

Taking Action for the World's Poor and Hungry People

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SPEAKER SUMMARY NOTE

Session: Africa: New Strategies, Actions, and Ways Forward to End Extreme Poverty and Hunger in Main Developing Regions

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Title: Investing in Infrastructure

Introduction

There is the growing recognition of the role that different types of infrastructure play in reducing poverty. Indeed discussions of what constitutes or does not constitute infrastructure are very common in the literature. While there has been a tendency to focus on many refer to as social infrastructure, including schools and health facilities in terms of their poverty reduction effects, there is now increasing attention being paid to economic infrastructure to complement social infrastructure. This is based on the understanding that the poor have to earn increasing incomes within the shortest possible times, and this requires the presence of the appropriate types and quantities of economic infrastructure to facilitate that process. Discussions of soft and hard infrastructure in Africa have been largely academic.

There is also the view that infrastructure is not simply required to facilitate production of goods and services, but the process of erecting the infrastructure should itself be a major source of employment and income earning. Jerome and Ariyo (2004) have identified a number of channels through which investment in infrastructure can contribute to sustainable growth and poverty reduction. These are as follows:

- Reducing transaction costs and facilitating trade flows within and across borders;
- Enabling economic actors—individuals, firms, governments—to respond to new types of demand in different places;
- Lowering the costs of inputs for entrepreneurs, or making existing businesses more profitable;
- Creating employment, including in public works (both as social protection and as a counter-cyclical policy in times of recession);
- Enhancing human capital, for example by improving access to schools and health centers; and
- Improving environmental conditions, which link to improved livelihoods, better health and reduced vulnerability of the poor.

Changing Perspectives on How to Provide Infrastructure

The capacity for infrastructure to reduce poverty is strongly linked to how it is provided and who owns it. For a long time, the provision of infrastructure was generally seen to be the sole responsibility of the state or the public sector. Today that view is changing, but with considerable controversy. The 1990s indeed saw major efforts to involve the private sector in infrastructure provision, but with very varied outcomes. It may be noted that the development of different infrastructure services in Africa in the 1980s and 1990s was sector specific, with hardly any attention paid to cross-sectoral strategies. The common strategy was to seek private capital and users' contribution as the principal means of financing infrastructure projects. Although the sector-specific strategy worked in some countries and communities, it largely failed to attract the necessary capital to build and maintain infrastructure, rural ones especially. Difficulty in paying the user charges made many projects problematic. At the same time, experiments with public-sector led labor intensive road construction projects did not appear to be sustainable in many countries.

The roles that the public sector should play alongside the private sector continue to be debated. In the energy and telecommunications sectors for example, the decision to invest in operating units rests largely with the private sector, while governments seek to attract larger investment and provide incentives for a more equitable provision of these units through regulation. In contrast, in the transport sector, the decision to improve rural roads is made by public entities only at the various levels. Rural water supply and sanitation decisions are generally being made

at the community or individual level, but with strong signals from national and international bodies. While some rural infrastructure projects are seen to have clear poverty reducing effects, the same cannot be said for others.

Infrastructure and Poverty Reduction

There are hardly any studies of the direct effect of infrastructure on poverty reduction in Africa. There are, however, good examples from Asia where Yao (2003) has documented the poverty reducing effects of rural roads in India and the People's Republic of China.

Table 1—Poverty Reducing Effects of Rural Road Investment

Poverty Reducing Effects of Rural Road Investment	India		Peoples Republic of China	
	Elasticity*	Percent Share	Elasticity*	Percent Share
Direct effect through increase in agricultural productivity	-0.0119	17.92	-0.0450	28.46
Direct effect through increase in non-farm employment	-0.0300	45.18	-.0417	26.38
Direct effect through increase in rural wages	-0.0204	30.72	-0.0399	25.24
Indirect follow-on effect through higher economic growth	-0.0041	6.18	-0.0315	19.92
Overall	-0.0664	100.00	-0.1581	100.00

* The elasticity estimates measure the percentage changes of the rural poverty incidence with respect to road infrastructure investments, working through different channels.

In Africa, there are some less direct assessments of how infrastructure provision has had significant effects on poverty reduction. The case of Ghana is worth mentioning. Aryeetey and McKay (2005) have observed that growth in Ghana over the past two decades has been pro-poor. While growth has moved from an average of 4.2% in the 1980s and 1990s to over 6% lately, poverty incidence first dropped from 52% in 1992 to 39.5% in 1998 and then to 28.5% in 2006. A major aspect of poverty reduction has been the increasing access to various infrastructure items, and this is reflected in the government's spending. They observe that a major feature of the government spending programme in the last twenty years has been the steady increase in the spending on the social sectors and on infrastructure in general. There is evidence of a clear increase in capital expenditures after economic reform was adopted in the 1980s. Capital expenditures moved from being only 3.3% of GDP in the decade before reforms to 5.1% in the first decade of reforms and then to an average of 12% in the second decade. In 2001, capital expenditure was 13.49% of GDP but declined to 9.71% in 2003. As a share of total expenditures, capital expenditures moved from 33% in 2000 to 42% in the following year before dropping sharply to 23.4% in 2002. By 2003, it had risen again to 35% and has remained at about that level. In 2006 capital expenditures amounted to 36% of the total. The expenditure on infrastructure alone has averaged about 10% of total expenditures in Ghana in the period since reforms.

Aryeetey and McKay see a strong correlation between the growing public investments in such infrastructure as rural roads, water, sanitation, and energy in the poverty outcomes. In particular rural roads are generally seen as facilitating the interaction between urban and rural areas, leading to a more mobile rural population that is increasingly engaging in a more diversified set of economic activities, including many non-farm enterprises. The effects of health and education infrastructure on poverty reduction are not so obvious in view of the weak outcomes on households.

Investment in infrastructure is likely to have a more sustained effect on poverty reduction if it is able to crowd in private investment for employment and income-generating activities. That is what Ghana's new medium-term plan being prepared by its National Development Planning Commission is seeking to do. The regulatory environment has to be used to ensure that the technology used by private investors will remain affordable to poor households.