

Rays of hope

The future of energy

by Sharier Khan

IN THE 1960s when the first domestic natural gas connection in Bangladesh was offered to the public, people were so much ignorant and sceptic about its usage that they did not voluntarily accept the offer. The first line was given to a writer saying that it was free of charge and that there was no risk of explosion, according to a former Titas Gas official.

Long time has passed since then. Demand for gas by different types of consumers is now exceeding what the government is able to produce or supply. And general awareness that natural gas can change the face of our economy is now there. But this awareness was actually established only a few years back, only after the government had invited private sector investment in the gas sector in the early 1990s.

Right now, Bangladesh is still going through a phase of self-realisation regarding the energy sector in general. The gas scenario may not look very encouraging, as there is still a serious lack of direction at the policy making level. But in the near future, when our policy makers would "culturally" understand the need for utilising gas and other natural resources for economic growth - the energy sector would push the country out from its vicious circle of poverty.

Bangladesh's biggest sub-soil natural resource is its gas - which accounts for about 72 per cent of commercial energy consumption.

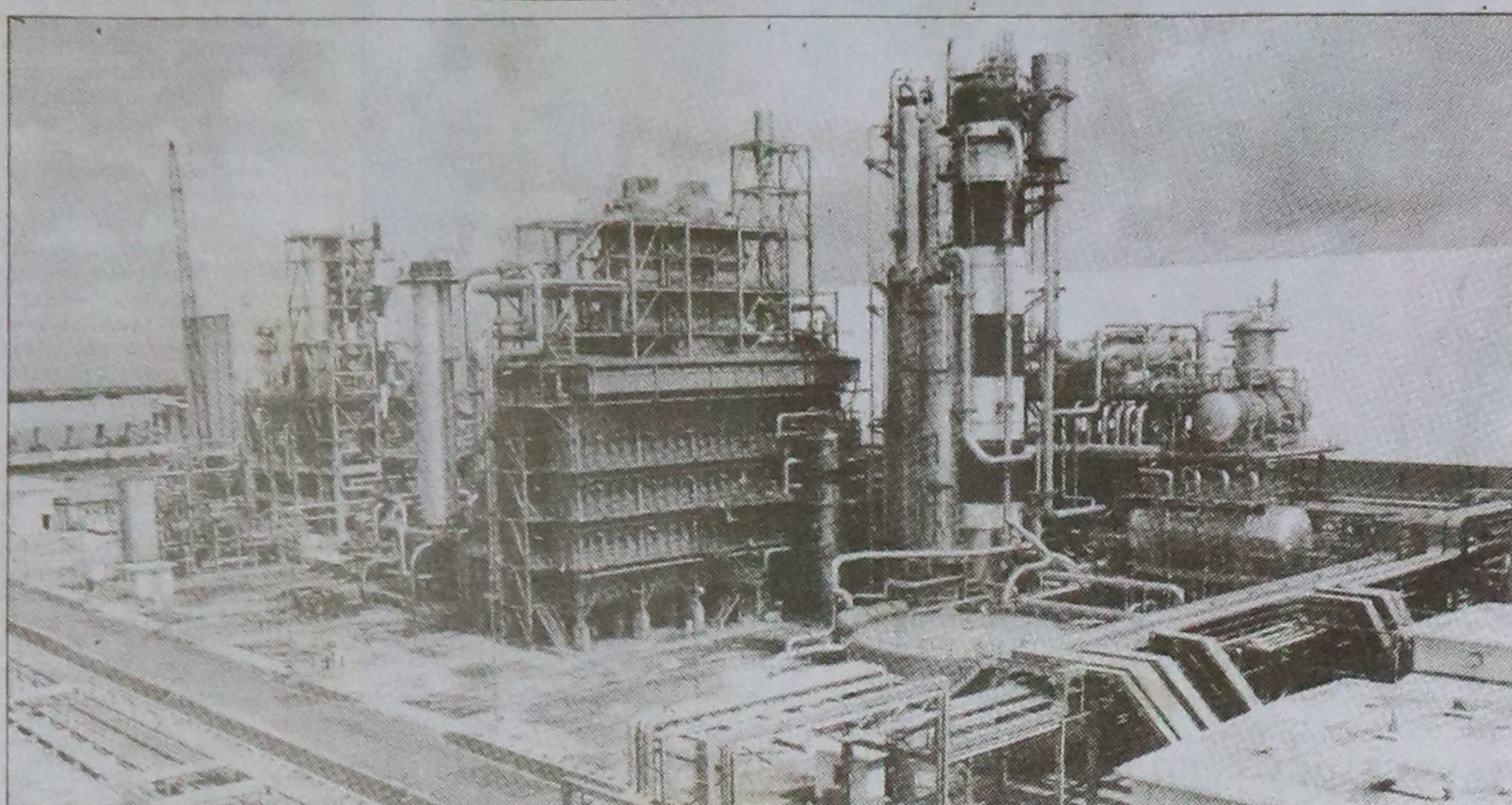
According to international oil giant Shell, Bangladesh's potential natural gas resource might be 38 trillion cubic feet (tcf) in total. Some other oil companies claim that the reserve would exceed 50 tcf. However, local energy experts including those working at Petrobangla believe that the country's geology would not allow discovery of gas more than 25 tcf in total. Presently, Bangladesh's proven discovered gas amounts to a total of around 10 tcf.

Other than gas, the country also has some coal, hard rock, lime stone and some other minerals, located mostly in the north Bengal. In addition, the country also has oil prospects.

But all these resources will be meaningless if they are not utilised for the greater benefit of the people. Till now, development of different energy sub-sectors focused primarily on meeting short-term needs. Gas fields were developed to supply gas mainly to the power plants and the fertiliser factories. And the power plants and fertiliser factories were set up on the basis of conservative growth projections. Similarly, as industrialisation had been slow, the growth of commercial gas users remained limited within Dhaka and Chittagong and some other areas only. Use of gas in domestic sector remained confined within Dhaka.

The present total gas consumption of the country stands at around 1000 million cubic feet per day (mmcf). According to one estimate, this gas demand would rise up to around 1300 mmcf in 2005 at the present rate of consumption.

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It is interesting to note that Bangladesh's per capita energy consumption is only 65 KG oil equivalent. It's nearly five times lower than the consumption rate of neighbouring India. Only 15 per cent people of the country has access to electricity and around two per cent people has access to gas for domestic usage. These facts reflect the big challenge left for the nation in the energy sector. Imagine the level of economic activities that could be achieved only if the nation increased the level public access to power and gas and increased per capita energy consumption rate.

However, the first problem in increasing the level of energy consumption is lack of investment. Bangladesh needs billions of dollars in investment for exploration and development of gas, for setting up of power plant or fertiliser plant; and for establishing plants for other gas, oil or mineral products or by-products. Realising the need for investment, the government has opened up doors, in phases, for private investment from the early-1990s.

While private investment's focus is on profit, the government's focus is on greater public welfare. Therefore, there is a conflict of interest now and the government is yet to outline a guideline so that both can overlap with each other. Until it comes up with one, private investment would not increase in the way the government projects it to.

In the energy sector investment scenario, due to lack of understanding of the importance of the sector, the government actually invested inadequately in the past. When there were any proposal for developing a gas field or a power plant or a hard rock project from Petrobangla or Power Development Board, the government followed a relaxed policy or the pretext that it did not have enough funds. However, analysis of the government's Annual Development Programmes (ADP) of the last few decades shows that it seldom utilised more than 80 per cent of total allocation. In other words, 20 per cent of the ADP goes unutilised all the time. This fact is self-contradictory to the claim that the government lacks fund for its projects. Implementation of a project actually depends on the government's seriousness about it, government officials say.

In recent years, the government has become aware of the importance of increasing self-finance of some energy sector projects side by side with the private sector. As a result, some important gas-pipeline projects, power projects and gas exploration projects have been undertaken. As per the present trend, the government's investment in energy sector would increase in the future.

To increase the level of energy consumption, Bangladesh also needs to focus more on industrialisation. Right now, industries are contributing around 18 per cent of the GDP, but its growth rate remains negative for the last two years. Unless there is emphasis on industrialisation, bulk energy consumption would not increase. As a result, investors would not be interested to invest in gas and power sectors.

According to a World Bank estimate, Bangladesh was deprived of 0.5 per cent GDP growth due to power crisis or load shedding in 1998-99. In other words, by ensuring good power supply Bangladesh could attain additional 0.5 per cent GDP growth.

Besides, by supplying power to areas where different types of industrial base can be set up, the government can practically encourage industrialisation across the country. Some visionaries in the energy sector believe that the country's north-western region has the potential of being a new industrial base.

The need for ensuring more power in near future has been recognised by both the government and the private companies. The government is already following power demand forecasts made by the Power Systems Master Plan that seeks huge investment in the next five to 10 years as power demand is projected to grow rapidly by the rate of around 10 per cent each year. Growth in the power sector would be meaningful for the gas sector where oil companies are willing to invest more "if there is a confirmed market".

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Investment would also be necessary in building power and gas sector infrastructures. The major problem area of the whole energy sector now appears to be lack of mid-term and long-term planning. Unless the government is able to visualise the country's future by linking the energy sector's growth with trade, business and agricultural growth, it cannot design a mid-term and long-term plan. Without such plans, energy sector's growth would be retarded and therefore, it would not be able to bring about desired economic changes. For example, when the government opened up oil and gas exploration sector to the private companies, it actually did not have a mid-term or long-term plan for infrastructure development. As a result, when private oil companies struck and developed gas fields, the government did not have adequate pipelines to optimally carry gas from those gas fields for utilisation. Naturally, the oil companies are no longer enthusiastic about striking new gas fields.

The idea of 'greater benefit of the people' was actually never pursued. In fact, there is a debate going on among the parties involved in the energy sector whether the government should focus on investment and expansion of local gas market or simply earn foreign currency through export. However, the Prime Minister has recently announced that Bangladesh should have at least 50 years of gas reserve for its people before it decides to export gas. This policy statement may not be the result of any planning, but this is where we start.

For the sake of long-term economic gains, direct or indirect, it is imperative that the government should invest in the energy sector side by side with the private sector. It is important because government's prime motive is benefiting the public and taking energy facilities to the segment of population where the private sector would not initially find any interest.

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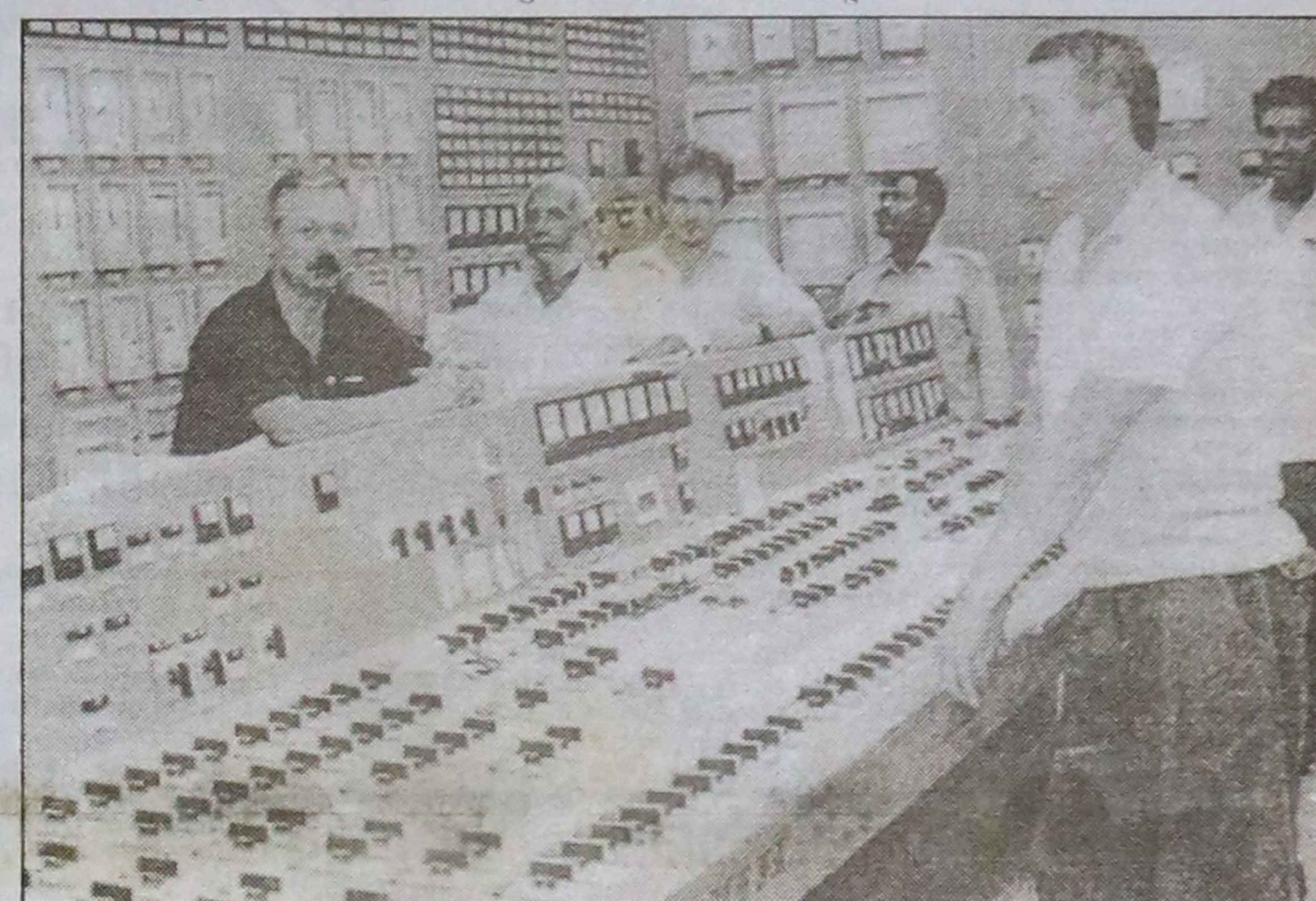
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Control room of the Ghorashal power plant.

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Taking education to the deprived

by Mustak Hossain

IN A BID to achieve the goal of providing education for its 136 million primary school-goers, the country has done a formidable development

in primary education through a collective effort of both the government and non-government organisations.

The rate of enrolment and

completion has risen from the 1990 level of 60 per cent and 43 per cent, to 95 per cent and 70 per cent respectively by the year 2000.

At present, net enrolment stands at 82 per cent although the gross enrolment rate is 95 per cent and completion rate stands at 60 per cent. The drop out rate decreased to 27 per cent in the just concluded year from 59.30 per cent in the year 1991.

The government has introduced food for education, as many guardians do not send their children to school due to poverty. At present, 2,280,467 students of 2,200,000 families at 17,203 schools in 1243 unions are being benefited. Under this programme one child from each eligible family is given 15 kg of wheat or 12 kg of rice every month. This programme is playing an important role in alleviating poverty, creating temporary jobs and improving children's nutrition. A maximum of 40 per cent of

students' families is benefited from this programme. A total of 3,138 primary literacy centres have been introduced by giving financial grant to the NGOs. The aim of the initiative is to bring out of school and school-dropout students back to the education system.

In twenty-nine years since independence, innumerable programmes have been launched in the country but only a few got momentum. BRAC's Non-Formal Primary Education (NFPE) is a rare example in this regard. Fifteen lakh 33 thousand and 388 students have so far completed primary education from BRAC, NFPE schools since its inception in 1985. It is a milestone in the country's primary education history.

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quiring higher level IT skills, must be given foremost importance to utilise the huge unemployed youth force of the country and to enhance the nation's potentiality for software export, the survey observed.

Private sector experts, however, observed that most of the IT professionals capable of producing software were being absorbed by foreign firms to meet