

DHAKA WEDNESDAY FEBRUARY 25, 2009

Energy security

FROM PAGE 40

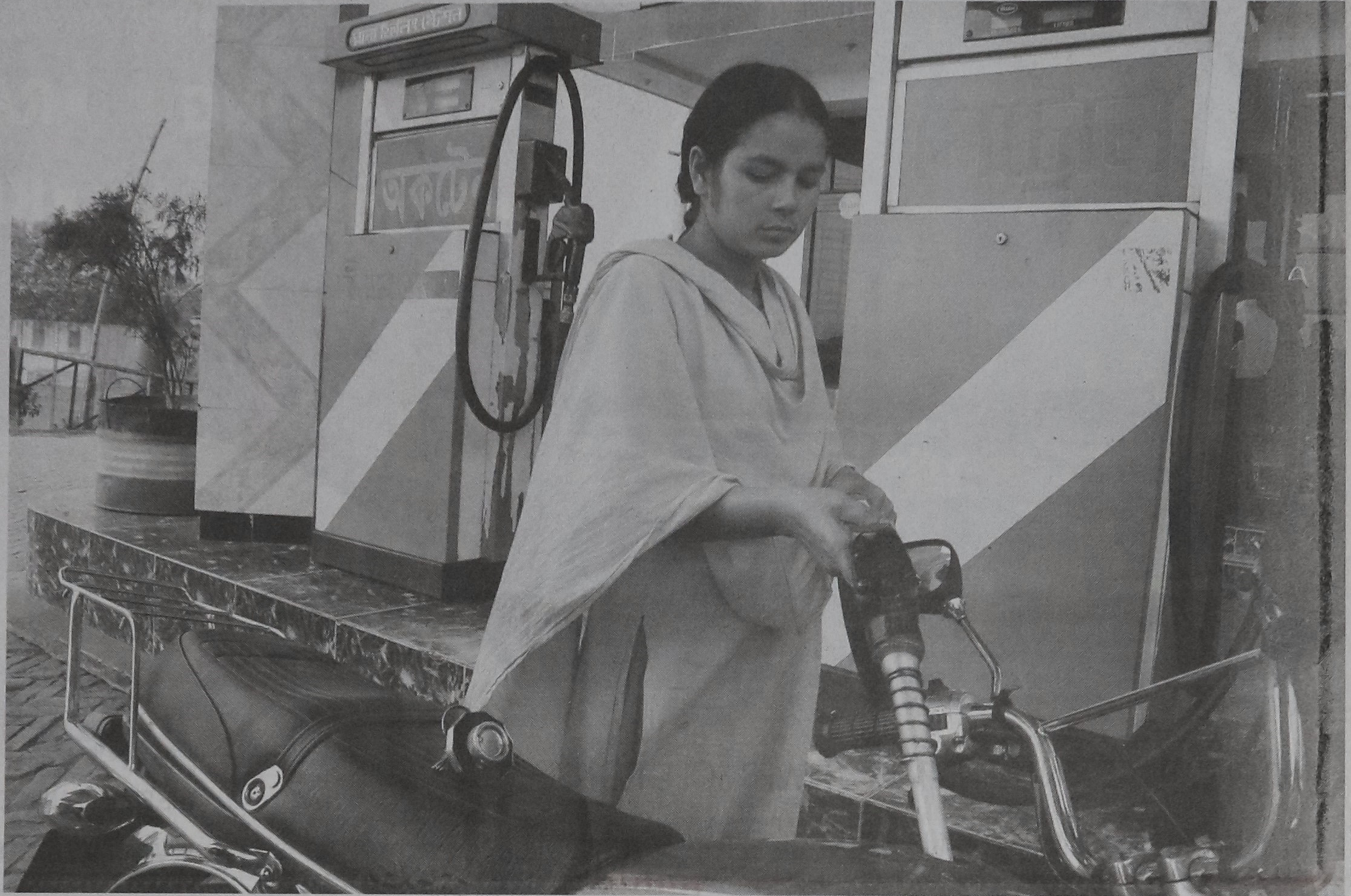
pricing, regulation and fiscal policy on energy. Prices should be at the right level reflecting all costs to prevent market distortions. Effective metering and a workable energy payments system are critical to the promotion of greater energy efficiency. Energy policy must be concerned with efficiency of production and distribution. For this purpose, it requires prudent management of state-owned enterprises and regulating private sector participants in the energy sector. It entails coordinating the activities of various government agencies and of the relevant state-owned enterprises involved in energy sector.

The environmental dimension of energy security dictates that since the exploration and transporting of energy has profound negative environmental consequences, environmental objectives should be incorporated into their energy policies. Symbiotic relationship between energy and environment is explained by the fact that use of non-renewable sources such as fossil fuels can emit carbon dioxide.

International community is increasingly pursuing energy security and sustainable development through deployment of cleaner, more efficient and low-carbon energy technologies. Environmental dimension of security is sometimes linked with its economic dimension. For instance, low energy prices enhance energy use and hence, lead to more environmental pollution. On the other hand, it is contended that higher energy prices will reduce energy consumption and consequently reduce pollution. Therefore, price of energy should fully reflect this externality of environmental cost.

Security of supply is one of the most important aspects of energy security. The supply of energy can be constrained by many factors including poor infrastructure, lack of proper distribution system and bureaucratic control over energy sector.

Bangladesh's main non-renewable resources are natural gas and coal. Natural gas accounts for more than 70% of the commercial energy use in Bangladesh. Gas in Bangladesh is mainly used to produce electricity. A part of it is used to produce fertilizer as well. Currently Bangladesh's recoverable proven reserve of natural gas is around 14 TCF. It requires about 26 TCF additional gas by 2025 to attain a 7% gross domestic product (GDP) growth. Bangladesh has coal reserves of 2.5 billion metric tones in four fields, which



may be equivalent of 65 TCF Gas. Natural gas resources are fast depleting in absence of any new major discoveries in recent past. Therefore, existing reserves of coal has enormous potential for future source of power generation to meet the growing energy demands. Bangladesh has a per capita electricity consumption of about 167 kWh per year, which is one of the lowest in the world. Only 33% of the population has access to electricity and about 15% have direct access to natural gas. Therefore, adequate attention should be given to the exploration and prudent use of coal. In order to meet mounting demand in industries, power generation and household use, energy sources should be diversified.

Bangladesh should generate energy from renewable sources to reduce its

dependency on natural gas and oil. More investment should be made for exploring renewable energy sources such as biomass, heat, solar and wind-based power, and for developing untapped hydro resources. Bangladesh formulated energy policy in 1996 and 2004. However, the objectives of energy policy are yet to be fully achieved due to inadequate planning, political instability, unnecessary delay in decision making and lack of good governance in energy sector.

Widespread corruption in state-owned enterprises in particular, marketing and distribution companies of Petrobangla of Bangladesh is well documented. Corruption adds to the cost of energy by creating tremendous economic inefficiency and the loss of opportunities to achieve the goals of energy accessibility, energy availability. Such corruption and mismanagement has resulted in ostensible 'system loss' in unbelievable proportions at the expense of public welfare. Full transparency and accountability should be ensured for not only for the sake for good governance, but also for preserving and protecting country's scarce resources.

The energy policy of Bangladesh, 2004 appropriately highlight the necessity of ensuring optimum development of all the indigenous energy sources, sustainable operation of the energy utilities, rational use of total energy sources and environmentally sound sustainable energy development programmes causing minimum damage to environment; encourage public and private sector participation in the development and management of the energy sector. But legislative support is yet to be put in place to implement the policy.

Given the fact that energy development programmes are highly capital intensive, private sector's involvement is especially imperative for exploring both non-renewable and renewable energy. For facilitating increased level of private and foreign investment in energy sector, presence of a functioning legal framework and process, political and economic stability is vital to provide reasonable predictability for making business decisions and to reduce the political risks factors.

Many areas, both onshore and offshore, of Bangladesh remain unexplored. Therefore, extensive exploration and drilling should be undertaken

on urgent basis to increase reservoir of petroleum resources. Recent effort of offshore bidding is a step in right direction, but demarcation of maritime boundary with India and Myanmar remains major stumbling block in the offshore exploration. It should be noted that the offshore areas have enormous potential as Myanmar and India have already discovered large gas reserves in the Bay near the maritime areas that belong to Bangladesh. Problem of maritime boundary delimitation with neighboring countries shall be settled on the basis of well established principle of international law on the urgent basis in order to harness natural resources in sea and to enhance our energy security.

Bangladesh should desperately develop and invest in development of renewable energy such as geothermal, ethanol fuel, biogas. Renewable energy systems encompass a broad, diverse array of technologies, but operating costs are comparatively low. Renewable energy sources are generally sustainable in the sense that they cannot 'run out' as well as in the sense that their environmental and social impacts are generally more benign than those of fossil fuel. It is gratifying to note that we have a Renewable Energy Policy which has been formulated in last year. The Renewable Energy Policy, 2008 aims at efficient utilisation of renewable energy and achieving the targets of developing renewable energy to meet five percent of total power demand by 2015 and ten percent by 2020. However, adequate legal and institutional support is needed for exploring renewable energy and private investment in this sector. In fact, some private initiatives have already been successfully undertaken in Bangladesh for producing solar energy, but still more efforts are needed for generating energy from wind, tide, wave and ethanol.

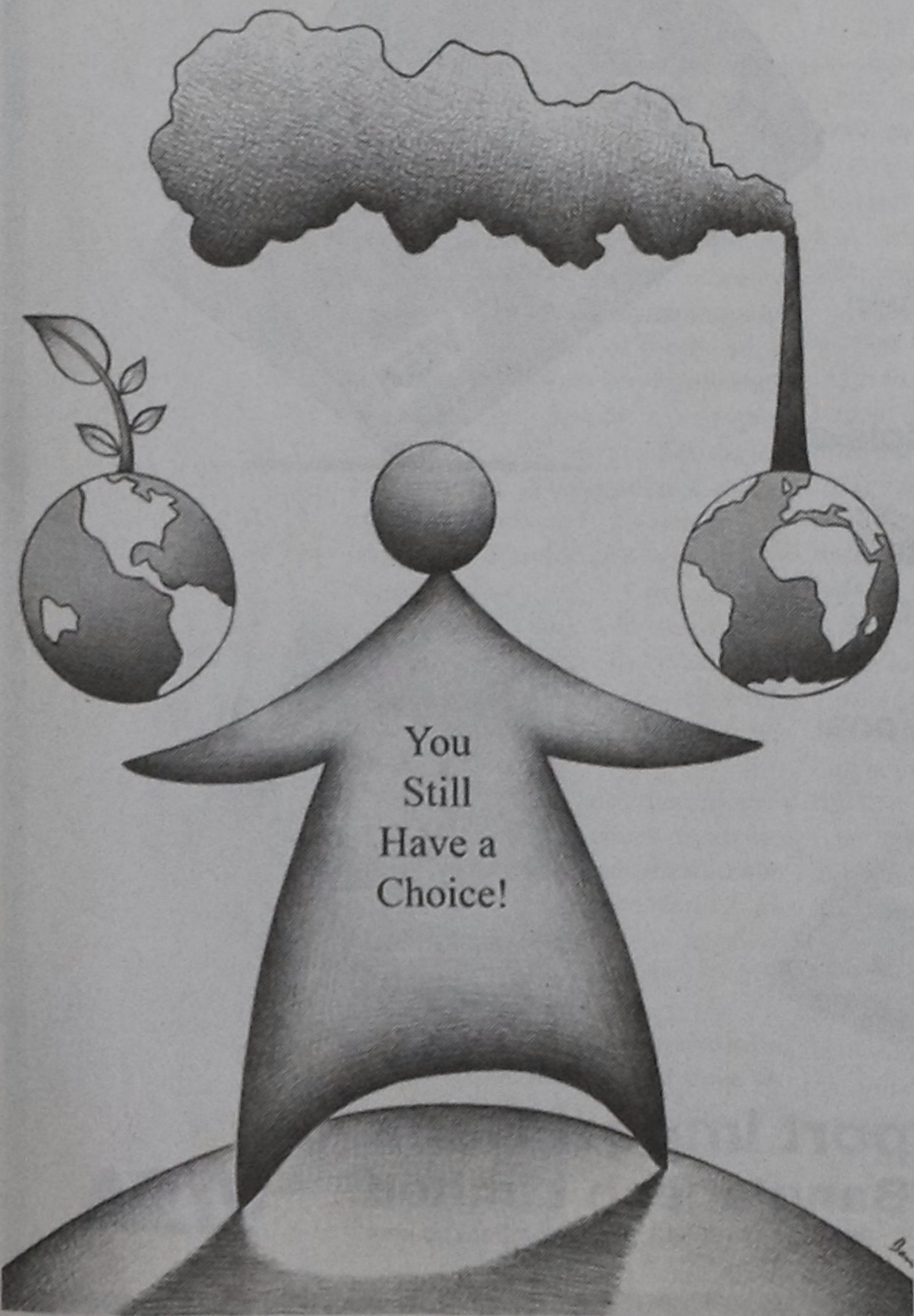
Nuclear energy is increasingly gaining popularity as alternative energy source, which is simultaneously reducing harmful air pollution and addressing the climate change challenge. Establishment of nuclear reactor for generating electricity appears to be most viable options for energy security. To meet the Bangladesh's energy demand in the future, case for nuclear energy should vigorously be pursued. Many developed and developing countries are heavily reliant on nuclear energy. Although nuclear energy is very

efficient, it is relatively costly. The other concerns regarding the nuclear power are safety, and nuclear waste disposal. However, these concerns are greatly eliminated by adopting appropriate technology and international standards on environmentally sound management of nuclear wastes.

Strong institutional framework is essential for securing energy security and pursuing the energy policies. We have not yet any regulatory body on renewable energy. A regulatory body Sustainable Energy Development Agency as envisaged in the Renewable Energy Policy, 2008 should be put in place to take concrete steps to remove policy, institutional, financing, market, information, technical and human resource barriers existing in the renewable energy sector of the country. According to the Policy, the proposed institutional mechanism has been entrusted to formulate financing and delivery mechanism to increase the affordability of renewable energy systems for the rural poor. The regulatory body is also supposed to encourage community based organisations, NGOs, rural energy entrepreneurs and private sector organizations in development of renewable energy and facilitate the institutional requirements for successful implementation of these projects. Existing institutional mechanism such as Energy Regulatory Commission should be strengthened further for competitive energy market and to deliver its stated goals.

Energy conservation is vital for energy security of any country. There is a saying that energy saved is energy produced. Efforts to improve energy efficiency and energy saving contribute greatly to the strengthening energy security. Increased energy efficiency and conservation reduce stress on infrastructure and contribute to a healthier environment through decreased emission of greenhouse gases and pollutants. Recently, the government has formulated a draft Energy Conservation Act in 2008 in order to ensure energy efficiency and energy conservation. It is heartening that the draft has been aired for public opinion. It is hoped that the draft Act should be turned into law immediately taking into consideration of considered opinion of experts and stakeholders.

Dr. Abdullah Al Faruque is an Associate Professor and Chairman, Dept. of Law, University of Chittagong, Bangladesh.



You
Still
Have a
Choice!