Some thoughts and views on the National Energy Policy

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Bangladesh is in the process of transition in many ways – politically, economically and socially. The unbearable political situation that prevailed in 2006 and the changes that happened in 2007 have brought a high degree of expectation in the people for a major overhauling of the way the polity, the bureaucracy and the service delivery mechanisms function in the country. Side by side with public demands for transparency and accountability, there is a cry for reform and changes in all spheres of administration and across all sectors. Over the last one decade, the country has been changing from a predominantly agrarian economy to an industrial and service economy. The private sector and remittance from expatriate workers play a key role in the national economy which is seeing a growth rate close to 7%. The country is going through rapid urbanization and is projected to having mega cities in 15-25 years time. Infrastructure development has become a major sector by itself. With its encouraging and proactive policy towards Foreign Direct Investments (FDI), Bangladesh has promoted the flow of foreign exchange into the country, which in turn is propelling the economy forward. All these changes happening in the country and the need for energy to support it, coupled with the sheer brunt of the electricity crisis that the country has been reeling under, has focused the attention of people on the key sector on which hinges the economy and social and environmental wellbeing of the country.

With rising energy needs for meeting the country's economic growth, infrastructure development, urbanization and industrialization, Bangladesh is feeling the pinch from the current lack of adequate power and intermittent load-shedding. Against a demand for 5000MW approximately, there is a shortage of about 1500MW of power. The experts say that in spite of the massive shortage of power and sheer neglect of the past government in significantly raising the generation capacity in the country in the last 5 years, growth has continued to rise due to the addition of 1500 MW of power by the private sector. While this is laudable, energy remains among the key developmental priorities for Bangladesh in the foreseeable future. At 160-180 kwh, Bangladesh has one of the lowest per capita consumption in the world compared to countries in the region (India 580 kwh, Pakistan 580 kwh) or globally (developed countries exceed 5000 kwh). This calls for concerted efforts, guided by a well thought out and cross-sectorally linked policy, for development of the energy sector in Bangladesh. It may be mentioned here that we tend to think of power and energy as being separate entities whereas in the global context energy encompasses conventional power, nuclear power, coal, gas and renewables. Keeping that in mind, there is a need to have a holistic and all encompassing national energy policy in the country.

At present the country has around 8 different policies related to the various sub-sectors and strategic interventions. Their inter-linkages and overlaps are unclear, they do not provide a holistic view of the country's needs and approaches, and some are even contradictory to others. At the height of the power crisis in 1995, in a meeting held on 11 August 2005 at the Ministry of Power, Energy & Mineral Resources, the Government decided to formulate a single "stand alone" policy document by converging all existing and proposed policies in the energy and power sectors and looking at emerging issues as well. It was welcomed by all concerned as it was felt that it was high time Bangladesh had a holistic and *harmonized* National Energy Policy (NEP) covering all the energy sub-sectors with inter-linkages where necessary. The Power Cell and the Hydrocarbon Unit were assigned the task of development of a harmonized National Energy Policy encompassing power, hydrocarbon (oil and gas), coal and sustainable energy development together with other relevant issues. UNDP and GTZ came forward to assist the Government in this effort and launched a team of national and international experts to provide support to the national team in developing the NEP.

The experts team was guided by the National Committee for Revision & Updating of National Energy Policy set up by the Ministry as well as the Power Cell, the Hydrocarbon Unit, the Institution and Policy Support Unit (IPSU) of the Ministry of Environment & Forest, and the Geological Survey of Bangladesh. The experts team consulted a cross section of the relevant ministries, departments, utilities and Independent

Power Producers (IPPs) from both hydrocarbon and power sectors; think tanks like BIDS; private sector bodies such as IDCOL, IIDFC, Grameen Shakti and Rahimafrooz; development partners like the World Bank, ADB, USAID, and CIDA and others for development of the NEP. A "core team" comprising of relevant members from the Government's drafting committee, the concerned government institutions together with energy experts from UNDP and GTZ reviewed the draft NEP developed by the team of consultants and validated it through a series of consultations with key relevant stakeholders. Thus, the draft NEP has been developed through a long drawn consultative process over a year involving the major relevant stakeholders from the Government, non-government and private sectors as well as key development partners.

The experts team reviewed and took into consideration all the policies related to the power and hydrocarbon sectors that were developed in the past and are currently in effect. The desk review also included other relevant documents like the Poverty Reduction Startegy Paper (PRSP), the Millennium Development Goals (MDGs), Power Sector Master Plan, Gas Sector Master Plan, and different studies conducted in the past for the gas, power and coal sectors. An initial draft "Concept" of the new harmonized National Energy Policy was developed first and presented to the National Drafting Committee in July 2006 for their comments and guidance in moving forward with the development of the draft NEP. This was followed by a series of meetings, seminars and workshops which were organized with the National Drafting Committee and utilities such as BERC, PDB, REB and Petrobangla in order to receive feedback and bring clarity into every step of the process of policy harmonization. The team received a lot of invaluable suggestions, comments and recommendations on the harmonized draft policy from the National Drafting Committee and all the major stakeholders who were consulted. Following this process and methodology, the draft NEP was developed and the document has undergone a continuous process of updating until the draft was submitted to the National Committee in October 2006. The draft NEP remains to be scrutinized by the Government and formally approved. The Government may wish to place the draft NEP on their website in order to draw wider public comments before its finalization.

The draft NEP essentially has 5 major components : *power, hydrocarbons* (gas, oil), *coal, sustainable energy* (conservation, efficiency and renewables) *and rural energy*. The last was made as a special component of the Policy given the fact that electricity has reached roughly 30% of the population only leaving the rest 70% of rural masses without any viable energy service. The issue at the core for rural energy is both lack of access to energy services and affordability. A more serious aspect of the crisis emerges when the excessive pressure on biomass, the only means of fuel for the poor, comes as a direct result of the lack of electricity for majority of the population. The outcome is alarming with accelerated loss of forest cover and associated loss of biodiversity. The resultant increased frequency of extreme events, especially flash floods due to deforestation, landslides in hilly areas and soil erosion, set back the economic gains made as a result of diversion of funds to disaster response, recovery and rehabilitation. The forest cover in Bangladesh has reached an all time low of 6-7% and may have indirect causal links to global warming. Although it is recognized that biomass fuels may continue to play an important role in the rural energy scene for many years to come and may be looked at from a regenerative policy point of view, there is a need to go beyond that in order to provide modern energy services in rural areas which will support development of rural enterprises, diversify rural livelihood and energize the rural economy in general.

The very high demand – supply gap for Bangladesh has been taken into consideration in the draft NEP. The *Private Sector Power Generation Policy* specifically identifies the low energy intensity of the economy as the reason for the need for a more dynamic and private oriented power policy. Various state documents have spelled the need for both market based and non-market based interventions to improve the energy intensity of GDP (kWh consumed per capita). The optimal rate of growth of energy consumed per capita has to be increased in order to increase the overall economic growth rate beyond 7%. The current growth rate of power is not sustainable for the economic growth rate. Therefore, side by side with conventional power generation, the country has to move into non-conventional energy as well. The use of renewable energy in the country is still lower than desired, especially when compared to countries in the region like India, Nepal and China. Most of the initiatives taken in this area by the government, non-government organizations, private sector or donors have been pilots and not significant in terms of total energy generation in the country. Most glaringly, the country lacks a *systemic approach* for the development and sustenance of sustainable energy initiatives on a wider scale through various routes

including market, government or donor interventions. It is expected that once the Sustainable Energy Development Agency (SEDA) is established, it will provide the leadership and direction for moving towards that.

For the oil, gas and coal sectors, exploration and pricing are key issues in the draft NEP. For that matter, a transparent pricing framework is also required for electricity. The IPPs are currently not feeling encouraged to sell power to the grid at low price on one hand, while on the other hand, the PDB is buying power from the IPPs at higher rate and selling to REB and DESA at a lower rate thus incurring huge financial loss. Therefore pricing on a cost recovery basis is recommended in the Policy for the coal, gas and power sectors. The Policy also advocates removal of subsidies which distort consumption. Demand Side Management is a key issue in the Policy related to all the sectors and in particular the conventional power sector. Investments in gas and coal exploration are seriously lagging and current problems faced in Boropukuria and Phulbari coal mines are compounding the problem. The Policy encourages both domestic and foreign investments in the coal and gas sectors, but with a view to ensuring optimum resource use keeping in mind the domestic need. Policies need to be geared towards having more transparent processes for exploration and development of the sectors keeping in mind possible market distortions due to price, environmental impacts and most of all any adverse effect on human wellbeing.

The draft NEP also provides the rationale for the proposed "Four Fuel Strategy" of the harmonized policy which are (i) expansion of gas supplies to meet near-term (next 15-20 years) needs through immediate exploration; (ii) increasing the available stock of energy through effective energy efficiency programmes; (iii) developing coal resources in order to diversify and expand domestic energy resource base, and (iv) developing renewable energy to meet today's rural energy needs and to provide for tomorrow's sustainability. Nuclear energy, though proposed by some quarters, should not be encouraged since it is too costly and the country's capacity for its development, operations, monitoring, supervision, maintenance of round the clock safety at international standards and safeguard issues related to disposal of spent fuels is in question. A very compact and concentrated population in a small land area like Bangladesh cannot risk a 'Chernobyl'.

There is talk of development of a separate Coal Policy by the Government. If that is done, then it defeats the Government's original intention of having a holistic and harmonized National Energy Policy. The NEP should in essence be a platform for providing the guidance and direction in which the country would need to move with respect to the various sub-sectors of energy and therefore does not need to be over-detailed. The details of how that would be done for each of the sub-sectors would need to be spelled out in separate documents which would be the *Strategic Action Plans (SAPs)* for each of the sub-sectors. To facilitate the proper implementation of the National Energy Policy, sector wise specific Strategic Action Plans will need to be prepared as a follow-up to the NEP. In this respect, initial preparatory work has already started with GTZ and UNDP's technical support for development of the SAPs. Broader consultations will follow once the draft NEP is endorsed by the Ministry. The Coal Policy should be a component of the NEP (one of 5 major components mentioned above) rather than a separate one. But it should have a detailed SAP for implementation of the policy like all the others as well.

In conclusion, the expectation remains that the harmonized National Energy Policy will help mitigate the present acute energy crisis and provide a direction to the country in achieving energy security in near and long-terms. The proposed policy will also contribute in avoiding potential conflicts amongst the different policies, plans and regulations on power and energy, and is expected to bring in synergistic compatibility and complimentarity between the relevant sectoral issues.