

# Is expensive power the only solution?

M. TAMIM

IN 2009, the average electricity production cost was below Tk.3/kWh. The energy mix for power production was roughly 82% gas, 10% oil, 4% hydro and 4% coal. Within a span of three years the oil contribution of power production has shot up to 30%; reducing gas component to 67% and the average production cost has more than doubled to Tk. 6.5/kWh. As a result the government was forced to raise the electricity tariff several times recently.

Bangladesh power Development Board (BPDB) has been the sole custodian of power sector management with the support of the Energy Ministry. In 1998, BPDB predicted that the peak demand would be 6,000MW in 2007. This was done during the time when the last two major base load plants (Meghnaghat 450MW and Haripur 360MW) came on stream.

Since then the power situation gradually worsened.

Despite warnings from PDB and concerned citizens, all attempts to establish base load power plants failed due to indecisions over the awarding of projects. Till 2007 the principal barrier to electricity generation was lack of power plants, a scenario that rapidly changed when we faced acute gas shortages in 2008. More than 500MW generation got stranded due to gas shortage, especially in Chittagong.

Primary fuel shortage was a new challenge to all but none could escape the mind set of the politically rewarding process in setting up new power plants. At the end of the previously elected government's tenure the idea of oil based rental power plants was coined and a number of companies were selected (ironically not due to gas shortage!). This was a makeshift short-term arrangement for not being able to add base load generation.

An earlier measure taken due to failure of adding grid power was allowing captive power generation for the industries. That measure although inefficient, saved the sector. The caretaker government picked up the idea of rental units and signed ten oil based power deals. The quickest way of bringing power to the grid is oil based small plants. Knowing very well that this could not be a long-term solution, the term "three year quick rental" was coined to remind everyone that the expensive solution was for short-term only. The initial thought was not to expand the oil based production beyond 2,000MW.

Al resented the idea of quick rental for the first six months and criticised its pitfalls in the same way they are facing themselves today. The reality of a daunting gap between electricity supply and demand forced them to go the rental way. They had no other choice but what they failed was to envision a long-term solution to replace the expensive oil based solution that they strongly criticised at the beginning of their tenure.

At the same time expanding oil based power plants beyond 3,000MW was done without analysing financial and infrastructural involvement. Since 2010, the 5-year planning PDB put forward is basically a non-starter mainly due to lack of secured fuel supply and assured financial support for the projects.

Majority of the proposed base load large capacity projects are on paper only with the exceptions of the

two Bibiyana plants and the Shahbazpur combined cycle power plant. In the 1,40,000MW plan, 4,000MW is gas based (!), another 2,000+ is dual fuel and about 3,600MW is dependent on imported coal. The 500MW import from India is advancing slowly but more likely to be added to the system by 2013.

Supplying power at high price is argued showing that the cost of not supplying a kWh to the economy maybe anywhere from Tk 25 to Tk 50. The 50% share of total power consumption in the household sector in Bangladesh defeats this argument from an economic point of view although there is no denying of productivity loss due to energy shortage.

The obvious pressure at the present scenario is perhaps more political. Two countries in this sub-continent have gone towards a liquid fuel path -- Sri Lanka for its prolonged civil war and Pakistan for its political indecision and internal feuds.

Both are paying high price for this decision, Pakistan by facing 8,000MW of load shedding; mainly due to its inability to pay for the high price

the government nor the public.

Only a steady and secured supply of alternate primary fuel at sustainable price can save the country from a disaster like Pakistan. Once the fuel is assured, a sensible commercial framework of business will automatically bring in investment (finance). This can be done either by importing fuel or indigenous supply. Securing long-term coal or LNG import deals at a flat rate is becoming very difficult. Recently Indonesia, South Africa and Australia, the three major coal exporting countries adopted a new policy that stipulates benchmarking of coal prices to international market rates that increased the cost of long-term coal contracts for Indian companies from \$50/ton to \$100/ton. The long-term Australian coal price forecast (FOB) by Citi is \$130-160/ton. After peaking in February to \$120/ton, the present price has fallen to \$90/ton (FOB). Including freight and tax, this good quality coal will cost about \$170/ton or more at the coastal power plants of Bangladesh.

The other option is LNG import. In addition to their present supply of 7.5 million ton, India wanted 5 million ton/year of LNG from Qatar but it refused the price Qatar asked for the gas last month. Qatar wanted at least 14.5% of Brent crude price; at 110\$/barrel that would mean about \$16/Mcf at Qatar port.

Add shipping and taxes would cost \$20/Mcf to the Indian consumers. The \$5/Mcf price initially coined by Petrobangla for imported LNG in Bangladesh that was doubled to \$10 later is just a pipedream. The weighted average gas selling price in Bangladesh is just \$1.6/Mcf!

The stoppage of coal development and gas exploration despite the presence of clear economic advantages has forced the governments to take short-term and expensive oil based rental power plants. Our current economy simply cannot afford or sustain the burden of importing expensive energy either. Apart from supply interruption risk, the international energy price volatility is also a source of great uncertainty.

If the entire country is offered for exploration by the IOCs, any new gas will not cost more than \$3/Mcf (including profit gas) and that is without any financial risk to Bangladesh. The question of any export does not arise now as the current deficit including suppressed demand in the local market is more than 1bcf per day (very different from 1999).

Production cost of our own coal will not exceed more than \$90/ton even using the most expensive extraction process.

Along with efficiency improvement, using mainly indigenous primary fuel (50% coal, 30% gas, 8% renewable including hydro) and some imported liquid fuel (12%), the average electricity production cost can be maintained at Tk.4/kWh even for a production of 20,000MW for the next 20 years. This will require a lot of preparation, planning, engineering, financing, integration, managing and most importantly determination and courage to implement, but this is a far better theory than the one being chalked up by PDB.

This will ensure sustainable solution meeting the three basic requirement of energy security -- affordability, availability and accessibility.

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oil, and Sri Lanka by administering one of the highest electricity rates in any developing country.

Pakistan has huge potential in hydrocarbon and hydro power but the proxy war within the country and the perpetual indecision on national issues pulling the country wide apart -- especially energy wise. On the other hand Sri Lanka is quickly correcting the forced mistake they committed by establishing a 300MW imported coal based power plant that will be expanded to 600MW soon. They have also declared that no more liquid fuel based power plant will be set up. Sri Lanka's 40% power comes from Hydro and they have no other energy source within the country.

Frequently asked is how long the "3-5 year short term rental" will last in Bangladesh? As a result of extended use of liquid fuel, can our economy sustain the pressure of prolonged (high) cost of oil import? Are we going to end up like Pakistan (bankrupt from oil bill) or like Sri Lanka (a very high electricity tariff)? Whichever way we look at, Bangladesh simply cannot afford to bear the high cost of oil/electricity -- neither

# Olympic Games flashback



JACQUES ROGGE

At the end of every Olympic Games it falls on the president of the International Olympic Committee (IOC) to try to characterise the 16 days of competition in a simple phrase. Exceptional, magnificent, unforgettable -- just a few of the descriptions used for recent editions of the Games during my time as President.

But how will London be remembered? Record-breaking? Certainly. Fun? Definitely. Rainy? Let's just keep our fingers crossed.

Whatever the vagaries of the much-debated British climate, the Games themselves already have all the elements necessary for success -- not just for the two weeks of competition, but long, long after the flame has been extinguished. This is thanks to the local organisers who have firmly rooted the foundations of the Games in the concept of legacy: what the event will leave behind when the last athlete turns off the lights in the Olympic Village and heads for home.

London Organising Committee Chairman Sebastian Coe knows he has some very tough customers to please. As he recently put it: "The most demanding stakeholder any city now has is not the International Olympic Committee, not the government. It's actually the population of the city and the country where you're delivering the Games. And the key question they ask is: What are you leaving behind?"

With such demanding judges, Lord Coe and his team simply had to put legacy at the heart of their bid. And London 2012 stands to leave behind a great deal for the citizens of the host city and country. They spoke of inspiring a generation, of revitalising long-depressed areas of London, of providing Londoners with improved infrastructure, employment opportunities, and access to sports facilities. With the help of unwavering governmental support at all levels, the organisers have already taken a huge step toward achieving this and much more.

For every pound spent on infrastructure, 75 pence has been dedicated to legacy purposes. This initiative helped finance the radical transformation of a huge section of East London from a contaminated, neglected landfill into the glittering new Olympic Park, which will be converted into an innovative and sustainable community offering jobs, housing, schools and leisure activities after the Games. Thanks to the Olympic Park Legacy Company, six of the eight permanent venues have already found post-Games tenants -- a major achievement in itself.

Legacy has not always been at the forefront of Olympic planning, however. Many years ago it was sometimes more of an afterthought to Games organisers; a concept often left to chance. Some host cities clearly fared better than others in this regard.

The IOC recognised that for a city to truly leverage the Olympic Games as a catalyst for sustainable renewal, it had to be planned for from the very beginning. This is why we now require all bid cities to define their objectives and long-term strategies from the very moment they become an applicant city. So that if successful in their bid, the Games organisers have a clear vision for the seven years of Olympic preparation and beyond.

New host cities can also draw on the lessons of previous host cities through the IOC's transfer of knowledge programme, which provides access to a vast amount of information, including case studies of previous Games programmes and initiatives, Olympic Games impact studies and technical reports.

One of the first host cities to truly benefit from early planning was Barcelona. Like London, Barcelona used the opportunity to stage the Olympic Games in 1992 to regenerate some of the more neglected parts of the city, including 100 hectares of industrial land along its shoreline. The revitalised waterfront area has transformed the city, as has the huge increase in accommodation thanks to the Games, helping put Barcelona on the map in terms of tourism. The city's tourist numbers, as one example, have grown from fewer than 2 million per year prior to the Games to 7.4 million last year.

There have been many other examples in the years since. Lillehammer 1994 set a standard for "green" Olympic Games by staging the event with social and environmental benefits in mind; Sydney 2000 included the creation of one of the largest urban parklands in Australia; Beijing 2008 resulted in 400 million children learning about the Olympic values in a programme designed to educate youth through sport; while Vancouver 2010 led to major transportation improvements, including the addition of 180 diesel-electric hybrid buses, a new metro line linking the airport to downtown, and an overhaul of the Sea-to-Sky highway that has made travel from Vancouver to Whistler safer and faster.

The London organisers have benefitted greatly from the achievements of previous Olympic host cities via the IOC's transfer of knowledge programme and other legacy initiatives. Soon it will be London's turn to help future host cities improve their projects.

Will the Games of the XXX Olympiad be remembered as exceptional, magnificent, or unforgettable? Only time will tell. But one thing is certain: London 2012 has everything in place to produce a lasting legacy.

The writer is the International Olympic Committee President. This article is exclusive to The Daily Star.

# MDGs or not, school meal is a must

ALAMGIR KHAN

MANKIND are the only beings who may be said to have gained an absolute control over the production of food', wrote Lewis H. Morgan in 1877 after his investigation of ancient societies. Among mankind Bangalis again lost their control over the production as well as consumption of food long ago. In the famine that continued from 1769 to 1773 (*chhiattorer mannonar*), 1 crore people, one out of three, died in Bengal. From 1802 to 1854, in 53 years famine struck Bengal 13 times taking away lives of 50 lakh people. From 1860 to 1879, in 20 years famine struck Bengal 16 times taking away lives of 1 crore 20 lakh people. There were famines in 1918-21, 1934, 1943, and in the independent Bangladesh. The British turned Bengal into a country of everlasting famine and we continued to keep that tradition alive. Besides these historical years, famine existed and still exists in Bangladesh in a silent way and starving and half-starving people are always there in the country. Especially alarming is the fact that our children are sitting in classrooms with empty and half-empty stomachs, which not children of every country do.

School meals have been served in Finland since 1948, in Sweden since 1973, in the United Kingdom since 1944 and in the United States since 1946. School dinner is served also in France, Japan, Singapore, India and many other countries. There are differences in their ingredients, serving management and prices. Some foods have also been provided in schools here and there in Bangladesh since the British period. The National Education Policy 2010 has a provision of midday meal in schools in rural areas and the government has started it at a small scale. The school meal issue

has been a matter of discussion for decades in Bangladesh. The usual arguments are: to increase enrolment, to reduce drop-outs, to retain children in education, etc., all this to achieve MDGs. No MDGs were born when all those countries mentioned above adopted school meal programmes. Again, there will be no MDGs after 2015, but their school meal programmes will continue. Then why is this fuss in our country about achieving the

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MDG with school meal programmes?

In Bangladesh there have been many studies, talks, roundtables, etc. for school meal programmes with the objective of reducing drop-out, increasing enrolment, etc. Keeping MDGs as the target in mind. What will these thinkers do when MDGs are over? MDG or no MDG, school meals will never incur a loss upon the state. Any person with some common sense can understand that food in schools will produce better health and education for our children and promises a better future for the nation.

Some may make an objection that there is not so much money for running such a big programme in

the country. These children eat some meals in their houses; so the meals provided in school are not a drain of money, only state instead of private expenditure. Some can argue that many children go starving either ways, as this article itself says; and that is exactly the reason it calls for the meals in schools. Does this starving save anything for society? If those starving children are provided with food then they will give back many times more to the society. That it is not drainage of money every parent understands. Therefore, parents who can afford spend most of their money for their children. What is wrong with the policy makers of the state that they do not understand this simple thing? The basic problem is that the individuals, who never let their own children go to school with an empty stomach, are in power, and not a collective body that represents general people.

MDG or no MDG, midday meal is the right of every schoolchildren. The government will not need to spend all the required money for this. The corporate bodies can be forced to contribute for this as their social responsibility, taxes can be imposed upon the rich people; and if people can be sure of sincerity in the programme even the poor will come forward with their support of whatever they can contribute.

The biggest lie in Bangladesh is that there is lack of money. Some people are rolling over money, black and white. News come out of a lot of money suddenly found within the pillows and under the mattresses of some not-so-poor people. It is necessary to raise the slogan of right to meals in school for every child in the country.

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