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Bangladesh needs to act to boost renewable energy as climate change effects loom

Fast-growing Bangladesh is getting richer but environmental issues are being left behind. It may be time to take a step back and look at what could and should be done to avert a potential catastrophe.

Bangladesh is one of the countries most exposed to climate change events. Almost 75% of its territory lies less than 10 meters above sea level, and more than 700 rivers run through its territory. Floods, drought, salinity, cyclones, sea-level rises, and more may become more common in the coming years.

At the same time, its 160 million inhabitants are starting to benefit from growth of over 6% a year in the last decade. Per capita energy consumption has almost doubled since 2000 and millions who never had access to power can now flip a switch for lights or plug in appliances to get electricity.

Just 24 years ago, only 10% of the country had access to electricity. As of 2016, that had increased to 76%, with about 12% of that portion generated from solar home systems. Understandably, the government wants to generate more electricity to expand coverage and make the overall system more reliable.

About 56% of Bangladesh's energy currently comes from natural gas, much of which is produced domestically. Biofuels is the second most common source, followed by oil, coal, and renewable energy, which only accounts for about 1%.

The government recognizes that the way it gets its energy needs to change, not least because the country's natural gas is running out.

But that change has to come amidst growing demand for energy.

The current electricity generation capacity of Bangladesh stands at 15,351 megawatts and the government has set a target to achieve electricity generation of 23,000 megawatts by 2020, with 10% of the total power demand coming from renewable energy sources.

As a working paper for the Asian Development Bank Institute points out, that goal would require huge investments in the sector. And the financial system in Bangladesh just isn't ready for that level of commitment.

There is a strong potential for solar, wind or hydro-generated renewable energy in Bangladesh. The issue is how to fund projects to exploit it.

One initially successful renewable energy program seemed like it might have been a model for future investments. It is now all but dead, a victim of poor management and the unforeseen consequences of bureaucratic decision making.

The Solar Home System program in Bangladesh was a very successful green energy program, and has so far provided about 20 million people with access to solar electricity. A public nonbank financial institution, the Infrastructure Development Company Limited (IDCOL), has distributed 4.13 million solar home systems, mainly through nongovernment organizations (NGOs) at subsidized prices.

The program involves a wide variety of support measures, including subsidies, grants, and refinancing facilities that help NGOs promote the systems to people in off-grid areas at an affordable price. The NGOs set up local partner organizations which loan money to the homeowners who buy the solar systems.

The project was a good example of a public-private partnership in green financing in Bangladesh.

It is now on the brink of abandonment.

A huge amount of defaults on the loans issued for the program can be attributed to a lack of coordination among various government agencies, weak financial governance, difficulties in commercializing the program, and the emergence of a private unregulated market.

For example, the program started in 2003 with a subsidy of \$90 per system but IDCOL has started phasing out the subsidies and grants. The subsidy was cut to just \$20 per system in 2015.

At the same time, private-sector systems that are cheaper, although arguably inferior, have emerged.

The experience of the solar home systems now stands as both an example and a warning for renewable energy in Bangladesh.

There are many challenges besides those which helped to stem the success of the solar home system.

The country lacks a comprehensive legal and regulatory framework that would allow the sort of financial programs that might fund solar investments.

Land prices are high and banks worry that lending for renewable energy projects is too risky.

The government has not introduced the sort of measures that have helped promote the growth of green energy in other countries, such as feed-in tariffs, which amounts to supplemental support to electricity prices generated from green energy.

One optimistic sign is that the country's central bank, Bangladesh Bank, is taking the lead in introducing green finance into the local market. It appears to have a clear vision of bringing green banking into the country's finance sector.

Bangladesh Bank has introduced a host of policy decisions for environmental and social safeguards for banks and nonbank financial institutions to follow while disbursing loans to commercial enterprises.

However, many challenges hold back even those initiatives. There isn't much demand for investment in green projects at the moment and there aren't enough people with the skills needed to assess the financial implications of such projects.

Small-scale entrepreneurs who might head up green energy projects lack proper credit records that might make banks more comfortable in making those loans.

Bond markets and sources of venture capital are underdeveloped in Bangladesh as well. They must be developed or other sources of funding for green projects have to be found.

This podcast was based on [*Green Finance in Bangladesh: Policies, Institutions, and Challenges*](#), a working paper for the Asian Development Bank Institute by Monzur Hossain, senior research fellow at the Bangladesh Institute of Development Studies in Dhaka, Bangladesh.

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