DHAKA POWER DISTRIBUTION PROJECT: PHASE II & IIA, BANGLADESH

The Projects - The Evaluation - Overall Conclusion & Success Rating - The Main Findings - Lessons

The Projects

The projects evaluated are Phases II and IIA of the Greater Dhaka Power Distribution Project (GDPDP). They form part of a five-phase multi-donor programme costing in total to date approximately £350m, of which ODA has contributed over £100m since 1973. The project represents a major investment in the power sector in Bangladesh.

The objectives of Phase II were to improve, rehabilitate, strengthen and extend the electrical power system within Greater Dhaka and to cater for the anticipated load growth up to 1987. Total costs were estimated at approximately £60.93m (in 1984/5 prices) with ADB providing just under half of the total funds, GoB 31% and ODA 23% (£13.82m). Of the ODA funds 16% were for Technical Cooperation, with the balance of capital aid being made up of 6 off-shore turn-key projects and 10 off-shore supply-only contracts. The Phase IIA project was proposed in June 1987 to bring forward essential work proposed for the delayed Phase III project. Two locations were identified where there was a particularly urgent requirement for two 132/33kv substations. Out of a total cost of £10.88m (1986 prices) ODA agreed to provide a £9.79m grant (90%) including the contractors' local costs. During the period of Phase IIA ODA also provided funds for management consultancy (£0.34m in 1987/88) which was followed by a further grant of £1.97m in 1990.

The Evaluation

The evaluation was undertaken by an interdisciplinary team which conducted the field work for the study in Dhaka in June and July 1992.

Overall Conclusion & Success Rating

The projects were *partially successful*. The projects were a success in that they provided a substantial physical infra-structure, within a reasonable time and broadly within cost under difficult circumstances. The projects' economic and social impacts are substantial. ODA's increasing emphasis on management and institutional reform of the electricity system was justified, but has, so far, been *less successful*.

The Main Findings

- The technical design was effective within its narrow terms of meeting the load growth in most of the areas covered. The designers used a definition of project beneficiaries which, while conventional at the time, had the effect of excluding from the analysis the needs of the "invisible 40%" of the city who live in slums and who in the future need to be taken into account. With hindsight the technical design may have better met the needs of the operator to reduce non-technical losses and to effectively maintain and manage the system; it may also have better met the needs of medium sized industry by allowing them to be supplied directly by the LV system rather than requiring them to purchase their own transformers and switch gear to connect to the HV system.
- A striking feature was the limited involvement of local inputs in most aspects of the project. In the evaluators' opinion more emphasis should have been given to increasing the numbers of Bangladeshis inside and outside the utilities who would become responsible for managing and maintaining the systems.
- The project had an outstanding economic return. The financial return of the project, however, was very much more doubtful. The utilities' overall financial performance is poor and this has a detrimental effect on the financial viability of ODA's investments.
- The projects made a decisive contribution to a wide variety of benefits of different social groups. Where these benefits reached disadvantaged groups they were often fortuitous or indirect and had rarely been explicitly so targeted at the project's inception. The most dramatic indirect benefit has been the financial emancipation of thousands of women employed in the mushrooming garment factories in Dhaka. The lives of large numbers of poor people were also significantly improved by the use of very modest amounts of electricity for lighting, fans and (less so) even in cooking.
- During the course of the projects, it became clear that the viability of the physical assets were threatened by failures in management and human resources elsewhere in the system. The projects illustrate ODA's increasing commitment to these concerns, but also the inadequacy of the approaches adopted so far in these projects.
- The Phase II and IIA projects represented a new phase in ODA's aid relationship as it began to specify and enforce aid conditions in concert with other donors. Although there was wide support within Bangladesh for the new hard line of the donors, there were certain negative consequences. In particular some aid conditions were too ambitious and not always demonstrably feasible for the agencies involved and agreements to conditions reached under duress lacked sufficient commitment or understanding by the people required to implement them. Unless improvements can be made to the institutional performance of the operating agency, including improved systems of operation and maintenance, the durability and sustainability of the project work is seriously in doubt. It is unclear whether those few institutional reforms which have occurred are sustainable.

Lessons

- Investing in urban electricity transmission and distribution systems (T&D) is potentially of considerable economic value to developing countries. They can even have significant benefits to poor people and disadvantaged groups such as women which may not be appreciated at appraisal and may be enhanced by consideration during design.
- The observed approaches to building institutional capacity, human resources, and to improving the quantity and quality of local inputs are inadequate. Using aid conditions and management consultants does not ensure success. Essential ingredients are likely to include a long-term commitment by both sides to building local capabilities, a step-by-step approach which includes the setting and enforcing of achievable conditions, and a commitment to improving the availability of funds to meet recurrent costs.
- The monitoring and integration of the non-technical aspects of complex projects appear inadequate. The project framework could become a more effective component of monitoring if the indicators were more detailed and if objectives and activities were adjusted in the light of experience.
- In the design of T&D projects greater emphasis needs to be given to the reduction of non-technical losses, the needs of such customers as small and medium scale industry, and to poor urban dwellers.
- Project designers would benefit from the evaluation and synthesis of experience of different approaches to improving institutional performance in the power sector through altering institutional structures, the introduction of private capital, improved training and management, the introduction of competition, the contracting out of services (such as bill collection) and the utilisation of existing social groups in the efficient provision of services. Although there is advice available on how to introduce institutional reform in a corrupt environment there appears to be insufficient knowledge within ODA of how to deal with institutional reform where the operating environment is conducive to corrupt practices and where the administrative and legal infrastructure is weak.