Energy security in Bangladesh

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NERGY is a key to both economic and social progress. Consistent with its. status as a least developed country energy consumption in Bangladesh is indeed very low. The following statistics show the severity of this backwardness. Per capita commercial energy use in Bangladesh is, as of 1999, 139 KgOE (kilogram of oil equavalent). being the lowest in South Asia and one of the lowest few in the world. In other South Asian Countries it is, as of the same year, 358 KgOE in Nepal, and 406 KgOE in Sri Lanka, 444 KgOE in Pakistan, and 482 KgOE in India. To give a few examples of better-off and rich countries just to put our energy consumption in global perspective: per capital energy consumption is, as of 1999, 454 KgOE in Vietnam, 818 KgOE in Costa Rica, 1,878 KgOE in Malaysia, 3,005 KgOE in Spain, 3.878 KgOE in the UK. 5,769 KgOE in Sweden, and 8,159 KgOE in the United States.(World Bank: World Development

Looking at the electricity consumption, one finds from the available data, as of 1999, that per capita electricity consumption is 89 kilowatt-hours (Kwh) in Bangladesh as against 321 Kwh in Pakistan, 379 Kwh in India, 225 Kwh in Sri Lanka, 252 Kwh in Vietnam, 1,426 Kwh in Costa Rica, 4,497 Kwh in Spain, 5,384 Kwh in the UK, 11,138 in the United States, and 14,138 in Sweden. (UNDP Human Development Report 2002)

Then, at the prevailing extremely low average consumption level, there is glaring disparity in Bangladesh in access to energy. Piped natural gas and electricity are accessible only to four per cent and 20 per cent of the country's total households respectively; moreover, most of these households are located in urban areas. The disparity is thus both between rich and poor and between urban and rural population. Almost four/fifths of the total population of Bangladesh is rural and a substantial proportion of the urban population is slum dwellers. Poverty is pervasive in both rural and urban areas. In the urban areas, the disparity is much more

Some 65 per cent of the country's primary energy supplies comes from non-commercial sources (i.e. biomass) such as fuel wood, dungs, twigs/leaves etc. The poorthe large majoritymostly uses these energy sources. The efficiency of these energy sources is low and they also pollute the environment and create health hazard in the kitichen. Of the remaining portion of the country's energy use, which is commercial and generally used by the better-off and the richa small minority, natural gas contributes 25 per cent, oil 8 per cent, and hydroelectricity 2 per cent. making a total of 35 per cent.

The supply side of the energy sector of Bangladesh is broadly characterized as follows. Although renewable, in addition to the associated problems mentioned above. the supplies of biomass are unsustainable; gas is non-renewable with a rather limited proven supply and uncertain prospects for additional supplies; hydropower potential is virtually non-constant; and the coal resources are available in several areas amounting to about 1.5 billion, but the production of coal is yet to start and it can be quite expensive and is particularly polluting both as a health hazard and in the context of climate change. Clearly, the people of Bangladesh, particularly the large majority, who are already deprived, face a high degree of energy insecurity, a major negative in relation to the prospects of sustainable development in the country.

Under the circumstances, all efforts should be geared to improving the country's energy security both at the national level and at the household level. This must be the key concept driving the nation's energy policy. Naturally, the pathway towards that goal should be a comprehensive process with clearly identified short, medium, and longer term targets to be achieved in, say, 5 or 10 years, 20 or 25 years, and 40 or 50 years respectively from now. The analytical framework must be hased on economic, social, and environmental (i.e. sustainable development) considerations and not on political expediency.

The approach should be an integrated development and management of all energy sources which mainly include gas and biomass. The management of the sector has to be so designed as to ensure energy supplies, as they are developed, to different zones, sectors, and socio-economic groups on an equitable basis. In the absence of a great deal of scope of commercial energy development except for gas, appropriate support (policy, resource, institutional) needs to be given to the proper development of biomass fuels. Before taking up the issue of gas let it be pointed out that there are also other sources of energy such as coal, biogas, solar power, wind powerwhich may be of marginal importance now but can be developed into important sources of

the two national committees appointed by the present government in December 2001, a few months after assuming power. which submitted their reports in June and August 2002.

The committee focusing on the determination of renewable gas reserve and gas resource potential in Bangladesh has concluded that the proven + probable gas reserve of the country, as of April 2002, is between 12.04 Tcf and 15.55 Tcf. Regarding gas resource potential, the committee very perceptibly states: "The undiscovered resource assessment is basically a combina (IP. 57) is neither here nor there. Will

quate for export of any volume of gas. The supply-demand related findings of the other committee would indicate a similar conclusion.

But, the other recommendation of the gas utilization committee that "limited export of gas may be considered if new discoveries are made by IOCs [International Oil Companies]" does not appear to have emerged from the analysis provided. The argument given in justification of this recommendation that "Petrobangla can get into a comfortable position if it could get its share without having to buy the IOC share"

In Attachment B(3), Annex 18 to

the report on gas utilization, it has been shown that the annual payment to be made to the IOCs is of the order of US\$ 150 to 200 million. The report has suggested that "these financial obligations, both in terms of domestic revenues and foreign currency outflows, are bearable and, therefore, affordable. It has, therefore, been recommended that all IOC gas could be purchased and [the committee] sees no reason for the IOCs to complain" (P. 56). Indeed, if the IOCs get paid, there is no financial reason why they should not come

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is on the basis of the historical economic growth (4.55 per cent per annum) achieved by Bangladesh over the past three decades, which shows a gas requirement of between 64 and 69 Tcf by 2050. While it is possible that Bangladesh will achieve a higher rate of economic growth6 or 7 per cent; but, even with reference to the historical growth rate, the secure availability of gas is only about a fifth of the minimum gas requirement for the period up to

energy in future if necessary attention is given from now on. Solar and wind power based electricity is environmentally clean and should be given due emphasis in terms of policy, institutional, and financial support.

The development and management of the gas sector should be carried out within the broad framework outlined above. The broad context is sustainable development and, hence, the utilization of gas for equitable benefit of all segments of society. Let me make two points in this regard. It is a glaring social and economic injustice that only about 4 per cent of the total households have access to piped gas and only about 20 per cent to electricity Therefore, a policy of expansion of piped gas to more and more people at a fast enough rate is called for. Similarly, generation and distribution of electricity need to be expanded to provide more and more people with opportunities to access

The key questions concerning the gas sector are: (a) what is the quantity of gas that is known to be available and how much more may be available in future? and (b) how may the available gas supplies be best utilized in national interest? These were the subject matters of

tion of hypothetical and speculative numbers with little or no economic considerations. As such, these numbers may only be used for petroleum exploration purposes. and not for petroleum exploitation planning".

However, gas demand projection can be made with somewhat more confidence, using appropriate assumptions regarding different parameters including economic growth rate. One of the projections of gas demand made by the committee is on the basis of the historical economic growth (4.55 per cent per annum) achieved by Bangladesh over the past three decades, which shows a gas requirement of between 64 and 69 Tcf by 2050. While it is possible that Bangladesh will achieve a higher rate of economic growth6 or 7 per cent; but even with reference to the historical growth rate, the secure availability of gas is only about a fifth of the minimum gas requirement for the period up to 2050.

The committee focusing on gas utilization has indicated supply shortfall occurring from around 2014/2015, given the recoverable reserves as estimated at the present time. Further, it has arrived, after in-depth examination, at the conclusion that current reserves are inadePetrobangla not be in an uncomfortable position until new discoveries are made? How long will it be until new discoveries are made? How will Petrobangla manage until then? Petrobangla's problems should be addressed through other more nationally beneficial means, some of which I indicate below. The argument seems to have been picked to justify the recommendation, i.e. it appears that some stretching of imagination came into play in getting this recommendation on board in the report. It is not acceptable.

Except for the recommendation of limited gas export from new discoveries, the report on gas utilization is acceptable. The other report (on recoverable and potential gas reserve determination) is acceptable as it stands.

One argument given in support of gas export by its proponents, which is also behind the concept of limited gas export, is that IOCs have to be paid for their gas if gas export is not allowed and that is to be paid, according to the terms and conditions of the Production Sharing Contracts (PSCs), in foreign exchange at international prices. But, the following arguments show that there are genuine alternative ways of raising the funds, which will serve national interest admirably.

forward and invest resources in further explorations under equitable agreements which will need to be negotiated.

Secondly, the government's financial capacity, both in terms of domestic currency and foreign exchange, can be bolstered if corruption is reduced and flight of financial resources checked.

Thirdly, remittances, which have been increasing in a significant manner in the past, can perform better in future. There are going to be increasing shortages of skilled hands in the advanced countries in future because there will be fewer and fewer citizens to replace the retiring people, given zero or negative population growth in those countries. If Bangladesh can identify the emerging requirement of specific skills in those countries and develop such trained hands through appropriate training programmes to export to those countries, remittances will expand substantially in future. Jute export was replaced by garment exports as the leading foreign exchange earner of the country as jute/jute goods exports collapsed. The garment export is going to face servere problems as guotas will be dismantled by 2004 and may experience large-scale reduction in exports. Skilled human

power export may be a future cornerstone of our export regime, given appropriate policies and action programmes

Another argument offered in favour of gas export is that electricity generation capacity needs to be increasedobviously gas-based, of which scope exists to expand the availability of electricity from the current 20 per cent of the population and that gas export would provide the financial resources to do that. But the export of gas from the current supplies will reduce the number of years for which gas will be availablesav. from around 15 years down to 10 years or less. What will then happen to the gas-based electricity generation capacity in the country? Gas import does not appear to be a feasible option because the country is unlikely to achieve financial capacity in 10 on the cross border power trade vears time to import substantial issue. The establishment of a Ganquantities of gas on a secure basis. Also there is the question as to where gas would be imported from. Hence, given that 85 per cent of the currently generated electricity is gas-based, which will more or less be the order of things in future under the proposed expansion programme to be funded by export of gas, the country will, in the absence of availability of gas plunge into darkness instead of expanded

In the context of the country's energy security, it is absolutely necessary to pursue extensive das explorations. In this regard, I fully agree with the recommendation of the gas utilization committee that all onshore gas blocks be allocated to Petrobangla in view of only negatives drawn from the experiment with the PSCs. Since economic and social progress is closely linked with energy security and since gas is the only commercial energy source securely available for the next decade and half or so and more is likely to be discovered in future, no gas export must be considered unless there is a proven reserve which will contain excess supplies on top of the quantity required to meet the growing national gas requirements for at least 40 years. At the same time, efforts must be devoted to creating a strong enough economic base and social environ-

availability of electricity, initiating a

downward economic and social

ment by then (i.e. in 40 years time) so that the country can face issues. including those relating to energy security, from a stronger and more secure position.

Also, it takes time to develop/expand other energy options, which may include solar power, wind power, biogas improved biomass energy, and cross border power trade. The development of these options must be taken up earnestly in order to ensure energy security in the country in future. If no more or not much new gas is discovered, an energy crisis appears to be in prospect in about 15 years time. The approach therefore must be two-pronged: extensive gas explorations and serious and consistent efforts to develop/expand other energy It seems in order to say a little more

ges-Brahmaputra-Meghna (GBM) Regional Power Grid involving Bangladesh, Bhutan, Nepal and India was identified by a study conducted by the Bangladesh Unnayan Parishad (BUP), Dhaka; the Centre for Policy Research (CPR), New Delhi; and the Institute for Integrated Development Studies (IIDS). Katmanthu and published in 1994 (Converting Water into Wealth: Regional Cooperation in Harnessing the Eastern Himalayan Rivers). A follow-up study further elaborated on the subject. The following quotation from this work published in 2000 (Cooperation on Eastern Himalayan Rivers Opportunities and Challenges) may be stated here, taken from the conducting remarks of the relevant chapter that suggests a way forward: "There are attractive possibilities for the integrated development of energy resources and the creation of a GBM Regional Power Grid to interconnect the power systems of Bhutan, Bangladesh, Nepal and India taking advantage of resource complimentarily, demand diversity and geographic proximity. This would also render other benefits optimally to all cooperating countries". For more on this, one may consult the above mentioned and other relevant studies and reports.

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Lest we forget

Justice Mohammad Ibrahim

USTICE Ibrahim was not only a distinguished Judge but he was also equally distinguished in other fields of life. as a Vice-chancellor of the Dhaka sity and a Central minister of the then Pakistan. Talented as he was from his early days, he always left his mark and touched great heights in every sphere of human activity wherever and whenever he was called upon to provide leadership, be it judiciary, education or administration.

Unfortunately, I have not had any occasion except appearing before him in an arbitration matter. in his failing days to come in personal contact with Justice Ibrahim. He retired in 1955 from the High court before Ligined as a lawyer in 1960 but all the same I was quite familiar with his name and fame since I came to Dhaka



from my native town Dinajpur in the early fifties for studying in the Dhaka University. I was staying with my uncle, Late A Jalil, then a Deputy Secretary of East Pakistan Government, whose house

was in Purana Paltan area. In those days, as one entered Purana Paltan, a quiet and charming neighbourhood, from the south-west aside, one would invariably notice a big two-storied building with a large compound bearing a name on the forehead Param Bhavan, Perhaps it was pass by that house at least twice, if not more, everyday to reach my uncle's house located near a famous small restaurant of those days named Chalantika. Justice Ibrahim used to live in Param Bhavan

Nearly forty years later when I was in the Appellate Division of the Supreme Court I had a very devoted and dutiful 'Jimmadar' (Judge's personal keeper), an expatriate from Bihar Qamruddin by name, who retired in 1991 while serving with me. He began his life as a young orderly of Justice Ibrahim in 1952. Qamruddin told me that before Justice

Ibrahim moved into the said house in 1953 which he had bought from its Hindu owner, it was his duty to give 'Azan' in that house every morning and evening as directed by Justice Ibrahim. Major part of that house has now devoured by the North South Road (Bijoynagar) and in place of Param Bhavan there stands a commercial building 'Ibrahim Mansion'. As I pass by that road and look to the high rise building gripping nostalgia overtakes me and I seem to hear Qamruddin's 'Azam' as I walk down the memory lane but the deafening traffic noise, however, rudely gives me a jolt. Justice Ibrahim was born in

1898 in Bishnupur village of Sadarpur thana of Faridpur district. His ancestors had a respectable heritage in that they served as Judges during the time of Nawab Alivardi Khan. Justice Ibrahim was all along a meritorious student and he graduated with honours in English literature from the Dhaka University. There was a break in his studies as he got involved in politics being inspired by the patriotic movements of his time and the lofty ideals of great men like Mahatma Gandhi, Moulana Mohammad Ali, Moulana Shaukat Ali etc. However, he turned back from politics on the advice of Dr Naresh Chandra Sen Gupta, an eminent lawyer of the time and also a Professor of Law at the Dhaka University and through his encouragement got the law degree. He started practicing law in his home district Faridpur, was a part time lecturer in law at the Dhaka University, was appointed a Public Prosecutor in 1939 and then became an Additional District and Sessions Judge in 1943 and was posted at Barisal. He became a Sessions Judge there and was working as such in 1947 when Pakistan came into being. He was elevated to the High Court bench in 1950 and retired from that office

He was made Vice-chancellor of the Dhaka University in 1956 and continued in that office till October, 1958. Following the promulgation of martial law at that time, he was invited by President Ayub Khan to become his Law Minister. Justice Ibrahim knew that Avub Khan had promised a new constitution for Pakistan and thinking that he might be able to make some useful contribution in providing a good constitution to the country he joined his government as Law Minister. It is public knowledge that Justice Ibrahim in

course of time became disenchanted because of growing difference of opinion with the regime over constitutional issues, particularly those relating to democratic institutions and provincial autonomy. Ultimately, he decided to part tendered his resignation, came back to Dhaka from Islamabad and his resignation was accepted after a long time in early 1962. Since then he lived in Dhaka in that house in Purana Paltan, often not in good health, until a big portion of the house was acquired for the North South Road. He died on October 13, 1966.

Justice Ibrahim with all his high achievements in life was an ideal to me for his great learning in law. He was a Judge of the High Court for a very short time, only five years. But his brief stay has shed a lustre in the legal domain which has survived the test of time. When I became a Judge of the High Court in 1977, naturally I turned to my senior brothers for guidance in writing Judgments. Almost in one voice they advised me to read, among others, the Judgments of Justice Ibrahim and follow the model set by him. Not that I did not read his Judgments before but when I read them again as a young Judge. I was struck by his deep knowledge of the legal concepts and the lucid and precise manner in which he used to bring them out in his beautifully written Judgments. His command over both law and English was superb. I have come to realize that it requires not only a trained mind but a clarity of mind to be able to convey legally loaded concepts in simple terms which are intelligible even to an uninitiated person.

With the belief that the readers particularly those interested in law might have a glimse of the state of the art of Justice Ibrahim's way of declaring the law on a particular subject, I thought it would not be out of place to mention one or two of them from his judgments. It was not the time of indulging in human rights, gender equality etc as at present but the cold principles governing the civil rights of citizens which everybody looked for from the higher judiciary. Justice Ibrahim was a skilled craftsmen in this field. While considering the effect of a void lease because of minority of the party Justice Ibrahim held:

A void contract is an agreement not enforceable by law. But though the contract was void, it was followed by delivery of possession, and the grantee or her assignee can maintain her possession against all except the true owner namely Ahmad Khan or his assignee. It is not the law that, because the lease is void, the quardian can be ousted by any aggressor without title. Possession is one of the methods by which property can be acquired. A person, who first succeeds in taking possession of a thing which belongs to no one, becomes the owner of it. If he takes possession of a property which belongs to another, he does not become the owner; but his possession is good against all except the true owner and if he is dispossessed by a stranger, he is entitled to recover possession as a possessory owner (Julfakkar Joardar Vs

Abdul Kuddus, 5 LDR 174). In a suit for partition upon declaration of title he pointed out how a valid title is acquired in respect of land and how it can be proved. A person cannot acquire title by transfer of possession where purchase by registered deed is the only method prescribed by law. The kabala is the primary evidence of what was purchased. and where the evidence is plain in itself and unambiguous as to existing facts, extrinsic evidence of possession cannot be adduced to show that a different land was purchased, for, even if such possession is proved, it cannot prevail against the deed of title: it can only mean that the purchaser took possession of a wrong land (Durga Nath Vs Loke Nath, 5 DLR. 319).

We, both judges and lawyers, owe a very big debt to him. It pains me to see that the culture of reading which is so essential to the legal profession is fast going out of habit and practice. The World Bank in aid of the government of Bangladesh is presently engaged in a capacity building project of the judiciary with a view to ensure quick dispensation of justice. While it is important to ensure quick disposal of cases, it is equally, if not more, important to ensure the quality of justice and our judges and lawvers would do well not to wait for the World Bank's prescription but to look upon our own precedents and examples set by our judges like Justice Ibrahim and try to emulate the path trodden by them.

On this occasion I pay my homage to the revered memory of the great Judge and a great man. May Allah grant him eternal peace and happiness.

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