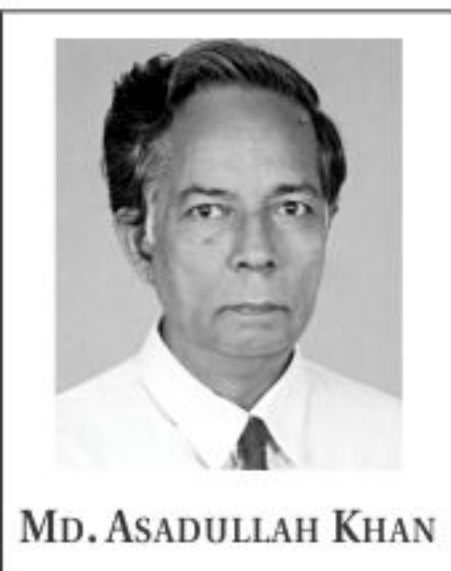


BITTER TRUTH



Md. ASADULLAH KHAN

# Create awareness, save the environment

FOR the last four decades scientists and world leaders have been trying to cope with the consequences of exponential growth of humans and their increasingly frantic demand for the resources that only nature can provide. They have been trying to save the threatened species and give natural process of the world a chance to maintain a healthy biosphere. This means some sacrifices and restraints, and evidently we can no longer pursue short-term prosperity without long-term survival.

People in some industrialised countries mistakenly believe that efforts to achieve conservation of nature threaten human economic welfare. But nations have hardly any illusion that a good quality of life can include both material well being as well as a healthy, productive and beautiful natural world. And for millions of people like us living in the less prosperous parts of the world, the care and conservation of natural resources, restraint and cautious disposal of toxic wastes, hazardous effluents and sludge from the industries, are the only ways to improve conditions.

Build-up of carbon dioxide or other greenhouse gases in the atmosphere, toxic land fills to ozone depletion, are causing degradation of the natural environment and the increasing extinction of many species of plants and animals. People should be giving more thinking time and greater energy on finding and implementing practical remedial measures. We can see that humanity is at war with the forces of nature. But the world's biosphere is all that keeps the human species from extinction. That calls for preserving the web of life, and any action that we take to exploit it beyond natural capacity is in every sense a threat to the quality of life of those who will come after us.

To help save our environment, we need to take some urgent and concrete steps, like limiting the release of carbon dioxide; solving the problem posed by CFCs; cutting pollution and waste, which means toughening fuel standard for autos; launching large scale tree plantation programmes; banning the dumping of wastes by industrialised countries; making birth control information and devices easily available; developing educational programmes to impress upon people the value of nature's diversity; and promoting waste recycling. The second worst environmental hazard is pollution, caused largely by industrial inefficiency, increase in motorised transport, wasteful consumption and some modern agricultural practices. Humanity has used the world as a waste bin -- but the bin is now overflowing. Every year, more than 120 million tonnes of sulphur dioxide and around 40 million tonnes of nitrogen oxides are released by the major industrial nations. Most importantly, last year all the world's nations combined pumped nearly 38.2 billion tons of carbon dioxide into the air, almost 10% more than the previous years. These airborne pollutants are no respecters of natural boundaries and tackling them successfully relies on international cooperation.

Nature, it must be stressed here, is like business. Business sense dictates that we guard our capital and live from interests. Nature's capital is the enormous diversity of living things. Without it, we cannot feed ourselves, cure ourselves or provide industry with the raw materials of wealth creation. Prof. Edward Wilson of Harvard University rightly says: "The folly our descendants are least likely to forgive us is the ongoing loss of genetic and species diversity."

So far as is known, only 150 plant species have ever been widely cultivated. Yet, over 75,000 edible plants grow

in the wild. In a hungry world with population growing by 90 million each year, the extinction of plants vastly needed for human survival is tragic. The places that support most diversity are tropical rain forests, mangrove swamps and coastal wetlands.

Our Sundarbans might be a vast trove of medicinal plants that still remain unexplored. It must be emphasised that coastal embankment works and massive tree plantation and forestry creation for shelter in times of disaster must be taken up, along with building of climate resilient infrastructures, because forests play an important role in global and local water cycles. Trees protect soil against erosion. Forests also influence local climate. On global level, forests stabilise climate by regulating energy and water cycles. Tragically, total forest cover in the country today stands at 6.7% against the requirement of 25% of total land area.

WB president Jim Yong Kim, in a message to the Doha climate meet warned that unless the nations launched a more aggressive programme to integrate climate change into development, the world will be heading for a catastrophic end, with poverty increasingly taking a worse turn. Kim emphasises: "We will never end poverty if we don't tackle climate change upheaval. It is one of the single biggest challenges to social justice today."

Large quantities of hazardous wastes are still being generated by the developed and industrialised countries. Our country, that is yet to achieve that level of industrialisation, has to bear the brunt of the side effects of the progress achieved by others. It is high time that we entered into an agreement detailing legislation that would stop trans-boundary movement of hazardous wastes. Unless an understanding of the cross-sectoral linkages

relating to bio-diversity, land and water use, sustainable growth, forest management, and desertification control is reached on regional basis, our development efforts will be set at naught.

Our rivers, lakes and wetlands have become lifeless receptacles of human wastes, pesticide residues and toxic effluents from dyeing units, textile industries, paper and

pulp mills, fertilizer factories and brick kilns. Technology and treatment plants to handle toxic metals have not been set up in many factories. These poisoned waters now symbolise not life but death. In consequence, rivers like Buriganga, Shitalakhya and Turag do not have fish of any kind now.

Over 300 tanneries in the city's Hazaribagh area discharge chromium-rich effluents that ultimately find their way into those rivers. The fundamental causes of the country's land and water degradation are need, greed, apathy and ignorance. This calls for educating the people that some of our earth or water has been scorched or drained beyond repair and sustainable development is a must.

The question that looms in public mind is how to prevent our environment from wallowing in waste and poisonous materials that we ourselves are producing. Higher fines, taxes, and strict enforcement might force the manufacturing industries to curb production of waste and toxic materials. True to his upbringing and education, a former director (enforcement and monitoring wing) of the Directorate of Environment, made it his mission to clean up the mess created by the polluting industries, hill-cutters, plunderers of forest and wetlands and brick manufacturers. But, much to the shock to the dismay of the people, this officer who created a sense of awakening in all classes of people about preserving the environment has been transferred from his present assignment. In the present Bangladesh context, it will be difficult to find another like him with the same commitment and spirit.

The writer is a columnist of *The Daily Star*.  
E-mail: aukhandk@gmail.com

## ROOPPUR NUCLEAR POWER PROJECT

# What is the real deal?

DR. ABDUL MATIN

I recently read with much interest the news item entitled "Nuke deal at final stage" in The Daily Star. Having been associated with the nuclear power for the last fifty years and following the recent negotiations between Bangladesh and Russia on the Rooppur Nuclear Power Project (RNPP), I have written extensively on the subject raising several issues which need to be addressed in the interest of the public before we sign the final deal.

If implemented, the RNPP will be the single largest project in Bangladesh. It is, therefore, important that we proceed cautiously, prudently and professionally with this project.

I therefore feel that the following issues need to be clarified and discussed thoroughly:

### Feasibility report

Bangladesh started negotiations with the Russians more than three years ago but the feasibility report of the project has not been completed as yet. The feasibility report deals with the technical and economic viability and also the safety and environmental aspects of a project.

How can a deal on a large project like the RNPP be in the final stage without a feasibility study and without knowing the final cost?

### Project cost

The cost of a 1,000 MW nuclear power plant has been estimated at Tk.12,000-Tk.15,000 crore i.e. approximately US\$ 1.5 billion to 1.85 billion which comes to US\$1,500-1,850 per kW. It is not known who made this estimate.

Vietnam is negotiating with the Russians for two similar 1,000 MW reactors. They lined up a credit of US\$ 9 billion for these reactors. This comes to US\$ 4,500/kW.

Belarus and Turkey are also negotiating with Russia for two nuclear power plants at around US\$4,000/ kW. There is, therefore, no reason to believe that a 1,000 MW nuclear reactor at Rooppur will cost less than US\$ 4 billion i.e. Tk.32,000 crore.

Why are we then being told that the cost of a 1,000 MW reactor will range at Tk.12,000-15,000 crore?

### Loan of US\$ 500 million

It is reported that Russia will advance a loan of US\$500 million for preparatory works like preparing a feasibility report, manpower training, plant design etc. A feasibility report should not cost more than US\$10 million. A buyer of a nuclear reactor normally spends this money from its own resources.

Preliminary training of manpower can be done in Bangladesh using the facilities at the Atomic Energy Research Establishment (AERE) at Savar. The plant design and manpower training in Russia should be a part of the final contract for the construction of the plant which is yet to be signed.

There is no justification at all for taking a US\$ 500 million (Tk.4,000 crore) loan at this stage when the feasibility report is yet to be ready -- the final cost of the plant is not known and the final contract for the project has not been signed.

Who will take responsibility for repaying the loan in the event the project is not implemented for some reason?

### Russian operators for Rooppur

It is also reported that the Russians will operate the Rooppur Nuclear Plant for the first 10 years and then hand over the plant to the Bangladeshi operators. Is

this a feasible proposition in the context of Bangladesh? What will happen to the plant if there is a civil disturbance at Rooppur during the first ten years and all the Russian operators leave the site en masse?

Who will look after the plant in their absence? We have learnt from the Fukushima accident the dangers of a nuclear power plant even during a shut-down condition. It is thus imperative that we build our own manpower to operate our nuclear power plants.

In fact, we could have our manpower ready by now if we had taken proper steps to recruit and train manpower three years ago when we started the negotiations with the Russians.

### Reactor safety

After the Fukushima nuclear accident, there have been some concerns about the safety of the Russian reactors being built in India (Daily Star, October 03, 2011). Are we aware of those safety issues and have they been resolved satisfactorily?

### Project schedule

The preparation of the feasibility report, the submission of a project proposal by the Russians, the evaluation of the project proposal and final contract negotiations should normally take 30 months if we follow standard norms and procedures. So how are we close to a final deal now? I do not know who is fooling whom and for what reasons!

**Reorganisation of bodies dealing with atomic energy**  
The Bangladesh Atomic Energy Commission (BAEC) is basically a research organisation. Its

scientists are not trained to handle the construction and operation of a large nuclear power plant. They are unable to recruit experienced engineers because of opposition by its scientists to lateral entry at senior levels.

It is, therefore, necessary

to establish a separate Nuclear Power Authority (NPA), like in India, and make it responsible for construction and operation of all nuclear power plants in Bangladesh.

This authority can recruit engineers who have experience in the construction and operation of large power plants and train them in nuclear engineering. Some of nuclear engineers of BAEC can also join the NPA. The Bangladesh Atomic Energy Commission should be responsible for research and development on atomic energy only.

The Nuclear Energy Regulatory Bill was passed on May 31, 2012. The regulatory authority should be formed as early as possible. The regulatory body should be in full operation with necessary staff by the time the contract for the RNPP is signed.

The Bangladesh Atomic Energy Commission, the Nuclear Regulatory Authority and the Nuclear Power Authority should be under a separate ministry of atomic energy headed by the prime minister.

One should be surprised to know that not a single Bangladeshi nuclear engineer worth the name was involved in any of the negotiations with the Russians during the last three years.

The current delegation to Moscow for financial negotiations consists of 15 members, most of whom have no part to play in the negotiations. I am afraid this is perhaps one of the ways how the US\$500 million loan would be spent before signing the final deal!

The writer is former Chief Engineer, Bangladesh Atomic Energy Commission.

# Tazreen fire, corruption and rule of law

## Lessons for Canadians

JANET KEEPING and IFTEKHARUZZAMAN

MUCH attention is being paid to the incidence of deadly fires in Bangladesh's garment industry. The factory fire in Tazreen, Bangladesh, which killed more than 110 people, has been the primary focus of attention, but the Tazreen fire was far from the first in Bangladesh's clothes manufacturing industry.

Arson is blamed for the Tazreen fire but, as widely reported, the deaths were caused by "blocked stairwells and locked emergency exits." The company which owned the plant, the Tuba Group, is said to have been "repeatedly cited" for infractions of worker protection rules and thus looks culpable.

Responsibility also has to be borne by the Bangladeshi government officials for failure to ensure that those rules were enforced. Corruption is rampant in Bangladesh, which scores poorly on Transparency International's Corruption Perceptions Index (CPI).

Allegations have been made that corruption was involved in allowing the factory to stay open despite the repeated infractions. We cannot confirm that claim but investigative media reports published in credible newspapers like The Daily Star quoting even people within the industry clearly suggest that rampant corruption by regulators and factory owners' greed for excessive profit lead to many such accidents.

On the other hand, it may have been simple law enforcement incompetence or lack of funding, rather than corruption, that was at fault or, as is common,

some combination of all three.

The bottom line is that worker safety laws were not enforced. There are lessons to be learned from tragedy in Bangladesh about the importance of the rule of law.

First, its absence kills. Examples are regrettably easy to come by. Consider the pilot who flew the Russian plane which crashed in September 2011 killing nearly the entire Lokomotiv hockey team. It is reported he didn't

have the training he claimed, that his piloting credentials were falsified.

Or what about the children in Sichuan China who died in 2008 when their schools collapsed on top of them because local officials corruptly colluded with contractors in their shoddy construction?

Most Canadians take the rule of law for granted most of the time. But the risk to human health and life in pervasively corrupt jurisdictions without a functioning rule of law -- such as Russia, China and Bangladesh -- is real and ever present.

Second, although Canadians may feel very distant from tragedy in places such as Bangladesh, they are not. Indeed they are implicated both directly and indirectly in both the problems and perhaps some of the solutions.

For one thing, the owner of the Tazreen factory, in which so many Bangladeshis died, is reported to be a Canadian.

**A Montreal company "stopped importing from the Tuba Group's Tazreen factory earlier this year because the company failed an audit." As a result, poor Bangladeshi women lost their garment industry jobs. Better ways to resist corruption must be found.**

For another, Canada's only major conviction to date under the Corruption of Foreign Public Officials Act saw a Calgary-based oil and gas company -- Niko Resources - plead guilty to bribing a Bangladeshi Cabinet Minister. There is no direct causal connection between bribing a Cabinet Minister to advance an oil and gas project and the failure to enforce worker safety laws.

But by bribing that cabinet minister, Niko Resources

was helping to perpetuate the lawlessness and corruption that keep Bangladeshis overwhelmingly poor and powerless, and which not infrequently kill them.

Worrisome too is that Canadian engineering company SNC-Lavalin is under investigation for alleged corruption around Bangladesh's largest ever

infrastructure project -- the "Padma Bridge."

Many companies from developed countries seem to think it is OK to behave unethically in places such as Bangladesh, while purporting to be good corporate citizens at home. But in an age of instantaneous global communications, such blatantly inconsistent ethics don't make the grade.

Establishing the rule of law and eradicating deeply entrenched corruption in places such as Bangladesh are extraordinarily complex tasks. The primary onus to

effect such changes is on the governmental, political and professional institutions in those countries. But western companies doing business abroad have also to take responsibility for their actions.

Those companies are not helpless in the face of lawlessness and corruption in foreign jurisdictions. For example, the Toronto *Globe and Mail* reported that a Montreal company "stopped importing from the Tuba Group's Tazreen factory earlier this year because the company failed an (ethical-sourcing) audit."

But as a result, poor Bangladeshi women lose their garment industry jobs. Better ways to resist corruption must be found. One is for companies to be more closely involved in preventive measures, such as strict compliance with safety standards, as part of their initial investment decision.

Another take-away for Canadians is the importance of vigilance at home. The allegations of collusion between government and business to inflate construction costs in Quebec, while not yet proven, are extremely disturbing.

From other parts of the country we hear of abuses of power, such as politicians using their elected positions to solicit funds for their favourite charities. If not addressed in early stages, these abuses undermine the rule of law and produce a climate of impunity conducive to more egregious forms of corruption.

Janet Keeping is chair of Transparency International Canada.  
Iftekharuzzaman is Executive Director of Transparency International Bangladesh.