries lack the technical skills needed for implementing government plans to create an environment conducive to private sector investment. General advice on macroeconomic reforms is readily available from many sources. Assistance in building up basic institutions such as land registries, security exchanges, and legal regimes, the essential prerequisites for private sector growth, is conspicuously absent. The Bank could provide governments with technical assistance to facilitate the creation of an enabling environment, to promote privatization schemes, to revise and rationalize investment codes and fiscal regimes, and to develop capital markets. It will provide special advisory services for project structure and financial packaging during investment

appraisal, and financial advisory services to governments for privatizing projects or to private enterprises, including restructuring and formation of new or existing ventures.

Promoting and Publicizing Credible Ratings

Sovereign credit ratings constitute an effective instrument for mobilizing resources. High ratings improve the access of domestic investment projects to global capital and financial markets, discourage capital flight, and attract FDI. To improve access to private infrastructure finance investments, which has been almost non-existent up to now, African countries must have credible ratings. African countries have only limited coverage by reputable rating agencies. This is due, in part, to incomplete information, knowledge, and expertise on Africa. The Bank could be a catalyst for addressing and resolving this problem by providing timely information on the evolving economic and social trends on the continent. For those rating agencies that issue ratings only upon request by the country concerned, the Bank could encourage more countries to seek ratings.

Support Regional Cooperation Projects

The Bank can also play an important role in promoting the markets, institutions and instruments to mobilize resources for cross border infrastructure investment projects. In Southern Africa, for example, the Bank played a critical role in encouraging regional infrastructure projects. In 1991 it carried out the Study of Prospects for Economic Integration in Southern Africa (SEISA). To be noted: the funding of multinational projects and programs in low-income countries will be extended

from a pool of resources specifically earmarked for that purpose. The pool would represent 5-10 per cent of the level of ADF replenishment of concessional resources on the order of US \$ 3.38 billion for operations during 1999-2001. The Bank will also seek opportunities for co-financing multinational projects.

Conclusion

Poor infrastructure remains the single most important obstacle to development. Political and economic instability, low per capita incomes, and often challenging geographic conditions have significantly hampered its development. The links between infrastructure, economic growth, poverty reduction, environmental conservation, global competitiveness and trade, and indeed regional integration make this a key.

Private participation can help bridge the infrastructure deficit and realize large fiscal, efficiency and welfare benefits. Private investment in Africa's infrastructure saw encouraging beginnings in the telecommunication sector, power, water and transport. If this process is to be intensified, increased domestic resource mobilization is needed together with an improved business environment for attracting more FDI. Increased private capital involvement may be desirable, but the state must still play a decisive role as a regulator and facilitator. In addition, the state should assume the role of a provider of vitally needed services where private sector investment is not forthcoming or where the market fails. This provider role is particularly vital in areas closely related to rural development and poverty reduction and in war affected countries. State involvement can have significant results if it is supported by increased local community participation and financial and technical assistance from the international community.