Innovations in Funding Spatial Data Infrastructure in Developing Countries

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When one speaks of infrastructure in a country, people typically think of ‘hard infrastructures’ such as roads, electricity, water supply, telephone lines. However, there is an underlying data infrastructure that supports these hard infrastructures; an assemblage of data provides the means to plan, assess impact of projects, monitor everyday functioning of government initiatives. Although data play this significant role, they are not widely accepted, managed, or financed as infrastructure. In this paper, we suggest that data infrastructure developers may learn useful lessons by studying and implementing the innovative provision and financing strategies of providers of (hard) infrastructures.

We address in particular approaches in developing countries, where limited government budgets and a trend in donor preference for other priority sectors, such as education and health, are forcing traditional (hard) infrastructure providers to experiment and improvise. The (hard) infrastructure sectors are now getting “ready” to build or rehabilitate (hard) infrastructure assets. To do so, they are (i) evaluating the current condition of the asset, (ii) assessing existing regulatory, policy and institutional arrangements, (iii) estimating the rehabilitation cost of the asset, (iv) studying and evaluating Private Sector Participation models (PSP) and (v) establishing the conditions for successful PSP in infrastructure provision and financing. Hard infrastructure and data infrastructure have important differences, but they also share a number of attributes, such as ubiquity, interdependence, accessibility and economic and social benefit. Therefore, it seems plausible that countries could adapt existing hard infrastructure financing approaches to that of SDI financing. This work focuses on operational aspects of funding and bringing about change, rather than a more theoretical approach or modeling. We identify country-specific opportunities, policies, regulations, and institutional arrangements that create an ‘enabling environment’ for SDI funding.

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