

The Energy Bomb Drops

South Asia is one of the regions of the world with a large rural population and low per capita electricity consumption. The economic growth and industrialisation in the region is leading to a rapid increase in demand for electricity. The planned capacity relies on a wide range of resources including oil, gas, coal and hydropower. Apart from the availability of hydrocarbons as an energy source, South Asia presides over enormous untapped hydropower resources, located mostly in Nepal, Bhutan, north-east India and Myanmar.

by Nuruddin Mahmud Kamal

INTERNATIONAL oil industry and those who had followed political and economic developments of the world oil situation in the 1970s knew that Middle East oil had reached a critical point by early 1973. Arab countries had more dollars than they knew what to do with and were also aware that they could meet the soaring demand of all the consuming countries. The Middle East and North Africa, who possessed three-fourths of the world's known oil reserves, were supplying 90 per cent of the international demand. Indeed the Arabs had been studying energy surveys and reports, particularly those of the United States and other Western countries. Their prime target was the US for its naked support to Israel.

The Arabs were also aware of the vulnerability of other consumer countries. For example, Japan's import accounted for 100 per cent of its oil needs. Western Europe's about 93 per cent and the United States' 37 per cent. However, only five per cent of American needs were met by Arab oil; therefore, they knew, an embargo could be damaging but could not wreck the US economy. But, by cutting down on oil supply, they hoped to force Western Europe and Japan into pressuring the United States to influence Israel to withdraw from occupied territories and agree upon a peace treaty.

In fact, since 1970, King Faisal of Saudi Arabia was under pressure from other Arab governments to use oil as a weapon. In April 1973, King Faisal sent Saudi Arabian Oil Minister Sheikh Ahmad Zaki al-Yamani and Deputy Oil Minister Prince Saud to Washington DC to talk to the United States into changing its Middle East policy. It was a bizarre episode in the history of American foreign policy. Seldom had been an impending international disaster so completely misjudged by the United States.

When Washington turned a deaf year, King Faisal told Standard Oil of California (SOCAL), Texaco, Exxon and Mobil — owner companies of the Arabian American Oil Company, known as ARAMCO, which used to produce almost all of Saudi Arabia's oil — that he expected them to help get his message across. Western Europe was becoming impatient and exceedingly nervous over America's failure to correlate between its Middle East policy and the world energy problem. However, it was not until August 1973 that King Faisal's message and the potential world energy crisis became front-page news. During summer that year, the US squeezed through a much-heralded gasoline shortage.

King Faisal became the "man of the hour" when President Anwar Sadat of Egypt secretly visited him. On September 2 Libya's radical leader Colonel Muammar Guaddafi nationalised 51 per cent of all foreign oil companies, the majority of which were American. On September 6, at a press conference, President Nixon for the first time linked American oil to its Middle East policy. "Oil without a market, as Dr Mossadegh of Iran learned many, many years ago, does not do a country much good. And I think that the responsible Arab leaders will see to it that if they continue to use the price, if they continue to expropriate, the inevitable result is that they will lose their markets and other sources will be developed," said President Nixon in a veiled threat.

Dr Mohammed Mossadegh, who became Prime Minister of Iran in 1951, nationalised in British-owned Anglo-Iranian Oil Company in 1953. The British and American governments mounted a secret operation to overthrow him. It was widely known that the CIA organised and directed the 1953 coup (*The Invisible Government*, David Wiser) that overthrew Mossadegh and brought back Mohammed Reza Shah Pahlavi, then in exile, to his throne. The International Oil Companies had also successfully boycotted sale of Iranian oil (as is being done to Iraq now).

Subsequently, the British lost their monopoly, and an international consortium of British, Dutch, French and American oil companies signed a 40-year pact with the Shah for Iran's oil. But, that was a story forgotten long back. Things had changed since then. In those days there was a surplus of world oil and buyers called the shots, but that was in the mid-1970s.

President Nixon was far behind the times. Since 1970 there has been shortage of world oil. In view of the known years of lead time necessary to develop additional American or any other international energy sources, the President's big talk about oil producing countries losing their markets had all the menace of a toothless lion's roar. As September ended, Kissinger, in a luncheon address to Arab foreign ministers at the opening fall session of the UN, said the US was ready to assist "to find ways" of creating a situation "with which you can live", but not to "expect the United States to bring forth miracles". Arab

leaders had their own ideas of how to get negotiations "off dead centre". Nevertheless, it was a gamble, but they felt that psychologically and economically conditions were favourable for the shock treatment of open warfare. The energy bomb was dropped.

On October 6, 1973 the Synagogues in Israel were filled with worshippers. Suddenly, the quiet that enveloped the country was shattered by wailing sirens, alerting a startled populace to the outbreak of the fourth Arab-Israeli war in 20 years. The area across Suez Canal and Golan Heights witnessed massive invasion of the airforce. Bloody fighting that ensued for three weeks before the United Nations arranged a cease-fire was not just another bitter chapter in the story of unresolved confrontation in the Middle East. It quickly became an international energy war when, within two weeks of the war, the Arabs unleashed their ultimate weapon — the power to manipulate world affairs through economic action. By cutting back almost a fourth of the production of the world's then greatest known oil reserves, and embargoing oil shipments to the United States and the Netherlands — and subsequently Portugal, South Africa — they dropped a political and economic bomb whose spectacular fallout spread rapidly around the world.

Even after the war had begun, King Faisal initially used his influence to prevent a drastic use of oil as a political weapon, hoping that the United States would not rush into supporting Israel, but would intervene diplomatically. At least Dr Kissinger gave such indications.

On October 17, Arab Oil Ministers met in Kuwait to make a formal decision on how to use the oil weapon. The Saudis succeeded in convincing others to take the relatively mild step of announcing a five per cent cut on oil exports every month until Israel evacuated the territories occupied in the 1967 war and restored the legal rights of the Palestinian people. The following day news exploded that President Nixon had asked the Congress for two billion

dollar in emergency military aid for Israel to maintain the military balance and achieve stability in the Middle East. The camel's back broke.

King Faisal announced 10 per cent slash in Saudi production and a total embargo on the United States, measures which were quickly adopted by other Arab countries. Within a few weeks Arab oil cutbacks reached 25 per cent.

Throughout the industrialised countries, the immediate chain reaction to the Arab manoeuvre was astonishing. Like Alice (in the Wonderland) they suddenly fell down the rabbit hole and went through the looking glass. Stock markets plunged to new lows as analysts and economists predicted a world recession, bringing massive unemployment and rampant inflation. Factories closed for lack of fuel. Workers were laid off by the thousands. There were growing shortages in food, clothing, housing and manufacturing materials — all stemming from oil shortages. Everywhere the price of everything went up. Europe and Japan blamed the United States for what was happening.

The Arabs had successfully splintered relations between consuming countries.

In the United States, there was bewilderment, confusion and disbelief. At the beginning, people adjusted well to the conservation measures the government urged. Gasoline-less Sundays, powered thermostats, reduced speed limits (in car), going back on daylight saving time and turning off lights were managed quietly. But when fuel oil and gasoline shortages became realities instead of predictions and prices rose astronomically, the national mood changed sharply in the United States and Europe. It became ugly. The public was bitter and accusing. In America highways were blocked by protesting truck drivers, people were killed in angry demonstrations.

The communication media covered "the energy war" with the zeal and dedication they had devoted to man's first landing on the moon. People suddenly heard more about energy

than they had ever wanted to know or thought it possible to ask. The Americans found themselves awash in a tidal wave of conflicting opinions. There were those who said the crisis was only temporary. Others claimed the crisis was not real but had been created by the oil companies to bring about higher prices. Some maintained it had been contrived by the US Government to divert attention from Watergate scandal of President Nixon. The situation was so confusing that nobody knew whom to believe. Credibility, in regard to the oil industry and government in the United States, was as short in supply as gasoline. The oil companies defended themselves in full-page newspaper ads. None of this was enough.

Nevertheless, it was an unbelievable situation in the United States in 1973. They were unable to realise that Saudi Arabia would find it difficult to raise oil production to meet the projected American needs. Only a few in the United States Government had taken King Faisal seriously since he became king in 1964. As the most conservative of Arab leaders he had never played international diplomatic poker and never stooped to a bluff. Most of the Arab leaders had made fifteen different threats during 1972 to use their oil politically against their enemies, of whom they considered the US Enemy Number One. The majority of the Americans, in government and out had pooh-poohed the Arab threats about energy crisis. They counted on the traditional lack of Arab unity. In the mid-1950s, the *Newsweek* had published an interesting article about the Middle East affairs. Although I have forgotten most of what was written, but I do remember the cartoon on the cover page which depicted a scene where one Arab country was chasing another with an open sword while Israel was standing at a corner and smiling.

It was one of the briefest periods in Pakistan of a civilian government headed by the illustrious Prime Minister Shaheed Suhrawardi. At a public meeting in Lahore (Pakistan), he remarked, "Zero plus zero is zero (about the Middle East)."

Much water has flowed through the Meghna and the Jamuna, and less through the Padma since then. The history of the last 40 years has witnessed many wars, geopolitical changes in the Middle East and elsewhere, but the scenario of Arab-Israel confrontation has not ended.

However, no one in the Western world could imagine that the oil crisis was impending. As the world's greatest oil producer America had grown fat and prosperous, feasting on an abundance of energy. They were consuming one-third of the world's energy although they accounted for only six per cent of the total population. Any thought that they might be forced to go on an energy diet was totally unthinkable. However, owing to their zoning consumption and underdevelopment of their own great oil, gas and coal resources, predictions were that they would be importing almost 55 per cent of their oil needs by 1985 unless their national policies were changed. The basic premise was that oil would come freely from the politically unstable Middle East and the Middle East should remain politically unstable. If the Middle East ever try to become politically stable, external pressures would be created once again to destabilise the situation. There are many such examples in Asia and Latin America where conspiracy and political disturbances were rampant. For instance, the case of Iran and nationalist Prime Minister Dr Mossadegh's fate in the mid-1950s. In retrospect, what we witnessed was that the United States used to import (and still do so) substantially large amount of oil from all over the world and electricity from Canada for their home consumption and conserve their own resources for future in the name of strategic reserve. Perhaps, today, some of our neighbours are also pursuing a similar policy and strategy. However, there is no harm in such a policy pursued by any government as long as it does not influence or interfere in the policy prescription of another sovereign government. I am an ardent supporter of regional co-operation and shar-

ing of resources for common benefit. For instance, it is known that South Asia is one of the regions of the world with a large rural population and low per capita electricity consumption. The economic growth and industrialisation in the region is leading to a rapid increase in demand for electricity. The planned capacity relies on a wide range of resources including oil, gas, coal and hydropower. Apart from the availability of hydrocarbons as an energy source, South Asia presides over enormous untapped hydropower resources, located mostly in Nepal, Bhutan, north-east India and Myanmar. Given the diversity of South Asia's energy resource base, sizeable economies are likely to accrue to all countries of the region from co-operation in the development of their energy resources and the networking of their power system. Such networking would increase reliability and security of the system, savings in fuel, reduces the reserve capacity need and above all diversify supply options whilst reducing emissions from power plants.

Although, by and large, it went unnoticed in the United States, 1970 was the year of the Arabs in the world oil. It marked the turning point for the course world events would take. For ten years, prior to the 1970s, Arab oil countries had been struggling to wrest control of their own oil resources from the international oil companies (IOCs) to which they had given development concessions, a practice that existed in this part of the world as well until 1974. In late-1974, the Petroleum Act was passed by the Parliament. Soon 'concessions' were terminated and was replaced by production sharing contract (PSC) for the first time in Bangladesh. In less than a year, negotiations were completed and six internationally known foreign companies were awarded six offshore oil contracts. Now it takes years to even open negotiation by Petrobangla and the government of Bangladesh, let alone awarding one on a fair basis.

In 1970 host governments in OPEC (Organisation of Petroleum Exporting Countries) succeeded in wresting the power from the multinational companies including the then known Seven Sisters. They began dizzily spiral of increasing their share of profits and also forcing up the price of international oil from less than two dollars in October 1973 to eight dollar per barrel overnight in late 1973. This tendency continued up to 1981, when the highest ever per barrel light Arabian crude oil price

went up to 34 dollars per barrel. In three years since 1973, Saudi Arabia was making more money than it could absorb.

So, came the bees from the west and picked up the honey! As the result of a vast expansion programme, it became the giant of the world oil exporters (popularly known as swing producer of OPEC), reaching a production of more than eight million barrels a day, almost equalling that of the United States, the world's largest producer. The country's (Saudi Arabia) projection of a daily production of 20 million barrels a day by 1982 was met by about 80 per cent in 1981. The government of Bangladesh faced crude oil import crisis against the budget allocation for the First Five Year Plan (FFYP) 1973-78. The impact of (November 1973) oil crisis was tremendous for the newly born country. In almost one year, allocation for import of oil would have exceeded the budget for five years. Thanks to the good gesture of Arab countries, who offered ninety to one hundred twenty days deferred payment for oil import, the country was relieved from a great financial setback. The government faced the second dilemma in the form of very high crude oil price vis-a-vis lower petroleum products price in 1981. The refined petroleum production in Singapore and Abu Dhabi was heavily tilted towards higher production of diesel and kerosene (the two most important petroleum product required for Bangladesh), thereby making these products comparatively cheaper than the cost of production at the Eastern Refinery (the only crude oil refinery in Bangladesh built in late-1960s). The dilemma was either to temporarily shut down the refinery and carry out maintenance and refurbishing or to continue processing crude oil. An exercise was carried out by the Natural Resources Sector Division of the planning commission to examine the comparative advantages and disadvantages of both the options (in 1981). The in-depth deskwork indicated that if the refinery was closed for about one year and much-needed (deferred) full-scale maintenance was carried out, allowing all its employees to draw salaries, even overtime and other benefits sitting at home, the refinery would be benefited by almost one hundred crore of taka in one year. But this was not to happen due to other vested interests in the country's oil sector. (To be continued.)

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Arctic Ozone may Not Recover as Early as Predicted

THE greenhouse effect, which warms the Earth near its surface, may be preventing the damaged ozone layer over the Arctic region from recovering as quickly as scientists previously thought. The fragile stratospheric ozone layer shields life on Earth from the harmful effects of ultraviolet radiation.

A NASA press release, reporting on a paper published in the May 26 issue of the journal *Science*, says more polar stratospheric clouds than anticipated are forming high above the North Pole, causing additional ozone loss in the sky over the Arctic. According to the article, ozone concentrations in some parts of the Arctic's upper atmosphere declined as much as 60 per cent from November 1999 through March 2000.

Following is the text of the press release: The ozone layer that protects life on Earth may not be recovering from the damage it has suffered over the Arctic region as quickly as scientists previously thought, according to a paper published in the May 26 issue of the journal *Science*.

More polar stratospheric clouds than anticipated are forming high above the North Pole, causing additional ozone loss in the sky over the Arctic, according to Dr Azadeh Tabazadeh, lead author of the

"Scientists used to believe that as chlorine levels decline in the upper atmosphere, the ozone layer should slowly start to recover.

However, greenhouse gas emissions, which provide warming at the Earth's surface, lead to cooling in the upper atmosphere, this cooling promotes formation of the kind of polar stratospheric clouds that contribute to ozone loss."

paper and a scientist at NASA's Ames Research Center in California's Silicon Valley. The stratosphere comprises Earth's atmosphere from about 9 to 25 miles (about 15 to 40 kilometers) altitude and includes the ozone layer.

"Polar stratospheric clouds provide a 'double-whammy' to stratospheric ozone. They provide the surfaces which convert benign forms of chlorine into reactive, ozone-destroying forms, and they remove nitrogen compounds that act to moderate the destructive impact of chlorine," said Dr Phil DeCola, Atmospheric Chemistry Program Manager at NASA Headquarters, Washington, DC.

"The Arctic has become colder and more humid, conditions that promote formation of more polar stratospheric clouds that take part in polar ozone destruction. The main conclusion of our study is that if this trend continues, Arctic clouds will remain longer in the stratosphere in the future,"

Tabazadeh said.

"An ozone hole forms every spring over the Antarctic in the Southern Hemisphere which is colder than the Arctic," said Tabazadeh. "The Arctic has been getting colder and is becoming more like the Antarctic; this could lead to more dramatic ozone loss in the future over the Northern Hemisphere, where many people live."

Researchers used data from NASA's Upper Atmosphere Research Satellite to analyze cloud data from both the north and south polar regions for the study. "What we found from the satellite was that polar stratospheric clouds currently last twice as long in the Arctic as compared to the Arctic," Tabazadeh said. "However, our calculations show that by 2010 the Arctic may become more 'Antarctic-like' if Arctic temperatures drop further by about 37 to 39 degrees Fahrenheit (about 3 to 4 degrees Celsius)," she said.

When Arctic polar stratospheric clouds last longer, they can precipitate, removing nitrogen from the upper atmosphere, which increases the opportunity for chlorine compounds to destroy ozone more efficiently. The polar stratospheric clouds involved in the reactions contain nitric acid and water, according to researchers who discovered these clouds in 1986.

"Data from the Microwave Limb Sounder on UARS have provided the first opportunity to observe nitric acid throughout the Arctic and the Antarctic over a period of many years," said Michelle Santee, a scientist at NASA's Jet Propulsion Laboratory, Pasadena, CA, who is a co-author of the Science paper. "The continued presence of nitric acid in the Arctic winter — which is not the case in the Antarctic — helps to moderate ozone loss by reducing the amount of reactive chlorine, but this could change in the future," she added.

More than a decade ago, scientists determined that human-made chlorine and bromine compounds cause most ozone depletion. Manufacturers made the chlorine compound, chlorofluorocarbons of "CFCs," for use as refrigerants, aerosol sprays, solvents and foam-blowing agents. Fire fighters used bromine-containing halogens to put out fires. Manufacture of CFCs ceased in 1996 in signatory countries under the terms of the Montreal Protocol and its amendments.

The Montreal Protocol bans CFC emissions. As a result, the chlorine concentration in the upper atmosphere is already starting to decline, according to Tabazadeh. "Scientists used to believe that as chlorine levels decline in the upper atmosphere, the ozone layer should slowly start to recover. However, greenhouse gas emissions, which provide warming at the Earth's surface, lead to cooling in the upper atmosphere, this cooling promotes formation of the kind of polar stratospheric clouds that contribute to ozone loss," she added. "Several recent studies, including this one, show that ozone recovery is more complex and will take longer than originally thought," she explained.

This research was founded by the Office of Earth Sciences, NASA Headquarters, Washington, DC.

Government service rules permit a lactating mother to take maximum of 3-month maternity leave. Doctors insist that this is not enough as a newborn infant must be breast-fed for at least six months to ensure healthy growth.

Canada and in African countries like offer six-month maternity leave to working women. It is four months in India, Europe and the U.S. In developed nations, employers provide daycare centres for working mothers with small kids. For lack of these facilities many Bangladesh women leave jobs to take care of their infants.



The Directorate of Women Affairs says, there are 20,228 women working as gazetted and non-gazetted officials at the 33 government ministries. Government has also about 30,000 lower-grade female employees. More women work in the private sector, although actual figures are unavailable. The condition of the private sector women is even worse.

Is any change coming? Maybe. State Minister for Women and Children Affairs, Prof Jinnatunnesa Talukder says a move is underway to raise maternity-leave to 4 months. The proposed provision will also be applied in the private sector. Paediatric Dr MQK Talukder, Advocate Salma Ali of Bangladesh Jatiya Mohila Ainjibi Samity and Barrister Sigma Huda of Bangladesh Manobadhikar Bastabaiyan Sangstha insist the maternity-leave be raised to six months.

The experts say factories and offices having at least 50 female workers must open daycare centres for the babies of working mothers.

TOM & JERRY By Hanna-Barbera



The Cycle of Disintegration

The political consciousnesses of the mute masses have risen exponentially since liberation; hence old drinks served in new bottles will not serve the purpose again and again.

by A Husnain

Some stable names will take up unstable stances, in the firm belief of being able to restore balance in the environment in which they prefer to work — for the people.

Two negative trends have vitiated the politics of the day. One negative trend is the penetration of black money into patriotic politics. Black money is competing (?) with empty wallets. There is a difference between a sailing ship and an old tree rooted at one spot (read uncontrolled missile on a voyage to unknown destination). The betting scandal in cricket is due to the investment of huge funds into the international games for quick investment return. Politics faces a similar situation; therefore the politicians have to play political cricket the right way.

The other culture is the political violence being practised today. When based in least-developed countries, these parasites are mighty difficult to neutralize, as the top ten per cent of the society control the rest 80 per cent, politically, socially, economically, and culturally. Where are the conservators against these culture-vultures? Therefore the nation will face changing tides; and several cycles will appear and fade out, as a cleansing process. Bangladesh is facing another backlash, and the outcome is unpredictable. The masses can contribute in quantity, but not in quality, as the latter has to come from the leaders at the top, with the right sense of direction and motivation; and who will not be influenced by

colourful bands of sycophants, opportunists, and trendy have-nots.

The political consciousnesses of the mute masses have risen exponentially since liberation; hence old drinks served in new bottles will not serve the purpose again and again. This millennium is an age of exposure (at the global level); locally, more and more high-power operators such as Ershad Sikdar and Shimul of Khulna may be caught and exposed, because Nature cannot sustain instabilities and social tumours for long, as per immutable cosmic laws.

Administrative systems in different countries (far and near from Bangladesh) are subject to unexpected changes, due to long static environmental conditions. Changes demand a lot of the society's energy for processing; watch for symptoms of fatigue or regeneration.

The newly placed ventilating systems will exact a heavy price for restoring stability. The leaders should be more vocal in identifying the coming changes, and how they plan to tackle the same (the patient is cured, but dead).