CLIMATE CHANGE IMPACT

Telling the truth

Annual reports still appear to be the most popular mediium, at least in the context of Bangladesh. The disclosure exercise, as the study findings suggest, remains essentially superficial; substance is often superseded by rhetoric.

ATAUR BELAL AND TAIABUR RAHMAN

F late, the issue of climate change has come to the forefront of discussion and attention amongst government, business and nongovernment quarters. Interest in this issue was heightened even further by the Copenhagen Conference on Climate Change held in December 2009.

In addition to the state responses around the world, the business sector is also responding to it. As the engines of economic growth, it is argued that business activities result in significant environmental and climate changes. Therefore, with increasing carbon emission, it is expected that firms will address this issue in a comprehensive, transparent and accountable manner.

One of the corporate responses could be the systematic measurement and reporting of their environmental and climate change impacts. Hence, examining the extent and nature of corporate environmental and climate change disclosures in Bangladesh is of utmost importance and relevance. This article is based on a content analysis of annual reports related to the year 2008 and of the websites of the 100 largest companies (according to market capitalisation) listed on the Dhaka Stock Exchange.

Bangladesh is considered as one of the worst victims of climate change, although its contribution to climate change is minimal. Given the growing importance of environmental and climate change issues, a question arises as to how firms are responding to these issues.

There has been increasing focus on environmental and climate change issues within the sustainability reporting literature. Previous studies of corporate environmental reporting (CER) in Bangladesh indicated an increase in disclosures, albeit from a very low base. Although, it is compulsory for Bangladeshi corporations to disclose expenditures on energy in their annual reports, there are no other requirements for environmental disclosures.

It is apparent from a careful scrutiny of the policy context of climate change in Bangladesh that there is little emphasis on the role of business in the adaptation and mitigation plan. A recent report on the emerging issues in Asian CSR revealed that climate change is going to be the number one stakeholder concern, which

is expected to be addressed by the companies in Asia.

Therefore, in order to achieve long term success Bangladeshi companies will need to respond to the challenges of climate change with appropriate strategies. It appears that this is yet to be articulated in the policy arena of Bangladesh.

The study found that none of the companies disclosed their Greenhouse Gas (GHG) emission data, which is a key climate change related disclosure, while 88% (website 3%) of the companies disclosed their energy usage data in monetary terms. Only 4% (website 1%) of the companies made brief policy statements related to climate change, whereas 10% (website 0%) identified climate change as an important factor.

Only 5% (website 6%) of the companies disclosed that they had an effluent treatment plant (ETP), although establishment of ETPs has been made mandatory in Bangladesh. While a number of companies (45%) made brief policy statements (website 18%) on environment, the length of disclosures barely exceeded an average of three sentences.

Thus, the level of environmental and climate change disclosures is very low.

Although 91% made disclosures in at least one category most of them made disclosures in the energy usage category only, which is a mandatory disclosure. Even fewer companies made disclosures in the specific areas of climate change. This indicates that although there is some corporate awareness of climate change issues disclosures were made in some selected categories only. No disclosure was made in the significant categories like GHG emissions.

Closer examination of the nature of disclosures suggests that most of them are positive and descriptive in nature. There is hardly any bad/negative news. This finding raises question about the credibility of disclosures as we are aware that the department of environment had served notice on a number of non-compliant companies on the issue of ETP and other environmental matters. Lack of independent information further undermines the credibility of the disclosures made.

It is clear that there are significant differences in the extent of environmental and climate change disclosures in the annual reports and websites. Annual reports still appear to be the most popular mediium, at least in the context of Bangladesh. The



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disclosure exercise, as the study findings suggest remains essentially superficial; substance is often superseded by rhetoric.

There has been little practical action towards translating the high-flying statements into reality -for example, only a meagre 5% of the sampled companies bothered to disclose information on the installation of ETPs, which is a mandatory requirement in Bangladesh.

On the basis of the above discussion and analysis we would like to make the following recommendations for consideration by the relevant policy makers:

The current policy framework -- especially such key national documents as the Bangladesh Climate Change Strategy and Action Plan, National Adaptation Plan of Action, and National Environment Policy -- does not adequately provide for specific role of corporate institutions in terms of environmental and climate change affairs. It is imperative to provide for a better articulation of the corporate sector's role in these policy documents, and for bringing synergy amongst the policies.

The mandatory legal requirements need to be effectively monitored by the relevant government agencies This in turn will call for capacity building of these oversight agencies to enable them to perform their role.

There need to be policy-level incentives for the few relatively better performing companies in this regard In the absence of an effective "reward and punishment" mechanism, compliant companies may eventually lose their zeal in the face of unhealthy competition from their non-complaint peers and free-riders.

Dr. Ataur Belal is at Aston University, UK and Professor Taiabur Rahman



If the company finds it difficult to run a profitable business with low gas price in Bangladesh market, it is probably even more difficult for Bangladesh to raise the gas price at a fast pace because of the negative impact of a price hike in the economic and social spheres.

BADRUL IMAM

N 1996, Cairn Energy, a British oil company, discovered Sangu gas field in the ■ Bay of Bengal, and started production in 1998. With offshore gas reaching the land for the first time, people began to hope that it would take the country out of the energy crisis and bring economic prosperity, like in so many other countries that have successfully tapped their respective offshore oil and gas riches. After all, the Bay of Bengal is a large sea and its true oil and gas potential is not known.

In a few years, gas production peaked at about 200 million cubic feet per day (mmcfd). The size of the gas field was also reportedly large. But after some years, when the gas field was still being developed, Sangu showed signs of a downturn. The sudden drop in production, from more than 100 mmcfd to less than 50 mmcfd, in a short time span surprised all. The production rate continued to fall and reached the present rate of only 35 mmcfd. This not only disappointed the field operator and the end users, the whole of Chittagong, including the industrial hub, also fell into the grip of an acute gas crisis because Sangu was the main gas supplier to the area.

What was the reason for the sudden fall in Sangu? According to reservoir engineers of Petrobangla, the excessive rate of gas production by the foreign company damaged the gas reservoir, which eventually led to the drop in production rate. Sangu became a subject of controversy, not only for this matter but also due to several other factors related to reserve estimation and cost recovery. The gas field is jointly managed by Cairn Energy of U.K and Santos Oil of Australia. How are the operators doing, what do they think about the future of Sangu, and what are their opinions on the controversial issues?

One of the senior representatives of the companies offered his view when asked for comments about reservoir damage due to overproduction by the operator, supposedly leading to production decline. He said: "Overproduction of gas damaging reservoir is a fallacy, and from the data it is clearly not the case. The sudden fall in production is due to the complexities of the gas reservoir. One of the characteristics of Sangu gas reservoir is that it has been affected by several channel cuts that disrupt its continuity. It is rather risky to produce from such complex reservoirs without running 3D seismic. But because of higher cost of 3D seismic operation, Petrobangla was reluctant to allow the operator to run it at that stage as it would increase the cost recovery, although 3D seismic is allowed nowadays."

A second point of controversy arises from the discrepancy in gas reserve estimates of Sangu. It was hinted by local officials that the company intentionally showed a bigger reserve of Sangu at the development stage in order to secure permission to produce at a higher rate. The higher the production, the higher the profit for the company.

The company's senior representative, however, said: "Reserve estimation of oil and gas field is a dynamic process. As a field is developed and new data added, new estimates may find the reserve bigger or smaller than previous estimates. This happens in oil/gas business all over the world. At Sangu, an initial estimate was done to suggest a reserve of 1 Tcf gas, but this was later revised to suggest that half that amount was present. This is not very unusual in a complex reservoir like Sangu. When a good number of gas fields are developed together, some fields show reserve growth while others show reserve reduction. But together, the over-

all picture is positive. The problem with Sangu is that this is the only developing gas field, and a negative growth (reserve reduction) in this single field paints an overall negative picture."

The gas processing plant for Sangu raises yet another controversy. Although Sangu is not a very large field, the gas processing plant is disproportionately large. While Sangu was estimated to produce 150 to 200 mmcfd (presently the production rate is down to only 35 mmcfd), it was certainly unwise to build a plant capable of processing 520 mmcfd. And that is what has been built near the shore at Silimpur in Chittagong. The cost of building such a "white elephant" has been borne by the country under the PSC provision of cost recovery.

The largest of all controversies about Sangu is perhaps cost recovery. The primary goal in engaging foreign oil companies in gas exploration is to share the produced gas and thus benefit from the free gas share. But in the case of Sangu, a very large part of Bangladesh's share goes back to the company and the country actually gets too little gas. Thus, the wisdom of entering into such a partnership with foreign companies raises questions.

The senior representative of the foreign company said: "As the state has seen little revenue out of Sangu, the company also saw little or no profit. Up to now the company has sunk \$1 billion in investment in Sangu, yet the expected pay gas zone could not be found due to the complex stratigraphic nature of the gas reservoir. Even the very costly drilling in the deep high pressure zone in south Sangu went dry to the disappointment of the company. The company had to go for a high rate of production to recover its loss.'

What then is the future of Sangu? The company operating Sangu is trying to keep the field alive and is running 3D seismic for better understanding the reservoir complexities. Based on the 3D seismic the company is supposed to drill more wells, but that depends on how the company evaluates its economic status. The company's senior representative said: "The company needs profit to run a business. The low gas price here makes it difficult to make a reasonable profit from the risky investment. Therefore, the company wants the government to raise the price of gas."

But the point is that if the company finds it difficult to run a profitable business with low gas price in Bangladesh market, it is probably even more difficult for Bangladesh to raise the gas price at a fast pace because of the negative impact of a price hike in the economic and social spheres. Both the parties should seek a formula that would work for both.

To conclude, Sangu is the first and only producing offshore gas field in the country, and it is likely to be exhausted in the near future. But Sangu is not the last station. The true potential of offshore fields, if realised, may provide the country with gas supply to end the energy crisis. Bangladesh depends on foreign oil companies for offshore gas exploration because of its lack of technological capability.

In addition to Sangu, foreign companies hold acreages under PSC in several offshore blocks, including Magnama, Hatia, Teknaf, and are bound to invest according to the contracts. The foreign companies are large enterprises and uphold their interest wherever they go for business. It is perhaps Bangladesh's turn to look for ways that will uphold her interest. The best way to move forward is mutual respect and cooperation so that gas exploration and development can be done in earnest.

Dr. Badrul Imam is Professor, University of Dhaka; Visiting faculty, University of Regina.



Aila victims yet to be rehabilitated.

Reducing disaster risk at village level

Z A M KHAIRUZZAMAN

ANGLADESH'S unique geoclimatic conditions make it traditionally vulnerable to natural disasters. Since 1970, at least 10 major natural disasters and countless local emergencies have struck the country.

The 1970 cyclone cost 300,000 lives, the 1991 cyclone 139,000 lives, while the 1987 and 1988 country wide floods affected 80 million people altogether. In 1998, there was a prolonged and devastating flood which affected about 60 per cent of our country area and about 10 million people were affected.

On November 15, 2008, Cyclone Sidr struck the southwestern coast of Bangladesh with winds up to 240 kilometer per hour. Four of Bangladesh's 30 districts were classified as "severely affected" and a further eight were classified as "moderately affected". Of the 2.3 million affected households about one million were seriously affected. The number of deaths caused by Sidr is estimated around 3,500, with 1,001 still missing and over 55,000 sustaining physical injuries. Monsoon floods had previously caused extensive agricultural production losses and destruction of physical assets, amounting to about US

1.1 billion dollar. Bangladesh is the worst cycloneaffected part of the world. Cyclones, storms, floods, earthquakes and landslides strike different parts of the country every year with mind-numbing regular-

ity. For the millions of poor and dispossessed living in these regions, every calamity spells death, destruction and deprivation. The disasters underscored the increas-

ing need for a multi-disciplinary and multi-sectoral approach in the developmental plans and strategies towards risk reduction. Relief and voluntary organisations are beginning to realise that besides relief work it is also imperative to reduce the vulnerability of people by adequately preparing them to face these disasters. It may be mentioned that Dhaka

Ahsania Mission (DAM) and Concern Universal, Bangladesh has initiated a Community-Based Disaster Risk Reduction (CBDRR) intervention in some of the most vulnerable and disaster prone areas in the country. The initiative is supported by the European Commission's Humanitarian Aid Department (ECHO) under the DIPECHO (Disaster Preparedness ECHO) Fifth South Asian Action Plan and Cordaid.

Since June 16, 2009, the two organisations are working jointly with the local community in the coastal districts of Patuakhali and Barguna, a highly dynamic ecosystem facing storms, high tidal waves, floods and cyclones every year. They are helping the local community in 14 unions of Mirzaganj upazila in Patuakhali district and Patharghata upazila in Barguna district in building effective preparedness to face the consequences of recurrent disasters and minimise loss of lives and property.

The programme has been incorporated with the agenda of 1,576 learning centers in the disaster prone regions of Rangpur, Mymensingh, Dhaka, Barisal, Noakhali, Chittagong and Rangamati.

Activities under this initiative will continue till September 15, 2010.

The novelty and uniqueness of the initiative is that local community, union parishad (UP), secondary schools, learning centres and Ganokendro (people's welfare centres operated by DAM), government and non-government organisations have been involved with its activities while all the institutions are working in close coordination with each other.

Project activities include discussion, development of risk reduction action plans for vulnerable areas, education material for school children containing awareness messages on disaster, training module on Disaster Management Committee (DMC), handout package for DMC training, manual on post disaster care, volunteers' guide, posters on disaster preparedness, flyers and festoons containing awareness messages on disaster preparedness, simulation models on cyclone and floods and simulation focusing role of schools and students in disasterrisk reduction.

Mentionable, a team consisting of 14 Dhaka-based journalists of print and electronic media went to Charkhali village under No-4 Deuli Subidkhali union of Mirzaganj upazila in Patuakhali district on February 22, to witness a community based disaster risk reduction simulation exercise there.

Held at Charkhali Samabae (Cooperatives) Secondary School, the simulation exercise has proven to be a success. It has created great enthusiasm among local people. The villagers were highly

impressed by the extraordinary performance of the school students.

Jahangir Alam, an official who is responsible for coordination and monitoring of the Community Based Disaster Risk Reduction Project told the visiting journalists that it is the people in the community who should lead this working together to safeguard themselves against disasters. The exercise, he said, was part of ensuring what they understand their already developed response plan, so that when a disaster hits, they would know what to do.

ZAM Khairuzzaman is a working journalist



School students participating in disaster risk reduction exercise in Patuakhali village.