

# Sub-Saharan Africa: Lessons from Four Sectors

**T**HE BANK COMPLETED 287 PROJECTS BETWEEN 1992 and 1997 in Sub-Saharan Africa, at a cost of US\$9.6 billion, in four essential sectors: agriculture, education, health and nutrition, and urban and rural infrastructure. The Operations Evaluation Department (OED) undertook a review of these efforts to establish what has worked and what has not, and how the sector strategies for the Region could be improved. OED found that while 66 percent of all projects were rated satisfactory at time of completion, many had disappointing results in sustainability, policy reform, or capacity building. These experiences have yielded important lessons that can be used to strengthen the Bank's approach in the Region.

Projects in all sectors were negatively affected by lack of local technical and institutional capacity, as well as by weak project design. The specific lessons for each sector are discussed below.

## **Agriculture**

The Bank's 118 projects in the agriculture sector, totaling US\$3.6 billion, represented nearly 23 percent of all Bank lending to Sub-Saharan Africa during the period under evaluation. The projects included 10 adjustment loans, as well as freestanding extension projects and agro-industry projects, many of which had research and institutional development (ID) components.

Although performance in the sector was above the average, with 69 percent of the projects rated satisfactory, other factors important to long-term success were found to vary widely. Poor project planning was identified as generally damaging to prospects for success, while a systematic approach to improving research and infrastructure had a significant positive effect.

## *Sustainability*

Only 26 percent of the agriculture investment projects were rated sustainable, compared with 80 percent of the agriculture adjustment projects, 35 percent of all Bank projects in Sub-Saharan Africa, and



54 percent of agriculture projects in all regions. OED has found that the sustainability of rural development projects is threatened when: (i) policies change in unsupportive ways; (ii) the level of investment and services so exceeds national norms that not enough resources are available to maintain supportive policies; (iii) project implementation has relied heavily on technical assistance, and local staff have not been adequately trained to take over effectively; (iv) technology adoption depends on subsidies that cannot be eliminated; and/or (v) project-specific institutions have been established that cannot be absorbed into the regular government machinery.

### *Policy Environment*

The failure of many projects designed to increase agricultural production, diversity, or productivity was traced back to insufficient attention to the existing policy environment at the time of project appraisal. Experience has shown that elements of an unfavorable policy environment include exchange rates and revenue measures that depress export earnings (and thus farm prices); pricing and marketing policies and practices that restrict farmers' freedom to market produce to their best advantage; directed cropping patterns that are contrary to farmers' wishes; land tenure policies that discourage on-farm investment; and input supply policies that restrict the adoption of new technologies.

### *Design of Extension Projects*

Because of weak design, only 25 percent of freestanding extension projects had satisfactory outcomes and only 3 percent had a substantial impact on institutional development. Specific design weaknesses included the failure, during project appraisal, to pay adequate attention to the real needs of farmers; poor policy environments, which inhibited production incentives; and rural infrastructure; and overestimation of government commitment (governments often failed to provide counterpart funds or to appoint key staff during implementation).

### *Research*

Projects to promote good practices in agricultural research had a satisfactory average rating of 76 percent. Most of these projects focused on strengthening national research systems by creating or improving research plans of action; financing mechanisms to ensure reliable, timely funding to implement the action plans; management and institutional capacity to implement the plans and to be accountable for the budget; links among research, extension services, and farmers; and links between national and regional research institutions. Other elements of project success included an advisory group of stakeholders to help shape the work program;

**Table 1: Projects by Sector**

<i>Sector</i>	<i>Number of projects</i>	<i>Total value (US\$ billion)</i>	<i>Percent of total SSA portfolio</i>
Agriculture	118	3.6	23
Education	33	1.2	7
PHN	19	0.4	2
Infrastructure	117	4.2	27

*Note:* SSA = Sub-Saharan Africa.

adequate salaries; and good, professional working conditions.

### *Rural Infrastructure Development*

Experience from the National Rural Infrastructure Program in Guinea indicates that a broad, countrywide approach to improving rural infrastructure has a high impact on agricultural production and service delivery. In Nigeria, provision of rural infrastructure enhanced the rate of adoption of agricultural technologies, particularly when the design and location of infrastructure facilities was carried out in consultation with farmers. And a Bank project to open up previously impassable roads generated an increase in economic activity and agricultural production.

### **Education**

The Bank completed 33 projects in the education sector. These projects totaled US\$1.2 billion and represented 7 percent of the total Sub-Saharan Africa portfolio. Eleven projects, worth US\$166 million, focused mainly on primary education, and US\$656 million was slated for balance of payments support tied to policy reform.

OED found that Bank efforts in the education sector are of questionable long-term effectiveness, although the objectives of projects have been deepening—from the provision of infrastructure early in the period toward more institutional and policy objectives. While 61 percent of all education projects (5 percent below the average) and 73 percent of investment loans had satisfactory performance ratings, primary education projects were only 59 percent, and policy-based loans only 51 percent, satisfactory—the latter reflecting the politically difficult nature of many major policy reforms in the sector. Moreover, ID impact was rated at only 9 percent (compared with 50 percent for education projects in other regions), and sustainability at only 18 percent (compared with 69 percent in other regions). These results were attributed to weakness in four general areas.

### *Project Design*

Nearly half the projects had too many components, too many objectives, too many donors, too many beneficiaries

relative to the implementation capacity of the governments, too much emphasis on infrastructure, and/or improper sequencing of reforms. Experience in Cape Verde, for example, has shown that upgrading of primary education services must first focus on design, methods, materials, content, and pilot testing, before proceeding with geographical expansion and infrastructure investments. Good practice in design involves the following elements: (i) activities must match the implementation capacity of sector institutions; (ii) components must match the coordination capacity of project management; (iii) activities must be properly sequenced; and (iv) the policy and institutional frameworks must be strong enough to withstand the strains of project activities.

### *Politically Sensitive Policy Reform*

The political sensitivity of education reforms, especially those affecting the financing of higher education and teachers' salaries, has led to opposition from politically vocal groups and consequent government noncompliance with some of the loan conditions. Political opposition can be mitigated by incorporating the concerns of stakeholders into project design; defining and phasing in strategic reform measures over time; and developing a widespread public consensus for education reforms before they are undertaken.

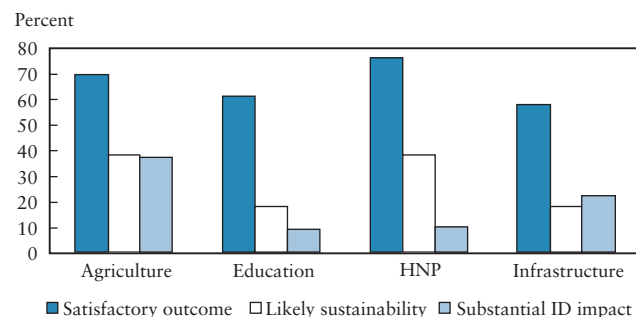
### *Capacity Building at the Central Level*

Traditional technical assistance to the education system has been unable to achieve sustained improvements in management and administrative capacity. Failures in capacity building are generally the product of high staff turnover prompted by poor working conditions, inadequate salaries, and lack of logistical support—lessons that have not been fully incorporated into the design of education projects. Given the overwhelming failure of such efforts, it is questionable whether further capacity building should be attempted in the absence of the kinds of major civil service reforms that will enable governments to attract, motivate, and retain high-caliber staff.

### *Community Participation*

Experience has shown that improved outcomes in education are directly related to greater ownership and control by parents and community groups, and to the level of understanding of community needs. In some areas, for example, the short-term cost of books and clothes for schoolchildren can outweigh the incentive effects of proximity to schools, or even free schooling. To be more effective, projects need to incorporate systematic beneficiary assessments and new approaches to increasing the involvement of communities in school management and financing.

**Figure 1: Comparative Project Performance by Sector**



### *Performance Indicators*

The higher outcome ratings of investment projects largely reflect what was required of early projects to gain a satisfactory rating: the achievement of their physical objectives. Even among projects aimed at improving the quality of education, performance has been measured through inputs such as books delivered or teachers trained. As interventions in the sector become increasingly complex, however, projects need to include relevant, monitorable output and outcome indicators to enable a proper assessment of progress.

### **Health, Nutrition, and Population (HNP)**

In the HNP sector, the Bank completed 19 projects worth US\$366 million, accounting for 2 percent of the total Sub-Saharan Africa portfolio.

While 76 percent of these projects were rated satisfactory and 38 percent were rated sustainable (both higher than the average for the Sub-Saharan Africa portfolio), only 10 percent of the projects, and only 5 percent in the area of basic health, had a substantial impact on institutional development. These disappointing results have yielded lessons for future HNP work.

### *New Approaches to Capacity Building*

The poor institutional development outcomes reflect the ineffectiveness of Bank-financed training, technical assistance, and other efforts to improve strategic and resource management at the central and district government levels, as well as efforts to strengthen public sector health providers. These efforts failed because they were unable to overcome systemic public sector weaknesses, including lack of coordination within and among government agencies, inappropriate organizational structures, and the inability of the civil service to attract and retain good people—all problems that need to be addressed through civil service reform. In addition, there were no significant efforts to support capacity building in the private sector.

### *Efficiency before Infrastructure*

HNP projects in Sub-Saharan Africa were about half as sustainable, overall, as HNP projects in other regions (38 percent versus 74 percent), primarily because they focused on expanding infrastructure without sufficient attention to the fiscal implications of recurrent costs. A recent OED health sector impact study has found that, before delivery systems are expanded, attention should be paid to improving the effectiveness and efficiency of existing primary health care programs by reducing expensive, low-priority programs; integrating services at various levels; introducing affordable generic drugs; and integrating the resources of governments, the private sector, NGOs, donors, and users.

### *More Effective Supervision*

Forty-one percent of Bank projects in the HNP sector were assessed as deficient in supervision (compared with 21 percent of all projects in the Sub-Saharan Africa portfolio). A recent Quality Assurance Group (QAG) assessment of health sector supervision in Africa has identified the following issues as constraints to good supervision: (i) the inability of a single task manager to properly supervise a range of projects; (ii) inadequate resources for supervision; (iii) an overemphasis on procedures rather than on achieving development objectives; and (iv) overly complex project design. In addition, institutional objectives are often poorly specified, and therefore cannot be systematically monitored.

### *Factors that Affect Demand*

Projects have focused on increasing the supply of health services, but not on factors that suppress demand. A recent OED study suggests that the failure to pay adequate attention to demand factors is a key weakness that must be overcome if Bank efforts are to have a greater impact on overall health system performance. Project appraisals should include data gathering on service utilization and consumer attitudes.

As objectives in the HNP sector deepen, and the focus changes from process objectives (training a given number of people, building a certain number of clinics) to increasingly complex efforts to improve health indicators and reform institutions, project success will require:

- Increasingly flexible intervention instruments
- Project designs that enable learning en route
- More private sector involvement in providing services
- A broader consensus for policy reform
- More relevant performance indicators
- Upgrading of national monitoring and evaluation systems to evaluate progress in the sector.

### **Infrastructure**

The Bank completed 117 infrastructure projects, valued at US\$4.2 billion, between 1992 and 1997, representing 27 percent of the total Sub-Saharan Africa portfolio.

Performance in the sector was below the average: 58 percent of projects had satisfactory outcomes, only 18 percent were considered sustainable (12 percent in the transportation subsector), and only 22 percent had substantial ID impact. The ID impact of projects varied widely among subsectors, from 2 percent in urban management and housing to 10 percent in water supply and sanitation, to 31 percent in transportation, to 61 percent of the small sample of self-standing rural infrastructure projects.

OED has found that the efficiency and sustainability of infrastructure investments in Sub-Saharan Africa are constrained by weak institutions, project design, and project management, and by uncertain government commitment to the maintenance of new facilities.

### *Institutions*

Infrastructure projects require a level of institutional capacity that simply does not exist in many Sub-Saharan African countries. Weaknesses include lack of skilled personnel; government interference in day-to-day operations; lack of autonomy; and borrowers' preference for physical components over measures to enhance institutional performance. In addition, ID measures included in projects are often inadequately focused and sequenced. Evaluations suggest that more innovative approaches to capacity building are required if the institutional constraints to infrastructure development are to be overcome.

### *Project Design and Management*

Projects were weakened by the failure to assess the real needs of target populations or to establish sustainable financial and administrative structures. In the urban management and housing subsector, in particular, where only 39 percent of Bank projects had satisfactory outcomes, more than 80 percent of the projects were considered deficient at appraisal. The appraisals: (i) lacked market analysis of the demand for housing and services among target groups; (ii) were overly complex and lacked specific focus; (iii) included deficient loan recovery mechanisms; or (iv) failed to engage private sector participation. Evaluations suggest that Bank projects could have a greater impact by involving local NGOs, private mortgage companies, and private builders in project design.

Project supervision often pays inadequate attention to sustainability issues such as financing mechanisms, institutional capacity, the autonomy of implementing agencies, and policy reform.

### *Government Commitment*

Experience has shown that uncertain government commitment to the maintenance of new facilities cannot be overcome simply through loan covenants, which have proven ineffective in such cases.

In addition, OED has found that infrastructure projects to enhance development should focus more on increasing the effectiveness of transport corridors and creating positive labor externalities. In particular:

- An OED study found that international corridors are essential to the development of landlocked countries, but that political conflicts, security risks, and weaknesses in transport systems make transport costly, slow, and unreliable. To address these weaknesses and help reduce the cost of services in the context of infrastructure projects, the study suggested that the Bank:
  - (i) help ensure that financing mechanisms are in place for the maintenance of transport infrastructure;
  - (ii) encourage divestiture of services that the private sector can provide efficiently; (iii) concentrate on
- improving the performance of customs; and
- (iv) develop and implement a legal framework that minimizes rent-seeking, supports fair competition, and punishes abuses.
- One key lesson emerging from the handful of self-standing rural infrastructure projects (the other Bank efforts in rural infrastructure are in agricultural area development) is that labor-intensive construction methods—while they may take longer to execute—have the advantage of creating jobs. The highly satisfactory outcomes of the public works projects in Burkina Faso and Senegal reflect this positive externality. In addition, an evaluation of a rural infrastructure project in Guinea found that works carried out by labor-based rather than conventional methods can:
  - (i) be of equal quality; (ii) be easier to maintain and probably no more costly; (iii) create at least three times more employment; (iv) stimulate the local economy; and (v) have no direct negative impact on the environment. Thus, the use of labor-intensive construction methods should be expanded.