In Africa it is becoming clear that the reasons for the shortage of infrastructure investment go beyond the need for policy and governance reforms. But the key problem is not a lack of funding, as might be expected. Instead, it is the lack of packaged, bankable projects—which in turn points to a need for more and better project preparation. But understanding this fact is only a beginning. African policy makers face special obstacles when it comes to adequate project preparation. Their work to resolve these problems is generating important lessons for other low-income regions.

Country officials, development experts, and donor representatives have struggled for years to understand the infrastructure financing problem in Africa. By all accounts the problem is massive: Africa ranks last among the developing regions in access to such infrastructure services as water, transport, energy, and telecommunications. Not surprisingly, there is no shortage of infrastructure investment opportunities in Africa. Estimates suggest, for example, that the original Short-Term Action Plan developed in 2002 by the New Partnership for Africa’s Development (NEPAD) identified more than US$8 billion in needed infrastructure investment.

If there are so many infrastructure investment opportunities in Africa, why are so few projects attracting capital? The need for policy reforms and better governance is clear. But what else is missing? Are commercial lenders too risk averse for African projects? Are more risk insurance and other third-party support needed? Are development finance institutions not making enough money available?

It is becoming clear in Africa that the problem is not just lack of funding. It is also lack of bankable projects—projects with enough time and money invested to establish that they are financially viable from the standpoint of a financier. A closer look at the lists of infrastructure projects that circulate in Africa reveals many projects that still lack a detailed cost-benefit analysis or sustainability assessment.

In some cases the problem may be that regional projects are not included in the capital planning and preparation processes of the countries involved. Many projects that are socially or economically desirable may not be bankable, at least by the private sector, no matter how well structured. Many others may not be viable or desirable by any measure.

Whatever the case, many project proposals in Africa are backed only by out-of-date engineering studies, with little additional analysis or preparation. The projects need preparation and packaging. But such preparation is expensive and risky. Private operators and commercial lenders have money to do their own due diligence on projects for which bankability has been reasonably established—but little to spend on preliminary assessments of bankability.

Many African organizations are well aware of this basic problem and have taken initial steps to deal with it. In the past several years both the African Development Bank and the Development Bank of Southern Africa have established infrastructure project preparation facilities. Regional economic communities, such as the Economic Community...
of West African States and the Southern African Development Community, are establishing such facilities to deal with cross-border infrastructure projects. And African governments—such as those in Kenya, Malawi, Mozambique, Nigeria, and Tanzania—are creating units to help develop projects that take advantage of participation by private operators and investors.

### Project preparation in Africa—lessons learned

But identifying the problem, and attempting to address it through the creation of project preparation facilities, has not led to easy solutions. Efforts to deal with shortcomings in the preparation of infrastructure projects in Africa have generated a series of valuable lessons about the difficulties and complexities of project preparation in low-income regions.

#### More complicated than anticipated

Project preparation has turned out to be much more complicated than was originally anticipated in the design of many of the new facilities in Africa—and this problem is common in other developing regions as well. Many of the African facilities were created to work on fairly mature projects—to establish bankability through feasibility studies, then take the project through a transaction process to lock in financing. But determining bankability—that is, whether financiers will support a project—is just one in a long series of steps leading to a closed deal.

A project’s bankability can be determined only after establishing its feasibility in terms of social, economic, financial, technical, environmental, and administrative factors. Project development normally involves feasibility and prefeasibility studies to assess these factors. But these studies need to be preceded by conceptualization, consensus building around a project’s purpose and initial design, and action plans. And these steps in turn are often preceded by legal and regulatory reforms in the relevant sector and by policy reforms. Even a simplified list of the standard steps in project preparation gives a sense of the complexity of the process (table 1).

As officials at some of the new project preparation facilities in Africa have discovered, many of the infrastructure projects considered priorities by governments or regional organizations have had little of this work done. Yet the facilities lack the mandate to work on many of these tasks or lack the funding to address all of them. The situation is even more difficult for the highest-priority cross-border infrastructure projects. These projects, which tend to be extremely complicated, often lack ownership or involvement by country-level officials, making coordination difficult.

#### Little help for “upstream” preparation

Progress in developing infrastructure projects in low-income countries is often stymied by lack of adequate “upstream” preparation (mostly the activities in the first two phases; see table 1). So, even if money is available for feasibility studies, the lack of a basic legal and regulatory enabling environment can stall project development. A weak policy environment can have similar effects because of the government’s inability to identify, plan, prioritize, or conduct action planning for projects.

These tasks far exceed the mandates of the new generation of African project preparation facilities. Yet getting help for these activities from development finance institutions—whether local, regional, bilateral, or multilateral—is often difficult. Support for this work is scarce largely because it is risky: the work is so far upstream from actual transactions that it may or may not result in a closed deal. That makes the work unattractive to private developers, which must recover development costs from completed deals, and somewhat unappealing for donors, which must justify expenditures with tangible results that clearly promote development objectives.

#### Weak project appraisal methods

As the African facilities seek to upgrade their techniques for technical project appraisal, they are confirming the existence of a larger problem that only recently has been much discussed in international project finance circles: traditional cost-benefit analysis often leads to unrealistic evaluations and failed projects. As the World Bank’s chief economist recently noted (Bourguignon 2006), this quantitative technique has been unable to deal with such complicating factors as cross-border externalities, lack of good data, or the complexities of mixed public-private funding options. Nor has it been able to handle “political economy” issues such as governance problems and the behavioral responses to controversial projects by beneficiaries and bureaucrats.

These views were confirmed in recent research by the World Bank’s Transport Department (Flyvbjerg 2005). The study documented extraordinarily high levels of misinformation about costs and
Revival of private participation in developing country infrastructure

**TABLE 1**

**Phases in infrastructure project development**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enabling environment</td>
<td>Designing enabling legislation, Designing regulatory approaches, Reforming project-relevant institutions, Reforming policy, Building capacity to support project, Building consensus around project</td>
</tr>
<tr>
<td>2. Project definition</td>
<td>Identifying desired outputs, Determining priority of project relative to others, Identifying project champions, Preparing action plans (including terms of reference), Conducting prefeasibility studies</td>
</tr>
<tr>
<td>3. Project feasibility</td>
<td>Performing financial modeling, Conducting economic, social, technical, and environmental studies</td>
</tr>
<tr>
<td>4. Project structuring</td>
<td>Assessing public and private options, Structuring project finance, Designing legal entities</td>
</tr>
<tr>
<td>5. Transaction support</td>
<td>Designing and conducting bid process and drafting contracts, Negotiating financial and legal terms</td>
</tr>
<tr>
<td>6. Postsigning support</td>
<td>Finalizing postsigning financial arrangements, Conducting scheduled tariff reviews, Renegotiating or refinancing project</td>
</tr>
</tbody>
</table>

benefits in the analytical preparation of infrastructure projects. A survey of 58 rail projects, for example, found costs to be underestimated by an average of 45 percent and future demand overestimated by an average of 51 percent.

The failures of technical project appraisal to anticipate fundamental financial, economic, and political issues have been reflected in the recent performance of public-private infrastructure projects in developing countries: except in telecommunications, investment in such projects has been in sharp decline since the Asian crisis of 1997.

With methodological failures of this magnitude in the international project finance market, Africa’s new facilities are having difficulties identifying best practices for their own project appraisal efforts.

**Lack of funding for preparation**

The huge funding needs for project preparation far exceed what African facilities have available. A general rule of thumb is that preparation requires the equivalent of 5 percent of a project’s investment cost. If correct, that means a need for hundreds of millions of dollars to prepare African infrastructure projects over the next five years.

Yet NEPAD has recently suggested that preparation costs in Africa are closer to 10 percent of a project’s investment cost, largely because upstream preparation often has not been done. This estimate puts the total cost of preparing the infrastructure projects in NEPAD’s original Short-Term Action Plan at about US$800 million.

**The response from donors**

Since the late 1990s, when it became clear that the market for public-private infrastructure projects in developing countries would not recover quickly after the Asian crisis, particularly in emerging economies, international development organizations have established dozens of initiatives to assist with infrastructure project preparation. Bilateral donor agencies have designed special programs to provide such support, as have European development finance institutions. Donors...
also have supported the creation of multilateral trust funds managed by the World Bank to focus on specific sectors or types of projects. And the World Bank Group has created several facilities that deal with different aspects of project preparation and finance.¹

Perhaps the most active is the Private Infrastructure Development Group, a multidonor, member-managed organization established in 2002. Members include bilateral donor agencies (those of Austria, the Netherlands, Sweden, Switzerland, and the United Kingdom) and the World Bank. The organization has helped to create six facilities (programs, investment vehicles, and affiliates) for providing financial, practical, and strategic support to encourage private infrastructure investment in developing countries.

Critics sometimes suggest that there are too many of these facilities, most without enough funding to have significant impact in developing regions like Africa. Moreover, most are able to provide support only to a specific part of the project preparation cycle—there is no “one-stop shop” able to provide support from project inception to financial closure. Organizations preparing a project therefore must often seek funding from several of these sources. Lack of support for “upstream” work on the enabling environment for projects is another enduring problem not addressed by most of these facilities. Finally, a more practical problem associated with these facilities is simply getting information about them to potential clients; many African officials have little familiarity with the many donor-supported facilities in operation.²

Conclusion

Africa’s massive infrastructure financing problem is far from solution. But African leaders are beginning to focus in on the critical issues that must be resolved before this problem can become tractable. Policy reforms and good governance are basic building blocks that must be in place, but beyond that a lack of bankable, packaged projects seems to be the most critical limiting factor. A common phrase in Africa is “too much money chasing too few projects.” African leaders are focusing more effort on preparing projects that can take full advantage of this funding—and in doing so are learning important lessons about project preparation that may be of value in other low-income regions with urgent needs for infrastructure investment.

References


Notes

1. For names of such programs, see ICA Secretariat (2006).

2. As a first step toward better information, the Secretariat of the Infrastructure Consortium for Africa (ICA) has used PPIAF funding to prepare a users’ guide to two dozen donor-supported project preparation programs. The guide, which categorizes the facilities and provides initial contact information, is available on the Web sites of the ICA (www.icafrica.org) and PPIAF (www.ppiaf.org).