Building an efficient road network

Public-private partnerships hold the key to regional infrastructure

By Gumisai Mutume

As far back as the 1960s, architects of African integration agreed that building infrastructure was vital to lubricate the wheels of intra-African trade and distribute its benefits regionally. The continent's leaders embarked on ambitious projects such as the trans-African highways -- segments of which would eventually stretch from Cairo to Dakar, Tripoli to Windhoek and Lagos to Mombasa. These would provide access to the sea to 15 landlocked countries and improve regional links.

"Unfortunately, like the economic integration process, regional infrastructure cooperation and integration has not been an outstanding success," notes eminent Nigerian scholar and proponent of integration, Prof. Adebayo Adedeji. At the turn of the millennium a major drawback to trade among African countries remains the dire lack of infrastructure.

Crowded road in Dar es Salaam, Tanzania: There are too few roads in Africa, and they are deteriorating.

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Africa lags behind the rest of the world in all aspects of infrastructure development -- quantity, quality, cost and access. In 1997, Africa (excluding South Africa) had 171,000 kilometres of paved roads -- about 18 per cent less than Poland, a country roughly the size of Zimbabwe. As efforts to complete the trans-African highways continue, the quality of existing roads is deteriorating. In 1992 about 17 per cent of sub-Saharan Africa's primary roads were paved, but by 1998 the figure had fallen to 12 per cent, reports the World Bank. Today, more than 80 per cent of unpaved roads are only in fair condition and 85 per cent of rural feeder roads are in poor condition and cannot be used during the wet season. In Ethiopia, 70 per cent of the population has no access to all-weather roads.

In many countries, roads are concentrated in urban areas or around coastal ports -- trade routes established during colonial times for the overseas shipment of commodities. Far fewer roads link neighbouring countries in regional networks.

Costly transport woes

Poor infrastructure makes the costs of transporting goods in Africa among the highest in the world, notes ECA Executive Secretary K.Y. Amoako. African goods are therefore less competitive with those from other regions.
A poor transport system "acts as a non-tariff trade barrier," concurs Prof. Kenneth Button, a public policy expert at George Mason University in the US, who has conducted transportation studies for the European Union.

World Bank studies show that a 10 per cent drop in transport costs could result in a 25 per cent increase in total African trade. The Bank also concludes that only about 25 per cent of the decline in Africa's share of world exports can be attributed to poor prices, while the rest is due to non-price factors such as poor infrastructure and information services.

Bad roads, aged vehicles and lax regulations also cost lives. The continent's road fatality share is three times as large as its share of motor vehicles. In a sample of African countries, 339 deaths per 10,000 vehicles were reported in 1996. In comparison, the average death rate in the world's 10 most highly motorized countries was 2.3 per 10,000 motor vehicles that year, according to the Global Road Safety Partnership, a worldwide road safety organization.

**Financing gap**

As moves towards regional integration gain momentum, ways of overcoming Africa's transport problems are being sought. Building infrastructure involves significant initial outlays of capital and continuous expenditure on maintenance and management. "Most African governments are in no position to provide this on any significant scale," notes Prof. Button. Therefore, international agencies have traditionally been major contributors.

Crude estimates show that $18-25 bn per year is required to provide adequate infrastructure in Africa. The continent currently only invests about $5 bn annually.

Commercialization of infrastructure delivery may be the answer, suggests Alhaji Bamanga Tukur, former director of the Nigerian Port Authority. He says the private sector in Africa has tremendous capacity to develop infrastructure if there is a transparent and supportive policy environment. Mr. Tukur gives the example of MTN of South Africa and Econet of Zimbabwe, two companies that recently won tenders to operate a mobile telephone system in Nigeria. Of note, he says, was that 50 per cent of the total capital, $500 mn, was mobilized within Nigeria.

**Partnerships**

The state, however, cannot be allowed to abdicate its role as the dominant provider of infrastructure, especially in rural areas where development remains dependent on public or donor funding, says Social Affairs Minister Dolor Ernesta, of the Seychelles.

Mr. Ernesta argues that private investors will rush into sectors with quick returns, such as mobile telephones, but "it does not make economic sense [for them] to become engaged in many of the infrastructure developments that we need to implement in Africa."

These include building roads at great cost and little or no returns in remote rural areas. In Ethiopia, for example, bringing 90 per cent of the population within 20 kilometres of an all-weather road would cost an estimated $4 bn -- equivalent to 75 per cent of annual gross domestic product.
In any case, the record of the private sector in infrastructure investment in Africa has been poor. Between 1982 and 1994 private companies financed projects worth $340 mn, notes the ECA. In comparison, Latin American private companies invested $10.5 bn in infrastructure during the same period.

Some countries are introducing innovative ways of bringing the state and the private sector into joint ventures to raise capital. In South Africa, the BOT (build, operate, transfer) and FROM (finance, rehabilitate, operate and maintain) systems rely on private finance to design, construct and maintain roads. Once the roads are built, private operators charge tolls to recover costs and realize a reasonable return on investments before transferring ownership to the state.

In other parts of Africa, road funds overseen by public-private boards have been established. They are run independently, include road users on their boards and are subject to external audits. Money is raised from vehicle licences and user fees and jobs are contracted out to private developers.

While adequate infrastructure is essential for helping to promote trade among African countries, increased regional trade, in turn, could stimulate the growth of regional transport networks. The persistence of the trade patterns inherited at independence has been a factor holding back the development of integrated infrastructure in Africa, says Prof Adedeji. "As long as Africa's trade pattern does not change in form, content and direction, the impetus to alter the continent's infrastructure systems will remain timid."