

Europe's Test in Bosnia

As horrifying stories of mass rape of Bosnian Muslim women pour out, the international community cannot but feel shocked and outraged. The horror committed by the Serbian forces has been the most bizarre and widespread since the Nazi atrocities in Europe and the Pakistani soldiers' violation of Bangalee women in 1971. If anything, mass rape in the case of Bosnia has been used as an effective way of ethnic cleansing. When the first reports of systematic sexual abuse of Muslim women in Bosnia-Herzegovina were leading out to foreign press, things were already bad enough for taking up the issue with all seriousness by the United Nations. The European Community experts who went to former Yugoslavia to investigate have estimated the rape victims at 20,000. The Serbian pogrom is simply brutal and systematically carried on.

It is exactly at this stage that the world falls far short of its duty. The fact that the US has threatened with a second Nuremberg for the perpetrators of ethnic cleansing in the most mind-boggling manner, has not been with much of an effect. The European nations have not been serious enough in supporting the US plan for a trial of the war criminals. But since 1907 when the Hague Convention prohibited attacks on undefended civilian targets, the laws are clear enough. The same basic principle was again elaborated in the Geneva Conventions of 1929 and 1949. A Genocide Convention adopted in 1951 also provides for the UN to take "appropriate" action to stop all acts of aggression "with intent to destroy, in whole or in part, a national, ethnical, racial or religious group". The act of ethnic cleansing in the worst possible manner gives the UN the mandate to interfere in the Bosnian affairs.

The argument over any military intervention in that war-torn country should now be considered futile. Evidently, the Bosnian situation has often been wrongly compared with that of Somalia. The reason for such an intervention has not been considered strong enough. But the hesitancy of the European countries is specially deplorable. The latest French position is however quite appreciable in that it has expressed its willingness to go alone if need be — with military action against the Serbs. In fact, the Serbs have been ignoring all UN sanctions to carry out their hideous plan of elimination of the Muslims in Bosnia-Herzegovina. It is indeed a shame that Europe has been an inactive witness to what is happening on Bosnian soil. Human civilisation in the 21st century has been laid low by this Serbian criminality. It is therefore Europe's duty to act together to cleanse at least some of its guilt it has become a party to by default.

France has made its mind. We hope others will not be reluctant — as they have often been — to follow suit. A UN-sponsored military intervention is the best option as yet. The US may, however, find this arrangement unacceptable — which it indicated in the past — because it will have to provide for the logistic and weaponry support in a large-scale war against the Serbian forces. The intriguing situation is that no country other than the US is capable of doing the job efficiently in such a crisis. UN muscle-flexing is a must but it has at its command forces ill-equipped to bring the Serbians to their knees. The UN and the US should agree to a formula similar to the one they evolved during the war campaign against Iraq. The Bosnian situation can no more be considered a case of civil war; rather it should be seen in line with Iraq's aggression on Kuwait. The Bosnian Muslims' human rights are as sacrosanct as any people's in the world. The violators of their rights must be dealt with according to international laws on such issues. Another Nuremberg trial is what ought to be well in order for the purpose.

Let their New Life be upto their Expectation

We share the joy of the stranded Pakistani brothers and sisters who were flown in the very first batch of repatriation. After 21 years of forced exile from the homeland of their choice they have at last been allowed to return. Indeed they would need all the luck we can wish them. For the two decades, we in Bangladesh have been their forced hosts as they our forced guests. On this occasion we would like to say that perhaps their stay in Bangladesh was not all that comfortable or easy. However, we underscore that we tried our best, and though Bangladesh was not their country of choice and that all the time these people lived in expectation of going back, we tried to smoothen their lives in transition so to speak.

There is no question the life of these Pakistani returnees will be far from easy. For a start, having lived in a foreign land for the last 21 years they have suffered from the usual lack of education and other facilities that they would have gotten if they were able to return earlier. For example, most of them may have only spoken knowledge of Urdu. The citizens of Pakistan will, we are certain, extend to them all the cooperation and especially understanding, that they will no doubt need. These people will naturally be quite new to the ways and customs of Pakistan. Many of the young men and women will, for the first time, be going to Pakistan. There will obviously be problem of adjusting to the new land, new climate and new food.

We would like to extend our heartiest felicitations and all the best wishes for the new life that is to begin soon. In this connection we would urge the Government of Pakistan to speed up the repatriation process for the rest. The obvious joy on the faces of those who finally left should leave, no doubt, in anybody's mind the impression as to how dearly those who are waiting would want to reach Pakistan. Now that the process has once started, we hope it will soon expand to include all. Let the fear that all this will end in a token exercise prove to be totally false.

THE word for salt in Latin is *sally* which is the root of the English word *sally*. At the end of each campaign Roman soldiers used to be paid their salaries in salt. On their return home they would exchange salt, the salary, for food and other necessities of life. It is in search of salt that the Romans set out along Asia Minor and occupied Dead Sea region of present day Israel in order to ensure security of the vital source of supply of salt which became the life blood of the Roman Empire.

If the price of salt and sugar are the same then the kingdom is in trouble — poetess Khonna said this, several centuries before, but it is true even today. Such weird pricing at the screwed-up markets of our country sometimes become an agonizing reality which add salt to the continuing national injury of shortages of all kinds. And, like many other problems, we continue to live with it.

Governments in the past collapsed due to salt crisis since it is a food item without any substitute whatsoever. It is indispensable. Not only that, salt for human consumption is required in exactly the same quantity each day — neither more nor less. In our tropical climate, 5 kg of salt per capita is the absolute requirement every year. In 1992, the direct human consumption of salt by 112 million people will amount to 560,000 tons. After allowing for wastage and transport/storage losses, a minimum supply of 600,000 tons must be ensured if the crisis ought to be avoided.

But salt is also essential for cattle. Same is the case with the growing poultry industry. If we intend to plan for the growth of livestock sector which we must, poultry in particular, then a million tons of poultry or cattle feed pro-

We cannot afford to degrade our coastal land which are otherwise excellent for paddy cultivation by growing more and more salt... We must think in terms of mechanised salt production in factories where salt water is drawn in at one end, converted into brine and eventually salt is made from it at the other end of the process.

duced would require around 35,000 tons of salt. Among other important uses, leather tanning requires a great deal of salt. Mixed with ice, salt preserves fish during transportation to markets. An important ingredient for making dry fish is salt. Pickles cannot be made without it and preserved vegetable pickles can be an important export item. Canned fish in brine is a multi-billion dollar business worldwide and it can be promoted in our country as well provided good quality salt in abundance is available.

Given the potential for rapid expansion of leather, fishery and poultry industries, demand for salt is bound to increase by leaps and bounds; or lack of it might constrain future development of these sectors of the economy. In fact the lack of surplus in indigenous production capacities might already be a constraint in the development of a salt based chemical industry in Bangladesh. Sodium and chloride, the two non-metallic chemicals available in salt could be easily converted into caustic soda and hydrogen chloride, two very important base materials for manufacturing detergents. Over Taka 200 millions worth of these chemicals were imported during 1988-89.

The demand for caustic soda can expand with increasing availability within the country. Some of it could be exported as well. Even salt itself can be exported to the north-eastern states of India where it is transported all the way from Calcutta. Nepal can be a market too. Clean, good quality iodised salt must have a ready-made demand in the neighbouring parts of

Bangladesh amounting to 200,000 tons per annum. If all the sources of demand for salt is taken into account, then the 1992 demand could easily be around one million tons. This is big business with a turnover exceeding Taka one billion per annum. By the year 2000, the demand for direct human consumption alone should be 800,000 tons. The leather processing industry is also bound to expand. Same is the case with poultry. The salt-based chemical industry should also be a realisable target. Lastly, we should also try to secure an export outlet to

double cropping of salt and shrimp along the coast has considerably increased profitability of saline coastal lands. It is an excellent business and there is much more money from shrimp culture where salt becomes the subsidiary crop. As a result, attention to traditional salt cultivation is lacking and the annual average output is showing a rapid downward trend. If no alternative is found, import of salt by the turn of the century should amount to near around 800,000 tons per annum. If there is a choice between shrimp and salt, obviously the

these factors, salt production is not only declining, its variability in terms of output further add to our problems. Another significant drawback of our traditional salt agriculture is that its further expansion is not environmentally sustainable. No crop, aman paddy in particular can be grown in salt beds. Like brick fields, salt destroys the land for a long time. On the other hand, shrimp cultivation although it requires saline water, does not degrade land to any great extent. In fact, shrimp followed by aman paddy is a sort of lucrative double cropping practised in the Khulna region. There are ways to undertake such shrimp and paddy double cropping which would not only sustain the yields of both but the practices are also environmentally sound.

The most important cause of our poverty is extreme scarcity of land. We cannot afford to degrade our coastal land which are otherwise excellent for paddy cultivation by growing more and more salt. At the same time, demand for salt is increasing which we are meeting through imports. What should therefore be done? We must think in terms of mechanised salt production in factories where salt water is drawn in at one end, converted into brine and eventually salt is made from it at the other end of the process. It is not a difficult technology but the problem is the cost of energy, heat or electricity, required for the purpose. It would be too expensive compared to the traditionally manufactured salt utilising solar energy abundant during dry months from November to middle of April.

Energy costs could perhaps be reduced by resorting to the use of solar photo voltaic cells. During the same dry months when sunshine is abundant, it is possible to trap large amounts of solar heat for evaporation of sea water and obtain the residual salt. The critical element would be cost of solar cells which used to be expensive but the price is declining and it may be feasible to use them round the year during day time when it is cloudless. Alternative energy source might be the surplus heat generated by power stations, steel plants, fertilizer factories and in particular, petro-chemical complex which produce enormous quantities of heat during the production process. If we decide to go ahead in developing the gas based petro-chemical industry, then associated units to utilize the surplus heat generated and produce both electricity and salt seem to be an attractive proposition.

Once large-scale salt production units prove successful, traditional salt cultivation is bound to be eliminated altogether. But no harm will be done to the salt growers since shrimp harvest twice a year or shrimp paddy double cropping is a very profitable substitute and such substitution will be from the environmental point of view, very sound and sustainable. Above all, the non-traditional view of the future of salt industry would induce rapid economic growth. The coastal shrimp farms might very soon develop into a multi-billion dollar export industry. The salt factories as envisaged would constitute the beginning of a new chemical industry; while its linkage to petrochemical plants could be decisive to set up such plants in Bangladesh. We have been talking about it, like many other subjects for quite a while now.



north-east India and Nepal. The projected demand for salt would therefore be around one million tons. It is not only big business; it can grow much bigger within the next few years. The increase in demand is also evident from the fact that during the last few years, average annual import of salt was around 400,000 tons against variable domestic production of less than half a million tons per annum (based on a five year average). This is the demand side of the business. The problem however belongs to the supply side and the non-traditional view on the salt industry is concerned with augmenting salt production in Bangladesh.

Our sea salt as opposed to rock salt is produced following the traditional practices as a cottage industry. It is a crop like agriculture and recently, choice is in favour of the former and with intensification of shrimp farming, salt production is bound to decline rapidly. This is because two harvests of shrimp are possible in a year if salt cultivation is avoided. It is a serious problem and we hope government is aware of it. Production variability is another significant feature of our salt agriculture. When calamities strike the coast, as happened last year, the salt and shrimp are all lost in the high tides. We can survive without shrimp for a year or a season only but not without salt; and all the more because our climate is hot and humid so that we need more salt than usual. In addition, it is not only tidal disasters, an untimely rain in April, although good for the sowing of the Aus crop will ruin the thickening brine in the salt beds. As a result of all

The Threat of Plutonium Proliferation Japanese Import Raises Concern

by RS McCoy

The protest by many countries around the world against the passage of the Japanese ship Akatsuki Maru carrying plutonium from France to Japan underlined the dangers and toxicity of plutonium.

THERE had been a grave concern about the potential for serious environmental contamination should there occur a naval accident or an attack by pirates or terrorists on the Japanese ship, Akatsuki Maru, carrying plutonium from France to Japan.

Now that the ship has reached Japan, has the degree of concern, subsided? A few micrograms of plutonium can cause lung cancer if inhaled. Less than 10 kilograms of plutonium is enough to make a nuclear weapon, raising the prospect of nuclear terrorism and nuclear weapons proliferation.

It is thus well to study the wider implications of plutonium proliferation, such as nuclear weapons proliferation and global environmental contamination.

Surfeit of Plutonium

Today the world has a surfeit of plutonium — a total inventory of 100 tonnes of plutonium, obtained by reprocessing spent nuclear fuel and separating plutonium for commercial purposes. Now that plutonium is also being recovered from the ongoing dismantling of American and Russian nuclear warheads, it is estimated that by the year 2000 there will be as much as 300 tonnes of plutonium, which will pose extremely dangerous storage problems.

Plutonium is a highly toxic, radioactive, man-made material with a half-life of 24,400 years. It has only three uses — as the fissile material of choice for the production of nuclear weapons; as mixed-oxide fuel (MOX) in conventional nuclear reactors; and as fuel in fast breeder nuclear reactors. Preventing the spread of nuclear weapons by halting the production of the essential raw materials, such as plutonium, highly enriched uranium and tritium, is an old idea. It was

an important part of the Baruch Plan, presented to the United Nations by the United States 10 months after Hiroshima and Nagasaki, which called for 'complete managerial control of the production of fissionable materials'.

From 1956 to 1969, the US continued to promote the plan as a separate arms control initiative, offering to transfer fissionable materials from the US stockpile to an international atomic agency, but the disparate US nuclear warhead stockpile caused the former Soviet Union to reject the plan and continue with its nuclear weapons programme.

Although recent nuclear disarmament initiatives and environmental concerns have resulted in the closing down of facilities for the production of plutonium for nuclear weapons, the production of plutonium for civilian purposes has continued. The danger is that there is no guarantee that in the future the plutonium will not be used to make nuclear weapons, either by those governments currently avowing civilian use or by other nations or groups (particularly terrorist organisations) that may acquire it.

In addition, there are also serious environmental risks from the accumulation of radioactive wastes generated by reprocessing. These highly radioactive wastes have been discharged directly into the environment in the past but are now generally stored in massive tanks in about a dozen countries around the world to await further reprocessing and disposal. Many of these tanks are

known to be leaking and can give rise to fires and explosions that could contaminate large areas. Such an explosion occurred at the Soviet nuclear weapons complex in Chelyabinsk in 1957, releasing 20 million curies of radioactivity into the environment. Storage tank explosions have now become the foremost concern of the US Department of Energy.

Halting the production of plutonium is therefore an environmental issue as much as an arms control issue. When President Bush announced in July this year that the US halt in the production of enriched uranium (in 1964) and plutonium (in 1987) was a major non-proliferation initiative, he acknowledged that plutonium is an international problem and even identified 'South Asia and the Korean peninsula' as proliferation-risk regions. But he failed to emphasise the civil-military nuclear connection and refused to interfere with Britain's and France's increasing commercial reprocessing and plutonium trade, carried out under the guise of peaceful, civilian nuclear activities.

By 1993, British Nuclear Fuels (BNFL) will have commissioned its new Thermal Oxide Reprocessing Plant (THORP) at Sellafield, while France will have added two

new plants to its reprocessing facility at La Hague. It is estimated that by the year 2000, there could be 200 tonnes of commercial plutonium in the world.

So while President Bush warns us about the dangers of plutonium proliferation, Britain, France and Japan are heralding in a new nuclear era of plutonium trade and transportation on the high seas, in the name of commercial free enterprise.

Plutonium Storage

Today scientists are still struggling with the technological problems of dealing with nuclear warhead plutonium and of maintaining the highest standards of safety and security for the next quarter of a million years, since plutonium has a half-life of 24,400 years. These problems with warhead plutonium expose and underline the contradictions and irrational thinking on the continuing commercial production of plutonium.

Commercial Reprocessing

Reprocessing spent nuclear fuel first began when nuclear weapons states needed a supply of plutonium for their nuclear weapons programmes. Subsequently reprocessing was marketed for nuclear waste management, although in fact it produces 160 times more

nuclear waste by volume than the spent fuel with which it starts.

Much of this waste is discharged into the environment as liquid and gaseous pollutants. As a result, the Irish Sea and the beaches of Ireland, Scotland, Denmark and North Germany are contaminated by plutonium. There has also been documented evidence of an abnormally high incidence of leukemia among children living near Sellafield.

In the early 1970s, plutonium was expected gradually to replace enriched uranium as the primary nuclear fuel, as the demand for electricity was expected to grow dramatically. However, since the increase in oil prices in the 1970s resulted in drastic reductions in electricity demand and a cancellation of orders for nuclear reactors in Europe and the US, uranium prices have dropped considerably and have remained low. Plutonium is now 13 times more expensive than uranium.

It is therefore clear that today reprocessing spent nuclear fuel and separating plutonium can no longer be justified as it is environmentally hazardous, uneconomic, and it will facilitate nuclear weapons proliferation.

Japan's Plutonium Economy

Japan's aim is to achieve energy self-sufficiency in the 21st century by accumulating 90 tonnes of plutonium by the year 2010. Burning plutonium to generate energy and at the same time breeding more plutonium from spent fuel have long been the unrealised dream of the

nuclear industry. The idea is to 'close the nuclear fuel cycle', that is, recycling the first uranium fuel to achieve an unlimited nuclear energy resource. But more than 40 years of research, costing more than US\$62 billion, have failed to make fast breeder nuclear technology commercially viable.

France's only fast breeder reactor, 'Superphoenix', has been closed down since 1990, leaving Japan as the pace-setter with its prototype fast breeder reactor at Monju, which may take another 30 years to become commercially viable.

When the Japan Atomic Energy Commission decided in December 1989 to use ships to transport plutonium for France and Britain, the decision marked the end of debate in the Japanese Diet on the subject — a debate almost exclusively limited to the choice of transport modes and not on the need for plutonium. Claims that research and development programmes would run out of plutonium in a few years were accepted without proper discussion.

In a document, 'Nuclear Fuel Recycling in Japan', the Japan Advisory Committee on Nuclear Fuel Recycling has stated that 'it is a national principle that Japan will not possess plutonium beyond the amount required to implement nuclear fuel recycling programmes'. This statement is consistent with the International Atomic Energy Agency (IAEA)'s statutory position on the avoidance of excess fissile material, but experience has shown that the monitoring mechanisms of the IAEA are not always fool-proof. Critics say that Japan is setting in motion the machinery to accumulate plutonium much faster than it can be used up as nuclear reactor fuel. (To be concluded tomorrow)

To the Editor...

Letters for publication in these columns should be addressed to the Editor and legibly written or typed with double space. For reasons of space, short letters are preferred, and all are subject to editing and cuts. Pseudonyms are accepted. However, all communications must bear the writer's real name, signature and address.

Stop this de-learning process

Sir, during all these 22 years of our independence, our political leaders (are they really our reflection?) could not do anything worthwhile to emancipate the people from the clutches of poverty and deprivation. Instead, all they did through their bickerings and goebelism is to un-hero some of the nation's heroes. If this heinous process is allowed to continue, a time may soon come when we will have none to take pride in.

Examples are many, but I will just cite only two cases of such obnoxious character assassination. The leader of a big political party has repeatedly accused the two Sector Commanders of our War of Liberation to be 'agents of Pakistan'. Behold, my God! If our war heroes — one of them

had the privilege of proclaiming the independence of the country! — were acting as the agents of the enemy, then where were we stand? Can't these 'blind' politicians understand that such irresponsible utterances negate the very genesis of Bangladesh?

On the other side of the fence, there are some people who are reluctant to recognize the contribution of Sk Mujibur Rahman towards our country's independence. How could they be so blind to history? No doubt, in accordance with the Sher-e-Bangla's 1940 Lahore Resolution, emergence of something-like-Bangladesh was inevitable, but it was mainly for the Sheikh that Bangladesh achieved its independence in 1971. The 'Sheikh of 1971' is not erasable from the pages of history, notwithstanding what he did in the post-1971 pe-

riod. The problem with these politicians is that they do not have the capability to understand that history is a summation of countless still-photos which cannot be altered or twisted as per their sweet will. But my question is: Is there none in Bangladesh who could stand up and say in chronological order: 'It was the Sheikh who dreamt and prepared the ground for an independent Bangladesh, it was 'that Major Zia' who declared the War of Independence and it was General Osmany who led the war to logical end.'?

'Vox Bangladesh' Dharmond, Dhaka

Voluntary retirement of Railway workers

Sir, Our Railway sector comprising east and west zones has been 'a white elephant', apparently for its excessive number of workers. Recently, the Railway authorities have taken some effective initiatives to reduce its loss with the recommendation of World Bank, including reduction of work force from fifty-six thousand to forty thousand.

In this regard, they have aired a circular offering 'voluntary retirement' to them who desire to do so. And a pleasing response has come: About 6161 workers have applied for voluntary retirement so far. If the authorities can succeed in this praiseworthy effort, our Railway sector will see the face of profit which is strongly required for our fragile economy.

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Appreciation

Sir, I feel indebted to having the opportunities to read two political commentaries on the Leader of the Opposition by the editor and the evaluation of 1992 Bangladesh scenario by the executive editor of The Daily Star. The exhortations made in the commentaries produced the results they were intended for. In this context will it be too much to say that the editor has become the real socio-political egg-head of the country? Could we then exhort him to use his pen more often to keep us on the rail and help us achieve national destinations? More so, by way of continuing his

'interviews' in a sort of 'Round Table' of experts of all disciplines?

The deep and dispassionate insight with which the executive editor dissected the politico-socio-economic scenario of Bangladesh should carry a light to the people at the centre stage in national affairs. The patriotic fervour he is fired with and the lucid style he is blessed with in his analysis of national affairs hold hope for us as a nation. We want many more such brilliant brain-storming bombardment from his facile pen.

Abul Quasem Dhaka

Hasina is right

Sir, I was surprised by reading the 'Commentary' by S M Ali published in your 20th December issue. In that, the learned writer blamed Sheikh Hasina for her speech in a public meeting and termed her as a controversial speaker. Mr S M Ali might remember the speeches of the Prime Minister and her Ministers who always sense conspiracy in opposition's activities. But what is the conspiracy they do

not or cannot mention.

In every meeting the Prime Minister says that a political party is trying to foil the hard-earned democracy and making conspiracy against the nation, but she never explains anything about the 'conspiracy'.

Are not these statements controversial? Information Minister Nazmul Huda, rather intentionally, makes baseless stories about our liberation-war. Barrister Salam Talukder made Khaled Mosharrar an Indian agent. Did he get any proof in favour of his statement?

BNP apparently backs Jamaat and other anti-liberation forces against the pro-liberation forces. Anybody can realise that the motives of BJP and Jamaat are similar or same, only in different perspectives. So the statement given by Sheikh Hasina during recent days was right and timely. Mr S M Ali must know the proverb, 'set a thief to catch a thief'. We do not expect such one-sided comment from a journalist nationally and internationally renowned like him. Ablik Azimpur, Dhaka