

Feature

Environment

ECOLOGICAL DAMAGE FROM THE GULF WAR

by A. S. M. Nurunnabi

The Gulf war has posed an environmental catastrophe on a scale never known before. The damage to the ecological system of the region might be so extensive that the effects of the war would remain with us long after the last missile has flown and the last shot has been fired.

The Gulf war caused ecological damage in the Gulf region on a scale never known in history. The damage had been the direct result of oil spills in the Persian Gulf and the burning of oil fields and refineries in Kuwait. In the opinion of the USA which led the multinational alliance against Iraq, the causative factors for the damage were used by Iraq as weapons of war.

Giving a horrific new meaning to the term "oil war", it seemed that Iraq mounted a massive attack against the Persian Gulf itself. The Iraqis opened the oil pumps at Sea Island Terminal, a super tanker loading dock about 10 miles off the Kuwaiti coast. They also pulled the plugs on five Kuwaiti tankers, loaded with 3 million gallons of petroleum, berthed at al-Ahmedi. Iraq next reportedly unhooked another spill, opening the pipes at Mina-al-Bakr depot in southern Iraq. Thousands more barrels of crude gushed into the Gulf, joining the spill loosed before from the Sea Island Terminal, and from tankers berthed nearby. According to an estimate, the slick totalled roughly 12 million barrels.

A few days after Iraq opened the taps, the slick burst into something even more hellish. Billows of black smoke streamed up from flames around the tanker terminal, hovered above the Gulf and swept over Iran.

Iraq had probably unleashed the oil with military purposes in mind. Tar balls could tar up the desalination plants along the Saudi coast that provide most of the fresh water to the Gulf countries as well as to allied troops. Iraq might also have in mind that setting the oil ablaze might thwart an amphibious marine landing on the Kuwaiti coast.

According to experts, the oil spill has delivered a devastating blow to the ecology of the Persian Gulf. It was feared that "massive oil spills could turn this body of water (Gulf) into a virtual dead sea". The spills mingled and split into ribbons, each slithering towards a different beach or island, desalination or industrial plant and even out to the Gulf of Oman and beyond. Wind and waves whipped the Kuwaiti crude into a goopy mousse. Within a week the slick covered more than 250 sq. miles. Clouds of dense smoke rising from the oil fields in Kuwait and producing huge quantities of sulfur dioxide and particulates posed a health danger

that could match the world's gravest air pollution disasters, according to US experts.

Because it is virtually an enclosed basin, with an outlet to the sea only 55 K.M. wide at the Strait of Hormuz, the Gulf is especially vulnerable to oil spills. In a body of water, badly contaminated by tankers, garbage and sewage, a disastrous spill of the kind that Iraq caused seriously endangered the fragile environment of the Gulf region.

Of immediate concern was the damage the spills could cause to the Saudi economy. The gushing crude threatened to clog the intake valves of power plants, which use Gulf water for cooling. Because petrochemical and other industrial plants also cool their machinery with water, the spill might create havoc with the Gulf's economic life, bringing to a halt normal economic activity. The spill could affect desalination units on which many Gulf nations — and troops of the US-led alliance — depended for drinking water.

For many environmentalists, the disaster was the realisation of their worst fears. It is not yet possible to assess what the total effect of the spill would be on the environment. Effects on the marine environment were of immediate concern. As a naturally occurring hydrocarbon, the oil will be degraded in the marine environment. The lighter fractions in the oil will volatilise relatively quickly, incidentally contributing "greenhouse gas" concentrations in the air. The fate of the remainder would depend upon current and weather conditions.

The anti-clockwise surface current in the Gulf carries the oil slick down the coast of the Arabian Peninsula. The coasts most at risk from pollution by the oil are the southern Gulf Coast of Saudi Arabia, the island of Bahrain and western Qatar. The amount of oil coming ashore would depend upon weather conditions.

The fishing industry is also likely to be harmed by the oil spill. Severe short-term losses in fishing would result from the direct fouling of fishing nets and fixed fishing devices located in shallow waters. Fishermen would be obliged to stop fishing until the slick had

passed by or beached itself. Even longer term effects would result from impacts on the marine habitats upon which commercial fish species depend. Many fish of commercial importance breed in shallow inshore waters which are particularly vulnerable to oil pollution.

The Gulf has a number of highly productive habitat types which might be affected by the oil. The extensive mud flats along the coast are coated with blue-green algae which provide the basic input for the food chains of many fish and crustaceans. The beaching of oil on seed mud flats would not only smother the surface algae, but would also kill the fauna of worms and crustaceans upon which both fish and birds feed.

In somewhat deeper water, there are sea-grass beds which provide the nursery grounds for commercially important

shrimps. Because of their depth, sea-grass beds are not subject to direct oil pollution, but the young shrimps may be affected by the toxic residues of partially degraded oil.

Mangroves, which are important because of their contribution to the ecosystem, are easily susceptible to pollution damage. Being intertidal, mangroves can easily be oiled. The smothering effect of oil on young mangroves and on the aerial roots of large trees, which control their salt and oxygen balance, could be fatal.

Birds are highly susceptible to oil pollution. Cormorants and other diving birds were already killed in large numbers in the Gulf and many more contaminated birds would also die. Turtles would be coming ashore to lay eggs on sandy beaches and thus could be affected physically and chemically by beached oil. Dolphins

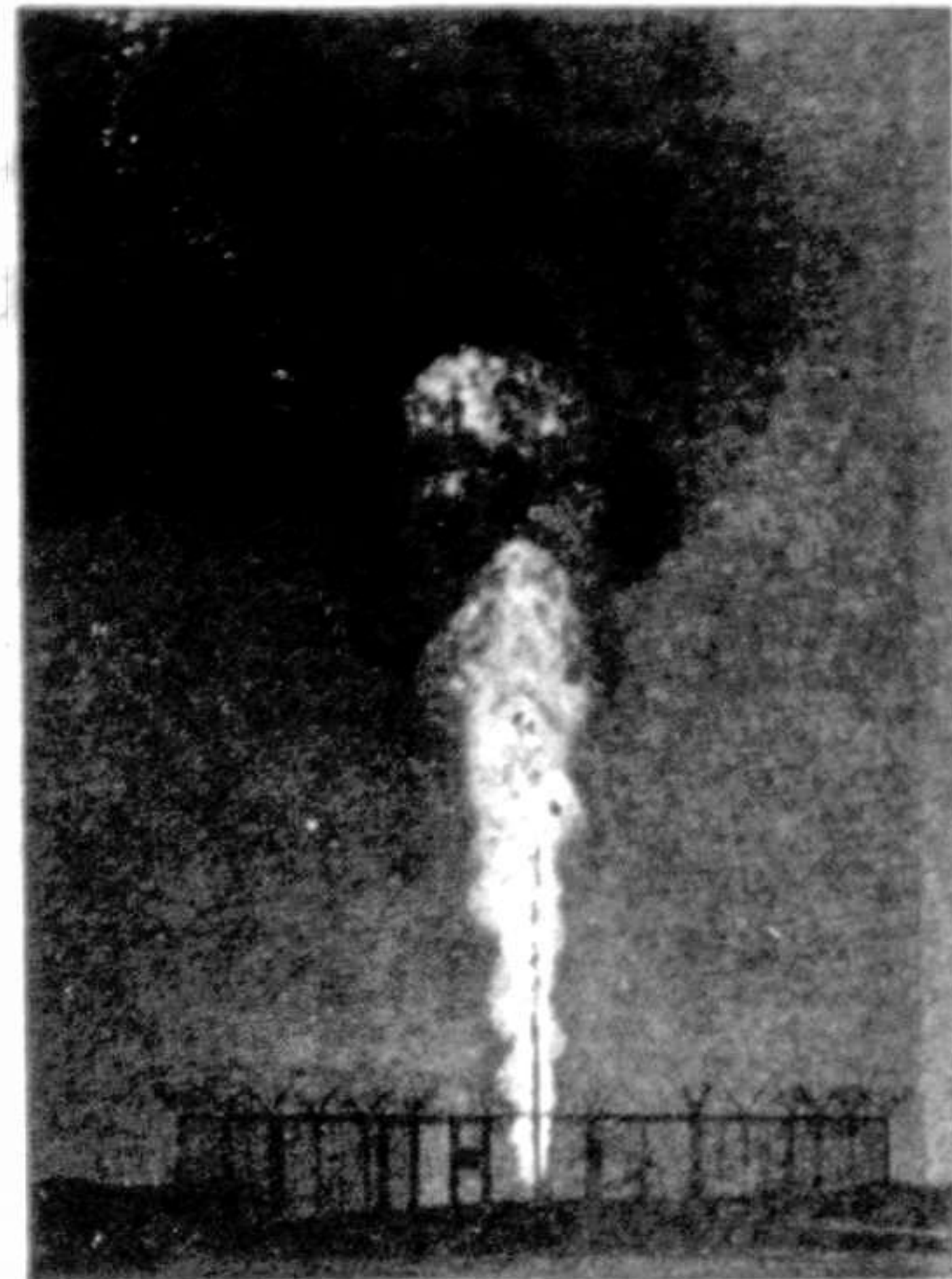
and dugongs might also be affected by the oil spill.

The effect of the burning of oil in wells, tankers and storage facilities on the ecosystem would also be very severe. The burning could produce heavy amounts of sulfuric and nitric acids. The greatest threat was that air borne soot from petroblazes might cancel spring time in the Northern Hemisphere and stifle the Asian monsoons on which millions of people depend for their very lives. This would happen if the soot rise high enough to alter the way the sun's energy is absorbed. Scientists can't predict with certainty what will happen, but in the worst case a huge conflagration that shoots soot three to five miles up would cause solar heat to be absorbed high above the ground. That would dampen atmospheric circulation — a vast potential for cli-

mate changes over six to twelve months. If oil fires burn for three to six months, form extensive soot clouds would form decreasing solar energy by 20 per cent and lowering average temperatures 4 degrees Fahrenheit. That could bring frosts in spring and freeze crops. Besides, unknown amounts of poisonous chemicals from bombed Iraqi factories and weapons stockpiles and of carcinogenic uranium slivers from armour-piercing allied shells, might have been released into the atmosphere.

Thus, according to environmental scientists, the Gulf war has posed an environmental catastrophe that could poison the air, land and sea and threaten the health of millions of people. In fact, the damage to the ecological system of the region might be so extensive that long after the last missile has flown and the last shot has been fired, the effects of the war would remain with us. In fact, it might turn a war between nations into one against the planet itself.

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Kuwaiti oil well set ablaze by retreating Iraqi troops

their survival, will be severely affected. The demands on conservationists have thus increased in direct proportion to the urgency for rapid assessment and damage limitation. The WWF/IUCN Task Force is developing a number of measures to address the problems related to pollution in the Gulf.

On March 15, the WWF/IUCN task force joined UNEP at a United Nations interagency meeting in Geneva, where a plan of action for the coming months was presented. Ms Nicole King-Voley, WWF Water Pollution Officer and member of the WWF/IUCN Task force, reported that the meeting had led to considerable progress towards establishing closer collaboration of efforts in the area.

According to Ms King-Voley, their main input from IUCN and WWF will be in the coastal and marine environment chapter where we have proposed to help assess the impact and suggest remediation and protection measures for coastal and marine ecosystems and wildlife. Ms King-Voley also pointed out the need to focus on fisheries, nursing grounds for shrimps and fin fish. A UN interagency proposal, put forward at the meeting, recommends that approximately 90 person-months of expertise be spent in the region; around six

months have been allocated to WWF/IUCN. The overall coordination of this work is to be vested in a core group, comprised of 11 separate task forces including the WWF and IUCN team. This special group is expected to be in Kuwait by April 15. The initial survey and assessment phase, including a detailed plan of action in priority areas, should be drawn up by July 15.

The WWF/IUCN Task Force has also responded to a request from the EEC (which has also set up its own task force for the Gulf for cooperation in sharing of know-how and findings. The WWF/IUCN Task Force is also liaising closely with other institutions including the Marine Emergencies Mutual Aids Centre (MEMAC) in Bahrain, the NCWC, Saudi Arabia, the Aramco oil company and the International Maritime Organization (IMO) in London. With the latter for example, it is working closely to study and advise them on the ecological effects and availability of bio-remediation agents.

A Gulf Emergency Trust Fund has been set up by the WWF/IUCN Task Force to finance both the assessment missions and studies, and the implementation of follow-up measures involving coordination and technical input.

—WWF Features.

Joint Task Force Springs into Action for Gulf

by Praveen Bhalla

ALARM signals sounded all over the world following waning environmental damage caused by the deliberate spillage of millions of gallons of crude oil into the Gulf soon after war broke in the region in January.

As numerous conservation and environmental groups and national governments came forward with offers of funds and assistance for eventual assessment and clean-up operations once the war was over, it became evident that it would be necessary to coordinate action plans and channel funds efficiently.

In response to this need for coordinated action, WWF and IUCN-The World Conservation Union announced the setting up of a Task Force in mid-February to work in close cooperation with the Saudi Arabian Government through its Meteorological and

Environmental Protection Agency (MEPA).

Immediately following the cessation of hostilities in the region, and once safety was assured, the Task Force sent its consultant, Dr Andrew Price, to the Gulf on March 2 on a two-week mission to conduct a rapid assessment of the environmental damage to coastal and offshore sites and report his findings. Dr Price has 16 years of extensive experience in research and environmental projects in the region. These include environmental baseline surveys with Aramco, critical marine habitat surveys for ROPME and an evaluation of the 1983 Nowruz oil spill for MEPA. The most important sites identified during his recent mission were based on the baseline surveys at 53 sites carried out by the MEPA/IUCN field team in 1986. Besides the sites of the key desalination

plants, emphasis was placed on major fishery/nursery areas and other areas of known ecological importance such as breeding grounds and critical habitats.

During his recent mission, Dr Price acted as technical adviser to MEPA and other national and regional organizations (eg. the National Commission for Wildlife Conservation and Development, Saudi Arabia or NCWCD). He presented MEPA with a report on the key threatened areas requiring priority action for clean-up. In addition, he liaised with UN agencies, government and other organizations working or represented in the region. Dr Price has submitted a complete report of his mission to the WWF/IUCN Task Force and is now preparing project proposals for the United Nations Environment Programme

(UNEP), the REC and the NCWCD dealing with marine and terrestrial habitats.

Fighting the oil fires
The environmental situation in the Gulf was considerably exacerbated by some 650 burning oil wells which were deliberately set ablaze by the retreating Iraqi army in Kuwait. Now, over 1,000 wells are aflame. The smoke from these is causing severe atmospheric haze and smog, leading to a noticeable decline in temperatures and drastic reduction of sunlight, said Dr Price upon his return.

The population, especially the most vulnerable groups such as babies and the aged, are likely to suffer respiratory problems and other related ailments. Terrestrial vegetation, coral reefs and other marine habitats, which depend on sunlight and warmth for

Parliament

Following is the remaining part of the Parliament proceedings on Saturday:

Shahjahan Siraj

Shahjahan Siraj (JSD-S-Tangail) said that the bill was brought to the House for furnishing the image of a newly-elected democratic government. By enacting the bill, the government would harass its opponents, he apprehended.

Suranjit Sengupta (Gonatantri Party-Sunamganj) supported the provision regarding penalty for negligent conduct of bank officers and employees. But he demanded delectation of a Section 505 A which prescribes imprisonment for a term of 7 year or for more or for both.

Sengupta said if the bill was passed along with Section 505 A it would be a black law. "We would not be a party to passing the bill and as such we shall stage a walk out", he said.

Zobed Ali

Zobed Ali (AL-Netrakona) criticised the bill saying that the provision of Security Act of the Pakistani days had been incorporated in this bill.

Passing of the bill would invite disaster for the nation, he said.

Ali demanded the withdrawal of upazila courts for improving the quality of the judges and protecting the independence of judiciary.

Rashed Mosharraf

Rashed Mosharraf (AL-Jamalpur) described the bill as repressive and said by bringing the bill, the government wanted to impose undue burden on the people.

Criticising the provisions against collection of subscription/toll, Mosharraf said the collection of subscription was necessary for welfare and service oriented activities. He requested the Law Minister to withdraw the bill.

Abdur Razzak

Abdur Razzak (BAKSAL-Shariatpur) said that he saw some elements of Martial Law in this bill.

Criticising the bill, Razzak said that it was a clear indication that the government was trying to introduce an autocratic system. Showing a newspaper to the

'4,000 industries now found missing'

Speaker. Razzak said the police had arrested students while collecting donations for the cyclone-affected people.

He said those arrested by the police, wanted to do a good job.

The BAKSAL member said that they wanted the rule of law and restoration of fundamental rights of the people and as such they cannot be a party to passing such a bill. He demanded that the bill should be withdrawn by the minister.

Defending the bill Law and Justice Minister Mirza Golam Hafiz said there is nothing objectionable in it as it simply seeks to extend the period of jail terms from two years to maximum 14 years and a minimum of 7 years for crime like extortion.

He said the bill in question is not a motivated one. It aims at curbing the criminal activities of the mastans in the name of raising subscription. In this connection, he pointed out that the maximum punishment for extortion of money was fixed at two years some 130 years ago. But with the passage of time many methods of crime have been evolved. For this it has become necessary to extend the period of jail terms proportionate to the nature of crime, he said and assured the members that this law would not be allowed to be mistused.

While explaining different provisions of the bill, the Law Minister referred that the misuse of power by the bank management during the nine years of the autocratic regime. Over Tk 43 crore had been embezzled by the dishonest employees of the banks. Besides, Tk 1500 crore, given from various financial institutions during the period, had been declared as bad debt, he added.

Abdul Matin Khashru

Bringing his amendment to the bill during he stage of its consideration, Abdul Matin Khashru (AL-Comilla) said independence of judiciary and judges would be curbed if it was passed in its present form. Rule of law and independence of judiciary are pre-conditions for democracy. But this bill is a

negation of these two conditions, he added.

He said it is an irony that maximum punishment for extortion has been fixed at 14 years in jail while two year jail term has been recommended in this bill for negligent conduct of bank officials and employees. He said crores of Taka were taken from banks by the industrialists for the establishment of 7500 industries during the past regime. Of these industries, over 4000 are now found missing, he added.

Taking the floor, Tofael Ahmed (AL-Bhola) said, "we are not opposing he Penal Code (Amendment) Bill, 1991 for the sake of mere opposition."

He suggested that the bill be withdrawn, taking part in the discussion on his amendment in the bill, Rahmat Ali (AL-Gazipur) said this bill was moved to victimise the political opponents.

He said strict application of the existing law is enough.

Mirza Golam Hafiz
Law and Justice Minister Mirza Golam Hafiz assured the members that the bill would be reviewed after its passage. "We cannot review it just now for some technical difficulties," he added.

Mirza Hafiz hoped that all the businesses in the House would be conducted in cooperation and coordination with the opposition.

Deputy Leader of the Opposition Abdus Samad Azad then proposed to send the bill to the select committee.

Salahuddin Quader Chowdhury (Ind-Chittagong) said there is no logic to pass a bill hastily. He, however, said the bill contains.

Matia Chowdhury
Some good provisions, Begum Matia Chowdhury (AL-Sherpur) then said she is worried about the misapplication of the law. She urged the House to review the Bill.

The Law and Justice Minister opposed all the amendments moved by the opposition members and requested the Speaker to take step for passing the Bill.

The Speaker then put the amendments to vote and the House rejected them by voice vote.

At this stage, all the opposition members led by the Deputy Leader of the Opposition, Abdus Samad Azad, staged a walk out.

The Bill was adopted by the House by voice vote.

The Speaker then gave the floor to the Law and Justice Minister to introduce his bill, the Code of Criminal Procedure (Amendment) Bill, 1991 for immediate consideration.

The Law and Justice Minister Mirza Golam Hafiz accordingly introduced the bill for immediate consideration.

Ebadur Rahman

As the opposition members, who staged the walk out, reentered the House. The Speaker invited Ebadur Rahman Chowdhury (JP-Maulvibazar) to move his amendments to the bill.

Ebadur Rahman move three amendments to the bill.

The Speaker adjourned the House at 6.30 pm for 30 minutes for Magreb prayer.

Razzak Ali

When the House resumed after Magreb prayer with Deputy Speaker Sheikh Razzak Ali in the chair, Shudangshu Shekhar Halder (AL-Pirojpur) rose on a point of order and said there was a practice in the House to read out the names of the members, who wanted the bill to be sent for eliciting public opinion. But he said the practice was not being maintained.

Tofael (AL-Bhola), rising on a point of order, said the Deputy Leader of the House Prof. Badruddoza Chowdhury assured the House of holding discussion on the situation of the cyclone affected areas in the evening. He said the foreign missions here complained that they did not get any clear picture on the aftermaths of the storm. He said the government should clarify the position. He said the present government was an elected government and nobody should misunderstand it.

The Deputy Leader of the Opposition Abdus Samad Azad,

pointed out that the Deputy Leader of the House had assured for an hour-long discussion on the situation in the cyclone affected areas.

The Deputy Leader of the House Prof. Badruddoza Chowdhury admitted that he had agreed with the suggestion of the opposition to have an hour long discussion on the post-cyclone situation. But, he said, some members including the Health Minister, who had gone to the affected areas, had not come back as yet. He requested the opposition to wait for their return to have an updated report of the situation.

The Deputy Speaker said there would definitely be discussion on it if there was any time after disposing of the legislative business.

Suranjit Sen Gupta

Suranjit Sen Gupta (GP-Sunamganj) said the amendments proposed to the Code of Criminal Procedure, 1898 by the government were against the fundamental rights and the constitution of the country. He said it would be an attempt to make the country a police state. He said "we did not get a law like this even from the autocratic and martial law governments."

The House passed the Code of Criminal Procedure (Amendment) Bill, 1991 with some amendments, proposed by the Law and Justice Minister Mirza Golam Hafiz.

The opposition members staged a walk out for a brief period, protesting the passage of the bill.

The Press Council (Amendment) Bill, 1991 was postponed as proposed by the State Minister for Information Mohammad Nurul Huda.

The Foreign Minister A.S.M. Mostafizur Rahman then moved the Arms (Amendment) Bill, 1991 on behalf of Prime Minister Begum Khaleda Zia, who is holding the charge of Home Ministry, for immediate consideration.

Taking the floor, Deputy Leader of the Opposition Abdus Samad Azad pleaded for sending the bill for eliciting public opinion.

Tofael Ahmed

Moving his amendment to the bill for eliciting public opinion Tofael Ahmed said the ordinance was promulgated by the neutral government for holding the elections in a free and fair atmosphere.

Ebadur Rahman Chowdhury (JP-Maulvibazar) also moved his amendment for eliciting public opinion.

Mufti Abdus Sattar

Mufti Abdus Sattar (Jamaat-Bagerhat) said the enactment of the bill would curtail fundamental rights of the people. He requested the concerned minister to withdraw the bill and take steps for stopping the use of unauthorised arms.

The Foreign Affairs Minister on behalf of the Prime Minister and Home Minister thanked Shahjahan Siraj and Salahuddin Quader Chowdhury for not moving their amendments.

He hoped that the other members, who had moved their amendment, would withdraw them.

The amendments were however rejected by the House by voice vote.

As soon as the Arms (Amendment) Bill, 1991 was passed, the member of the opposition en masse stood up and insisted on discussing the situation in the cyclone affected areas.

Being asked by the chair, Foreign Minister Mostafizur Rahman, on behalf of the Prime Minister and in-charge of the Ministry of Home, Begum Khaleda Zia moved the Special Powers Act (Amendment) Bill, 1991 for consideration in the House.

The Deputy Speaker then started reading the names of the members who wanted the bill to be sent for eliciting public opinion. But his voice was not audible in the chaos and confusion in the House.

Abdus Samad Azad

The Deputy Leader of the Opposition Abdus Samad Azad said the opposition members had been pressing for discussion on the situation of the cyclone-hit areas since morning but to no effect. He said

Speaker along with the Leader of the Opposition Sheikh Hasina and himself visited the affected areas together on board a helicopter. He said it was a gesture on the part of the government to work together.

He said a coordination committee has been formed for relief operation. He said two secretaries along with other high officials were in the affected areas.

Prof Chowdhury said necessary directives had been sent to the Deputy Commissioners of the districts where the cyclone had not hit to procure chira and molasses and send those to the affected areas including Chittagong.

He said a full report on the situation could be given after receiving latest information from the affected areas.

Six more members belonging to the Treasury Bench took part in the discussions on the cyclone situation giving detailed measures taken by the government in the affected areas.

They were: LGRD Minister Barrister Abdus Salam Talukder, State Minister for Food Barrister Nazmul Huda, State Minister for Telecommunication, Shamsul Islam, Begum Sarwar Rahman, Moulana Ataur Rahman, Dr. Mosharraf Hossain (State Minister for Energy).

Taking part in the discussion, State Minister for Land Zamruddin Sircar said the government had taken effective measures in tackling the post-cyclone situation.

Syeda Nargis Ali said the woman members of Parliament wanted to go to the cyclone battered areas.

Taking the floor, Akbar Hossain suggested that the people should be educated about the emergency situation.

State Minister for Civil Aviation and Tourism Abdul Mannan gave details of the precautionary measures taken in Chittagong and Cox's Bazar Airports. Parjatan Corporation's motels before the cyclone.

He said regular flights between Dhaka and Chittagong would resume within two to three days.

Deputy Speaker Sheikh Razzak Ali adjourned the House at 11-30 pm Saturday till 11 am on May 9.