# Chapter 4

## **Evaluation Highlights**

- The Bank's internal institutional environment has not been supportive of agricultural development.
- While political commitment in client countries appears stronger now than in the past, overall in-country capacity to support agricultural development is weak and budgetary resources to support agricultural development activities are scarce.
- Research capacity exists, but sustaining and strengthening activities is a challenge.



Boy hand-irrigating field in Burkina Faso. Photo by Curt Carnemark, courtesy of World Bank Photo Library.

# Key Factors of Performance

### **Internal (Bank) Factors**

our factors related to the internal organization of the Bank have influenced its ability to support the development of agriculture in Africa. These are: relations between country and sector units, relations between and within sector units, the technical capacity of the staff in the institution, and the system for monitoring and evaluation of Bank activities.

#### Relations between country and sector units

The management structure of the Bank distributes accountability and responsibility for the design and implementation of operations between country and sector staff. Under this "matrix management," the sector units deliver lending and analytical work, but the country management units, led by the country directors, make the decisions about the allocation of resources among competing sector units in their countries.

Task managers of agriculture projects in the Africa Region interviewed as a part of this study noted that there were no well-defined procedures to ensure synergy between the work of country and sector units, and as a result, the agriculture sector was adversely affected. While it can be argued that the CAS process is intended to ensure synergy, the link between the preparation of the CAS and agriculture sector lending and nonlending activities was found to be weak by this review. As noted by a recent IEG assessment of three agriculture projects in Tanzania

(IEG 2007k), the strategies for the country and the list of projects financed by the Bank gave the impression of having been developed independently, and then forced together afterwards. A QAG review seems to confirm this finding when it notes that sector studies are frequently undertaken to justify operations in advanced stages of preparation, instead of preceding such preparation efforts (QAG 2004).

Country-level reviews carried out as a part of this study have also noted this problem: the Kenya review found that in several of the CASs for that country, except for the most recent one, the logical connection between the strategy and the lending program in The agriculture sector agriculture was not well articulated. For example, in the 1998 CAS, while the El Niño Emergency Project, the roads project, and another agricultural sector investment project were not necessar-

seems to bave been adversely affected by the matrix management system.

ily incompatible with the country strategy and the CAS objectives, it was not evident that these three choices had been subjected to any rigorous

screening process for prioritization. There was no evidence of dropped options. There was a similar finding on Cameroon.

CASs rarely included a bolistic assessment of the agriculture sector or linked sector priorities to budget. This review found further evidence of lack of synergy between the country and sector units in its CAS analysis. As already seen in chapter 3, the CAS review done for this study found the 1995 Ethiopia CAS to be the closest to

best practice regarding recognition of the interrelated nature of agricultural development. That CAS recognized that the National Fertilizer Project (1995) and the Seed System Development Project (1995) were designed to improve agricultural productivity and food security through extended use of improved seeds and fertilizer, which were recognized as the two most critical inputs in enhancing yields. Yet there was a complete lack of coordination between the two projects. It seems the CAS logic did not influence the preparation and implementation of those projects. It is thus not surprising that the Africa-specific data on

Internal constraints encourage the design of complex projects covering many activities.

which the fiscal 2003 and 2004 ARD retrospectives of the CASs were based found that the majority of the CASs (57 and 63 percent, respectively) were unsatisfactory in the size and composition of their rural lending and nonlend-

ing programs (extracted from communication with ARD, December 12, 2006).

The resources allocated to a sector in a country program depend on two factors: the country

Bank client demand for agriculture lending has not been strong.

unit's conviction that a particular sector is worth supporting and demand for investment in the sector from the country. The envelope of available IDA resources is also a

constraint, because it defines the upper limit of resources that can be distributed among sectors. Usually no more than one project is supported in a sector in a particular year. This sometimes results in complex project designs, because it creates an incentive for staff to cover as many activities as possible in a given project.

An internal review of the quality of supervision for the Lesotho Agricultural Policy and Capacity

Building Project notes the tendency to do such complex projects in small countries, because each project may be the only opportunity to work in a sector for years. A similar internal review of the Mauritania Financial and Private Sector Capacity Project (fiscal 1995), which had an agricultural component, also found that the project was trying to do too much in a country with weak administration. The review expressed concern that the project was trying to tackle judicial reform, the mining code, fisheries resource research, the chamber of commerce, and banking supervision—all in one operation.

A recent ARD report (World Bank 2005g) on interviews with country directors, the majority of whom were in Africa, found that their interest in supporting agriculture projects was not very high, since such projects were more time-consuming, riskier, and more expensive to design and implement. The projects were also likely to be more contentious than those in other sectors, especially when they involved forestry or irrigation infrastructure.

Another recent ARD document (World Bank 2005i) acknowledges the complex nature of agriculture projects and their high preparation costs. Data on project preparation costs from the Bank's databases confirms that agriculture interventions in Africa are more expensive than projects in other sectors. Agriculture projects were also found to be riskier (see appendix M). Nearly 63 percent of respondents to the IEG staff survey agreed that supervision and project preparation costs to the Bank for agriculture projects are significantly higher than for projects in other sectors in the Africa Region. Some country directors also found that the rural corporate strategy (Reaching the Rural Poor, World Bank 2003d) missed the opportunity to be truly operational (World Bank 2005g). The perception of the country directors and staff was reinforced by the poor performance of agriculture projects in the 1990s and appears to have contributed to the Bank moving away from support for agriculture.

Until very recently, Bank client demand for agricul-

tural lending has not been strong. In a 2003 quarterly report to senior management, the director of ARD noted that many country directors have stated that the decline in purely agricultural investment lending reflects the demand of borrowers for other kinds of support from the Bank, notably adjustment support, which has increased substantially in the Region, as well as the change in agriculture projects to embrace a more community-driven focus. Where there is support for large volumes of investment lending, it is often multisectoral. In the past two years there has been renewed interest in gaining Bank support for agricultural development among countries in Africa, and this is reflected in the consequent increase in lending (see chapter 3).

#### Relations between and within sector units

IEG's recent evaluation of community-based and community-driven development approaches (IEG 2005a) has drawn attention to ways that the sectoral organization of the Bank handicaps coordination across teams working in different sectors. IEG's 2006 Annual Review of Development Effectiveness (IEG 2006i) also notes that the Bank's matrix management structure does not encourage staff to work across sectoral boundaries or to address cross-sectoral issues. Agriculture is more susceptible to this problem than any other sector by virtue of its interconnected and multifaceted nature. As already seen, outcomes in the sector are dependent not only on various agriculture-related activities—such as extension, credit, and seeds-coming together, but also on activities of sectors such as transport contributing effectively to agricultural development.

One example of this involves the way agriculture interacts with the transport sector. Respondents to an open-ended question in the IEG staff survey identified lack of rural infrastructure as a fundamental constraint to the development of agriculture. Among the reasons noted for this neglect was the expectation of agriculture staff that rural roads would be covered by staff in the transport sector. However, since there is little coordination across sectors, not much is done to strategically develop rural roads in Bank

transport projects to ensure that a Bank agricultural intervention attempting to increase agriculture productivity in a particular area is also able to ensure market access for the increased crop production.

Similar disconnects are seen in the *The Bank's sectoral* financial sector. Respondents to the organization handicaps IEG survey noted that financial sector cross-sector coordination. staff had been of little assistance in coming up with a realistic strategy for increasing access to financial services to support agricultural sector growth.

Similarly, agricultural education in universities is under the education sector; the agriculture sector does not have the main responsibility for it. Hence, there is little evidence of attempts to link support for technical education in agriculture with the needs of the agriculture sector. More than 80 percent of the survey respondents agreed that coordination between Bank staff in agriculture and in other sectors in the Africa Region is not good.

Even within a country sector program, Eighty percent of staff there can be little coordination survey respondents said between projects. IEG's project assess- that intersectoral ment report on the Seed System coordination was not Development and the National Fer- good. tilizer Projects in Ethiopia (both approved in June 1995) found that a feature of the two projects was a lack of interlinkages and coordination in conceptualization, design, and implementation and among all parties involved (IEG 2007a, 2007b).

Despite going to the Bank's Board of Directors on the same date, each of the appraisal reports makes only minimal reference to the other project. Neither report considered how the two projects would harmonize their activities and there was little discussion of how they would engage with other activities—such as agricultural extension, research, and credit—that would be needed to ensure that the *Even within a country's* project activities increased agricul- sector program, tural productivity. The country review coordination may be for Cameroon, drawing on earlier IEG poor.

work in the forest sector of that country (Essama-Nssah and Gockowski 2000), also found that an understanding of the multifaceted and interconnected nature of agriculture and the major role that low productivity in the sector has played in deforestation was missing from the country program.

How can knowledge about the interconnected nature of agricultural interventions best inform the design of future agriculture projects? A sectorwide approach, such as that used in the Zambia Agriculture Sector Investment Program, may not necessarily be the best answer if it leads to the design of complex projects. This may challenge limited country capacity. Past donor procedures have not been compatible with pooling resources, as was attempted initially in the Zambia intervention.

Once the overall menu of activities has been identified, separate interventions can also be undertaken, although given the sectoral organization of the Bank, they present a coordination challenge within the institution. The realization that agricultural development requires a multifaceted and coordinated approach has to flow through the different Bank teams working on different projects in one country.

The broadening of the Beyond the Bank, as seen in chapter rural agenda has been 2, when other donors are involved in accompanied by reduced the overall task of supporting agricultechnical capacity in tural development, donor coordinaagriculture. tion presents challenges in terms of agreeing on strategy and priorities.

> Programmatic and budgetary support lending, now on the increase in Africa, seem likely to make coordination more difficult. This is because the allocation of those funds rests with sector ministries, which are in most cases far less cooperative than the Bank's sector units.

#### Technical capacity within the Bank

Major reorganizations in the Bank have technical capacity in agriculture.

Two major reorganizations in the Bank in the past 20 years have significantly significantly reduced its reduced the Bank's technical capacity to support agriculture. In the 1960s and 1970s, considerable attention was

given to technical aspects in components of agriculture projects. To do this, the Bank maintained a strong cadre of technical staff who came into the Bank in mid- to late career, and whose quality of support was acknowledged by the client countries and the world at large (World Bank 1991a). The major reorganization of the Bank in 1987 significantly reduced the number of agriculture technical staff in the Bank. This was recognized as an issue by a study that examined aid to African agriculture in the late 1980s (World Bank 1991b).

A decade after the first reorganization, after the Bank was reorganized again, along matrix lines, the availability of technical staff eroded further. Analysis of data from the Bank's Human Resources Department found a considerable decline since 1997 in the number of technical staff (irrigation engineers and specialists in soils, extension, livestock, and other areas) mapped to ARD in the Africa Region. In 1997 there were 40 technical experts mapped to ARD in Africa, but in 2006 there were only 17 (appendix G).<sup>2</sup> More than 67 percent of the respondents to the IEG staff survey agreed that the Africa Region does not have an adequate level of technical staff skills to support implementation of agriculture projects.

The decline in the Bank's technical capacity happened partly because of the broadening of the rural agenda discussed in chapter 2. While social development, broad-based rural development, and other such concerns are important issues in rural space, the emphasis on those new areas in rural strategies has resulted in a staff of generalists rather than one of agricultural specialists. Human Resources data show that staff related to the newer agenda have increased from about 51 percent of staff working in ARD in 1997 to 71 percent in 2006. With such limited technical capacity in ARD, it has become difficult for the Bank to provide substantive direction and advice to countries on technical agricultural issues, especially since government sector staff with which the Bank interacts are still largely technical specialists. About 65 percent of the respondents to the IEG staff survey agreed or strongly agreed that the strategic approach by the Bank of focusing on rural development more broadly has diluted attention to technical issues in agriculture lending in Africa.

Decentralization also appears to have affected the Bank's capacity to support agricultural development.3 The decentralization of Bank staff in the mid-1990s led to the increased hiring of local staff in the Bank's country offices. The decentralization improved understanding of country issues and reduced staff costs. While both are desirable goals, the tradeoff for this has been the reduced influence of internationally recruited staff with broad experience and knowledge of international good practices.

The decline in technical capacity appears to have affected the quality of the policy dialogue on agriculture with government ministries. More than 66 percent of the respondents to the IEG staff survey agreed that the policy dialogue bearing on rural development in the Africa Region does not adequately address technical issues in agricultural productivity (such as soil fertility, land management, land tenure, irrigation, and improved seeds).

The decline in capacity also has affected the quality of the agriculture lending program. Many country directors interviewed by ARD cited input and output marketing as areas where there were major problems in their countries, but they found that Bank staff were unable to help resolve these problems (World Bank 2005g). Other country directors noted that they could not get the skill mix they needed from rural staff for products such as Poverty Reduction Strategy Credits (PRSCs) and cited lack of attention by rural staff at the time of CAS formulation as a reason for smaller rural programs (World Bank 2005g).

#### Monitoring and evaluation

The Bank requires that each project approved have a monitoring and evaluation (M&E) system. Since January 1996, when Operations Policy and Country Services (OPCS) provided guidance to staff on preparing indicators, most projects have given increased attention to M&E. A review of 54

investment projects in the sample of The loss of technical 71 (see appendix A for how the 54 capacity has affected the projects were selected) found that 73 quality of policy percent of projects since 1996 have dialogue. had agriculture-related indicators, compared with 27 percent during the period before 1996. Of all the projects that had indicators, most included output indicators, though the number of outcome and impact indicators

has increased since 1996.

The types of output and outcome indicators in African agriculture projects vary widely, presumably reflecting the wide variation in project objectives and components. Project documents usually do not say how the indicators were selected, and the indicators listed are often not thoroughly defined. Though ARD is currently preparing guidance for designing indicators, no such guidance has existed up to now.

Even where there are indicators, the information reported in the completion reports is often of limited value for answering fundamental outcome and impact questions, such as who benefited, the development of *The percentage of* which crops received support and agriculture projects with how, and what gains can be attributed agriculture-related to the Bank project, among others. An indicators has grown internal ARD review in 2004 confirmed this finding.

considerably since the late 1990s.

A recent (February 2006) supervision mission for the Kenya Arid Lands Resource Management Project Phase II noted weaknesses in reporting, commenting that the reporting is overwhelmingly on activities undertaken, and not on their impact. IEG's assessment of the first Kenya Arid Lands Resource Management Project (IEG 2005b) had also found that only 5 of 19 indicators were impact indicators. In that report, IEG concluded that there could have been better assessment of qualitative aspects related to the responsiveness of district institutions and of poverty-focused activities, and whether benefits were being captured by the elite.

Further, where there were indicators, information they provide and they were relevant, reporting was is often of limited value.

Where there are indicators, bowever, the limited, often due to weak capacity in the country or because of weak or inadequate Bank supervision. Seventy-two percent of the completion reports reviewed mentioned problems with M&E that limited the ICR (Implementation

undifferentiated groups.

Completion Report) team's ability to The projects reviewed fully assess the project's outcome or also tended to treat impact. As a result, learning and scope beneficiaries as for designing realistic follow-on interventions is limited.

> Weakness in the M&E of agriculture projects in Africa has also been identified by an internal ARD study and by QAG. While weak M&E is not unique to the agriculture sector, since the outcomes of agriculture interventions are influenced by interventions in other sectors and by natural and other factors, it is critical that information on the Bank's activities be accurate. The review of project completion reports found several cases where weak M&E kept the ICR team from separating the project's contribution to the final outcome from external factors (such as weather events) or other projects that were implemented in the same period with similar objectives.

Though nearly half of food production in the Region is by women and issues affecting them are different, when a farmer is mentioned in project documents it is difficult to tell whether a male or female farmer is being discussed.

Another measurement issue common to the projects reviewed is the tendency to treat beneficiaries as undifferentiated groups. Few project documents provide a profile of the farmers that are expected to benefit. Instead, the typical document refers to beneficiaries in general terms such as farmers, stakeholders, or smallholders. It is important to differentiate among various farmer categories, as

noted in recent sector work in Zambia (World Bank 2007e). On the potential to commercialize smallholders, the report says (pp. 7–8):

When considering the potential for smallholder commercialization, it is important to recognize that Zambian smallholders are not a homogeneous group of farmers. Understanding the beterogeneity of Zambia's rural households and their different potential as agricultural producers is critical to designing strategies for commercially viable smallholders. There are distinct differences in smallholder households' assets, buman capital, income generating potential, and livelihood strategies.

With the greater interest in promoting nontraditional export crops and with the increasing standards demanded by importers, understanding smallholder capacity will become even more important.

There is also a gender dimension to the issue of farmer profiles. Nearly 50 percent of food production in Africa is undertaken by women farmers, and the challenges they face in access to land, credit, and extension are different from those of their male counterparts. However, the portfolio review found that, in most cases, when a farmer is mentioned in project documents, it is difficult to tell whether a male or female farmer is being discussed. Only 2 of the 71 documents reviewed clearly link gender to the project objectives, include gender-specific subcomponents, and have indicators to measure the project's impact on women.

The literature also shows that changes in the division of labor occur over time for several reasons (Doss 1999). Men may move into activities that are traditionally the province of women when new opportunities arise and activities previously done by women become more productive or profitable (Doss 1999). This suggests the need for a more complete profile of the intended beneficiary households to effectively design Bank interventions that target farmers' needs and to report on variation in the impact of interventions on different beneficiaries.

The recent emphasis on client-responsive approaches to agricultural development requires even greater attention to the details of farm households. Project teams might argue that these details may be included in beneficiary surveys and other documents prepared for such interventions. However, those documents are not readily available, and since the information is not reported at the completion phase, it is not clear how much the information they contain

commitment for

agricultural development

contributes to learning or is a factor in assessing the Bank's contribution.

The portfolio review also found that 40 percent of the closed projects reported information on yield change through indicators, but the yields for each crop were reported in aggregate. This makes it impossible to discern differences among specific types of farming, production systems, or agro-ecological zones. In addition, the project information did not explain the criteria used to select the crops that were reported. In many cases, specific crops are also noted in the economic analysis section of project documents, but as with yield indictors, it is not clear whether these are the only crops supported by the project or why they were selected for the calculation of economic rate of return. This review concurs with the conclusion of an internal ARD review carried out in 2004, which noted that until the Bank addresses the insufficient use of outcome-oriented indicators, inadequate M&E, and reporting tools that are not designed to facilitate the description of project results, it is unlikely that the Bank will be able to effectively track the results of its interventions in the Africa Region in a meaningful way.

#### **Country Factors**

Without political will and commitment and capacity in the countries it supports, the Bank's activities on behalf of agricultural development are unlikely to be effective. Since there are potentially 47 borrower countries in the Region, it would be difficult to address country-specific issues. Instead, this section focuses on two broad factors across countries. These are critical aspects of the wider issue of governance, which evaluation findings and the literature indicate have affected the development of agriculture in Africa.4 While political will and commitment and stability are less amenable to outside influence, the Bank can help build government capacity to formulate and implement sound policies through training and technical assistance programs.

#### Political will and commitment

Among the most important lessons for Africa

from Asia's agricultural development Political will and experience is the necessity for political will at the highest levels. It translates directly into favorable policy environ- appear to be growing in ments and budget allocations to Africa. agricultural institutions and related

infrastructure (IFPRI 2004b). With NEPAD and CAADP there now appears to be political commitment among African governments to support the development of their agriculture sectors. IEG's Poverty Reduction Strategy Paper (PRSP) review (IEG 2003b) also found that a large majority of PRSPs reviewed (94 percent) identified agricultural issues as central to the fight against poverty. African governments, many allocating less than 1 percent of their budget to agriculture, agreed in July 2003 at the Africa Union Summit to allocate at least 10 percent of national budgetary resources for implementation of policies and programs to support agricultural growth within five years. It remains to be seen whether the governments will be able to meet this commitment.

Political commitment to develop agriculture was weak early in the post-independence era, as reflected in the budget support and the policy environment for the sector. Though there were variations in policies across countries, agriculture generally faced heavy taxation, and monopolistic parastatal marketing boards often fixed producer prices below market levels.

However, governments also transferred resources through input and credit subsidies. As a result, some analysts have argued that the governments in Africa followed a contradictory strategy, extracting surplus and transferring resources at the same time. Such an approach allowed the government to meet the needs of the smallholders and supply cheap food for the urban population. But the strategy was fiscally unsustainable and did not contribute to development of the agriculture sector.

Then, in the mid-1980s, African countries were faced with severe crises—alarming impoverishment, food shortages, low levels of literacy and health, a fall in commodity prices, and a stifling rise in the debt burden (IEG 1998a). Agricultural

performance declined as the area under cultivation expanded and the best lands were exhausted. What followed was an era of structural adjustment reforms when, under pressure from the Bank and the IMF, several governments undertook major reforms.

Political commitment for both the sector reforms and agricultural development was often weak during the structural adjustment period. Many government decision makers did not accept the premise of the reforms and did not trust the working of the markets (Jayne and others 1999). Ministries of agriculture did not support a reduction in their functions, preferring to retain budgets and authority even where they or the central government made verbal commitments to liberalization (Foster and others 2001). Civil society organizations often opposed the reforms, arguing that they adversely affected the poor, and some expressed concern over losing sources of public revenue because of the reforms (Kherallah and others 2002).

In Senegal, for example, the government struggled to maintain control over the processing and marketing of groundnuts, its primary generator of export earnings (IFPRI 2000). In Mozambique, an IEG project assessment (IEG

obvious in many ways.

2002a) found that it was widely That political believed in the country that a Bankcommitment was weak is supported reform program to liberalize the cashew sector "killed" the economically viable cashew process-

> ing industry. While the findings of the Bank and the literature differ on this issue, and while there is recent evidence of increasing production using intermediate technologies, the reform process itself clearly contributed to poor relations between the Bank and the government. Overall, this appears to be a case of Bank conditions being pushed too far when a government was not convinced or committed. A National Bureau of Economic Research paper (NBER 2002, p. 28) argues:

The reforms took little note of important market imperfections. . . . There was virtually no attention paid to the credibility of policy

changes and how to enhance it. The government made little effort to manage the political fallout that should have been quite predictable ex ante. And the World Bank did not sufficiently appreciate the ineffectiveness of buying reform through aid-cum-conditionality. In all these respects, Mozambican cashews provide an illuminating case study of the misfortunes that have befallen the reforms that African countries undertook in the last couple of decades.

The lack of initial enthusiasm for policy reform by African leaders probably reflected doubts about how responsive the economy would be to these reforms (Jayne and others 1997). Hence, reforms were often undertaken because they were a condition of a Bank loan. The agriculture sector review for Kenya found that an important lesson from the experience of the Agricultural Sector Management, Parastatal Reform, and Economic and Public Sector Reform Projects was that relying largely on conditionality did not work, and that mechanisms were needed for Bank-client communication and greater consultation with politicians and civil society.

A review of completion reports of structural adjustment and investment operations in several countries points to a number of manifestations of weak political commitment—inadequate provision of counterpart funds for projects, delay in passing important regulations and in dismantling parastatals, inconsistent policy directives, and delay in adoption of policies, among others. A review of QAG's supervision assessments of agriculture projects confirmed that weak government commitment was a significant problem during Bank supervision. In 56 percent of the closed projects where borrower performance was rated unsatisfactory at project completion, weak political commitment was a factor (see box 4.1).

Weak commitment has contributed to underfunding of critical research and extension systems in several African countries. The review of the agriculture sector in Nigeria found that while the country has the largest agricultural

#### Box 4.1: Weak Political Commitment Has Been a Factor in Performance

The completion report of the Togo National Agriculture Services Project (fiscal 1998) rated borrower performance unsatisfactory and noted, "The government failed to provide, in a timely and adequate manner, its counterpart funding to implementing agencies, and, for reasons still unclear, it withdrew the extension services for cotton production from ICAT and returned

them to SOTOCO from whom they had originally been transferred" (World Bank 2003f, p. 12).

The 1998 IEG study of the agriculture sector in Kenya (IEG 1998c) also found that lack of sufficient ownership was a weakness that had severely compromised developmental effectiveness of Bank-supported operations in Kenya.

research system in the Region, funding to the system was severely curtailed in the 1980s following the decline of oil prices. In Tanzania, IEG's recent assessment of the Second Agriculture Research Project (fiscal 1998) and the Second National Agricultural Extension Project (fiscal 1997) found that sustainability remains the biggest concern because there was insufficient attention to matching the scale of public sector activity to realistically projected resources.

In some cases the lack of political commitment reflected a deeper governance problem, and Bank project implementation did not always recognize this. The Cameroon, Kenya, and Tanzania agriculture sector reviews found that Bank interventions show little appreciation for the time required to carry out major reforms. In many cases, project completion reports and IEG project assessments also found that the pace and scope of the reform advocated in countries in the Region has been beyond the capabilities of the governments.

In Kenya, for example, reforms ran into political and implementation delays and reversals because of unrealistic expectations regarding the steps required for the reforms to pass through into legislation and implementation. In Zambia, the project assessment for the First and Second Privatization and Industrial Reform Credits found that the reform programs under the two projects were beyond the intent and capacity of the government to implement fully. In Cameroon and Nigeria, other factors played a part. The country sector reviews found that commitment to the agriculture sector rose and fell in tandem with oil revenues.

Many countries reversed reforms as a Weak commitment also result of external shocks or changing contributed to economic conditions (IFPRI 2000). underfunding of critical The civil war that erupted in northern research and extension and eastern Uganda, for example, systems. forced the government to divert re-

sources, or even ignore some of the components of liberalization such as a prohibition on printing currency to cover budget deficits (Bazaara 2001). Malawi reinstated fertilizer subsidies that were to be phased out in the mid-1980s because currency devaluation and the severance of transport routes through Mozambique significantly raised fertilizer prices (IFPRI

2000). In Ghana, the IEG project External shocks or assessment report (IEG 2001) found internal conditions that while structural adjustment was a caused many countries to major part of support to the country reverse reforms. after 1990, in 1992, coinciding with

elections, public expenditure financed by borrowing from the banking sector increased substantially when civil service salaries rose. This resulted in a large increase in the money supply and high inflation, and negated the reform principles.

Country capacity to support development of agriculture

Willingness and commitment are not by themselves enough to drive the development of agriculture. Capacity is also needed.

ity has prevented the state from ef- countries, weak capacity fectively planning and budgeting, bas prevented effective managing development assistance, planning and budgeting, and providing services (Commission management of for Africa 2005). In some countries, development assistance, scientific and technically proficient and provision of services.

In many African countries, weak capac- In many African

staff are in short supply (Commission for Africa 2005). This problem is partly related to the quality of education in universities, which is not a subject of this review, but again reinforces the dependence of agricultural development on other sectors.

Enhancing the countries' institutional capacity has been high on the donor agenda for the past two decades and has also been an important aspect of many Bank agriculture projects. This study found Bank activities that provided training to support the establishment of early warning systems for droughts and other natural disasters, improve M&E capacity, develop information systems, and strengthen human resource capacity through higher education, among other pursuits. Bank projects have also provided support for the revitalization and restructuring of agricultural research capacity to improve its coherence and quality and for training of research staff.<sup>5</sup> The Bank has also provided support for CGIAR, which has invested more than \$3.2 billion in nominal dollars in research and capacity strengthening in Africa since 1971 (see box 4.2). Further, since the Bank began to champion the cause of the developing countries in international trade agreements, strengthening their capacity to negotiate trade issues has also become part of the capacity-building agenda.

The Bank's contribution to policy formulation has picked up since 2002.

The Bank has also provided support for restructuring of line ministries and privatization of grain and agricultural marketing boards (an area critical to governance), developing management

systems and capacity to improve the allocation and utilization of budgetary and manpower resources, and enhancing capacity to formulate rural and agricultural policies and strategies. Contribution to strategy formulation, in particular, has picked up since fiscal 2002.

Sometimes, privatization and restructuring of line ministries or parastatals was part of a larger economic reform program in the country, as in the case of the Zambia First and Second Privatization and Industrial Reforms Credits (fiscal 1992 and 1993). At other times, agriculture projects focused

primarily on sector institutions, as in the Tanzania Agriculture Sector Management Project (fiscal 2004). The predominant emphasis of the Ethiopia Seed Sector Development Project (fiscal 1995) was also for institutional and human capacity building. The main activity was to restructure and decentralize the Ethiopian Seed Enterprise to create a commercially oriented agency.

Support for building the capacity of governments at the regional and subregional levels became important with the emphasis on decentralization in the Bank's client countries. In addition, several projects, particularly from the late 1990s, have provided support for strengthening producer organizations and farmer or user groups, either to take on more responsibility for operation and maintenance, as with water user groups, or to improve the negotiating capacity of producer organizations, as in the case of attempts to strengthen cotton or coffee producers. Since these projects have become popular, Bank projects have also attempted to provide training support to government officials to build their capacity to deliver cost-effective services to rural communities and producer organizations.

The Africa Region's self-evaluations and IEG project assessments show that the capacity-building aspect of the Bank's support has had much less success than anticipated. An IEG *Précis* reporting on capacity building in the agriculture sector in Africa found that "although some success has been achieved in implementing structural adjustment programs with a consequent reduction in government activities to a more manageable size and liberalization of economic policies that improved resource allocation and producer incentives, there has been less success in reviving the capacity of public institutions" (IEG 1999c, p. 2).

Even today, local agriculture ministries continue to be weak and relatively ineffective partners in promoting development of the agriculture sector. Weak borrower capacity was an important shortcoming in 77 percent of the cases where a Bank-supported intervention was rated unsatisfactory on outcome. This finding is of particular

### Box 4.2: The History and Challenges of National Research Capacity in Africa

The CGIAR is a network of 15 international agricultural research centers, all of which currently have programs in Africa, though only 4 are located in the Region. In addition, African countries also have national agriculture research systems.

In the early 1960s, 10 percent of the agricultural researchers in Africa were African and 90 percent were expatriate staff. By the early 1990s, however, overseas training programs had reversed the ratio.

This massive capacity-building effort in Africa is an important success story, but knowledgeable observers generally agree that agricultural research in Africa today is weaker and at an earlier stage of institutional maturity than in Asia and Latin America. Currently, 80 percent (4,800) of Africa's agricultural researchers are concentrated in 13 countries, while the remaining 20 percent (1,200) are dispersed in 35 countries across the continent.

Soon after independence, many new governments nationalized or abolished the regional research institutes of their former colonial governments. The first 20 years after independence saw substantial growth in national agricultural research systems, but it was not systematically planned and came at some cost to research effectiveness. The process was fragmented as departments within different ministries built their own research capacity.

During the adjustment era in Africa, civil service reform provided the political space for consolidating and restructuring agricultural research across much of the continent. This period also saw renewed donor interest in funding national agricultural research in Africa. Consequently, research units, staff, and infrastructure were pulled out of the different ministries, especially ministries of agriculture and livestock, and consolidated under a single semi-autonomous structure.

By 1991, 28 of the 47 countries in Africa had adopted this structure for their national research programs. Donor funding facilitated this process but it also resulted in a shift to reliance on donor financing, as agricultural research lost its traditional budget within

the line ministries at a time of budget stringency and reordering of government budgets. The effectiveness of research in Africa depends not only on the link between CGIAR institutions but also on the strength of the national research systems. The World Bank has been the largest supporter of national research systems. After more than 40 years of independence, however, many of those systems are weak and financially unstable. Promising reforms are under way in the systems of several countries and increased attention is being given to developing alliances and partnerships with universities and the private sector. The competitive grant programs have also grown rapidly.

In 1985 a group of donors at the Tokyo CGIAR meeting decided to create the Special Program for African Agricultural Research (SPAAR). The program was charged with improving the coordination of donor aid to agricultural research in Africa and helping strengthen the capacity of the national systems to use new technology from the CGIAR system. The decision to create the Forum for Agricultural Research in Africa (FARA) was made in 1997 during the Seventeenth Plenary Session of the SPAAR. FARA was envisioned as a facilitating and information exchange forum among the sub-regional organizations and as an apex body to represent Africa.

The activities of this partnership have not been independently assessed. However, the biggest challenge is that national systems today are dependent on donor support for a large amount of their resources, and it is not clear whether resources will be available in the future to sustain and strengthen their activities. This is also the challenge for local-level cooperative research ventures—for example, CGIAR institute collaborations such as that between CIAT and the Eastern and Central Africa Bean Research Network. The Bank has been supporting such networking but, given the persistent problem of financial sustainability in African agricultural research, there needs to be more aggressive targeting of, and support for, such regional cooperation options.

Sources: Eicher and Rukuni 2003; Ndiritu and others 2004; http://www.fara-africa.org/about-us/

concern, as Bank lending is shifting toward budgetary support, thrusting far more demand for management decision making in setting priorities on these weak ministries. In such projects, there is a need for realistic Bank analysis of current institutional capacity during project preparation and a clearly stated assessment of that capacity in the appraisal documents.

Unrealistic or overly ambitious project design has been a major factor and was a concern in almost half of the projects rated unsatisfactory on outcome. Several Bank projects have been unrealistic about the availability of resources to support activities after project completion. For example, the Tanzania Agriculture Sector Management Project (fiscal 1994) appraisal report had

undermining performance has been unrealistic or overly ambitious project design.

The main factor anticipated that the savings from the rationalization of the Ministry of Agriculture would finance incremental recurrent costs, but the recent project assessment found that the agriculture ministries appear just as short of

> operating funds now as they were before the project.

> The Bank has a long record of such experience, particularly in Africa, as treasuries tend to take back savings from downsized ministries. Funding is generally closely related to staff numbers. A similar situation occurred in Kenya, where savings from Forest Department reforms were redirected elsewhere. It should be possible for the Bank, which does Public Expenditure Reviews, to subject sectoral projects to tougher appraisal standards with regard to their financial sustainability in light of known budgetary constraints (IEG 1999c).

bas also been limited by weaknesses in training programs.

Capacity enhancement Success with capacity enhancement has also been limited by weaknesses in the training programs provided within Bank activities. In some cases relevant training was not organized; in other

> cases trained staff were not used effectively. A review by the Africa Region in 1997 found that project training is often the least-well-defined component of a project (World Bank 1997a). A review of completion reports found that in about

been given to incentives for retaining highly skilled technical staff.

15 percent of the completed projects Too little attention bas where outcome was rated unsatisfactory, weakness in training was identified as an issue. For example, the overall objective of the Mali Irrigation Promotion Project (fiscal 1997) was to

improve and induce, through capacity-building

activities, an expansion in small-scale irrigation, contributing to increased on-farm diversification of investments, productivity, and food security. The completion report for the project, while noting that the overall result of the capacity-building component was unsatisfactory, found that the training had been infrequent and insufficiently integrated into a plan suited to the training requirements of producers' organizations.

The completion report of the Gambia Agricultural Services Project (fiscal 1993) found that staff trained abroad for the specific purpose of improving sectoral analytical capacity were reassigned to other departments. In Malawi, the impact of efforts to build capacity, especially in the Ministry of Agriculture, was limited because of the rapid turnover of counterpart staff, particularly in the economist streams (IEG 1998d). In other cases, such as the Mali Natural Resource Management Project (fiscal 1992), IEG found that trained government staff moved to the private sector, to NGOs, or even abroad once the project closed (IEG 2003e).

Inadequate attention has been given to incentives and other factors such as staff salaries and promotion incentives that are important for retaining highly skilled technical staff. It is now widely recognized that the underpayment of public servants is a source of capacity weakness throughout most of Africa and is a serious impediment to the effectiveness of capacitybuilding interventions (IEG 1999c). However, most of these factors cannot be adequately addressed in sector interventions and often need to be tackled through reform of government pay structures and performance assessment and reward systems.