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VISION TO ACTION UPDATE 2001

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Africa Rural Development Strategy
Vision to Action Update 2001

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Chapter 1 Why a rural strategy for Africa and why now?

Sub-Saharan Africa's population remains predominantly rural (70 percent), and poverty is widespread, although imperfectly measured. The challenges for the rural poor of the region have been substantial in each historical epoch, and the early twenty-first century is no exception. The nature of the challenges and opportunities has changed enough in recent years to warrant a renewed articulation of the strategies that rural people and communities, with the support of their governments and donors, can employ to reduce poverty and improve well-being.

The international community's commitment to cut the global incidence of absolute poverty in half by 2015 implies a massive effort in rural Africa. The commitment is all the more sobering because World Bank lending for rural development is at an all-time low, and many other donors have cut back as well. Paradoxically, as resources for new lending for rural development decline, support for debt relief to reduce poverty has increased. The Highly Indebted Poor Countries (HIPC) initiative and the linked poverty reduction strategy process offer a unique opportunity to put the prospects of Africa's rural poor again at the center of the policy agenda.

As rural development moves back onto the radar screen of the donor community, all actors have a weighty responsibility to assure that resources are better used than in the past. At the risk of over-generalizing, one could argue that the decade of the 1980s was the last for the old centrist and statist models of intervention, most of which failed. In the 1990s development efforts focused largely on stabilizing the macroeconomic environment, reforming policies and regulations, and investing in basic health and education. Financial support for traditional rural development declined in the 1990s because priorities shifted elsewhere and because disillusionment with results of prior programs was widespread. By 2001 awareness is increasing that macroeconomic stability and investment in health and education are important but not sufficient in and of themselves to induce the kind of widely-shared growth by the poor that is needed to meet the global targets for poverty reduction.

This paper sets out a strategy to induce growth and reduce rural poverty consonant with the lessons of the 1980s and 1990s.[1] It is predicated on the assumption that political, economic, institutional, organizational, technical, and financial factors must be aligned in multisectoral interventions at both the local and national levels. Although there is no

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[1] This paper reflects contributions from staff of the Africa Region of the World Bank, participants in two workshops held in Africa, and many colleagues within and outside the World Bank who commented on earlier drafts. The task was managed initially by Sushma Ganguly, Rural Development Operations, and subsequently by Karen Brooks, under the overall guidance of Hans Binswanger. Other departments within the Africa region contributed ten papers from which material was abstracted. Contributions region-wide were coordinated by the Africa Regional Strategy Steering Committee and the Extended Steering Committee. Regional discussions in Nairobi in March 2001 and in Dakar in May 2001 provided the views of selected African stakeholders from the public, private, and NGO sectors. Support for regional consultations was provided by DFID and by French Cooperation. Wendy S. Ayers served as the lead writer, and she and Karen Brooks compiled the paper.

quick fix, there are ample opportunities to move in the right direction. Success can be measured by indicators gauging progress towards attaining key objectives to:

- Reduce rural poverty
- Reduce risk and vulnerability of the rural poor
- Promote widely shared growth drawing on complementarities between rural and urban growth
- Protect natural resources and reverse environmental degradation.

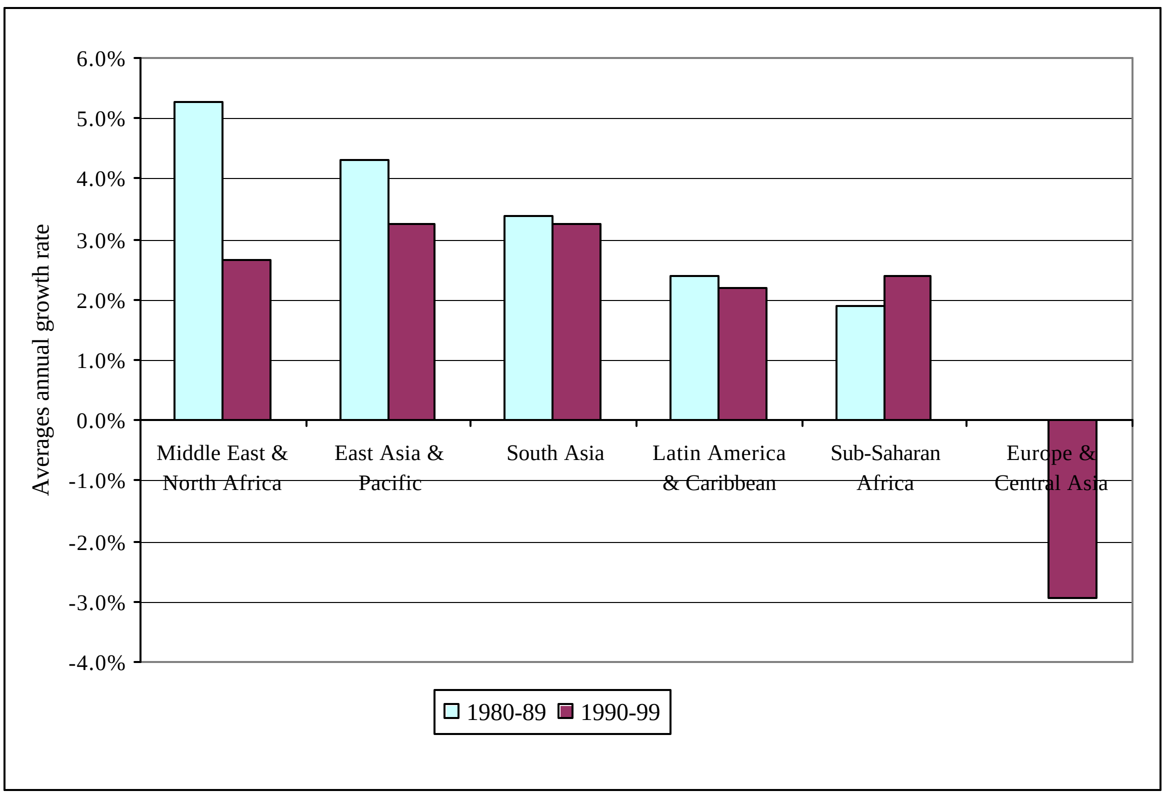
The following chapters provide an overview of the regional and historical context for rural development and elaborate the strategic interventions that form the core of World Bank support in partnership with governments, other donors, civil society and rural people, themselves.

Chapter 2 Regional context and challenges for rural development

Agricultural output is growing but productivity is stagnant

Agriculture remains important in rural Africa, and indicators of rural well-being are closely correlated with agricultural performance. Aggregate growth rates in African agriculture overall improved during the 1990s (figure 1). While Africa's agricultural growth lagged all developing regions in the 1980s, the gap narrowed in the 1990s, due to improvement in Africa and deterioration elsewhere. Despite improved growth, African rural poverty remains more prevalent and deeper than in other regions.

Figure 1 Agricultural growth by region, 1980–1999[2]



Source: World Bank World Development Indicators database

General improvement in the 1990s masks wide disparity in the performance of countries throughout the region. The 48 countries of Sub-Saharan Africa are widely diverse in their resource and factor endowments and their abilities to commit politically to actions to increase growth and reduce poverty. During the 1990s twelve of the 48 countries of the region were able to maintain agricultural growth rates of 4 percent or better (annex 2). This is a large improvement over the 1980s, when only five countries achieved

[2] Data for Europe and Central Asia are not shown due to lack of comparable measures for the 1980s, but growth in much of that region was negative throughout the 1990s.

agricultural growth rates of more than 4 percent (Benin, Comoros, Mozambique, Togo and Cape Verde).

Agricultural growth in a second group of countries has been positive, but less than 4 percent per year on average, and in many cases less than population growth. Rural poverty is gradually worsening in these countries, although again the measures are not complete. About half of African countries fall into this category.

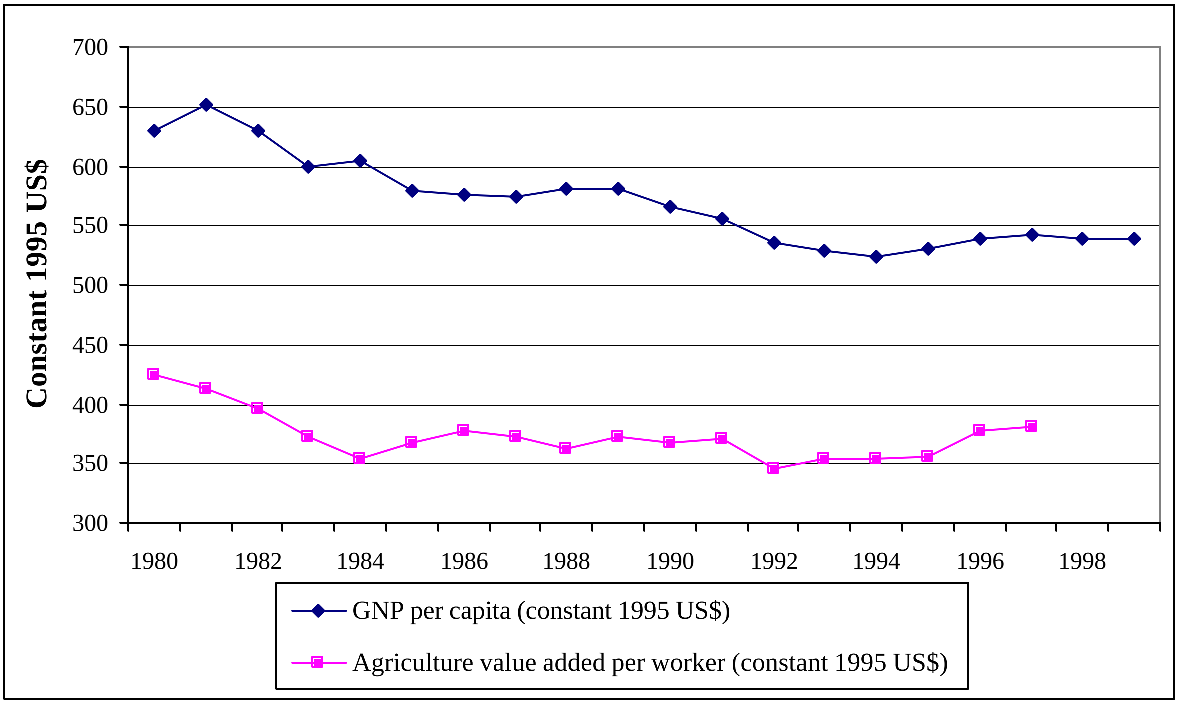
A third group of countries is still immersed in civil or international conflict or unrest with sharply rising poverty and increasing evident desperation, particularly of the rural people displaced by fighting. About 100 million Africans, 20 percent of the total population of the region, live in these countries. About 4 million Africans are currently refugees, displaced from their homes and deprived of their livelihoods. The impact of conflict is clear from the statistics. Countries that enjoyed high rates of agricultural growth during the 1980s, including Burundi, Rwanda, Sierra Leone, Comoros and the Republic of Congo, all experienced low or negative agricultural growth when overwhelmed by conflict in the 1990s.

AGRICULTURAL PRODUCTIVITY. While agricultural output is growing in Africa, productivity is not. Agricultural productivity per worker for the region as a whole has stagnated during the past ten years at an estimated US$365 per worker (constant 1995 US$) (figure 2). This is 12 percent lower than in1980, when value-added per worker was US$424. Increasing productivity per worker helps to fuel economic growth by generating the surplus that can be used for investment in agricultural and nonagricultural activities, and is widely regarded to be the first step in the process of agricultural transformation (Timmer, 1998). Average incomes per person also stagnated during the 1990s at just US$540 compared with US$629 in 1980 (constant 1995 US$).

Agricultural yields have also been level or falling for many crops in many countries. Significantly, yields of most important food grains, tubers and legumes (maize, millet, sorghum, yams, cassava, groundnuts) in most African countries are no higher today than in 1980. Cereal yields average 1,120 kilograms per hectare, compared with 2,067 kilograms per hectare for the world as a whole.

Low productivity has seriously eroded the competitiveness of African agricultural products on world markets. Africa's share of total world agricultural trade fell from 8 percent in 1965 to 3 percent in 1996. Reduced competitiveness derives in part from internal factors that African governments can address, such as under-investment in agricultural research, poor development of input markets, and insufficient attention to grading and standards. It also derives from factors that are outside the control of governments, such as lack of meaningful progress on reform of global agricultural trade. The largest trading partner for most African countries is the European Union, which accounts for about 50 percent of exports, and about 41 percent of imports. North America is second, accounting for 15 percent of exports and 30 percent of imports. Because such a large share of African exports are destined for the highly protected markets of Europe and North America, opening these markets could make a big difference for Africa's rural development.

Figure 2 Agricultural value-added per worker and per capita GNP, Sub-Saharan Africa, 1980–most recent available (constant 1995 US$)



Source: World Bank World Development Indicators database

Low agricultural productivity is a result of low investment in virtually all the factors that contribute to productivity. Only about 4.2 percent of land under cultivation in Africa is irrigated. This compares with 14 percent in Latin America and the Caribbean, a region with similar population densities and resource endowments (World Bank, 2001b). Fertilizer application is 15 percent lower today than in 1980. The number of tractors per worker is 25 percent lower than in 1980 and the lowest in the world. Endemic animal diseases reduce use of animal draft power. Malaria, HIV/AIDS and other diseases threaten the health of rural people. Literacy levels are slipping where people face pressures of disease and falling incomes.

Globalization presents new challenges

Looking forward, globalization presents new challenges for policymakers, as well as the new opportunities associated with global shows at goods, information, people and capital. The increasing integration of domestic and international markets limits the power of domestic policy to influence rural incomes independently of world market conditions. It also exposes countries to risks from external shocks and instability. In the current environment, governments must take account of how domestic agriculture is linked to global product and financial markets. They must also recognize that macroeconomic policies often have more impact on rural incomes than do agricultural policies, so adopting sound policies that encourage savings and investment and widely-shared growth is ever more critical. Globalization is also leading to rising importance of consumer preferences in determining what is produced. This is a particular challenge for Africa, which has a long legacy of governments and donors influencing supply. African producers must now reorient towards systems that are more attuned to consumer preferences and requirements.

Steady degradation of natural resources makes production of food increasingly difficult

The natural resource base on which most of Africa's rural poor depend is steadily deteriorating. Soils are under stress from poor cropping practices and increased exposure to wind and water. Much of Africa is subject to extreme annual variability in rainfall of plus and minus 35 percent, bringing poorly predictable droughts and floods and massive macroeconomic shocks. Despite higher than average variability in supply of water, the region has very little storage capacity. For example, in Ethiopia 43 cubic meters of water are stored per capita, compared to 746 cubic meters in South Africa, and 6,150 in North America.

Fresh water, one of Africa's scarcest commodities, is rapidly being depleted through inefficient use and polluted by industrial and domestic effluents, and by degradation of watersheds in major river basins. Through investments and continued reforms, Africans must manage scarce water resources effectively for agriculture, industry and human consumption, yet still leave enough to maintain healthy ecosystems. Forests, wetlands and rangelands are all receding or degrading at a rapid rate across much of Africa, with major consequences for the poor. Negative impacts of the loss of forest ecosystems include deterioration of watersheds resulting in droughts and flooding (of the region's 11 major multi-national watersheds, eight have lost over 90 percent of their original forest cover) and a deepening fuelwood shortage. The loss and degradation of natural habitats is accompanied by loss of biodiversity, which has both short and long-term implications for the region's poor. In the short term people suffer from loss of access to economically important natural products such as medicinal plants, foods (including famine reserves), and building materials. Longer-term impacts can include ecological instability and pest and disease outbreaks. Many coastal, marine and freshwater fisheries that provide protein for a large part of the population are threatened by over-fishing and by reduced surface water flows and pollution. Africa leads the world in the burden of disease arising from unclean water and poor sanitation, malaria and (together with India) indoor air pollution.

The international development community has set the goal for all countries to be implementing national strategies for sustainable development by 2005 in order to reverse the loss of environmental resources by 2015. Most African countries have produced environmental strategies. Few are implementing them systematically, however. But 70 percent of Africans rely directly on natural resources for a part or all of their incomes, and improved natural resource management can lead to higher incomes and reduce risk (see box 1).

Box 1 The rural poor depend heavily on natural resources: Empirical evidence from woodlands in Zimbabwe

Despite ample evidence that rural households in Africa depend heavily on environmental resources, there are few rigorous studies of either the value of resource use to rural dwellers or of the economic determinants of household resource use.

Recent work in Zimbabwe has sought to shed light on a series of complex determinants of environmental resource use. Findings from this work, carried out over several years in Shindi Ward in southern Zimbabwe, showed that environmental resources? broadly defined to include wild foods, wood and wood products, grass, reeds, canes and leaves, and other woodland-based resources? in aggregate contribute roughly 35 percent of average total household income.

The study also confirmed that the poor depend more on natural resources than the rich. Even so, aggregate total resource demands still rise with income: better off households, in quantitative terms, use more environmental resources overall. The research also showed that factors determining resource use are complex: different households use different resources for different reasons at different times. Still, the conclusions are inescapable: the rural poor depend heavily on resources derived from woodlands, and deforestation poses a significant threat to rural livelihoods.

Source: Cavendish, William, 1999.

High population growth in both rural and urban areas strains food production, processing and distribution systems

Despite the devastating impact of AIDS, Africa's population growth is the highest in the world, at 2.5 percent per year. Population in 2015 is projected to grow to about 920 million, compared with 640 million in 2000. This is 10 percent less than population would have been without AIDS (United Nations, 2001). The demographic impact of HIV/AIDS is dramatic in the nine countries with the highest HIV prevalence (Botswana, Kenya, Lesotho, Malawi, Namibia, South Africa, Swaziland, Zambia and Zimbabwe). For example, Botswana's population in 2015 will be 28 percent lower than it would have been in the absence of AIDS. Yet, because of high fertility, Botswana's population is projected to increase during the next 15 years. In only one country, South Africa, is population projected to decline during 2000–2015 (United Nations, 2001).

Producing food for an additional 260 million people in just 15 years will place an enormous strain on already scarce and degraded land and water resources. It will also severely tax food processing and distribution systems needed to feed an urban population that is expected to double by 2015, from 215 million to 430 million. Food safety risks will grow with the increasing dependence of a large portion of Africa's total population on ever more complex and long distance agricultural-food supply and distribution systems, an important issue that will need to be addressed.

Limited rural infrastructure inhibits access to markets and information

The lack of adequate, affordable and reliable infrastructure services (transportation, water supply and sanitation, energy and telecommunications) touches the lives of rural African families every day. Starting in the predawn hours, many women and children walk long distances to the nearest water supply, which may be unsafe or provide too little water to meet the community's needs. They cook with inefficient stoves in kitchens filled with smoke that damages their lungs and eyes, using wood that they or other family members cut from sources increasingly distant from where they live. The family raises crops and animals, but they struggle to move beyond subsistence living because they have little access to markets, inputs and vital information, because the local roads are impassable and there are no telephones or other communications technologies for many miles. Their villages lack electricity, which forces the children who are lucky enough to go to school to do homework by the light of kerosene lanterns, prevents the health clinics from regularly stocking medicines that require refrigeration, and discourages expansion of nonfarm businesses that could provide alternative sources of income.

A few statistics illustrate the challenges that most rural Africans face:

- Within a country, access to markets is strongly affected by access to paved roads, but Africa has the lowest density of paved roads of any of the world's regions. Moreover, 14 countries, with one-third Africa's population, are landlocked without river access to a seaport. This hinders access to international markets.

- Walking is the principal means of transport for 87 percent of rural households in Burkina Faso, Uganda and Zambia, according to a recent study (Brawl, 1996).

- Less than half the people in Africa have access to safe drinking water.

- Only about 5 percent of Africa's rural residents have access to modern electricity; the remainder depend on traditional fuels, mainly wood and cow dung, for cooking, warmth and light (Sanghvi, 2000).

- Very few African villages have a single telephone. The disparity of "teledensity" (number of lines per person) between urban and rural areas in Africa is estimated to be as high as 25:1 (Dymond, Juntunen, and Navas-Sabater, 2000).

Improving access to infrastructure of Africa's rural poor requires significant new investment. Yet investment in rural infrastructure has declined during the past two decades. To address the backlog of needed rural investment, governments must establish a disciplined and focused process for making budget decisions and create the decentralized institutions that will allow local governments and communities to share in financing and delivery of services.

Low levels of investment in people condemn many Africans to poverty and early death and limit their ability to contribute to development

On average, almost one in ten African children dies before she reaches her first birthday, a rate 15 times higher than in the industrialized countries. Life expectancy is lower in Africa than in any other region, at just 49 years for men and 52 years for women. This compares with the world average of 65 years for men and 69 years for women. Of the twelve countries in the world with maternal mortality rates exceeding 1,000 deaths per 100,000 live births, ten are in Africa. Primary and secondary school enrolment rates are lower than in any other developing region.

In many countries mortality and morbidity are worsening, in large part because of the impact of HIV/AIDS (see below). In 26 countries in the region life expectancy fell during the 1990s. Child malnutrition rates climbed in all but five African countries during 1990–96. Primary school enrolments in Africa have stagnated at slightly lower levels than were reached 20 years ago, and are the lowest in the world. Rural people score more poorly on all indicators of human development than people living in urban areas.

The international community has set as goals for education enrolling all children in primary school by 2015 and eliminating gender disparities in primary and secondary education by 2005. Meeting the goals will require building schools, training teachers and providing textbooks for an extra 80 million children during the next 15 years, most of whom live in rural areas where it is difficult and expensive to provide services. Similarly, reaching the three international development goals for health outcomes? reducing infant and child mortality rates by two-thirds by 2015, reducing maternal mortality rates by three-quarters by 2015, and providing access for all who need reproductive health services by 2015? will require substantial increases in health care services in rural Africa.

HIV/AIDS undermines development processes

HIV/AIDS has now killed over 20 million Africans, and orphaned over 10 million children. HIV/AIDS undermines agricultural systems and affects the food security of rural families. As adults fall ill and die, families lose their labor supply, as well as knowledge about indigenous farming methods. Families spend more to meet medical bills and funeral expenses, drawing down savings and disposing of assets. HIV/AIDS undermines the incentives and the ability to invest in farms, infrastructure and education, threatening future prospects for rural and national development.

While HIV/AIDS prevalence is still lower in rural areas than in cities and towns, infections in rural areas are growing rapidly. Rural communities bear much of the burden of the disease because many urban dwellers and migrant workers return to their villages when they fall ill. As the number of productive family members declines, the number of dependents grows, putting families at great risk of poverty and food insecurity.

Women are particularly hard-hit by the HIV/AIDS pandemic. Biological and social factors make women and girls more vulnerable to HIV/AIDS than men and boys. Studies have shown that HIV infection rates in young women can be 3–5 times higher than among young men. Women and girls also face the greatest burden of caring for the sick and the children left orphaned. In many hard-hit communities, girls are being withdrawn from school to help families meet immediate needs.

The epidemic is tragic? made more so because it is preventable. A major element of the Bank's rural development strategy for Africa is to assist in developing and implementing programs to prevent the spread of HIV/AIDS and help communities cope with its impacts, including care for the orphans and the elderly.

Conflict kills, wounds and displaces millions

During the past ten years, more than a dozen African countries experienced significant civil or international conflict. About 100 million Africans, 20 percent of the total population of Africa live in these countries. Some countries, including Sudan, Somalia, Burundi, Angola, and the Democratic Republic of Congo, have been in conflict for years. Others have only recently suffered flare-ups of violence, such as Sierra Leone, Guinea-Bissau, Liberia, Zimbabwe and Côte d'Ivoire. Millions have been killed or wounded. About 4 million Africans are currently refugees, displaced from their homes and deprived of their livelihoods. Conflict presents enormous challenges to rural development. In combat zones, conflict takes land out of production through mining or direct displacement of farmers, contributing to national and household food insecurity. In some countries, such as Angola, a significant proportion of arable land has been laced with landmines and cannot be farmed. But, even in places not directly affected by fighting, conflict destroys incentives to invest in farms or businesses. It also consumes resources that government could otherwise spend on basic health care and education, infrastructure or other purposes.

In turn, poverty, unemployment, low education, hunger and autocratic institutions are associated with conflict. Conflict is likely to grow worse in Africa unless significant progress is made in generating widely-shared growth, reducing poverty, lowering food insecurity, and creating more representative institutions.

Women's potential contribution to development is not adequately nurtured

Women provide 70 percent of total agricultural labor in many countries of Africa. In part this is because a high proportion of rural households in many African countries are headed by women, as men migrate to cities in search of work or are conscripted into armies. Even in households containing both adult men and women, women often have primary responsibility for producing food. Yet, often women do not have access to the resources that would enable them to increase output. One major constraint is time. Along with cultivating fields and tending animals, they must look after children, the sick and the elderly, collect firewood and water, prepare food, transport goods, and buy and sell goods in the market (Blackden and Chitra, 1999). Women also lack access to information of more advanced agricultural technologies or household labor-savings methods, because most agricultural extension agents are men and communicate most effectively with men. Women have difficulty obtaining capital for investment in their farms because they lack decision-making authority and access to credit or other means of acquiring new technology or agricultural inputs. A study in Burkina Faso showed that these disadvantages take a toll; women cultivate their plots less intensively than men and yields are 18 percent lower than on identical plots controlled by men (Udry, 1996). This suggests that unless the needs of women are specifically addressed in agricultural and rural development programs, agricultural? and national economic growth? will continue to lag (box 2). This has been known for many years, however, and still little progress has been made. While recognizing that change in gender roles is a long-term process the interventions supported by the World Bank are designed to accelerate the process where possible.

Box 2 Paying attention to the needs of women could increase Africa's food production by 15 percent

Rural women face considerable obstacles that make it difficult for them to achieve their potential. Given the important role of women as food producers, these obstacles result in considerable loss in agricultural productivity. The losses are well documented. For example, a survey of 750 rural households in Kenya found that men's gross value of output per hectare is 8 percent higher than women's. However, if women had the same human capital endowments and used the same volume and quality of factors and inputs as men, the value of their output would increase by 22 percent. Capturing this potential productivity gain would substantially increase food production in Africa, thereby significantly reducing the region's food insecurity. If these results from Kenya were to hold true for the region as a whole, simply raising the productivity to the same level as men could increase total production by 10–15 percent. Similar results were found in an analysis in Zambia, showing that if women enjoyed the same degree of capital investment in agricultural inputs, including land, as men, output in Zambia could increase by up to 15 percent.

Source: Saito et al, 1994, cited in Blackden and Chitra, 1999.

Chapter 3 The historical legacy: how relevant is it to today's agenda?

African rural areas are severely undercapitalized, as reflected in the low use of fertilizers, tractors and other agricultural technologies, limited infrastructure, inadequate education and health, and depletion of natural resources. Long secular persistence of poor policies and institutions explains the under-capitalization. Much of this can be attributed to the legacy of slavery and colonialism, both of which discouraged production and capital formation in the smallholder sector of Africa. Abduction and enslavement destroyed economic, political and social life of affected societies and undermined the formation of well-performing, sustainable states that arose in other regions as populations grew and economic diversification provided revenue bases for public entities.

Colonial rulers used instruments other than slavery that were equally extractive. Small-holders were prohibited in many areas from growing or marketing cash crops. Colonial governments maintained monopolies in marketing and input supply that enforced prohibitions on sales and raised prices of inputs. Head and hut taxes forced rural families to send members to work for wages, often outside the village. Access to public goods and services was confined to the estate or settler sector. Investments in infrastructure primarily served the marketing needs of the estate or settler sector. Finally, coercive colonial regimes resorted to forced labor and eviction of villagers from traditional land holdings, when needed.

Post-colonial policies did not reverse the decapitalization of rural areas. The era opened with great hope at a time when a fatally flawed development paradigm dominated professional thinking about economic growth. Nationalistic governments turned inward, favoring urban and industrial development over rural and agricultural. Belief in the efficacy of central planning led to suppression of the private sector and poor macroeconomic policies. Highly centralized political, fiscal and institutional systems governed rural areas. Agricultural policies levied implicit taxes on agriculture and transferred resources to urban areas, although in some instances the policies also delivered costly and inefficient subsidies, especially for fertilizer, transport, and subsidized credit. Organizations of civil society, including voluntary producers' organizations, were highly constrained. Post-colonial governments in many instances simply failed to nurture the entrepreneurial initiative of rural people. In more damaging cases, post-colonial policies fostered a culture of poverty and dependence among rural people. Governments throughout this period were assisted by the donor community, which, in turn was guided by faulty economics and the political polarity of the Cold War era.

The legacy of scarce capital, poverty, and dependence is thus very relevant to the agenda of today. Rural areas still lack capital, including physical, human, infrastructure, natural resources, social and political (as in representation and influence) capital. Deep institutional and social changes are needed to remedy this multidimensional lack of capital. Changes cannot be ordained from the top, and must derive from better incentives and stronger participation of rural communities and greater voice of rural people. The strategy seeks to build a framework that empowers and enables rural people to initiate, plan, and manage their own development. The important role women play in small-holder agriculture in Africa makes access of women to education, land, technology, services, inputs, finance, and social protection a key issue of African development as well as social justice.

The strategy emphasizes community participation, strengthening of voluntary producer organizations, primacy of the private sector in production and trade, a stronger role for markets, enhanced activity of local governments in provision of public services, and transparency and accountability in the use of public funds. The strategy is not new, and major elements were articulated in the 1997 *Rural Development: Vision to Action* document.

Chapter 4 The strategy

Although specific elements of the strategy are unique to countries and regions, the strategic interventions fall into four broad categories:

- Making governments and institutions work better for the rural poor
- Promoting widely-shared growth
- Enhancing management of natural resources
- Reducing risk and vulnerability.

The strategic interventions apply differentially depending on circumstances of individual countries. Given the scarcity of resources, the fiduciary responsibilities of the World Bank, and lessons learned regarding the efficacy of aid, preference is accorded to countries that are performing well and demonstrate a strong commitment to reduce poverty. This preference is reflected in the allocation of resources among countries and in increased attention to systems of public procurement and management of public finance.

Other factors that affect the emphases of national strategies include:

- Stability and strength of local institutions (for example, presence or absence of conflict, and status of decentralization)
- Relative factor endowments (for example, abundance or scarcity of land and water)
- Potential for agricultural intensification through greater commercial integration of small-holders relative to alternative farming systems for economically marginal areas
- Prevalence of HIV/AIDS and other endemic diseases of people and livestock
- Cultural traditions affecting dietary preferences and livelihoods.

For example, in countries emerging from conflict, such as the Democratic Republic of the Congo, the rural strategy will focus on rebuilding livelihood systems at the community level through participatory diagnoses and microprojects. In large and diverse countries, such as Zambia and Tanzania, different strategies are appropriate for different regions. In many places the potential for intensification through better linkages of producers' organizations to markets is substantial. In marginal areas far from markets, intensification based on purchased inputs is not appropriate, but improved rotations and cultivation practices can strengthen food security and stewardship of natural resources.

Making government and institutions work better for the poor

Issues of governance, including the general framework for security, the rule of law, and probity in public expenditure are particularly important for rural areas, since the least empowered within a political system suffer most from poor governance. These issues are high on the World Bank's corporate agenda, and are reflected in the Africa Region in allocation of resources among countries (more for those with demonstrated accomplishment on governance) and in increased attention to systems of public procurement and management of public finances.

Strengthening local government through decentralization

Decentralization is important to bring resources and decision-making authority closer to the people that government serves. Well-designed decentralization that improves the functioning of subnational governments can promote participation in development processes, enhance service delivery, and lead to projects that are more relevant, implemented with greater transparency and accountability, and are more sustainable due to a heightened sense of ownership by rural people (box 3).

To enhance local accountability, fiscal decentralization must be accompanied by policies that allow subnational governments to make budget decisions that reflect nationally-shared priorities, but are not made at the center. Local governments must be accountable to citizens for taxing and spending decisions. In general this requires giving each level of government the right to hire, pay and discipline staff performing locally managed and provided services; levy taxes and collect fees for services; and determine the level and mix of services to provide, often in conformity with national guidelines. Decentralization also involves reforming electoral processes to allow citizens to choose local government officials, and opening channels for greater citizen information on and participation in local government decision-making. Moreover, mechanisms must be included to ensure that people who are normally excluded from decision-making processes are able to participate in planning, designing and monitoring programs and policies. Strong support and oversight from the center may be needed to protect the rights of ethnic minorities, women and other marginalized groups to participate in decision-making and benefit from services.

Decentralization is a complex process. It entails gaining broad consensus on which level of government should do what, creating institutional capacities of subnational governments to raise revenues and deliver services, and implementing mechanisms to make subnational governments accountable to citizens for taxing and spending decisions. Successful decentralization takes time. A gradual approach, supported by carefully tailored assistance for capacity building, helps create the basis for further reforms and provides opportunities for learning.

Strategies for making decentralization successful include:

- Carefully monitoring the reform process. This can be done through user surveys, and making the results publicly available. Local communities should participate in the monitoring.

- Rewarding subnational governments that meet agreed goals with increased access to funding and more independence from central government. In Kenya's Small Towns

Development Program this approach has led to considerably improved revenue collection and service delivery of local governments.

- Supplying opportunities for training and other support to build capacity.

- Providing incentives to encourage central government staff to move to provincial, district and local government offices.

Box 3 South Africa's Integrated Rural Development Strategy promises to increase the voice of rural people

The South African government, in consultation with a wide range of key stakeholders through 2000, is now intensifying efforts to improve opportunities and well-being for the rural poor. In taking this step, the government is building on six years of experience, both positive and negative, with its own rural programmes, as well as assimilating key lessons from similar efforts worldwide. The resulting Integrated and Sustainable Rural Development Strategy is strategic in its vision and practical in its focus on mechanisms of implementation.

The strategy incorporates one of the key lessons of the international experience? rural development programs must be implemented in a participatory and decentralized fashion in order to respond to articulated priorities and observed opportunities at the local level. With the municipal elections of late 2000 and creation of the municipal councils, organs of local government will from the very start take on an important role in integrating programs to achieve synergistic rural development. Many will need assistance and guidance to develop capacity, but integration is clearly their role, and the newly created institutional structures will make this possible. The Office of the Presidency will initially provide strong reinforcement and help with coordination from above, but decisions will be taken at the municipal level. Each of the line departments will make an important contribution, and their efforts to achieve synergy and higher effectiveness in their own programs will be assisted by the strengthened integrative mechanism at both the local (municipal) and national (within the Presidency) levels.

The strength of this strategy lies in its emphasis on a mechanism that can achieve results on the ground. That mechanism, in brief, empowers rural stakeholders to use the Integrated Development Plan to select programs that address their priorities. The basket of selected programs is financed at the municipal level through an expenditure envelope comprised of the municipal budget, the commitments of the line departments made through the Integrated Development Plan process, commitments of donor organizations and NGOs, and public-private partnerships. Although these resources were available in the past, they were not channeled through the new integrative mechanism.

In addition to improved integration and targeting of existing programmes, the strategy calls for inclusion of a program supporting income-generating activities at the community level on a matching grant basis. It also names accelerated implementation of the land reform as a priority.

The new approach will be implemented throughout the entire country by 2010. It will be implemented initially in selected areas of concentration and subsequently expanded. The strategy is explicitly designed to enhance the political voice of rural people. It will be implemented through the structures of local government, which will concurrently encourage government to increase capacity and rural constituents to demand accountability. The strategy in its totality presents an opportunity for South Africa's rural people to realise their own potential and contribute more fully to their country's future.

Source: Government of the Republic of South Africa, 2001.

Putting communities at the center of development

Increasingly in Africa, resources to execute development projects are delivered through programs which empower communities to pursue their own priorities for development by providing financial resources, facilitation, and technical services. Initially much of this activity was channeled through social funds which finance small infrastructure projects such as schools, clinics or boreholes. Nearly all social funds involve communities in selecting projects, supervising implementation, monitoring outcomes and contributing to costs (usually 10–30 percent of the total). They do not, however, always provide funds directly to communities to use to implement projects themselves.

While social funds can be effective, they have several shortcomings. They are not embedded in the institutional structures of government, so they do not provide a permanent source of finance to communities. Moreover, they are often administered through special units that operate independently of government, and this can undermine local government.

Community driven development programs address the limitations of social funds. These programs provide partial grants to communities to use to pursue their own development objectives (within certain defined limits). Community driven development grants generate all the benefits of community participation (better project design, implementation and sustainability as communities select projects that match local preferences, and closely supervise project implementation to ensure community funds are properly used). But they go further. By giving communities control over management of money and procurement decisions they build local skills and institutions to manage development planning and implementation. And they help stimulate local private sector development by encouraging communities to purchase goods and services from local suppliers, including nongovernmental organizations.

Community driven development programs also work to strengthen the linkages between community and local governments. Staff of local government offices working in various sectors often participate together in community planning processes. This helps them learn about local priorities and coordinate sectoral activities, which they can then reflect in local development plans. The goal of the community driven development approach is to build local government capacity at the same time as community capacity, so that local governments can gradually take over the responsibility of distributing funds to communities and overseeing their use.

Successful community driven development projects often embody the following principles:

- Start small and grow gradually, so experiments that fail will not be costly. Grants as small as US$5,000–10,000 per community are enough to get started. Build in processes for learning and adapting programs according to emerging lessons.

- Be prepared to provide technical and managerial support to communities and local government structures that request such help.

- Create ex post accountability mechanisms to assure that communities have used funds as intended.

- Include safeguards in project rules to ensure that all community groups are able to participate in project decisions, including ethnic and religious minorities, women, the handicapped, the poor and other groups that are normally excluded.

- Provide incentives to communities to select projects that address central government and international priorities, such as preventing HIV/AIDS and caring for its victims, protecting the environment, and providing safety nets for and reducing poverty among the poorest.

Supporting voluntary producers' organizations

In addition to supporting improved governance, the Africa rural strategy strengthens the institutional foundations for rural development by supporting voluntary producers' organizations. Producers' organizations amplify the political voice of smallholder producers, reduce the costs of marketing of inputs and outputs, and provide a forum for members to share information, coordinate activities and make collective decisions. Producers' organizations create opportunities for producers to get more involved in value-adding activities such as input supply, credit, processing, marketing, and distribution.

Producers' organizations have a long and mixed history in Africa. Voluntary producers' organizations are somewhat stronger in West Africa. In much of eastern and southern Africa, officially-constituted producers' cooperatives were part of the institutional architecture through the 1980s, and an assessment of the appropriate types and roles for producers' organizations is still under way. Producers' organizations may operate strictly at the local level, focusing on issues of immediate concern to farmers, such as access to credit and services and resolving conflicts over access to natural resources. They may also function at the regional and national levels, influencing policy decisions on matters such as land, trade and fiscal policies.

The principles guiding support to producers' organizations are similar to those generally governing support to community-based organizations. The focus should be first on creating an enabling policy and legal environment within which producers' organizations can flourish and become partners with government and the private sector in decision-making and implementation. Aid should be directed at providing organizational support to help producers form and operate associations and technical assistance to strengthen capacities of producer organizations to create and implement business plans. This is especially important in mobilizing the poor and other marginalized groups who may not be invited to join existing producers' organizations.

Improvements in the legal environment and technical assistance will be enough in many cases to allow producers' organizations to initiate activities and to access commercial financial services. In other cases, financial constraints will continue to limit the organizations' effectiveness. In these cases, financial support in the form of matching grants is appropriate for producers' organizations that have demonstrated capacity to manage funds and activities. As far as possible, grants should be untied to allow producers' organizations to pursue their own priorities in their own way. To ensure that benefits are widely-shared, producers' organizations, donors, and the government can jointly agree on criteria and procedures for accessing and allocating funds. This information should be made widely available to all members of the community. With untied grants, producers' organizations are free to purchase goods and services from suppliers of their choice. To enable them to make informed choices, government and others can provide them with lists of qualified service providers. To reduce the likelihood that funds are misused, programs should be subject to ex-post evaluation and audits, and groups found remiss barred from accessing funding in the future until they meet specified criteria. Use of grants should complement rather than displace development of services provided by financial institutions. For example, grants can be designed to facilitate mobilization of savings and to leverage in commercial lending.

Augmenting rural voice

Each of the interventions noted above (that is, support for decentralization, community participation, and producer organizations) also serves to enhance rural people's voice in discussions of priorities for public expenditure and national development. Development partners can amplify rural voice in consultations and negotiations with government and demonstrate the value of broad participation through their projects and programs. Nongovernmental organizations can help identify areas of common interest and help build pro-poor coalitions that link the interests of the poor with the nonpoor. In countries where poverty is predominantly rural, and where the World Bank has active programs, the country director of the World Bank becomes a major spokesperson for the rural poor, backed up by technical expertise of the Bank staff, in dialogue with the client over priorities for assistance. The Poverty Reduction Strategy Paper (PRSP) process and its links to the Highly Indebted Poor Country (HIPC) programs thus provide important opportunities for the donor community to encourage participants in national policy dialogue to give appropriate weight to the interests of the rural poor. This broad approach to strengthening rural institutions will be pursued in cross cutting as well as sectoral operations of the World Bank Group.

Promoting widely-shared growth

Agriculture remains high on the agenda for rural development in Africa—more so than in regions with greater food security and income levels supporting a more diversified economic base. Accelerating agricultural growth through technological change and trade raises the incomes of agricultural producers. It also increases real wages of both the rural and urban poor by bringing down the price of food. African families on average spend almost two-thirds of their total household incomes on food, so lowering food prices frees resources that families can use for other priorities. The increased income from expanded agricultural output stimulates development of rural nonfarm enterprises, as rural people spend their extra income on a wide variety of labor-intensive nonfarm rural goods and services, such as clothing, kerosene, processed foods, health care, transportation services, and construction supplies and services. Demand for inputs increases, drawing more private traders into rural areas. Regular supply of raw products encourages investment in processing and related activities. For the most part, small, labor-intensive enterprises produce these goods and services, raising rural employment and incomes still further. Higher employment, in turn, boosts demand for food, which keeps staple prices steady in the face of higher supply. Rising rural employment increases wage rates of both rural and urban workers. Agricultural growth contributes to reduction of poverty both directly and through its linkages with rural non-farm activities.

Agriculture, although important, is not be the only source of growth in rural Africa. In some villages and small towns tourism fulfils the same function, especially labor intensive tourism employing local people (box 4). Mining and mineral processing, forestry, fishing, and other natural resource based activities are important in some places. Any activity that produces a tradable good or service that is sold out of the community and generates income can stimulate growth of other productive activities through linkages in consumption and production. In Sub-Saharan Africa today, however, agriculture is the most important rural enterprise, contributing an average of 30 percent of total gross domestic product (excluding South Africa), and over 40 percent in one-third of countries (annex 2). Agribusinesses, which themselves depend on agricultural growth, are responsible for an additional 20 percent of gross domestic product and about 25 percent of total rural incomes (including value-added of agro-related industries and agricultural trade and distribution. Raising productivity of these agriculture and rural nonfarm businesses will profoundly affect the rate of economic growth for the majority of African countries over the next ten to fifteen years.

Agriculture leads growth in many parts of rural Africa, but investments in infrastructure and human capital lead agriculture. Hence the agendas of income generation and provision of services are intertwined. Moreover, as agricultural growth accelerates and demand for nonagricultural goods and services grows, well-functioning infrastructure and service delivery systems raise the multipliers that spread agricultural growth broadly within the community.

In most of rural Africa small-holders participate in markets and sell at least a portion of their output for cash. For these producers, growth based on better integration with markets, diversification of sources of rural income, and interlinked development of farm and nonfarm activities can reduce poverty. Many rural Africans, however, live in areas that are marginal either because they are remote or have very poor natural endowments. Small-holders in marginal areas may not be competitive producers of crop or livestock products for markets. In these areas, strategies based on more intensive interaction with markets may not be appropriate either economically or environmentally. Promising technologies are available and new ones are being developed that combine low-input agriculture and forestry and innovative rotations to improve food security in areas where more intensive use of purchased inputs is not a feasible option.

Agriculture and related rural enterprises are primarily private activities, and the private sector leads in generating growth. The public sector plays an important supporting role in a number of areas that facilitate private activities. Important among these are: reforming policies and institutions to encourage investment; improving provision of agricultural services, including research and extension; increasing investment in infrastructure and quality of services in rural areas; expanding access to rural financial services; improving water control systems; strengthening land policy; and improving management of livestock production systems.

Box 4 Tourism can help countries diversify their economies and reduce poverty

Tourism is one of the world's fastest growing businesses, and Africa is benefiting significantly from this trend. During 1985–99, tourism arrivals in Africa grew by an annual average of 7.5 percent per year, compared with a world average of 5.2 percent (World Tourism Organization, 2001). This was faster than in any other region except Asia and the Pacific. During the same period, Africa's share of the world market expanded from 3 percent to 4 percent.

Tourism is a significant source of income, employment and foreign exchange in many countries of Africa. It already accounts for over 6.4 percent of GDP and 7.6 percent of jobs (including both direct and indirect effects) (World Travel and Tourism Council, 2001). By 2011 it is projected to account for 7.6 of GDP and 9.2 percent of employment in the region. However, tourism is far more important for some countries than others; countries with beach, significant wildlife resources and large diaspora communities benefit the most. Countries where direct spending on travel and tourism accounts for more than 5 percent of GDP include Seychelles (19 percent), Mauritius (14 percent), Cape Verde and Namibia (8 percent), Comoros (7 percent), and Gambia (6 percent). Countries where tourism and travel accounts for 3–5 percent of GDP are Ghana (5 percent), Botswana, Ethiopia, Kenya, Madagascar, Sao Tome and Principe, Senegal, Zambia (4 percent), Mali, South Africa, Tanzania, Uganda, Zimbabwe (3 percent) (World Travel and Tourism Council, 2001).

Tourism offers several advantages that farming and manufacturing do not. Earnings from tourism tend to be more stable than those from agricultural and manufactured commodities. Tourism can flourish in countries with few other competitive exports, and can be developed on the basis natural resources and culture, assets to which the poor often have access. Moreover, tourism is a labor-intensive business, and employs a high proportion of women, young people and workers who have little or no formal schooling. For rural people, tourism offers a means to diversify sources of income.

Governments and their development partners can increase the positive impacts of tourism on the poor. Measures include:

- Encouraging mainstream tourism businesses to link up with small enterprises supplying goods or services
- Developing the entrepreneurial capacities and managerial skills of small and medium-sized enterprises
- Providing training to the poor to improve their employment opportunities in businesses that serve the tourism industry
- Helping rural communities start and operate small-scale tourism businesses built around community assets
- Engaging rural communities in developing a policy and planning framework and decisions on tourism that affect them
- Involving local communities in managing public lands, such as national parks
- Providing a regulatory environment that protects natural resources from over-use and degradation.

What the World Bank is doing

The IFC and MIGA of World Bank Group provide support to private enterprises that are developing tourist facilities. IBRD, IDA and GEF provide loans or grants for development of nature and cultural tourism, often as part of projects establishing or maintaining national parks or cultural heritage sites. Strategies for enhancing the development impact of tourism are also being incorporated into CASs and PRSPs, as in those for Kenya and Zambia.

Reforming policies and institutions to encourage investment

CONTINUING POLICY AND REGULATORY REFORMS. The faster growing African countries have made substantial progress on macroeconomic and sectoral reforms. Continued assistance may be needed to consolidate reforms and to support budgets of public entities fulfilling newly defined functions.

REDUCING TRADE BARRIERS OF BOTH INDUSTRIALIZED AND AFRICAN COUNTRIES. An important part of the policy agenda lies outside the boundaries of African nations, in the evolving rules of the World Trade Organization (WTO) and decisions regarding subsidies and market access of the OECD countries. Despite the rhetoric of change on agricultural protection during the Uruguay Round, change in practice has been modest and gains for African producers very limited. Unless further gains are made in reducing subsidies and opening markets, the global goals of poverty reduction cannot be considered a serious commitment by the developed world. The World Bank assists in the area of trade liberalization by providing analysis and advocacy for African countries, and by assisting their trade representatives to prepare for participation in trade negotiations.

Reducing trade barriers within Africa will also help increase incomes. African import tariffs average 25 percent, which is three times higher than those of the fast growing exporters and more than four times the developing country average (Townsend, 1999). Nontariff barriers also remain high across the region. Trade barriers hurt farmers by increasing the costs of their inputs (for example, fertilizers and tractors), and by restricting markets for their outputs. Because so many Africans rely on agriculture for their livelihoods, liberalizing trade would have dynamic multiplier effects for rural areas and for economic growth as a whole.

DEEPENING STRUCTURAL REFORMS. In much of Africa, private sector response to policy and institutional reforms in the 1990s has been disappointing. This has led some to question the value of the reforms themselves. In many cases current problems derive from residual interventions an incomplete liberalization. For example, In Zambia the parastatal Food Reserve Agency continues to intervene in input markets to the detriment of development of private activity in this sphere. In Malawi new entrants in the transport business face high fees for licenses and pay high prices for spare parts of vehicles due to duties and tariffs. As a result, transporting goods from the farm to market costs twice as much in Malawi as in neighboring countries.

MAKING INSTITUTIONS TRANSPARENT, CONSISTENT AND CREDIBLE. About 60 percent of entrepreneurs in Africa report that unpredictable changes in rules and policies seriously affect their businesses (Brunetti, Kisunko and Weder, 1997). Institutional arrangements that foster responsiveness, accountability and the rule of law need to be developed if incentives for private investment are to improve. Areas of special attention include rules that allocate and define property rights (property and bankruptcy laws, intellectual property rights, zoning regulations), and rules that define permissible and non-permissible forms of cooperation and competition (licensing laws, laws of contract and liability, company and cooperative laws, anti-trust laws).

Improving provision of agricultural services, including research and extension

RESEARCH. Science, technology and innovation are crucial to raising the productivity of agriculture and improving management of natural resources in Africa. The technological lag in African agriculture is primarily a symptom of underinvestment and lack of adoption, not low rates of return to research. In the future, African institutions of research and extension will need further institutional and management reforms using the principles discussed in the last section, and higher levels of support, stronger involvement of beneficiaries, and closer linkages with institutions working on the frontiers of scientific discovery. Investments in agricultural research generate high payoffs in Africa, with a median internal rate of return of 37 percent (Evenson, forthcoming). However, after increasing from US$250 million in 1961 to US$701 million in 1981, spending for agricultural research in Africa stagnated in the 1980s and the 1990s. In many African countries, budgets go increasingly to fund staff costs rather than operations, which limits the effectiveness of spending.

More needs to be done both to increase funding for research by international and national research centers and to make spending more effective in meeting the needs of African farmers. Partnerships between the public and private sectors show increasing promise and reflect the substantial role of the private sector in agricultural research. For example, in a highly promising partnership the Institute for Genome Research in the United States and the Kenya-based International Livestock Research Institute joined together to control East Coast Fever, a disease that kills one million cattle in the region each year. Public institutions can improve cost recovery by collecting fees for improved seeds and other technologies generated through research. Partnerships within the public sector are important, as well. Regional and subregional collaborative research programs that coordinate the efforts of national research systems can meet this need. Strengthening linkages of the national agricultural research centers with the Consultative Group on International Agricultural Research (CGIAR) is also critical. The World Bank and other development partners have assisted in creating an African based regional entity (Forum for Agricultural Research in Africa, or FARA) that will strengthen the linkages between and among national research programs and with centers of excellence, including the CGIAR. In addition, the World Bank is developing a lending facility on which countries could draw to receive support for their national programs of agricultural research, with strong incentives for institutional reforms, and streamlined procedures for project preparation and approval.

To improve effectiveness of spending, more needs to be done to decentralize resources; involve farmers and agribusinesses in decisions on research priorities, funding, execution and evaluation; outsource research activities through competitive grants; bring research closer to and into farmers' fields; improve coordination among research institutions; and systematically monitor and evaluate results. A great effort needs to be made to focus the research agenda on the needs of women farmers. This will require reaching out to community organizations to learn what special constraints women face and then focusing research programs to tackle them.

Biological innovations in agricultural technology hold special promise for much of the African region, since the new technologies in many cases enhance resistance to pests and diseases, are productive under rain-fed conditions, and can be distributed relatively inexpensively through improved seeds or breeding stock. Africa needs larger, better funded research institutions and strong public-private partnerships that can engage effectively in developing and applying biotechnology in selected areas. To facilitate research and commercialization of agro-biotechnology, governments need to pay special attention to the policy and regulatory environment. Few African countries at present have in place a proper legal and regulatory framework to manage the introduction of this biotechnology—spanning biosafety, food safety, and intellectual property rights. The Global Environment Facility (GEF) is putting into place a mechanism to assist African countries to comply with the Biosafety Protocol. Africa has a special stake in global efforts to assure that the products of the new technology are safe and acceptable to consumers world-wide. Particular efforts should be made to assure that African perspectives are represented in the global for a where issues regarding trade and standards for biological technologies are debated.

EXTENSION. Beginning in the early 1980s, World Bank support to agricultural extension in Africa was guided by a framework that came to be known as the training and visit (T&V) system for agricultural extension. Characteristically, these ministry-based programs placed a cadre of civil servants in the field to work with farmers, while providing supervision and technical guidance through civil servants stationed at the provincial and national-level offices of the ministry of agriculture. These programs in Africa employed an estimated 100,000 civil servants who worked directly with up to 10 percent of Africa's farmers.

In recent years, disenchantment with these centrist and traditional extension programs has grown. High costs and perceived limited impact of the traditional programs has led to the emergence of new approaches in the design of public agricultural service programs. Since the mid-1990s countries have increasingly developed agricultural extension reflecting the principles of:

- Decentralizing resources and responsibilities for extension to local governments and communities. Decentralization gives farmers a bigger role in designing, funding, governing, executing and evaluating extension programs. It also improves responsiveness and accountability of extension agents.
- Outsourcing extension services to nongovernmental organizations, private groups or others. Outsourcing improves efficiency of delivery and accountability of extension agents, especially where a choice of providers is available.
- Sharing costs of extension services among national governments, local government, farmers' associations, nongovernmental organizations, donors and farmers. The share paid by local governments and farmers rises as the system matures. Cost sharing

makes financing of extension services more sustainable and less dependent on national budgets.

- Improving linkages among farmers, educators, researchers, extension agents and others. Stronger linkage improves the relevance and impact of research and extension.
- Systematically monitoring and evaluating extension programs. Careful tracking focuses attention on results.

A program designed along the foregoing lines is being implemented in Uganda with support from the World Bank and other donors (box 5). Other countries have expressed interest in the approach and are likely to move in the same direction. For example, Zambia is implementing participatory extension programs with support of the World Bank and other donors.

More work needs to be done to ensure that the principles for effective extension are systematically reflected in national programs. Approaches that better meet the needs of women farmers are also needed. Recruiting and training more women to provide services in the public and private sectors would help in reaching women farmers. Using women's associations as contact groups has improved outreach to women in some countries, and is often more effective than working through village associations, which are often led by men. In some countries, women extension volunteers selected by their communities to serve as point of contact with extension agents have proved effective in bringing extension services to women.

Increasing investment in infrastructure and the quality of services in rural areas

Investments in infrastructure improve the linkages between rural areas and small towns and trading centers, enhance productivity, and raise the quality of life of rural people. Rural income generation depends in large part on business services provided in towns, including marketing, exchange of information, banking, telecommunications, and others. Rural nonfarm enterprises are both providers and users of these services. The towns and rural hinterlands thus form a connected economic space in which value added per hectare correlates closely with the density of connection.

To ensure that poor people share widely in the benefits of growth requires measures to increase their opportunities and access to services. Substantial new investments in rural education and health care, clean water and sanitation systems, and transport, power and telecommunications services are needed.

Box 5 Changing the institutional arrangements of agricultural extension in Uganda

Through the National Agricultural Advisory Program, the government of Uganda is fundamentally altering the way it delivers agricultural extension from a supply-driven approach with government as the sole provider of advice, to a much more flexible and pluralistic demand-driven system. Key changes include:

- **Increasing independence and flexibility of extension services** by creating a small and semiautonomous unit within the Ministry of Agriculture, Animal Industry and Fisheries. This will allow the program to escape from old bureaucratic strictures and some of the civil service restrictions that limit the flexibility and effectiveness of many public sector institutions in Uganda.
- **Decentralizing responsibility and funding for agricultural advisory services** from district governments to farmers' organizations and their local governments. Central government will provide matching grants to district governments. District governments will channel the funds to farmers' organizations and local governments to use to hire experts on specific technology, market development and other areas important to farmers. Farmers can also use the resources to finance activities such as participatory planning and group mobilization.
- **Increasing outsourcing of services** by providing incentives to districts to reduce the number of extension agents they employ as civil servants and to use contracted services instead. To ensure that service providers are qualified and perform as expected, the government will set and enforce standards for qualifications and performance. It will establish a registration system of agricultural service providers as professionals. It will also provide training to civil servants made redundant through the reforms to ease their transition to employment in the private sector.
- **Boosting cost-sharing** by gradually and deliberately raising fees to local governments and farmers for extension services.
- **Improving donor coordination** by requesting donors to make a joint commitment to the program and use a common mechanism to finance it. A memorandum of understanding will be signed by participating donors (including IDA) and government, containing procedures for annual approval of budgets and workplans, quarterly cash flow forecasts, commitments, timing of flow of funds, triggers, procurement, reporting, review and evaluation and external audits.

Source: World Bank, 2001c

Long experience shows, however, that simply constructing roads, building clinics, or installing water pumps is not enough. Often in the past roads have deteriorated, clinics have gone without health care workers or medicines, and water pumps have broken down, never to be repaired. In many cases this occurred because governments and donors decided where infrastructure would be built, and what levels and quality of services would be provided. They did not pay sufficient attention to how resources for operations and maintenance would be generated. Nor did they provide the local staff and community members with the skills and support needed successfully to manage, operate and maintain the systems for which they were made responsible.

These difficult lessons have led to a fundamental rethinking of the roles of governments, donors, nongovernmental organizations, communities and the private sector in providing and operating rural services and infrastructure, and of the strategies needed to raise investment in rural services and infrastructure and ensure that the benefits reach the poor. Models of delivery of services are in a period of transition, away from centrally-controlled public sector provision, to more private sector, demand-driven and decentralized models, and therefore increasingly in line with the institutional development principles discussed in the first section. The public sector provides incentives to bring in private investors, assures access, contracts with private firms to provide public services, and provides services directly only in cases where the private sector declines to enter even under conditions of partnerships. Many of these latter instances occur in rural areas, since the costs of constructing rural infrastructure are high and the ability of rural clients to pay is limited. Private investments in infrastructure are more likely in rural towns than in the hinterlands. Even though costs may be too high to attract private providers, minimal national standards of service apply. Continued provision of services by the public sector in these cases can be justified according to national commitments to minimal standards, as temporary interventions to reduce poverty, and as instruments to reduce risks associated with isolation and the absence of services. In such cases, a heightened role for communities and local governments is particularly important to avoid the observed problems of the past.

While the new strategies vary by country and by sector, many attempt to:

- *Create a national policy framework that identifies priorities for rural investments as part of a national network of services and infrastructure, and specifies roles and responsibilities of various actors in delivering services.* This builds coherence by linking rural services with services delivered nationally. For example, rural transport is conceived more broadly than simply roads. Rural footpaths link to regional roads, which join national roads, each of which is managed by a different level of government. A national road transport policy framework specifies priorities for investment, indicates how resources for investment and operations and maintenance will be mobilized, and assigns responsibilities for managing activities at various levels. The national framework also links provision of infrastructure with development of transport services, including nonmotorized, low-cost forms of transport, such as bicycles and draft power.

- *Decentralize resources and responsibility to the lowest level decision-making body capable of delivering the services.* Decentralization can lead to services that better match local demands and needs. It will also promote ownership, transparency and accountability, and improved professional performance of teachers, health care workers and other service providers. Decentralization should give local governments a predictable, transparent share of revenue and recognize the appropriate locus of decision-making. For example, in the case of energy and telecommunications, the decision to invest resides largely with the private sector, while government's role is to attract investment and provide incentives for equitable provision. On the other hand, the decision to improve the rural road network is made largely by public entities at various levels, while water supply and sanitation decisions are generally made at the community or household level.

- *Provide communities with a range of levels and options depending on the scale and nature of rural infrastructure service*. Individuals, communities and investors should be allowed to choose from a range of technical options, since the implications for management and maintenance may differ.

- *Provide access to primary education and basic health services without fees*. These basic services contribute to the public welfare. Provision without fees is a key element of the effort to reduce and manage rural risks.

- *For services other than basic health and education, allow providers to charge fees adequate to cover their operating and maintenance costs, and some or all capital costs.* In the past subsidies for services have gone mainly to the nonpoor, and have often left service providers with too few resources to expand to meet demand from rural households and enterprises.

- *Empower communities to take the lead in the delivery of services and infrastructure*. Empowering communities to take the lead promotes ownership and sustainability, and builds capacity for future development undertakings. Rules of participation must assure that poor and marginalized people have a voice in community for a in order to prevent capture of the benefits by local elites.

- *Adopt approaches that specifically target the needs of women and girls and raise their status*. Approaches may include guaranteeing women and girls a role in community decision-making bodies and measures to enhance their income generating opportunities. Finding ways to keep girls in school is important. Employing female teachers in rural schools and giving them responsibility for teaching advanced students can help motivate older girls to stay in school by demonstrating the value of education.

Expanding access to rural financial services

A sustained process of income generation will require improved access to rural financial services, including savings, credit, insurance, collateralization of fixed and moveable property, transfer of funds, trade finance, and more complex financial instruments and transactions. The agenda for rural finance is multifaceted because the array of providers and clients and their needs are diverse. Out-grower schemes and suppliers' credit are important for producers of cash crops that require processing, such as coffee and cotton. Producers of food crops, livestock, and crops not needing extensive processing have traditionally not received financing through out-grower schemes, and have expected some form of officially provided credit, most of which is no longer available. Some of these producers, particularly those raising livestock, may have assets they can use as collateral. Attention to the legal framework for collateralization of moveable property, improved registry of liens, and improved contract enforcement could provide these producers with better access to credit, either individually or as part of voluntary groups.

In many cases, however, producers should expect to finance most of their working capital needs out of savings, or should leverage accumulated savings as collateral for loans. Thus programs that reduce the transactions costs of saving or increase the incentives to save will improve access of many small-holders to capital.

A major focus of the rural financial strategy is thus to bring the commercial institutions closer to rural clients, and to make the clients more attractive to providers of service. Even with a successful rural finance strategy, however, a large number of rural clients will not be served under conventional terms. Without finance or provision in kind of inputs formerly provided at low or zero price by parastatals, these households sink more deeply into poverty. In these cases, grants coupled with technical assistance to achieve higher earnings and build savings are the best approach. Similarly, some entrepreneurial initiatives of producers' organizations or community groups can receive financing through a blend of own contributions, matching grants and commercial loans. In such cases, care must be taken to assure that the grant element supports rather than displaces commercial financial activity.

Improving water control systems

In Africa over 95 percent of cultivated land is rainfed. Many of these lands are in arid or semiarid areas where rainfall is unreliable and crop failures are common. Providing water at critical stages of plant development (such as the flowering stage of maize) can dramatically reduce risks of crop shortfalls. Increasing yields on rainfed lands by just 10 percent would have greater impact on total agricultural output than doubling area under irrigation, even though productivity on irrigated lands is two to four times that on rainfed lands. Moreover, such improvements would benefit mainly poor farmers living on rainfed lands, without access to large irrigation schemes.

Increasing availability and control over water in rainfed areas through simple actions to harvest and store water, and/or to improve drainage, could thus make a major contribution to reducing poverty and increasing security of Africa's rural poor. Some promising technologies include microirrigation, surface storage, water harvesting, water conservation, rainwater catchment and storage, and recession agriculture. Where groundwater resources are available, low-cost technologies such as treadle pumps, simple bucket and drop lines, and small portable pump sets have proved popular among farmers. These technologies are supplied mainly by the private sector, supported by a network of small local maintenance and construction workshops. Farmers pay the full costs of operating their pumps, so they tend to use water productively, which reduces the impact of irrigation on downstream water users and the environment. Nonetheless, groundwater is a common property resource and there is a danger that, collectively, farmers in an area could seriously deplete groundwater resources. Where groundwater supplies are vulnerable, measures must regulate abstraction. Additional efforts in research and extension are needed to identify appropriate technologies for management of water and educate farmers on their use.

Expanding irrigated agriculture also offers considerable potential in Africa. Many large irrigation schemes built in the past, however, have neither generated adequate economic rates of return nor benefited poor small holders. On average, irrigation systems in Africa have cost US$8,300 per hectare to construct; more than three times the average of systems in South Asia (US$2,500), largely due to poor contracting practices (IFAD, 2000). Large schemes have often been poorly managed, providing water at highly subsidized rates that encourage misallocation of water resources and fail to generate resources for operation and maintenance. This has led to deterioration of distribution systems and a decline in irrigation services. It has also resulted in some cases in environmental damage including waterlogging, salinization, contaminated runoff, erosion and land degradation, and rise of water-related diseases such as bilharzia and malaria. Furthermore, farmers with political connections have benefited most from irrigation. The poor have upon occasion been pushed off land that suddenly became more valuable with the advent of irrigation. Women are particularly vulnerable to eviction as they often have insecure property rights to farmland.

In the future, more attention must be paid to designing systems of irrigation and water control within a framework taking into account the many competing demands for water, including drinking water, power generation, industrial and environmental uses. Legal and institutional frameworks for sustainable water management are needed. Water boards comprised of stakeholders from the various groups can be given responsibility for mediating competing claims for water, setting an agenda for future allocations, and advising on key policy issues that affect water distribution among users.

Land policy

How access to land is regulated, rights defined, and conflicts surrounding its use are resolved influences the distribution of wealth and power among households and groups. Land issues affect rates of investment, and hence growth, influence public finance through their impact on taxation, and affect social stability with its implications for foreign investment. Among the many issues relating to land in Africa, three are foremost: security of tenure, distribution of ownership and access, and management of natural resources. Present forms of tenure do not provide sufficient security to support investment, to facilitate mobility of resources needed in a dynamic economy, and to protect the vulnerable under increased population pressure and high mortality. The historical legacy has resulted in unequal distribution of land and problems of access in many places, but most acutely in Southern Africa. Problems of tenure and access contribute to degradation of land and poor management of natural resources, such as forests and wildlife. Because land is central to rural livelihood systems, improved management of land is central to reduction of rural poverty.

ACHIEVING SECURITY OF LAND TENURE. In Africa traditional systems of land tenure in the past generally provided effective security for most community members. Arguments that traditional tenure should be converted to free-hold or forms with similar security and formal titling in order that land could be used as collateral were in many cases unconvincing because financial institutions were not yet able or willing to accept small holdings in pledge. The benefits of enhanced financial flows due to conversion of traditional tenure did not appear to outweigh the costs of conversion and titling. Moreover, tenure reform raises controversy for political, social, and cultural reasons.

As rural financial institutions grow, however, and as costs of accessing services decline, the weight of costs and benefits shifts in favor of tenure reform. Moreover, population pressure, urban encroachment, and high mortality from HIV/AIDS are all exerting pressure on traditional systems of land tenure.

The major advantage of traditional tenure was its relative equality of access and provision of security for the vulnerable. With present patterns of mortality associated with HIV/AIDS in much of Africa, traditional tenure does not necessarily protect the vulnerable. Under many traditional systems widows and orphans lose access to land upon the death of a male head of household. Disincentives for investment present in the past may not have had much impact when rates of return to investment were low. Open national economies and flows of capital and goods, however, increase the potential rates of return to investments in rural areas for investors who can access land. Traditional tenure arrangements raise barriers to those who would invest in processing facilities and in outgrower schemes, both of which offer substantial benefits to resident small-holders. Individual small-holders contemplating small investments on their own holdings financed either through savings or through their own labor, such as introduction of improved water management, may be unwilling to do so without assurance that they or their heirs will retain the land. Recently passed land laws reflect demand for increased security of tenure at the household level, although the tenure arrangement may not be classical free-hold in all cases. The process of implementing the land laws will be a sustained one requiring time and assistance.

ADDRESSING UNEQUAL DISTRIBUTION OF LAND. The unequal distribution of land is a major issue in South Africa, Zimbabwe, Malawi, Mauritania, Rwanda, Kenya, Mozambique, Ethiopia and Nigeria. In some countries, such as South Africa and Malawi, the issue is potentially explosive and could lead to a major crisis. South Africa has adopted a program of redistribution, but implementation has lagged despite the evident high risks of delay. In countries where tensions are growing, but still under control, appropriate measures may include selective redistribution of land and strengthening systems of land administration to facilitate normal transactions. Issues of access to land can be addressed separately from issues of tenure security where tracts of land already held under free-hold either by the state or by willing private sellers provide a potential supply. In other cases distribution and tenure reform must be addressed simultaneously. Finally, where conflict over land issues has already erupted on a major scale (Zimbabwe, Côte d'Ivoire), assistance will be needed in formulating and enforcing policies that address the causes of the conflict and financing investments to implement the new land relations.

IMPROVING MANAGEMENT OF NATURAL RESOURCES. Africa still has large areas of land managed under open access regimes. Experience shows that these lands can be sustainably managed by communities with rights of access. In order for communities to manage these lands well, they need formalized tenure rights and, in some cases, return of previously expropriated lands, as well as technical assistance and training. Difficulties arise when communities have overlapping claims to use of open areas, or when competing uses within a community conflict. In these cases combinations of mediation and/or law enforcement are needed to prevent or contain conflict.

CHALLENGES AND THE WAY FORWARD. The challenges for land policy are many. More needs to be done proactively to address extreme inequality before tensions escalate into major conflicts. Doing so is not easy, as the case of Zimbabwe reveals, but the costs of inaction are high. Mechanisms to mobilize sufficient resources and expertise rapidly are needed. Community-based management of natural resources needs to be further developed. This will require a long-term commitment of both governments and their development partners. Customary and traditional tenure forms that inhibit investment, impede dynamic adjustment of land use, and fail to protect the vulnerable will have to change, but accomplishing the change in ways that do not undermine valued social and cultural traditions will require a creative and inclusive dialogue across many segments of African societies. In many countries that dialogue has started around the passage of new land laws, but it will continue well into the period of implementation of the laws.

Improving management of livestock production systems

Livestock in Africa are raised under varied systems, of which pastoralism, mixed agriculture-herding systems, and intensive, commercially-oriented schemes are the major ones. Pastoralism supports the largest number of people and contributes the most to GDP and exports. Intensive, commercial systems, which often operate in periurban areas and produce poultry, pigs, and milk for consumption of city dwellers, are growing rapidly and will become increasingly important with continued urbanization. Africa's livestock sector shows potential for significant growth without raising the environmental issues associated with intensive livestock systems of Europe and North America. Demand for meat and other livestock products globally is projected to grow substantially, and Africa's resource endowment places it well to produce competitively, for domestic, regional, and global markets. In order to realize the potential, the public sector will have to invest significantly in research to improve breeds and control disease, in setting and enforcing standards for animal health, and in providing the infrastructure for processing and trade of animal products. Appropriate public investments can generate significant private response. At present, animal numbers in many countries are declining.

PASTORALISM. Herding is a way of life in which the entire family is involved, and in which social organization, environmental management, and production systems are all interlinked. Herders often travel with their goats, cows, camels, sheep, donkeys and horses over long distances, in arid lands with highly unpredictable rainfall patterns.

They face both high weather risks and significant price volatility, in response to which they have developed sophisticated coping mechanisms.

Governments and their development partners face several key challenges in assisting pastoralists. Providing services to mobile communities requires special approaches to delivery. Needs and demands of pastoralists sometimes conflict with those of transhumants and settled farmers for access to land, water and other natural resources, and governments are called upon to mediate and/or enforce laws. Because pastoralists face high risks with few coping mechanisms, they are frequent victims of natural disaster requiring public intervention.

In the past, governments and development practitioners often tried to encourage pastoralists to settle in villages and use surrounding land more intensively for livestock production or agriculture. They supported construction of boreholes and dams to increase permanent supplies of water. This approach largely failed, because the arid pasturelands could not support intensive use without lengthy resting periods. It is now generally accepted that wide-ranging herding is the best use of the dry lands, and that assistance programs must support a mobile way of life. Some of the best projects assisting pastoralists now incorporate the following principles:

- Adopt a bottom-up, demand-driven approach in which pastoralists participate fully in decisions that affect them.
- Provide technical assistance to enhance pastoralists' skills in forming community-based organizations, assessing environmental conditions, negotiating and resolving conflicts with others, developing and implementing community-based land use plans, and monitoring and evaluating results.
- Help with clarifying land rights and with establishing mechanisms for resolving disputes over access to land, water and other natural resources.
- Develop and maintain early earning systems for drought, strengthen drought management capabilities, and build on customary coping strategies.
- Create flexible designs for projects, to allow them to adapt to lessons learned through experience.

Projects based on these principles are being implemented successfully in Burkina Faso, Chad, Mali, Mauritania, Niger, Kenya, and Senegal. Participating pastoral groups and outside evaluators report that conditions of rangelands are improving, conflicts with other land users are declining, milk and meat production are rising, and the quality of life in communities is improving. Promising approaches are now being expanded to include many more communities in the project area.

AGRO-PASTORALISM AND INTENSIVE LIVESTOCK PRODUCTION SYSTEMS. As with other productive activities, in most countries of Africa the state is withdrawing from direct livestock production and restricting its role to that of providing an enabling environment within which private producers can function. For example, the government of Guinea began restructuring its role in livestock production in 1987, by focusing on providing public goods, such as research and animal disease surveillance, and devolving other responsibilities to the private sector, decentralizing its continued operations, and promoting formation of producers' organizations at both local and national levels. The results have been impressive. There are now over 1,000 active local producers' organizations that collectively wield considerable political power. Private enterprises operating in the sector are numerous, dynamic and competitive. Livestock production has grown at an average rate of 4 percent a year, higher than in any other West African country. Exports of livestock products have also grown significantly. Guinea's experience offers positive lessons for other countries in the sub-continent.

Enhancing management of natural resources

Africa's endowment of natural resources is rich, but the environment that they jointly comprise is complex, fragile, and rapidly degrading. Soils are under stress from poor cropping practices and increased exposure to wind and water. Africa is subject to extreme annual variability in rainfall of plus and minus 35 percent, bringing poorly predictable droughts and floods and massive macroeconomic shocks. Despite higher than average variability in supply of water, the region has very little storage capacity. For example, in Ethiopia 43 cubic meters of water are stored per capita, compared to 746 cubic meters in South Africa, and 6,150 in North America. Forests, wetlands and rangelands are all receding or degrading at a rapid rate across much of Africa. Many coastal, marine and freshwater fisheries that provide protein for a large part of the population are threatened by over-fishing and by reduced surface water flows and pollution. Africa leads the world in the burden of disease arising from unclean water and poor sanitation, malaria and (together with India) indoor air pollution.

Africa is very diverse? ecologically, socially and politically? and countries are increasingly using policy reforms and decentralization, participation and empowerment strategies to improve management of forests, biodiversity, soils and water resources. Important among these are efforts to:

- Avoid harm, through prior screening and use of environmental assessments
- Mitigate adverse impacts identified in the environmental assessments through environmental management plans and other measures
- Empower communities and individuals to take full responsibility for managing natural resources and contributing to their sustainable livelihood
- Mainstream environmental issues into broader development programs through environmental support programs and other capacity building efforts
- Address past damage and assist communities improve their management of natural resources through focused investments
- Improve incentives for long-term environmental stewardship rather than short-term exploitation, such as through introducing predictable natural resource charges or taxes, transparent systems of forestry concessions, sustainable management plans, etc.

- Establish regulations and laws to protect the environment and build capacity to enforce them.

Reducing risk and vulnerability

Poor rural Africans face multiple risks everyday, and have few instruments for mitigation other than the traditional ones based on family relationships and livelihood strategies. . They lack knowledge of new land, water and pest management practices and so cannot curb their exposure to weather-related risks, pests, and plant diseases. They have little or no savings and limited access to instruments designed to smooth income and minimize risks, so are severely affected by harvest failures and fluctuations in price. They lack access to transportation and communications technologies, so are vulnerable to natural disasters and illness. Isolation of many communities reduces their ability to spread risks over larger areas, by selling bumper crops and buying in lean years. The onslaught of HIV/AIDS has exacerbated preexisting risks and disrupted traditional coping mechanisms. Moreover, some strategies to reduce risk and cope with shocks, such as rejecting new agricultural technologies, taking children out of school and reducing consumption of nutritious food (especially of women and children), trap families in poverty. Thus explicit efforts to assist poor households to reduce and manage risk are an integral part of the rural strategy.

Rural households and communities have developed sophisticated strategies for mitigating and coping with risk. To lessen the impact of shocks, households attempt to diversify their sources of income by planting different crops and plots, working for other farmers (through sharecropping or wage labor) and combining farm income with nonfarm income. They establish self-insurance networks through marriage and extended family ties and investment in social capital (networks, reciprocal gift giving, and hosting of lavish ceremonies). Having many children is a way of managing risk for numerous families seeking to enlarge and diversify their household labor supply. To cope with shocks when they occur, rural people draw down their savings, take out loans, reduce their expenditures by taking children out of school, increase their family labor supply by involving more members (women, children and the elderly), or migrate to unaffected areas. When all else fails, they sell their meager assets and go hungry.

These strategies provide only limited protection against fluctuations in income and consumption, especially when compared with the options open to urban people. Some of the latter may be eligible for social security or unemployment insurance. They may have access to hazard insurance for their main assets, and life and/or health insurance. They can hold several jobs, and switch jobs when needed. They can save in conveniently located banks, and may belong to burial societies and other savings groups. And when all else fails, they can go back to their villages of origin for temporary periods. Rural Africans, in contrast, often face restricted opportunities to diversify income, because income-earning opportunities tend to move together. For example, drought may affect different crops differentially, but output will decline and with it demand for nonfarm services. Community and group-based mutual assistance mechanisms also break down during periods of prolonged or widespread stress, since nearly everyone is affected simultaneously. Where conflict has displaced many people, as in Eritrea, host families and communities have required outside assistance to avoid being overwhelmed. People who are unable effectively to diversify risks are not likely to adopt new technologies because they cannot afford the down-side risk. Unmanaged risk thus impedes growth by inhibiting adoption of new technology.

To assist households and rural enterprises to deal with risk, governments in Africa have in the past developed mechanisms to lessen the impact of shocks or help people cope when they occur. These mechanisms include price stabilization boards and funds, government-sponsored crop insurance, generalized consumer and producer subsidies, subsidized microcredit, public works jobs programs, public pension schemes and others. Other interventions, such as subsidies to increase monocropping of maize that were common in Southern Africa in the past increase rural risks. Overall these interventions have proven ineffective and costly. Many of the programs, such as public pension schemes, benefit mainly middle-income urban dwellers, not poor rural farmers and pastoralists. Thus, improved approaches to help Africa's rural people manage risk are needed.

The first priority is to reduce risks through such general measures as prudent macroeconomic management, and the improvements in the way rural institutions work discussed above. They can also be reduced through basic public health programs, including widespread immunization and cost-effective nutrition interventions, educational policies that guarantee poor children access, and actions to stop conflict and enhance security. Investment in infrastructure and measures to help farmers gain access to drought and disease resistant crop varieties can assist rural people to reduce the variability of income. Improved transport and communications reduce costs of marketing, and hence lower the costs of local variability in production. Improving access to rural financial services (savings accounts and credit) facilitates smoothing of production and retention of assets in poor years. In each of these areas, the public sector can make a substantial and positive contribution to reduction of risk without incurring unsustainable costs or undertaking activities that crowd out the private sector. Other strategic approaches to managing risk include efforts to:

- *Focus on the most compelling risks*. Concentrating on finding solutions to the most severe covariate or community-wide risks affecting a country or region will save many lives and reduce hunger and malnutrition when adverse conditions inevitably arrive. Countries vulnerable to drought, such as Eritrea, have created drought early warning systems, mechanisms for mobilizing international assistance and effective administrative structures to handle distribution of emergency assistance. This has prevented drought from causing widespread famine. Countries vulnerable to other types of natural risks, such as flooding, should similarly create emergency preparedness systems. Attention can also be focused on improving management of land and water resources to reduce the frequency and impact of floods.

- *Find alternatives to the most harmful coping mechanisms*. Removing a child from school to help a family meet short-term needs for cash has long-term consequences for the family and for society. Reducing consumption of nutritious foods, especially of children and pregnant and lactating mothers, can cause a lifetime of disabilities. Direct interventions to enable the poorest families to keep their children in school and well nourished and avoid asset depletion or distress sales during emergencies. Programs must be well targeted and fiscally sustainable. Some successful approaches to targeting include assigning geographic weights to the poorest areas, asking communities to identify their neediest members, targeting beneficiaries on the basis of size of landholdings, and offering food or cash for work at minimum wages (this screens out people with better opportunities).

- *Give high priority to stopping the spread of HIV/AIDS and malaria and helping communities cope with its impacts.* Poor households facing HIV/AIDS are less able to cope with loss of labor and are more likely to dispose of assets to meet medical and funeral expenses than are more prosperous families. Governments and development partners should target assistance to the poorest households, especially in the period immediately following death, when families are struggling to reorganize their production systems. Programs managed by communities that allow rural people to design and implement their own approaches are proving effective when they are linked to local and national governmental structures. As costs of treatment for HIV/AIDS begin to fall and access to medication increases, measures should be taken to assure that rural people as well as urban can benefit.

- *Share risks and costs of adopting new technologies by offering matching grants to producers' organizations and other groups.* Early adopters demonstrate to others the benefits of new technologies, and they also bear high risks. Unwillingness or inability of very poor farmers to take downside risk can discourage them from adopting new approaches even if they correctly perceive the likely benefit. The public sector can share risks through matching grants to encourage recipients to adopt new technologies, and initiate their wider acceptance by others. Wider adoption can, in turn, reduce risk and improve management of it through complementary developments in infrastructure, finance, and marketing that accelerate as production and productivity of agriculture rise.

- *Explore innovative approaches to assisting producers and local governments to diversify risk through insurance.* Some producers will choose to purchase insurance to protect against fluctuations in the price of a major crop. Experience in developed countries suggests that many will not buy insurance if they face the full actuarial cost of the policy. Pilots under way at present are testing the demand of small-holder producers of coffee in Tanzania for protection against fluctuations in coffee prices. Even if producers choose not to insure against price fluctuations, local governments may find it useful to so insure when a large portion of their locally generated revenues derive from a single crop. At present local governments facing new and demanding obligations to provide services have been observed to increase tax rates when commodity prices fall, in an effort to stabilize their own revenues. The deleterious impact on producers is clear, and local governments may need assistance to find other ways to reduce the variability of their revenues.

Chapter 5 What the Bank will do to support rural development in Africa

What are we doing now?

The vice president leads the Africa Region's efforts to contribute to reducing rural poverty, with instruments consisting of the entire portfolio of projects and nonlending services. At the country level, the country director serves as the chief spokesperson for the rural poor in designing the country assistance strategy and the programs to implement it. Technical staff of the rural development, environmental and social, and other sectoral families contribute to the effort. Given the multisectoral nature of the task, staff in the rural development units contribute to the effort, but cannot carry the responsibility by themselves. Accountability for measurable results rests with the country directors and the entire country team.

The program is varied and covers 48 countries. The Africa Region's portfolio consists of 426 operations, many of which contribute directly or indirectly to rural development. The pipeline for the next three years consists of about 80 new lending operations per year (see Annex 3 for details of projects in the pipeline). As the program evolves, the Africa region's lending operations increasingly fall into three broad categories: budget support, community driven development, and capacity building. Among the products in the work program, the following are most relevant to rural development:

- **Analytical and advisory services.** Many countries in the Africa region are preparing poverty reduction strategy papers (PRSPs) and designing expenditure programs for support under the Highly Indebted Poor Country (HIPC) initiative. With the greater role of the private sector after reforms of the 1990s, analysis to identify constraints to private activity becomes increasingly important. The Africa Region is increasing its commitment to analytical and advisory services, much of which is devoted to identifying constraints and assisting in the design of appropriate programs of public expenditure. A portion of the increase will focus on mainstreaming rural poverty reduction into all of the above processes and programs.

- **Multisectoral poverty reduction support credits (PRSCs)**. These provide budgetary support to countries implementing well defined strategies to reduce poverty. They support rural programs to the extent that rural development is specified as a key element in a country's overall poverty reduction strategy. The nature of support depends on priorities in the country's budget, usually expressed in a medium term expenditure framework. Impact is measured against a combination of outcome indicators and reforms adopted. PRSCs are appropriate when a country's budget management and public procurement procedures are sound. Uganda has pioneered the PRSC operations in Africa, and the second Ugandan PRSC will support the country's Program for the Modernization of Agriculture (box 6). This new approach offers considerable potential for enhanced impact through increased ownership by the country, flexible implementation, and better coordination among donors.

- **Projects supporting decentralization**. These assist in developing the fiscal and administrative architecture for decentralization, provide technical assistance to build capacity of public entities facing new challenges, help put into place processes for participation and mechanisms to enhance accountability, and support design of systems of monitoring and evaluation. Many of the projects supporting decentralization concentrate on urban issues, but some improve the capacity and performance of government in rural areas, as in Senegal and Burkina Faso.

- **Community driven development projects**. These are closely linked to decentralization, and focus on improving community participation in setting of priorities, design and implementation of projects, creation of the financial architecture and accountability mechanisms to get resources to community groups, strengthening of local government, transfer of resources to the community level, and monitoring and evaluation. The community driven approach is multisectoral, demanding close coordination between specialists of different sectors.

- **Rural finance**. The newer generation of rural finance projects eschews lines of directed credit, and focuses on regulatory reform, capacity building of financial institutions and clients, and reducing the costs of linking providers and customers of financial services in rural areas. The newer rural finance projects are less preoccupied with the question of how to finance small-holders' agricultural working capital and more oriented toward providing access to a wide array of financial services.

- **HIV/AIDS**. Because of the catastrophic implications of HIV/AIDS for African development, prevention and mitigation of HIV/AIDS has been mainstreamed into most of the projects in the portfolio, either in the design stage or through retrofitting of components. In addition, the region has designed a generic rapid-response multisectoral intervention called the Multisectoral AIDS Program (MAP) that makes resources available through streamlined approval procedures to multiple countries in support of rapid, multilevel responses where commitment to addressing HIV/AIDS is demonstrated. A significant portion of funds flow directly to communities to carry out programs of their own design under simplified procurement guidelines.

- **Agricultural research and extension**. Projects supporting agricultural services focus on institutional reform and development, and are increasingly responsive to the needs and requests of producers, and incorporate innovative features in finance, such as competitive grants, cost recovery, and matching grants. Stronger linkage between research and extension is still needed, as is better integration with new developments in global agricultural research.

- **Management of natural resources.** Africa's natural resources are valued at many levels, from the very local to the global. Because of the global dimension, projects supporting forest preservation, biodiversity, carbon enhancement, management of soil fertility, watershed management, and coastal protection are supported under grants from the GEF, increasingly with blended GEF/IDA resources. Separate IDA credits support activities primarily of national or local significance.

- **Environment**. The Bank assists clients to mainstream environmental concerns into decisions on policy and investment, through advice on policy and regulatory issues, technical assistance to help ministries and departments of environment increase their capacity, investment projects, and grants for global environmental priorities. All projects are evaluated to ensure that relevant safeguards are met.

- **Basic education and health care services**. The Bank in the Africa region supports access to basic health care and primary education without user fees, in recognition that these contribute substantially to the public welfare and to poverty reduction. When, for fiscal reasons, governments levy these fees, the Bank works with governments to reduce the burden on poor people, by recommending (and providing financing for) targeted subsidies. In some cases, these subsidies go beyond eliminating user charges for poor people and provide a positive incentive for parents to send their children to school. This approach has proven especially powerful in encouraging parents to enroll their girls in school. In the case of immunization, maternal and child care, and certain interventions for tuberculosis, HIV/AIDS, sexually-transmitted infections, and malaria that have large benefits for the community and vulnerable groups, the Bank discourages user fees and helps countries find better ways to finance these activities.

- **Water management and irrigation**. Water management projects increasingly focus on simple designs that can be implemented and managed by communities as part of community driven development operations. Given the increasing importance of water in the region, more will be done to help countries and communities manage shared water resources, particularly multi-country river basins. With regard to large-scale irrigation schemes, emphasis will be on assuring that any schemes constructed can be made financially sustainable and will have strong institutional arrangements for maintenance. Benefits for the poor and women are explicitly addressed in work on irrigation.

- **Infrastructure**. Africa's rural roads are expensive to build and even more expensive to maintain. Functioning rural roads require support at the national and local levels, and this can be achieved through a combination of budget support or sector programs, decentralization, and Community Driven Development. Cellular technology and new designs in off-grid power generation and nontraditional sources of energy, when coupled with basic regulatory reform, offer exciting new opportunities to reduce the shortage of rural infrastructure. Some of this investment is being undertaken by the private sector. Innovative public-private partnerships are drawing private providers into activities that they would be unable or unwilling to take on alone.

- **Land reform**. Land reform is an important issue in the region, and one underrepresented in our portfolio of assistance. Support for land reform addresses issues of the distribution of ownership, tenure security, and resolution of conflicting claims. Programs of market assisted land reform can work well, and the Bank has assisted in design in several countries. Implementation has been less active, either because countries choose to implement on their own (South Africa) or because conflicts over land escalated before implementation could get under way (Zimbabwe).

- **Post-conflict assistance**. The Africa Region is helping several countries (Eritrea, Sierra Leone, Democratic Republic of Congo, Burundi, Rwanda) recover from conflict. Programs often include assistance to rebuild rural infrastructure, help displaced rural people and demobilized soldiers return to their villages and reestablish their livelihoods.

Box 6 Poverty reduction support credit helps Uganda promote rural development

As most Ugandans live in rural areas and earn their living from agriculture, increasing agricultural growth rates, diversifying agricultural production and expanding non-farm employment in rural areas are essential for poverty reduction. Uganda's poverty strategy reduction credit will therefore focus on actions to promote rural development. The Government's Plan for Modernization of Agriculture provides the strategic and operational framework for environmentally sustainable rural development and agricultural transformation from subsistence to commercial agriculture. Although it does not provide a detailed plan of action, it does describe the types of interventions required to promote rural development, define the responsibilities of the public sector, private sector and civil society in this effort and outline participatory processes through which interventions will be designed. The plan aims to increase incomes and improve the quality of life of food crop producers, (who are mostly women and mostly poor) and promote food security. It identifies six core areas for public action in agriculture and rural development: research and technology; advisory services; education for agriculture; providing a framework for rural finance; sustainable natural resource use and management; and strengthening of land rights and land administration.

What will we do more of? What will we do differently?

The Africa Region is taking a number of steps more sharply to focus its programs on poverty, which implies a shift toward rural priorities. Poverty reduction strategies designed by the countries are intended increasingly to be the foundation for country assistance strategies of the Bank. The process is still young, and not yet equally embraced throughout the region, but familiarity is growing and the quality of the strategies improving. The Region is using its commitment to increase economic and sector work to assure that the PRSPs of the future can draw on solid analytical foundations in the spatial dimensions and correlates of poverty and the implications for public expenditure.

The Africa Region is streamlining the portfolio in order to reduce the fragmentation of administrative budgets among many activities, a number of which may not ultimately lead to lending or other interventions with substantial impact. As the number of lending operations declines, some of the costs of supervision will also fall, allowing a shift toward more generous funding for supervision of remaining activities and an increase in resources for preparation.

The Africa Region has drawn on its experience in addressing the HIV/AIDS crisis, and is applying the lessons to other areas. In the early period, HIV/AIDS was perceived to be largely an issue for those in the health sector. As long as the approach was unisectoral, little progress was made. Health specialists did not have the expertise to address all of the dimensions of the HIV/AIDS crisis, and projects to address the pandemic competed with others in the Human Development portfolio for space in country lending programs. The region did not develop an effective approach to the crisis until country directors recognized HIV/AIDS as an overarching multisectoral problem of such high priority that it was incumbent upon them seriously to address it. Simultaneously, the region developed a new truly multisectoral instrument (the MAP) designed and implemented by experienced task team leaders from various sectoral units. MAP operations need not be designed from scratch for each country, since the basic elements can be adapted for country conditions. The MAP operations are multisectoral, quickly designed and approved, flexible to adapt as lessons are learned during implementation, and, correspondingly, intensive in supervision costs.

Elements of the MAP experience are relevant to rural development. The Country Directors must take the lead in seeking interventions and in holding themselves accountable for measured progress. Interventions must often be multisectoral to be effective. In some fields, such as agricultural services and the CDD operations, basic elements of programs can be treated as modular units taken "off-the-shelf" and customized to suit country conditions. Our traditional models of project design have much in common with medieval artisanship—hand-crafted each time. Where circumstances do not require such an approach, our resources can be more effectively used by incorporating existing designs, and allocating more attention to learning and revision while projects are under implementation. Box 9 describes a multisectoral project in Uganda designed to address several development constraints simultaneously.

Box 7 Cross-sectoral project collaboration: Uganda energy for rural transformation

The Uganda Energy for Rural Transformation Project is an example of stretching a sector's project boundaries to focus on mutually-supporting activities in rural transformation. As an APL, the project starts with the establishment of a propitious national policy framework to liberalize markets for decentralized, mini-grid electricity provision and incentives to promote investment in remote or underserved areas. In addition it includes a component for promoting telecommunications services in the rural areas, which themselves require electricity to succeed. The project also reaches out to the health sector, focusing on ways in which rural electrification and telecommunications will improve the quality of health service delivery. Based on these results, expansion into other areas, such as education and agriculture, are planned.

In order to facilitate the work of multisectoral teams, the Region is orienting its training activities toward teams, rather than individuals. This is part of a Bank-wide move, but it is especially relevant in the Africa region due to the evolution of the lending portfolio.

The Africa region is decentralizing functions to the country offices, along with a limited number of additional staff formerly based in Washington. With decentralization of functions comes a substantial additional need for training and new definition of working relationships between staff based in Washington and in country offices.

Within the Africa Region's Rural Development, Environment and Social Department, a process of reconfiguration and renewal was launched in 2001. The process is intended to improve management of the units in order better to pursue multisectoral tasks, to integrate rural and environmental issues more fully in the PRSP processes, to facilitate more seamless interaction between the various units, agendas, and staff in Washington and in the country offices, and to move forward with the regional commitment to decentralize functions. The rural family at present has a larger proportion of staff in country offices than is the case of other units in the Region, and with additional training and mentoring, can decentralize more functions to the country offices.

The rural, environmental and social staff work in partnership with other sectoral units within the Bank, with counterparts in government and civil society in client countries, and with other donors. The Africa Region has a strong partnership with the Food and Agricultural Organization in areas of shared interest, such as low-cost water control and land management, soil fertility enhancement, crop intensification and diversification, integrated pest management, statistics, policy analysis and capacity building. Similarly, the Bank has a long-standing partnership in Africa with IFAD and other multilateral organizations. The Bank is strengthening cooperation with the African Development Bank in priority areas, including agriculture and rural development and HIV/AIDS. It is contributing to the multidonor hub for rural development covering the countries of the Southern Africa Development Community, which was launched in Harare during fiscal 2000. It is working with other donors to establish a similar facility in support of food security in the Horn of Africa. Discussions are underway to establish a third multidonor hub located in West Africa. The hubs will help build capacity in African countries to tackle a variety of regional initiatives, such as improving the regional trade regime and developing common standards for food safety. They will also assist countries to access expertise of the donor community in a coordinated fashion.

With a streamlined portfolio, strong partnerships, renewal within the rural, environment, and social family, and further decentralization, the Africa Region is well placed to make a significant contribution to reduction of poverty. Actual results, however, will require continued and strong leadership by the regional leadership team and a specific focus on rural poverty. Without this overarching focus, the current and projected lending program could fall short in efforts to reduce rural poverty. The sectoral breakdown of the Region's projected lending program for fiscal 2002–04 is shown below in table 1. These are indicative projections, and are likely to change as the budget situation within the region evolves, and as country priorities change in the next several years. Trends are nonetheless revealing. Lending for education, health, transport, and water supply are all projected to increase, and agriculture and environment to decline precipitously by fiscal 2004. Increase in the former is consistent with an effective strategy to reduce rural poverty as long as the projects give adequate attention to rural issues. Decline in the latter (especially since most of this is now agricultural services, rather than the old style of agricultural projects) is not. Thus the existing lending program is one with high potential, but also considerable risk unless the regional leadership gives explicit priority to rural poverty in the design of the various operations, and unless the operations classified by sector are in fact multi-sectoral in impact.

Table 1 Africa Region IDA lending by sectors (in $US millions)

AFR IDA Lending by Sectors	FY2002	FY2003	FY2004
EDUCATION	310	254	370
HEALTH, NUTRITION & POP.	178	150	419
SOCIAL PROTECTION	-	160	85
HDN-OTHER	50	110	140
PUBLIC SECTOR MGMT.	138	195	332
TRANSPORT	266	788	585
WATER SUPPLY & SAN.	178	365	305
PREM-OTHER (PRSCs)	645	755	600
AGRICULTURE	485	415	165
ENVIRONMENT	159	130	80
ESSD-OTHER	60	51	-
ECONOMIC POLICY	340	-	250
INDUSTRY	-	-	-
PRIVATE SECTOR DEV.	163	-	250
URBAN	380	265	325
PSI-OTHER	-	-	190
MULTISECTOR (OTHER)	40	-	80
OTHER / NON-SPECIFIC	-	-	-
PREM-OTHER (NON PRSCs)	590	410	280
ELECTRIC POWER & ENERGY	410	307	180
MINING	-	50	50
OIL & GAS	175	-	-
TELECOM. & INFORMATICS	23	-	-
FINANCE	25	75	15

Note: projected. Includes 130 percent programming margin of Base Case.

Conclusions

Africa's rural people can contribute much more to their own prosperity and to global growth in the future than they have been able to in the past. The dynamics of rural growth and the factors that promote it are now better understood than before. Rural institutions are stronger in many places and democratic forms of government create opportunities for rural people to express their views and priorities. National governments have tamed fiscal deficits and opened economies in ways that improve incentives in rural areas. Increasingly, people at all levels understand how to manage natural resources so that they provide long-term benefits. New investments and developments in infrastructure link once remote areas more closely to their regional and national contexts.

Africans are acting on these opportunities despite formidable new obstacles. HIV/AIDS requires changes in behavior and investment of resources on a scale demanded of few societies or treasuries in more prosperous regions. The scourge of conflict creates new victims and destroys wealth. Natural resources are still subject to predation and degradation. Climate change is likely to hit Africa hard. And many OECD countries, despite rhetorical commitment to liberalization of trade, keep their own markets closed to Africa's most important exports.

The efforts and accomplishments of Africans to reduce rural poverty despite these obstacles warrant dynamic and effective support from their partners. The Africa Region of the World Bank is committed to move on the actions noted above, and continually to seek new ways to assist.

Annex 1 summaries of sector strategies

RESEARCH

What the Bank has done since Vision to Action. Since *Vision to Action* was developed in 1997 the Bank has significantly changed its approach in supporting agricultural research systems in Africa. The Bank is now involving groups outside the public research system to carry out research activities, such as universities, and the private sector; channeling more funds through local governments and farmer organizations; increasing support for capacity building; and sharing responsibilities with other donors in project design, supervision and financing. Projects now generally contain mechanisms to respond to farmers' needs, focus more on poverty and environmental issues, and use better monitoring and evaluation strategies.

Although these approaches are still new, the results are promising. For example, cooperation between international and national research efforts led to the identification of effective biological control methods for two cassava pests (mealy bug and green spider mite). Control of the green spider mite has increased cassava production by 30–40 percent. By 1998 West Africa had gained close to US$50 million per year. Similarly, controlling African cassava mosaic disease has allowed cassava output in Uganda in 1999 to surpass preepidemic levels, following a devastating 70 percent decline in production that had occurred earlier in the decade (3.5 to 1 million tons, equivalent to US$60 million) (World Bank, 2001). Research has also contributed to increasing outputs and quality of bananas, potatoes, millet, dairy, beans, maize, rice and livestock (IFPRI, 1998).

What the Bank is doing. The World Bank is the largest supporter of the national agricultural research systems in Africa, providing funding of about US$250 million per year to support research systems in 25 countries. It will continue this support. It will also continue to support the CGIAR, which has about a dozen centers and subcenters in Africa.

Through the Special Program for African Agricultural Research (SPAAR), soon to be replaced by the Forum for African Agricultural Research (FARA), the Bank is promoting the emergence of subregional and regional research organizations. This will help exploit economies of scale and improve research effectiveness through better coordination. Both are essential to capture benefits from the biotechnology revolution and other scientific innovations. New mechanisms need to be developed for the Bank to support such regional collaborative research.

The Bank is leading an effort to create a regional competitive fund for agricultural research with partners the African Development Bank, the Canadian International Development Agency, Sweden, and others. The fund would provide matching grants to finance research activities to groups that present the strongest proposals for carrying out the research, whether public or private. This is expected to generate additional resources for research and improve research design and execution, leading to greater impact. While still at the development stage, it is expected that FARA will play an important role in administering the fund.

The Bank encouraging work to improve understanding of the implications of HIV/AIDS for agriculture (and on the research institutes themselves) and ways to address its impact. It is also supporting ongoing programs to develop more sustainable systems of farming, especially programs to increase labor productivity and maintain and enhance soil fertility. The Soil Fertility Initiative, supported through both a regional program and Bank-assisted projects, is beginning to show promising results in several countries in West Africa (Guinea, Mali, Niger and Senegal) and Eastern Africa (Madagascar, Tanzania, Zambia and Kenya). According to a recent impact assessment of pilot activities, soil degradation can be reversed and yields can improve. Still, much remains to be done in tailoring technology to farmers' needs and disseminating results.

MANAGEMENT OF WATER RESOURCES

What the Bank is doing. The Bank recognizes the importance of policy and institutional reforms and capacity building for managing water resources equitably and sustainably. It is actively assisting creation of water users' associations and strengthening their capacities to perform their functions well. The Bank is encouraging governments to provide them with legal status to sign legally-binding contracts, and to give them full financial and administrative control over infrastructure construction or rehabilitation efforts. It is also providing support for training and other capacity building measures.

In lending projects, the Bank is increasingly taking a river basin approach. An example is the Tanzania River Basin Management and Smallholder Irrigation Improvement Project. The project will strengthen government's capacity to manage water resources and address water related environmental concerns both at the national level and in the Rufiji and the Pangani river basins, and improve irrigation efficiency of select smallholder traditional irrigation schemes in these two basins. The project strengthens assignment and management of water rights, increasing penalties and raising fees for water use, and improving information collection and analytical capabilities at the national level and monitoring capabilities at the basin offices in Rufiji and Pangani.

The Bank is promoting private sector involvement in irrigation development and operations and maintenance. It is supporting government efforts to create a favorable policy and institutional environment through measures such as increasing security of land tenure, reducing transaction costs of land registration, formalizing access to water by issuing water abstraction licenses and enforcing their provisions, creating markets for transfer of water rights, and enacting policies to stimulate development of rural financial markets. In some countries, it is helping government develop and disseminate information on hydrogeology through groundwater modeling, as in the Nigeria National Fadama Development Project, now under preparation.

The Bank is currently conducting research on a number of topics important for water control and irrigation in Africa. The first is on the feasibility of imposing volumetric charges on water users (of both pump-based and gravity systems). The study will identify options for policy and institutional reforms needed to introduce water charges, including decentralizing responsibility for revenue collection and spending decisions to the local level. The study will also examine institutional options and best practices for fee collection.

The Bank is also researching how irrigation and water control systems affect women. In the past, male farmers have benefited from irrigation systems more than women farmers, as women have lost access to plots and the income they produce once they become irrigated. Gaining a full understanding of how and why women are affected can help in designing systems that enable women to benefit as much as men. For example, in some places women have benefited from treadle pumps and drip systems used for growing irrigated vegetables. These may prove feasible elsewhere.

The third area of research will adopt an environmental perspective by looking at traditional technologies that increase water use productivity and decrease use of agro-chemicals. The research will analyze the interaction between water management and the incidence of pests and weeds, and will quantify the impact of green fertilizers on irrigated yields. In addition, the study will evaluate the relationship between improved water management, drainage of waterlogged areas, and increased water use productivity.

RURAL FINANCE

Importance of building up rural financial systems

- *Financial intermediation*:
  mobilize savings; make funds available for productive uses; payments system.

- *Poverty reduction*:
  - ❑ Households: Risk management (savings, insurance); smooth consumption; meet lumpy expenditures (e.g., school fees);
  - ❑ Entrepreneurs: Take advantage of market and investment opportunities (farm, off-farm).

- *Real sector growth*:
  - ❑ Agriculture: Facilitate adoption of more productive technologies;
  - ❑ Agribusiness, off-farm employment;
  - ❑ Financing for supply and purchase of rural infrastructure and other services, especially small and medium-size enterprises.

Key constraints

- *Weak capacity* in rural and microfinance institutions to expand portfolios, due to low skills, high costs, inadequate systems, and poor governance.

- *Policy/legal/regulatory*: Macro imbalances leading to high inflation and interest rates; restrictions on interest rates and lending; limitations on private and foreign entry into banking; microfinance institutions not well accommodated or supervised.

- *Risk/information*: High systemic risks of seasonality, natural disasters; inadequate information and mechanisms for risk mitigation; lack of collateral and financial track record.

- *Transaction costs:* Dispersed population, poor transportation and communications, low investment in financial technologies.

Priorities for rural financial development

- *Bring commercial system closer*:
  - ❑ Improve environment and incentives for commercial operation in rural areas;
  - ❑ Licensing of leading rural and microfinance institutions to mobilize savings (important for self-sustainability);
  - ❑ Develop financial products suitable for both clients and providers, especially for small and medium-size enterprises;
  - ❑ Link commercial financial institutions to grassroots microfinance organizations.

- *Upgrade clients*:
  - ❑ Grassroots training in financial skills and business management for microentrepreneurs;

- ❑ Build social capital through community associations and group formation;
- ❑ Improve ability of communities to manage decentralized funding for infrastructure and social services;
- ❑ Capacity-building and business services for small and medium-size enterprises, especially for decentralized rural services.

- *Diversification*:
  - ❑ Utilize non-financial channels of finance, for example, through trade credit associated with product processing, input supply and marketing activities;
  - ❑ Recognize role of informal financial sector;
  - ❑ Finance range of activities, not mainly agriculture.

Priorities for implementation

- *Capacity building*:
  - ❑ rural and microfinance institutions: Train staff and management of rural and microfinance institutions; MIS systems; product development; governance;
  - ❑ Support institutions: Strengthen associations/networks of rural and microfinance institutions, especially to monitor industry performance and standards and to develop training programs; strengthen local private trainers to provide affordable training to rural and microfinance institutions at cost-recovery prices.

- *Policy/legal/regulatory framework*:
  - ❑ Permit rural and microfinance institutions to charge interest rates needed to cover costs and grow;
  - ❑ Establish flexible approach that facilitates a range of rural and microfinance institutions, from licensing for savings mobilization to laissez-faire for credit-based, membership and grassroots rural and microfinance institutions;
  - ❑ Strengthen supervisory capacity for licensed rural and microfinance institutions;
  - ❑ Improve low-cost contract enforcement mechanisms for small transactions.

- *Limit provision of financing to situations where*:
  - ❑ Liquidity is a constraint, or complementary measures are undertaken to improve access of rural and microfinance institutions or targeted groups to available local commercial financing;
  - ❑ Retail capacity exists or is being built up to absorb wholesale funds at commercial rates;
  - ❑ Performance-based criteria are established for accessing funds, following needed technical assistance.

Issues for social funds, community action programs

- Microfinance in operations with (non-financial) poverty reduction objectives poses both opportunities and risks:
  - ❑ rural and microfinance institutions must become financially sustainable to provide long-term access of the poor to financial services, for risk mitigation, asset accumulation, and income growth;

- Poor design/implementation of government/donor credit schemes can undermine development of sustainable rural and microfinance institutions.

- Careful assessment is needed of debt capacity of intended clients, delivery/recovery capabilities of potential intermediary institutions, and underlying economic and financial conditions to choose among grant-based, credit, and institution-building approaches to achieve objectives.

Guiding principles for implementation

- Need awareness raising on microfinance best practices to shift emphasis away from "affordable" interest rates for the poor to sustainable access to financial services

- Social intermediation, financial development, and real sector objectives can best be pursued in separate operations (based on past poor performance of credit components in non-financial projects and risk of undermining sustainable rural finance)

- Grant mechanisms may be more appropriate where economic opportunities (and hence capacity to bear debt) are poor, financial institutions are absent, and objectives are welfare- or social-oriented (for example, grassroots management training, group formation).

- Grant-based programs should not get directly involved in loan or cost recovery.

- Where financing is assumed to be a constraint, preferred approaches focus on mobilizing local commercial credit, facilitating savings services, and transparent subsidies (for example, matching grants to private investors in rural services). Credit lines work best in finance-oriented operations with appraised retail capacity and measures to relieve documented liquidity constraints on rural and microfinance institutions (BP8.30 requires financial sector review of any operation with a credit component).

- Where financing is provided, loan and cost recovery are key criteria for continued access.

- Savings-based approaches are desirable for sustainability both at grassroots level in the absence of external rural and microfinance institutions and for larger, well-managed rural and microfinance institutions to reach scale and self-sustainability.

- Capacity-building to develop sustainable rural/micro finance can best be pursued in a stand-alone operation, rather than as an (inadequately supervised) component of an operation with other principal objectives.

- Coordination across sectors and with other donor programs is essential to ensure balanced, separate pursuit of these objectives.

RURAL INFRASTRUCTURE

Rural infrastructure consists of water, sanitation, transport, energy, telecommunications and information.

Our common challenge: how can countries ensure that rural communities have access to rural infrastructure, but that these services are provided continuously on a sustainable basis at appropriate levels of quality and affordability?

- Rural infrastructure is one of numerous activities that comprise the essential elements of African rural transformation, such as local governance, health and educational services, agriculture and other economic activities. These occur in an inter-dependent and dynamic environment.
- Our goal to increase access to sustainable services, which includes a recognition on nontraditional infrastructure types of interventions: for example, supporting footpaths for villagers to reach roads, promoting traditional energy sources (90 percent of rural energy is not networked-based).
- The trend is to decentralize and move service delivery to serve individual consumers, communities or groups of communities.
- In terms of finance and management, energy and telecom follow a purely commercial model, in which investment costs are reflected in the tariff and operations are carried out for a profit.
- Rural water is often managed by users group at the community level, comes with a cost and requires a high degree of community mobilization and training, with private sector support.
- Rural transport infrastructure is considered as a public good, receiving high levels of subsidy, although level of rehab and maintenance financing should be related to obtaining minimum service levels to as many rural residents as possible.

Strategies to improve country-level implementation

1. **National sector policy framework**
    - Sustained, quality and affordable service delivery will only succeed in the long run if it is carried out in a positive policy and regulatory environment. These reforms are geared to make conditions ripe for public and private economic agents to effectively respond to consumer demand.
    - There needs to be recognition that while many basic approaches are similar, each sector has a distinct set of policies related to its particular characteristics.
    - All rural infrastructure projects/interventions should include a mix of sector policy reform and improved methods and investment instruments to promote demand-driven service provision.

2. **Decentralization**

- Development objective should be to promote good governance and decentralization, by building capacity of local governments to dialogue with and respond to rural community demands.
- Roles of local governments and sector agencies need to be clear and mutually supportive.
- Need to develop common approaches to channel funds to local governments and communities.

3. Service-level delivery options which vary with scale and nature of rural infrastructure service

- Individuals, communities and investors should be allowed to access a range of technical options and decision-making frameworks to enable them to make informed choices, based on management, cost and service level options, in a transparent environment.
- Information flows are critical.
- The decision-making framework varies with nature and scale of rural infrastructure service, with communities playing a key role in rural water, transport must consider its networked nature and bring in local and other government, while energy and telecom seek greater roles for private sector, including financing.
- There is a need to recognize emerging technologies, opening up the possibility of extending new technical options to rural areas

4. Demand-responsiveness and cost-recovery

- Demand-driven services should be implemented where communities/consumers choose and commit themselves to preferred level of service based on their willingness to pay .
- Each sector has different rules for cost recovery. At a minimum, user payment should be through initial contributions to investment costs and payment of tariff/user fees to cover at least O&M.
- Subsidies need to be well-defined, targeted and structured to balance the desire to deliver efficient rural infrastructure services through the market, with the goal of ensuring rural infrastructure access in needy areas, but always under a strict cost-recovery and sustainability criteria.

5. Cross-sectoral collaboration to achieve rural transformation

- Rural infrastructure must be seen in context of rural transformation:
  (a) demand for rural infrastructure services derives form a host of other economic and social endeavors
  (b) rural infrastructure services themselves underpin many social and economic development activities
- Important linkages are required with the financial sector, related to as an increased role of the private sector in providing demand-responsive services to meet changing consumer demands.

- Need to investigate and promote cross-sectoral institutional models, including within the context multi-sectoral community-level interventions.

6. **Capacity Building**
   - Continuous need for capacity building to bring about more efficient and durable responses to rural infrastructure demand. Need to promote and strengthen existing training institutes and networks.
   - Assist national policy and regulatory agencies to make shift from implementer to facilitator/regulator and achieve policy reforms.
   - Improve capacity of communities and local governments to promote, demand, finance, implement and manage equitable and quality service delivery.
   - Strengthen private sector to play an increasing role in investment, delivery, management and technical support to rural infrastructure service provision.

Action plan for the Africa Region and Infrastructure Family

1. **Develop/refine sector-specific policies and institutional options for rural infrastructure**
   - Guidelines and toolkits for sectoral reform interventions and programmatic approaches
   - Guidelines and toolkits for sectoral interventions in multi-sectoral context.

2. **Pursue opportunities for cross-family and cross-network linkages**
   - Collaboration at country-level (CAS, PRSP) and project/program level, and ensure rural infrastructure contributions to overall rural development agenda in country
   - Develop sector-specific delivery systems in a mutually-reinforcing way with the CDD approach.

3. **Improve effectiveness of rural interventions through knowledge development and learning**
   - Pilot projects to test new approaches such as multi-sector rural
   - Studies on linkages with financial sector, consumer credit and smart-subsidies
   - Improved M&E to measure effectiveness and sustainability of our interventions.

4. **Capacity building for AFR infrastructure and non-infrastructure staff**
   - Clinics to review sectoral guidelines and toolkits
   - Learning events on cross-cutting themes such as decentralization.

HUMAN DEVELOPMENT

Although the Human Development family in the Africa Region is making a genuine contribution to the rural space, no rural-specific Human Development strategy has yet been prepared. Therefore, a tailor-made Human Development rural strategy should be developed for each country, led by the respective country team, in a multisectoral approach, using the opportunity of CAS and PRSP discussions to reach agreement on the appropriate strategy.

There are three key elements to the Human Development response to the multifaceted challenge of development in the rural space. The Human Development approach should be:

- *Targeted,* centering on basic education and maternal and child care
- *Gender sensitive,* focusing on women and girls, and
- *Flexible,* adjusting development practice to meet the specific needs of the rural space.

In pursuing this approach, the Human Development strategy would contribute to:

1. Creating opportunities, by increasing access to and generating demand for social goods and services in rural areas
2. Empowering local governments and communities through a decentralized delivery system, and
3. Enhancing security of poor and remote individuals and communities by helping them to prevent, mitigate and cope with social risks.

In defining each country-specific Human Development rural strategy, the following recommendations should be taken into account:

- Focus Human Development's contribution to the rural strategy in Africa on:
  - Combating the HIV/AIDS epidemic
  - Striving to achieve the international development social development goals in basic education (with gender equity), child health, nutrition, maternal health, and reproductive health
  - Providing social safety nets for needy orphans
  - Promoting job creation and income security.

- Integrate social risk assessment into analytical work for CAS, PRSP and sectoral ESW in order to identify the points of entry for Human Development responses to mitigate the risks of the most vulnerable groups in the rural area.

- Explore innovative ways to mobilize and empower people in the villages and communities, and to assist communities through targeted interventions and the effective transfer of resources (for example, collaboration with NGOs, community organizations and local governments).

- Balance the medium to long-term goals of reforming Human Development sectors with the more immediate needs of delivering services and assistance to those who most need it in the short term.

In assisting with the development and implementation of country-specific Human Development-rural strategies, the Bank should:

- Provide adequate resources and incentives to enable the leadership role of country teams and foster multisectoral teamwork

- Intensify support within the Bank and in country for disaggregated data collection and analysis in general, and in ESW and monitoring and evaluation, in order to capture the different dimensions of poverty, including disparities between the rural and urban, and within rural areas

- Adapt the Bank's financing instruments and technical assistance to the special challenges of certain Human Development dimensions in the African rural space (for example, multicountry initiatives to address transmission of disease, and the like)

- Improve tracking of specific Human Development rural poverty reduction projects, particularly the newer initiatives (ECD, MAP, orphans, etc), to facilitate learning and replication, including the factors affecting demand at the local levels

Work closely with external partners and other donors to secure the commitment of the countries themselves to the goals, policies and programs needed to reduce poverty.

The World Bank and user fees for basic education and health services

The World Bank does not support user fees for primary education. Not only is education a major route out of poverty, but primary education benefits society at large by creating a numerate and literate population. As a financial burden on poor people, user fees on primary education can lead to children leaving school, their families trapped in poverty and society worse off. When, for fiscal reasons, governments levy these fees, the Bank works with governments to reduce the burden on poor people, by recommending (and providing financing for) targeted subsidies. In some cases, these subsidies go beyond eliminating user charges for poor people? they provide a positive incentive by giving parents a transfer for sending their children to school. While governments should not charge user fees, local communities do levy charges (often paid in-kind through labor services) which, by building community support for the local school, can improve service delivery. Recognizing the important contribution that such charges can play in sustaining education services, the Bank's position is that they must be carefully designed to ensure that they do not lead poor parents to keep their children out of school.

The Bank supports the provision of basic health services to poor people for free or where specific community conditions warrant, at the lowest possible cost. In the case of immunization, maternal and child care, and certain interventions for TB, HIV/AIDS, sexually-transmitted infections, and malaria that have large benefits for the community and vulnerable groups, the Bank discourages user fees and helps countries find better ways to finance these activities. In many low-income countries where taxation capacity and therefore public resources for health sector are very limited, many households? even poor households? contribute premiums towards risk-sharing arrangements such as community financing and other insurance schemes that can protect them from the impoverishing effects of infrequent, but relatively high cost illnesses. The Bank works actively with countries to find ways to subsidize the premiums of poor populations so that financial protection under such insurance arrangements will expand over time to larger segments of the populations. In the absence of such insurance arrangements, in very low-income contexts where the governments' resource mobilization capacity is extremely limited, it has been shown that well designed and well implemented user fees or co-payments can mobilize additional resources from better-off groups that can then be used to improve services for poorer groups. Such cost-sharing schemes can play a critical role in helping ensure essential services are available. Where countries are pursuing such arrangements, the Bank works closely with policymakers to ensure that poor people face minimal or zero costs. The Bank also works with countries to better understand and reduce other barriers to access to basic services–such as unofficial fees, language difficulties, distance, and the like.

Annex 2 Share of agriculture and agricultural growth rates

	Agriculture share of GDP in 1999	*Annual average percentage growth, 1980-89 (constant 1995 US$)*	*Annual average percentage growth, 1990-99 (constant 1995 US$)*
Guinea-Bissau	63.6	3.2%	3.5%
Central African Republic	55.1	1.5%	3.3%
Burundi	52.2	3.1%	-1.6%
Ethiopia	48.9	-0.4%	2.4%
Tanzania	47.6	n/a	3.2%
Mali	46.5	2.2%	2.4%
Rwanda	45.7	0.8%	-4.0%
Sierra Leone	44.4	3.5%	0.3%
Uganda	44.2	1.5%	3.6%
Cameroon	43.5	2.7%	4.5%
Togo	43.0	5.5%	4.1%
Nigeria	41.2	2.2%	2.9%
Niger	40.4	1.7%	3.2%
Comoros	38.7	5.2%	-0.3%
Benin	38.2	4.5%	5.0%
Chad	37.9	2.7%	4.5%
Malawi	37.6	-3.3%	6.4%
Ghana	35.8	0.6%	3.0%
Gambia, The	33.2	0.8%	1.5%
Burkina Faso	32.1	3.5%	3.2%
Mozambique	31.6	7.0%	4.4%
Madagascar	30.0	2.1%	1.5%
Kenya	27.0	3.2%	1.2%
Mauritania	25.2	1.2%	4.4%
Cote d'Ivoire	23.8	0.0%	3.0%
Guinea	23.1	3.1%	4.3%
Sao Tome and Principe	20.7	3.4%	3.8%
Senegal	17.9	1.8%	1.5%
Zambia	17.3	3.6%	7.6%
Eritrea	16.0	n/a	n/a
Equatorial Guinea	16.0	0.1%	6.0%
Swaziland	15.8	2.1%	-0.6%
Namibia	12.8	1.3%	4.1%
Cape Verde	12.0	5.3%	3.7%
Congo, Rep.	10.1	3.5%	1.3%
Mauritius	8.0	1.9%	-0.2%
Angola	6.7	0.5%	-4.4%
Seychelles	4.1	-2.5%	-1.5%
South Africa	3.8	2.6%	0.2%
Botswana	3.6	1.2%	0.4%
Congo, Dem. Rep.	..	2.5%	2.8%
Gabon	..	1.5%	-1.8%
Lesotho	..	-0.5%	1.4%
Zimbabwe	..	2.8%	4.2%

Source: World Bank World Development Indicators database

Annex 3 Subregional dimensions of the Africa Region's programs to reduce rural poverty: Country-specific lending operations in the pipeline fiscal 2002-05

Country	Making government and institutions work better for the rural poor	Inducing widely-shared growth	Enhancing management of natural resources	Reducing risk and vulnerability	PRSP	CAS	PRSC
Angola	Economic management	Education Transport recovery Secondary cities				CAS	
Benin		Cotton Sector Reform Program		HIV/AIDS		CAS	I, 11, 111, IV
Botswana							
Burkina Faso		Basic Education Competitiveness & Ent Dev Energy Operation Rural Roads		HIV/AIDS	PRSP Progress Report	CAS	II, III
Burundi		Agricultural Rehabilitation Education PSD Health supplement Transport, Infrastructure Rehab		HIV/AIDS Orphans Integration	PRSP	CAS	
Cameroon	Community Development	HD Development Project 1, Infrastructure Project 2, Human Development Road Maintenance	Forestry & Environment			CAS	
Cape Verde		Growth & Competitiveness Education		HIV/AIDS		CAS	I
Central African Republic		Human Development			PRSP		
Chad	Rural Development Pilot				PRSP		I
Comoros		Social Fund II Emergency Recovery			PRSP	CAS Update	
Congo, Dem.	Rural Development	Infrastructure Rehabilitation Reg. Trade Fac./Mining Recov Social Sector Recovery		HIV/AIDS	PRSP		

Annex 3 Subregional dimensions of the Africa Region's programs to reduce rural poverty: Country-specific lending operations in the pipeline fiscal 2002-05 (cont.)

Country	Making government and institutions work better for the rural poor	Inducing widely-shared growth	Enhancing management of natural resources	Reducing risk and vulnerability	PRSP	CAS	PRSC
Congo, Rep.		Transport Rehabilitation					I
Cote D'Ivoire	Rural Poverty Relief	Cap/Basic Infrastructure Financial Sector Development Health II Transport/Infrastruc Program	National Env. Program PNGTER II (Rural & Forestry)		 PRSP 	CAS 	I I
Eritrea	Community Development II	Agriculture Capacity Building Education Sector Export Development Road Sector Demobilization, Rehab & Rein Health Power Distribution	Marine Development Nile		I-PRSP	CAS	I
Ethiopia	Decentralization Apl Institutional Development	Agiculture Input Markets Power Distribution Second Roads Project	Environment/Forestry Nile Pastoral Project	Food Security HIV/AIDS	PRSP	CAS	I
Eq. Guinea		National Rural Infrastructure Rural Electricity (IDA/GEF)		HIV/AIDS		CAS	II, III
The Gambia	Rural Sector Support				PRSP	CAS	I
Ghana	Decentralization Land Admin Traditional Authorities (LIL)	Community Water (Phase 2) Highway Sector II Health	Natural Resources (Phase 2)		PRSP	CAS	PRSC Phase 3
Guinea-Bissau				HIV/AIDS MAP		CAS	
Kenya	CDD	Health Highway III Rural Energy Water	Lake Victoria II		PRSP	CAS	I, II, III

Annex 3 Subregional dimensions of the Africa Region's programs to reduce rural poverty: Country-specific lending operations in the pipeline fiscal 2002-05 (cont.)

Country	Making government and institutions work better for the rural poor	Inducing widely-shared growth	Enhancing management of natural resources	Reducing risk and vulnerability	PRSP	CAS	PRSC
Lesotho		Road Project Health Education Sector Water Improved Project			PRSP	CAS	
Liberia					PRSP		
Madagascar		Energy III Rural Transport Rural Water Education III	Environment III Watershed Dev.	HIV/AIDS Nutrition III	 PRSP	CAS	I
Malawi	MASAF 3 Regional Trade Facility	Private Sector Development Road Maintenance Rural Energy Education Health	Lake Malawi/Fisheries			CAS	I, II, III
Mali	Community Based Rural Dev Strength Dec Service Deliv	Household Energy & Univers.				CAS	II, III
Mauritania		Water Sector Financial Services				CAS	I, II
Mauritius						CAS	
Mozambique	Decentralized Planning	Roads & Bridges 2 Health Energy Reform and Access		HIV/AIDS		CAS	
Namibia						CAS notes	
Niger	Community Based	Private Irrigation Education		HIV/AIDS	PRSP	CAS	I, II

Annex 3 Subregional dimensions of the Africa Region's programs to reduce rural poverty: Country-specific lending operations in the pipeline fiscal 2002-05 (cont.)

Country	Making government and institutions work better for the rural poor	Inducing widely-shared growth	Enhancing management of natural resources	Reducing risk and vulnerability	PRSP	CAS	PRSC
Nigeria	Comm Based Pov Red/CDD II	Financial Sector Reform PSP II (Ports) Rural Infrastructure-CDD Health System II -CDD Rural/Micro Finance	Microwatershed CDD		PRSP	CAS	
Rwanda	Community Reint & Dev II	Health Regional Transport	Energy & Environment		PRSP	CAS	I
Senegal		Rural Infrastructure/Elec Rural Transport	Casamance Natl Rur Inv	HIV/AIDS	PRSP	CAS	I, II
Sierra Leone		Education Health Sector II		HIV/AIDS	PRSP		
Somalia							
South Africa							
Sudan							
Swaziland				Poverty LIL			
Tanzania		Roads Rehab II Rural Water	Forest Conservation Lake Victoria Soil Fertility	AIDS	PRSP	CAS	I, II
Togo		Health			PRSP	CAS	
Uganda		Energy for Rural Transform Roads3 Rural Roads	Lake Victoria		PRSP	CAS	II, III, IIII
Zambia	Local Government	ASIP II Power PSD/Tourism Road SIP II	Copperbelt Environment		PRSP	CAS	
Zimbabwe	Local Government	Private Power Development		HIV/AIDS			

Note: This table shows the indicative program and is subject to change. Projects are those in the pipeline for fiscal 2002–05. Many additional projects supporting rural development are under implementation.

Bibliography

Barwell, Ian. 1996. Transport and the Village: Findings from African-Level Travel and Transport Surveys and Related Studies. World Bank Discussion Paper 344, African Region Series, Washington, D.C.

Binswanger, Hans, and Ernst Lutz. 2000. "Agricultural Trade Barriers, Trade Negotiations, and the Interests of Developing Countries." Paper presented at the Round Table for the United Nations Conference on Trade and Development, February, Bangkok.

Blackden, C. Mark, and Bhanu Chitra. 1999. "Gender, Growth, and Poverty Reduction." World Bank Technical Paper 428. Washington, D.C.

Brunetti, A., G. Kisunko and B. Weder. 1997. "Institutional Obstacles to Doing Business: Region-by-Region Results from a Worldwide Survey of the Private Sector." *World Bank Economic Review* 12 (3): 353–84.

Cavendish, William. 1999. "Empirical regularities in the poverty-environment relationship of African rural households." Working Paper Series 99.21, Center for the Study of African Economies, University of Oxford.

Christie, Iain T. and Doreen E. Crompton. 2001. "Tourism in Africa." Africa Region Working Paper Series 12. World Bank, Washington, D.C.

Cleaver, Kevin, and Götz Schreiber. 1994. *Reversing the Spiral: The Population, Agriculture and Environment Nexus in Sub-Saharan Africa*. World Bank, Washington, D.C.

Dymond, Andrew, Niina Juntunen, and Juan Navas-Sabater. 2000. "Telecommunications and Information Services for the Poor? Elements of a World Bank Group Strategy." World Bank Discussion Paper, Draft, June 11.

Ebel, Robert D. "Fiscal Decentralization and Intergovernmental Fiscal Relations." Paper for the Africa Region Seminar on Decentralization and Community Driven Development, December 18, 2000.

Eicher, Carl. 1999. "Institutions and the African Farmer." Revised version of the Third Distinguished Economist Lecture that was presented at the International Maize and Wheat Improvement Center (CIMMYT), Mexico City, January 15, 1999.

Eicher, Carl, and John Staatz (eds.). 1998. *International Agricultural Development* (third edition). Baltimore: Johns Hopkins University Press.

Evenson, R. E. Forthcoming. "Economic Impact Studies of Agricultural Research and Extension." In *Handbook of Agricultural Economics*.

Fan, S., P. Hazell, and S. Thorat. 1999. "Linkages between Government Spending, Growth and Poverty in Rural India." International Food Policy Research Institute Research Report 110, Washington D.C.

Food and Agriculture Organization. 1999. *The State of Food Insecurity in the World 1999*. Rome, Italy.

Goldman, Ian. 2000. "Linking Micro to Macro: Policies and Institutions to Support the Rural Poor." Khanya, Bloemfontein, Free State, South Africa, September 2.

Government of the Republic of South Africa. 2001. "Cabinet Paper on Integrated Sustainable Rural Development, January.

International Food Policy Research Institute. 1998. "Good News from Africa."

International Fund for Agricultural Development. 2001. Rural Poverty Report 2000: The Challenge of Ending Rural Poverty. New York, Oxford University Press.

Jaffee, Steven, Ron Kopicki, Patrick Labaste, Iain Christie. 2000. "Promoting Agro-Enterprise and Agro-food Systems Development in Sub-Saharan Africa." Background paper prepared for the Vision to Action Update.

Krueger, Anne O., Maurice W. Schiff, and Alberto Valdés (eds.) 1991. "The Political Economy of Agricultural Pricing Policy." Baltimore: Johns Hopkins University Press for the World Bank.

Malmberg-Calvo, Christina. 1998. *Options for Managing and Financing Rural Transport Infrastructure*, World Bank Technical Paper 411, Washington, DC.

Rondot, Pierre and Marie-Hélène Collion. 2000. "Investing in Producer Organizations for Sustainable Rural Development: A Framework for World Bank Action." Mimeo, Rural Development Department, World Bank, Washington, D.C.

Sanghvi, Arun. 2000. "Anchoring Energy within the Africa Region Poverty Reduction Strategy." World Bank, Africa Energy Group, June 30.

Sachs, Jeffrey D., and Andrew M. Warner. 1996. "Sources of Slow Growth in African Economies." Harvard Institute for International Development Discussion Paper 545. Cambridge, Massachusetts.

Schiff, Maurice W., and Alberto Valdés. 1998. "Agriculture and the Macroeconomy." World Bank, Policy Research Working Paper 1967, Washington, DC.

Scoones, Ian and Camilla Toulmin. 1999. *Policies for Soil Fertility Management in Africa*. Brighton: Institute for Development Studies, and Edinburgh: International Institute for Environment and Development.

Timmer, C. Peter. 1998. "The Agricultural Transformation." In Eicher, Carl, and John Staatz (eds.) *International Agricultural Development* (third edition). Baltimore: Johns Hopkins University Press.

Townsend, Robert F. 1999. *Agricultural Incentives in Sub-Saharan Africa: Policy Challenges*. World Bank Technical Paper 444, Washington, DC.

Udry, Christopher. 1996. "Gender, Agricultural Production, the theory of the Household." Journal of Political Economy 104: 1010–46.

United Nations. 2001. "World Population Prospects: The 2000 Revision Highlights." Draft. Population Division, Department of Economic and Social Affairs, New York, February. Also available online at www.undp.org/popin.

United Nations Administrative Committee on Coordination Subcommittee on Nutrition (ACC/SCN) in collaboration with the International Food Policy Research Institute. 2000. *Fourth Report on the World Nutrition Situation*. Geneva, Switzerland.

World Bank. 1997. *Rural Development: From Vision to Action*. Environmentally Sustainable Development Studies and Monograph Series 12, Washington, D.C.

World Bank. 2000a. *African Development Indicators 2000*. Washington, D.C.

———. 2000b. *Can Africa Claim the 21st Century?* Washington, D.C.

———. 2000c. *World Development Report: Attacking Poverty*. New York: Oxford University Press for the World Bank.

———. 2000d. "Ethiopia Regionalization Study." Africa Region Report 18898–ET, Washington, D.C.

———. 2001a. Implementation Completion Report, Uganda Agriculture Research Training Project, Washington, D.C.

———. 2001b. *World Development Indicators 2001*. World Bank, Washington, D.C.

———. 2001c. "National Agricultural Advisory Services Project." Report 21742-UG, January 22, Washington, D.C.

World Tourism Organization. 2000. *Tourism Market Trends 2000*. Madrid, Spain.

World Travel and Tourism Council. 2001. "Sub-Saharan Africa Regional Report." Report available at www.wttc.org.