

Small Power Plants: Key to Electrification

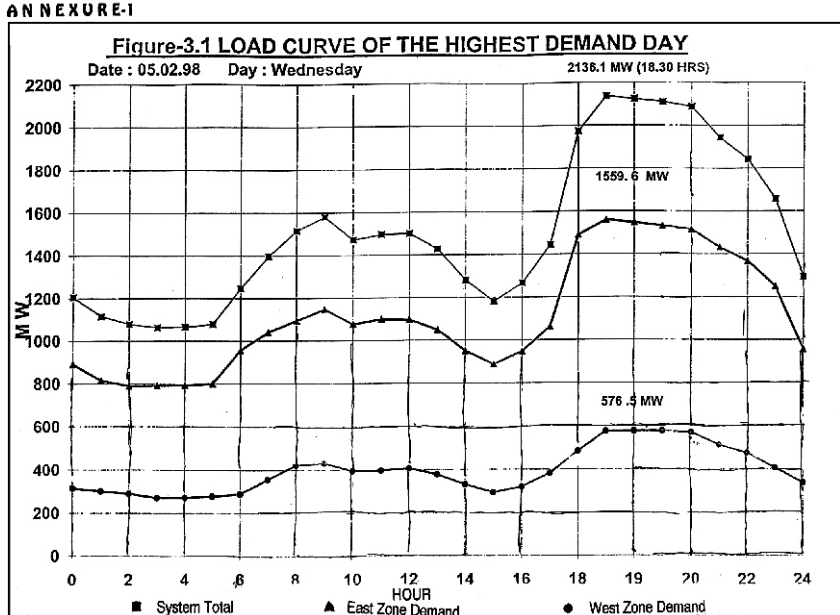
by Muhammed Aziz Khan

BANGLADESH has never come across an opportunity to alleviate poverty as profound in importance as finding gas in the poor country.

Bangladesh is afflicted by shortage of electricity, stifling economic growth and social welfare. We have ample gas resource; estimates vary from 30 trillion cubic feet (TCF) to 70 TCF. The best transformation of natural gas for Bangladesh is in to electricity, which can be applied for maximum value addition. Until now this has not happened as fast as desirable, due to lack of investment.

In the recent past, Government of Bangladesh (GOB) had invited international oil companies (IOCs) to invest in gas exploration and for power generation in private sector. The response received is good; IOCs are now producing about 35 per cent of country's gas requirement and one US company AES's power plants come on steam with about 1100 MW, that is about 35 per cent of electricity in the national grid would be provided by independent power producers (IPPs).

The challenge the government faces in the short term is how to pay for all this energy in foreign currency and in the long run how to bring the sector in the hands of Bangladeshi companies both in the form of technology transfer and management transfer, thereby improving the net worth for the country.



The GOB's privatization policy for gas and electricity is too specific and thus not fruitful, the solution is total all-encompassing privatization with a regulator's role for the government.

Here, however I will discuss how and why small power plants are the right solution for Bangladesh.

Electricity demand curve: The demand of electricity in Bangladesh as expressed in the load curve (Annexure-1) shows a 40 per cent difference between peak demand and off peak demand. At 8 PM, night demand is about 3000 MW, compared to 1600 MW, say, 3 AM. Small plants can be put on and off in tandem with the demand curve. Large power plants on the other hand cannot handle this variation in demand, resulting in huge inefficiency. Large power plants can only work as base load plants.

Lead time: Small power projects can be implemented within a year as demonstrated by a 100% Bangladeshi company, United Summit Power Co. Ltd (USPC); quite to the contrary large project typically takes four years. This allows implementation of small power plants to actual demand rather than waiting for years. For example, demand in Sirajganj area is currently 50 MW, plant for which can be set up in a year's time. But if the policy is to set up a 360 MW plant we have to wait for demand to pick up and set up transmission line. This again deprives the present demand and stifles growth.

Dr. Rubaiul Murshed

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Always children first

Difference between vomiting and regurgitation

Vomiting is the forceful throwing up of the contents of the stomach. In young babies it is easy to confuse this with regurgitation which is the effortless bringing up of small amounts of milk during or just after the feed. If your baby seems generally well and brings out a little milk during or after a breast feed or bottle feed, it is known as regurgitation. It is not actual vomiting and is seldom a cause for concern. It is usually due to the swallowing of too much air while feeding.

TV and children

Effects of heavy television watching on children

The extent of television viewing by children in the US is enormous, with average daily viewing being between three and four hours. TV viewing ranks as the number one waking activity of the American child. Schorr has summarized seven principal effects.

Increased aggressive behaviour and acceptance of violence.

Difficulty in distinguishing between fantasy and reality.

Distorted perceptions of reality (vis-a-vis consumerism, extent of violence, role of minorities).

Trivialization of sex and sexuality.

Increased passivity and disengagement.

Negative effects on cognitive learning.

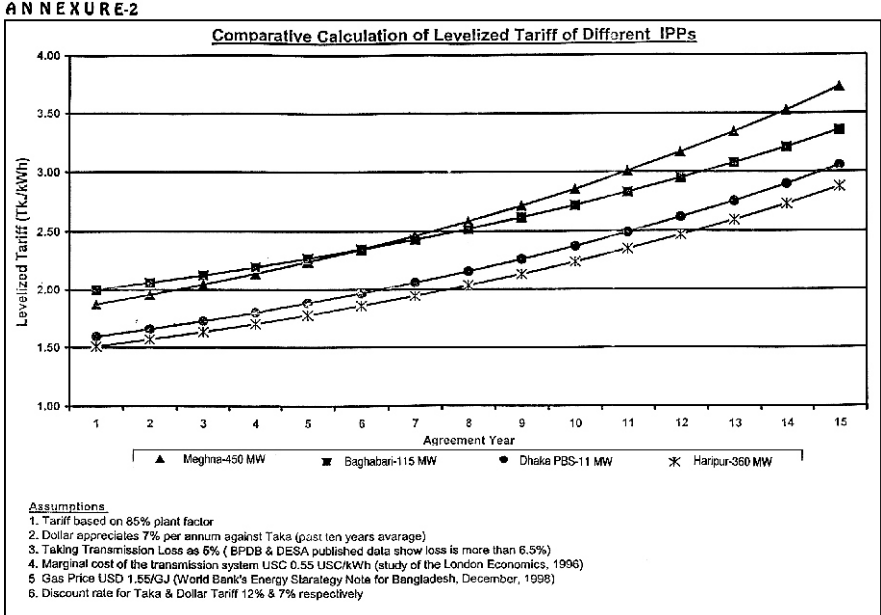
Loss of time and potential to inform and to teach "prosocial" behaviour.

Next: Before the doctor comes and other tips.

land labour, capital and enterprise. For small projects, we have the entire aforementioned ingredients available in Bangladesh. A 50 MW power plant would require about \$30 million, for which equity is available within our private sector; debt is available from our banking system. Whereas for large projects of 100 MW to 400 MW these are not available, as they typically require huge investment, as such large projects are implementable only by multinational companies.

Sense of belonging: Smaller power plants being distributed around the country will bring in a sense of belonging to the villages and will have a ripple effect on the local economy. This will not only provide impetus to growth but also encourage customers to pay.

Equal opportunity to local entrepreneurs: Infrastructure such as electricity is very sensitive and GOB should provide, if not more, equal opportunity to local entrepreneurs to get involved in this sector. Unfortunately, today the bidding process followed by GOB not only supports foreign companies but often effectively bars local companies from participating in the electricity sector. For example GOB discounts prices received over a period of time at 12 per cent whether the offer is in Taka or in US Dollar. This is most unjustified as Taka interest rate is 14 per cent vs.



Assumptions:

1. Tariff based on 85% plant factor
2. Dollar appreciates 7% per annum against Taka (past ten years average)
3. Using Transmission Loss as 5% (EPDB & DESA published data show loss is more than 6.5%)
4. Marginal cost of the transmission system US\$ 0.55 US\$/KWh (study of the London Economics, 1996)
5. Gas Price US\$ 1.25/GJ (World Bank's Energy Strategy Note for Bangladesh, December, 1998)
6. Discount rate for Taka & Dollar Tariff 12% & 7% respectively

clear that distributed small power plants are the right solution for Bangladesh. If we consider the gas pipeline network and the electricity transmission network, I believe we can start by opting for smaller power plants in Sylhet area on the existing gas network. This way we can add 150 MW, which is the current shortfall, within two years. In Baghabari where gas has already reached, two 50 MW power plants in 2001 and 2003 can be built. Similarly Sirajganj can have 50 MW by 2001 and another 50 MW by 2003. Subsequently as gas transmission progresses distributed small power plants can and should be built.

Conclusion: Bangladesh needs power, which is a basic infrastructure. Only 18 per cent of Bangladesh's population has access to electricity. It's sad to say that we have about 50 TCF gas and our people do not have electricity. Through small power plants we can help ourselves and lighten up Bangladesh.

The author is Chairman of Khulna Power Company Ltd. He is also the Chairman of United Summit Power Company Ltd., and Summit Group of Companies. The article is based on his discussion paper presented at 'Tech Transfer 2000: Bangladesh' held recently at BUET, Dhaka.

From the above it is amply

Lest We Forget

Mirza Golam Hafiz: Leader with a Mission

by Md. Anwarul Afzal

Movement in 1952 and in Anti-92, a movement in 1954 and was jailed on both occasions. I could still remember him when he was arrested and was hand-cuffed by the police and carried in open police van. We were then students of class III or IV.

In 1954, Hafiz's political career took a new turn as he was elected MLA in East Pakistan Provincial Assembly and took active part in the Parliamentary



activities. Because of his valid point of order, Abu Hossain Sarker Government could not place the budget leading to the fall of his ministry in 1955. He was the founder member and treasurer of Gananatrick Dal. In those days to form a political party with the name of Gananatrick Dal i.e. democratic party, was a tough job in the erstwhile East Pakistan.

Hafiz also participated actively in the more comprehensive and long-term process of ensuring the political and economic rights of the Bengalis in Pakistan through a radical transformation of political and economic power within the state. He took active part in 21-point Programme, constituted the platform of the United Front, coalition of the autonomist Bengali political forces of Pakistan which routed the ruling Muslim League in the 1954 Provincial Elections. He was one of the companions of Miss Fatema Jinnah during her presidential election campaign in the then East Pakistan.

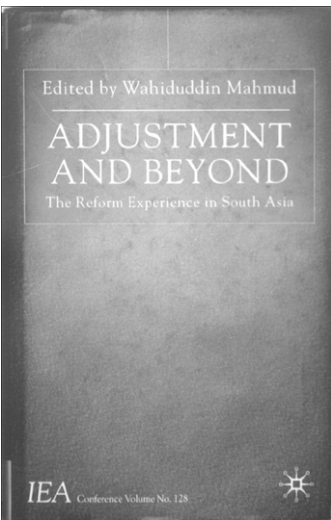
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ECONOMIC REFORMS IN SOUTH ASIA

Are Further Liberalisation, Privatisation and Opening of Markets the Way Forward?

Wahiduddin Mahmud (ed.), Adjustment and Beyond: the Reform Experience in South Asia, Palgrave Publishers (Global academic publishing of Macmillan Press, U.K. and St. Martin's Press, New York); Published in association with International Economic Association, January 2001; page xxi + 343.

Book Review by Selim Raihan



characteristics, notwithstanding many important differences in the country-specific situations. A general conclusion is that the crisis originated from the interaction between international capital market imperfections and institutional weaknesses in liberalizing domestic financial liberalization. It is also noted that the crisis occurred only after these economies had went for full liberalization of external capital account transactions in the early 1990s and had subsequently acquired large exposure to short-term foreign debts. The lessons for South Asia seem to be that external financial liberalization should be gradual and selective, accompanied or preceded by the development of efficient domestic financial institutions and adequate capacity for their regulation and supervision. At the same time, South Asia must learn the positive lessons of the erstwhile East Asian miracle.

The episodes of crises in the global capital markets also bring home the inadequacies of the standard Bretton Woods macroeconomics in dealing with the problem of deregulated capital markets. In this context, the paper by Nadim Ul Huq and Mansoor Dailami (IMF and World Bank, respectively) discusses the problems of devising sound macroeconomic policies for developing countries exposed to risks of volatility in international capital flows, while Peter Nunnekeam (Kiel Institute of World Economics) emphasises the importance of policy consistency and credibility. There are clearly many unresolved issues, such as how to deal with large capital inflows and the associated problems of asset market bubbles and exchange rate management. Edmund FitzGerald, an Oxford economist, attempts to analyse yet another important, but relatively unexplored aspect of short-term capital flows, namely, the transmission mechanisms through which the instability of such flows affects the 'real economy' variables including investment, production and employment. An understanding of these mechanisms is necessary for assessing the social returns from such capital flows as distinct from their private profitability.

Several authors have put the role of the IMF to close scrutiny. Yale professor Koichi Hamada argues that the IMF should incorporate both the ground realities of recipient countries and modern developments in economic theory in its operations, and that monitoring of IMF itself is as essential as monitoring by IMF of the client countries. Deepak Lal of the University of California (UCLA) goes even further to suggest that "the IMF has increasingly become the international debt collector" for foreign lending agencies instead of performing its role as the lender of the last resort. He argues that IMF's short-term loans should be denominated in local currency so as to make it bear the risk of failure of its economic stabilization programmes in client countries.

The trade-related issues of globalization, although relatively neglected in this volume, are of great importance to South Asia's development prospects. Sheila Page discusses the constraints and opportunities faced by the developing countries in the context of the evolving world trading system while Nurul Islam looks at the particular challenges facing South Asia. These challenges include coping with the new rules and conventions governing the global system and responding to the dual trends towards globalization and regionalism. The role of the public management of external economic policies will be significant but will change in character and content compared with successful policies in the past (such as those of the high-performing East Asian economies) and will require not less but greater skill and expertise.

Francis Stewart draws on the evidence from Asia, and Siddiq Osmani from Africa, for an update on debate on the poverty impacts of structural adjustment. The weight of evidence suggests that the most important determinant of the impact of adjustment on poverty is what happens to the GDP growth rate. The effect on income distribution is less clear and may vary according to the structure of the economy. For example, whether the labour-intensive sectors of the economy are likely to benefit from reforms. In this respect, Asian region, as a whole, may be in a better position to secure poverty-reducing adjustment than other regions. However, evidence from all over seems to support the view that achieving sustained growth and accelerated poverty reduction will require public policies and strategies that may extend far beyond the conventional structural adjustment reforms.

The political economy aspects of reforms are discussed by John Toye in the context of the sustainability of Indian reforms, but several other authors also touch upon these aspects. Based on these discussions, an interesting comparison is made in the introductory chapter regarding the nature of political resistance to reforms across the South Asian countries. Some reforms are clearly vote-losing, such as the withdrawal of agricultural and food subsidies which affects large sections of the population. Some reforms may antagonise militant groups who have very

little voting power but can create serious short-term disruption, such as the privatization of state enterprises resisted by trade unions. There are yet some reforms that will hurt only a small group of rent-seeking political-bureaucratic elite, but are likely to get general public support; these would include institutional reforms, such as for dealing with wilful default of bank loans or tax evasion or corruption in high places that subverts the effectiveness of the government's regulatory functions.

Clearly, the degree of resistance to these different types of reforms depends on the nature of prevalent political cultures. It is noteworthy that the political-blocked reforms in India belong to all the above three types. In Bangladesh and Pakistan, on the other hand, the reforms of the first type have met with little political resistance and even those of the second type have been implemented to a large extent. It is the implementation of the last category of institutional reforms that has so far lacked political feasibility. Ironically, it is Bangladesh and Pakistan that suffer from the weakest institutional development and need these reforms more urgently than the rest of the region.

As mentioned earlier, the strength of the volume lies in presenting the widest spectrum of viewpoints on the reform debate. This will be evident, for example, from the comments of two authors belonging to two very different schools of thought. Deepak Lal, an ardent advocate of economic liberalization, urges the South Asian governments to "disregard the siren voices of the intellectual gurus of the dirigistes assembled at this conference, whose current panaceas are as flawed now as in the past". Amiya Bagchi, on the other hand, is of the view that without "basic social and economic reforms for laying the foundation of a sustainable, equitable growth process", the pursuance of the neo-liberal agenda will only preserve or even reinforce the social bases of rent-seeking by landlords, traders and the powerful elite

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Garfield



by Jim Davis

