HE people of Bangladesh are surviving fighting with natural calamities like cyclone, flood, drought, tornado, and of late arsenic contamination of tubewell water. It is difficult to predict about the actual time of natural disasters but it has been observed over the last 30 years that people are affected by drought from March to May, by flood from June to September, cvclone/tornado (kalbaishakhi) April-May, and by cyclone and tidal surge

(depression) April-May and October-November. Due to topographical characteristics of the country, different regions are affected by different types of calamity during a specific time of the year. It has been observed that the northwestern part of the country is affected by drought for last couple of years, due to less or little rain fall and unilateral withdrawal of the Ganges water at Farakka, which cause damage to agriculture, fisheries, trees, plants, create salinity problem, ecological imbalance and environmental hazards in the downstream of the river (Padma) in the west, northwest, south and south-western part of the country. This problem has been created by human beings and could be solved by human beings as well. The water sharing accord between

Bangladesh and India is sup-

posed to solve water withdrawal

problem in the upstream.
Arsenic contamination in the tubewell water is another disaster which has been detected in the west and south western part of the country and is a great threat to human life and may spread to other parts of the country in near future if not contained effectively. Many people have been suffering from health problem related to arsenic contamination. Both the national and international experts are yet to find out a permanent solution to this problem except sealing up of the arsenic contaminated tubewells. Specialists opine that it may be due to extraction of ground water in massive scale for irrigation purposes. The experts suggested to use surface water for drinking purposes after proper treatment, which would be an additional cost in the daily life of the people of our country.

In the month of April and May, tornado used to hit many parts of the country which caused serious damage to houses and standing high yielding variety rice (boro crops), oil seed, onion, garlic, wheat and other seasonal agricultural crops. In the coastal regions of the country, due to cyclone along with tidal surge in the month of April-May and in October-November several hundred thousand people, cattle, and houses had been washed away in the years 1967, 1968. 1970, 1987, 1988 and 1991 to the Bay of Bengal. The cyclones along with tidal surge of 1970 and 1991 were very much devas-

Intensity of Damage

The intensity of cyclone, flood and tornado itself is different from each other by nature. Cyclone along with tidal surge not allow people much

FACING THE FLOOD Thoughts on Mitigation Measures

by Md Abu Sayed Mondal

time. They have to be prepared beforehand after receiving warning signal, otherwise they have to face serious consequences. The tidal surge is most dangerous to the life and property of the people in the coastal regions of Bangladesh. The cyclone/storm in high tide is more dangerous and the intensity of damage to the life and property is much higher than the cyclone/storm in low tide.

Tornado uses to hit within very short time. People do not have much to do about precaution during tornado.

On the other hand, flood water increases gradually as this depends on the rainfall and flood water inflow from upstream. Most of the people living by the river side are affected by flood in Bangladesh. During flood, the agricultural fields of the people are affected in the beginning and then fish farms, homesteads, roads, embankments and other infrastruc-

Movement During Flood and Cyclone

In the coastal areas, during cyclone, people have to move to the safe havens (cyclone shelters, nearest hills and strong houses) to save their lives. Radio. TV and other mass media and Cyclone Preparedness Programme (CPP) volunteers of Bangladesh Red Crescent Society (BDRCS) play a vital role for the evacuation of the people. People's consciousness has been increased substantially after 1991 cyclone specially in the eastern zone (Cox's Bazar and Chittagong) and in the central zone (Noakhali and Barisal). But it has been observed that people do not want to leave their houses normally unless and until they are compelled to do so. The reason is the fear of losing/theft of household belongings. However, finding no other alternative, at the last moment they move to the cyclone shelter often to be washed

away by tidal surge on the way. It has been mentioned earlier that flood waters use to increase in a gradual process, as a result people do not feel to move elsewhere leaving all the household assets and belongings behind. People use to watch the flood water rising rate and look out shelter. By the way, cyclone shelters are not available in any other part of the country except coastal regions. Due to inundation, people use to search for high land, building, embankment for shifting their families along with domestic animals and other portable household effects. The poor and landless people use to leave the flood affected areas in advance as they do not have much belongings like middle class and upper class people of the society. The houses of middle class and landless people are not either cyclone or flood proof and thus

are most vulnerable to both.

The Flood of 1998

In the year 1988, there was a severe flood in Bangladesh which caused serious damage to agricultural crops, life and property of the people. Immediately after the flood, a gigantic Flood Action Plan (FAP) was taken up with the assistance of the World Bank and other donor agencies and several studies were carried out by different firms/agencies. Before receiving full benefit of the study or before completion of the projects, the nation has faced another flood which is much dangerous and treated as deluge and the duration of flood is about 2.5 months (as of 15th September 1998) and has affected about 50 districts of the country. The flood started damaging agricultural crops. houses, fishery projects, industries, infrastructures and all sorts of people's wealth from the beginning of July 1998. Water stagnation for long time is a big problem in Dhaka city and in other districts in the affected areas. The drainage and sewer-age system in Dhaka city has been completely broken down. People to use boats for movement from place to place. People have been suffering from diarrhoea, dysentery and other water-borne diseases in the affected areas while nearly a thousand people died many of whom suffering from the above water-borne diseases. Dhaka. Narayanganj, Munshiganj,

the seriously affected districts. Relief Operation

Manikgani, Narsingdi, Gazipur,

Chandpur, Laxmipur, Rajbari,

Madaripur, Faridpur, Cha-

gail, Sherpur, Jamalpur, Siraj-

ganj, Gaibandha, Naogaon, Na-

tore, Dinajpur, Kurigram are

painawabganj, Rajshahi, Tan-

During flood, cyclone and other natural disasters, relief items like rice, wheat, chapati (hand made bread), puffed rice (muri), pressed rice (chira), molasses, oral saline, medicine, biscuits, clothes, plastic sheets, drinking water etc are distributed among the affected by the government and different agencies. It may be mentioned that most of the relief operations are concentrated in and around the cities/towns. The vast majority of rural people are generally left out. It is mainly due to disruption of communication. In Chapainawabganj district and in other places due to want of landing places helicopter could not land with the relief materials and even it is reported that people could not bury dead bodies due to want of dry place

It has been observed that, most of the poor affected people are in the front line to receive relief. The middle, upper middle and upper class victims usually do not ask for relief. Because. due to their social status they just can not queue up with the same people who used to work

in their houses/firms and during natural disaster are in more hardship condition.

Mitigation Measure: It is very difficult to come up with concrete suggestion on the mitigation measures because the intensity of the natural calamity is not known to any body. However the following ideas may be helpful to chalk out a national plan to face the disaster in our thickly populated poor country. Immediate measures to save people's life:

Identification of worst affected areas must be done before starting relief distribution. Means of transport to reach the affected people have to be found out locally; if needed, evacuation plan has to be chalked out at local level and in case of emergency air lift may be requested.

Relief operation to the most affected areas should be started on priority. Need assessment must be done by sending advance team and, accordingly, relief materials be rushed to those particular

To avoid duplication, co-or-

dination among the relief

distribution agencies must be done at local level through concerted efforts. Disaster monitoring team should be formed and sent out to the affected areas for monitoring the changing situation and accordingly measures be taken to save

human lives Active Disaster Management Committees have to be formed (if not existing) in the affected areas taking representative from the affected communities.

Relief activities must not be taken on political consideration but must be taken as humanitarian consideration. The survival of the people is the top most prior-

Safety/security of the women and children must be ensured in relief camps by the local bodies or by the law enforcing agencies.

Sanitary facility, supply of drinking water must be ensured in the temporary relief camp, otherwise the whole community may face health problems. At the central government

level sufficient readymade food like K-Ration (UN supplied ready to eat packet food/chicken/beef/fish), date and other dry food should be collected and stored which can be used in case of disaster in any part of the country.

To minimise corruption in distributing relief materials. proper account must be maintained in stock register at all levels which will be checked by the Disaster

Management Committees at the grassroots level. Long-term Measure

The various government departments like. Roads and Highways Department, Local Government Engineering Department, Water Development Board, Agriculture Department and other nation building departments and NGOs are supposed to take up various development schemes for the socioeconomic development of the country after receding of flood water. The Prime Minister has made firm commitment for construction of houses for the people who have lost their houses in the recent devastating flood. Moreover, to help the poor and destitute people in the country the government has taken decision to issue 1000 VGD cards in each Union to feed the hungry mouths during the lean period of employment (Oct. to Nov.)

In consistent with the felt need of the people the following ideas are put forward for consideration which are expected to ameliorate human suffering in disaster:

i) In the coastal areas of Bangladesh there are many cyclone shelters, killas (earthen mound), schoolcum-cyclone shelters which have been constructed after 1970 and 1991 cyclones for the protection of life and property of the people and more cyclone-proof infrastructures are expected to be constructed in the years to come. But in the flood affected areas by the river sides of the country such type of flood/cyclone proof infrastructure has not been constructed as yet.

Considering the flood situation of this year, in most vulnerable areas the existing primary school ground can be raised above the flood level and should be supported by tree plantation. (preferably fruit trees). It will not require any land acquisition. These raised grounds will be treated as flood shelter for the people and live stock. Through these schemes, an employment opportunity will also be created for the unskilled labour throughout the country. The planted trees, can be leased out to the community people on yearly basis and the income can be used for the maintenance of the trees and the raised ground and for the welfare activities of the community. The proposed schemes can be implemented through Food For Work scheme and some amount should be kept reserve for the tree planta

tion and care-taking (at

least for three years) in the

estimate. Organisational support through people's participation will be helpful for the success of the

People should be motivated and encouraged to plant banana trees around their homesteads. Banana trees could be used as raft during flood. In normal time, by selling banana, the house owner can earn additional money.

iii) In each flood affected village, there should be at least one tubewell above flood level which can ensure safe drinking water for the community during

In each family, arrangement should be kept for constructing at least one room on bamboo pole by plastic sheet which could be used during flood.

The hydrologists and civil

engineers of Bangladesh should think, whether we shall take up any scheme for excavation of river for quick flow of flood water. Do we have enough resources for maintaining such ambitious scheme? The scheme should be taken up on the basis of practical situation and people's acceptance. Scarce resources of the country should be utilised very carefully and properly. Dredging of river bed by machine will not create job opportunity for the unskilled labour. River training, construction of groyne, embankment, retard embankment might be more useful compared to river excavation. The hydrologists and civil engineers of the country are requested to come forward with most pragmatic pro-

In the countryside, the farmers are interested to grow HYV boro (rice) by using surface water and deep tubewell water irrigation. It is not possible to grow traditional deep water transplanted aman or broadcast aman after growing HYV boro rice. specially in lowland areas or in char areas. Efforts have to be made for growing mixed crop like HYV boro with deep water rice cultivation in the lowland and in beel areas for boosting agricultural product. It may be mentioned that deep water rice can survive in flood as it grows simultaneously with the rise of water level.

rinally, it may be mentioned that through people's participation it was possible to protect the DND; why it will not be possible to minimise the loss of flood if we work together sincerely and with dedication? Cur united efforts definitely will lead us success. Let us work for future generation, we must not forget that we have only one small Bangladesh in world to live in.

Lazing in Dhaka

Handling the Bengalees

by A Husnain

The Bengalee is ruled by his heart, although he has a good head. If you are a cricket bug, it means he is bowled by the heart, and bats with it; the brain is at the top end, at the periphery of the anatomy.

NE evening, after a hectic day outdoors sizing up the country and the people. a foreign prospective entrepreneur relaxed at his host's at a small informal gathering. Armed with a glass of iced drink - mixed with a dash of rock salt to revive his dehydrated frame due to profuse sweating - the gentle bideshi sought to break the ice with a tantalizing question: how to size up the live-wire Bengalees and establish empathy and rapport with them.

'Not difficult', interjected one of us in a bantering tone. just pull at his heart string; if you know where it is at the moment, as he misplaces it quite often...

'I mean, officially, in the office, from the business point of view. These foreigners are too straight-forward and practical, and have no time for mosquitocoil-like approach as practised at the Bengalee adda. No use trying to explain to them what is

The Bengalee is ruled by his heart, although he has a good head. If you are a cricket bug, it means he is bowled by the heart, and bats with it; the brain is at the top end, at the periphery of the anatomy.

The trick is to rouse him in the right way, and the mission is accomplished; depending on which side you make him pump his adrenal. He is carried away as easily as he is made to sit down. He has tremendous nervous energy for non-doing. This is a zamindari complex, you won't grasp it right away. 'Give me some examples'

smiled the guest, with a twinkle in his eyes, reaching for second drink, now served in a mug.

We are not like the French. but we are a bit emotional, more homely, more earthly. We get worked up quickly, and take side rather prematurely. We are a bit sentimental too, good or bad. Perhaps the geographical environment shapes our actions and reactions. It might have something to do with the seasons. We practically do not have any spring and autumn, which are preludes for preparation. Here it is always tropical summer and the rainy season, separated by a mild, caressing winter. We have not learnt to enjoy the closed indoors beside the fireplace.

Our imagination is as fertile as the fertile land - and the womb, if you don't mind. Our life is like the flowing water. We forget and forgive easily, and the garbage or ill-will is washed away, if we knew you were on our side. A little sympathy topples us over. A little consideration chains us into obligation.

We are gentlemen armed with the panic button.

Notice the Bengalee hospitality. In the rural area, a visitor or guest must have his meal before departure. You haven't witnessed our womenfolk bidding farewell at the doorstep the waiting taxi bill would run into hundred taka.

You never visit a home empty handed. Bengali sweets are traditionally famous. We have a sweet tooth - perhaps more than one. We always carry a pack of sweets for the hosts. And you would be served sweets at any home. Forget about diabetes. It is a Western disease found, nourished and cherished only in industrialised countries like yours. There are three modern diseases which you have given us: heart tension, hypertension (blood pressure). and gastric ulcer. These are money sicknesses. We live a marginalised life. Translated, it means "no desire, no want". Your margins are rich in many ways, but your core appears to be covered with too many layers of richness.

Our spokesman paused, to watch the effect on their guest. He seemed to be enjoying his drink, and the indoor ambience, and did not interrupt.

You notice I am talking too much? This is one of our weaknesses. We all seem to have the gift of the gab. That is why the profession of politics is so popular with the Bengalees. We seem to be making up for 200 years of deprivation. You might have read the quotation popular during the British-India period: "What Bengal thinks today, India thinks tomorrow." I shouldn't be quoting that, but that should give you some idea about the Bengalees.

So allow a Bengalee to talk for a while to let off steam; and occasionally let him pull the string of the steam whistle. He needs an audience. There is a reason for this trait

The Bengalees like adda or chatting. It might have something to do with the tropics. Perhaps it is the embedded hypnotic effect of the pattering of the monsoon rains; and basking in the winter sun, wrapped in embroidered chadder (shawl) drinking date juice just disembarked (at home in the rural areas). The ancestors used to drink ghoal or yogurt, served by the passing milkman.

There is no such time available in the industrialised societies. The times are changing, with emigration and jobs abroad. That is why you should feel more welcome. Soon dinner was announced, and we all shifted to the dining room.

America's War of the Future

N the words of US Secretary of State Madeleine Albright ■ the United States is engaged in "the war of the future" - a conflict pitting the remaining superpower against global. stateless terrorist networks.

The threats from networks such as the Islamic Army led by wealthy Saudi exile Osama bin Laden are real enough, say political analysts. However, they warn, the US response - opting for military rather than political action — undermines hopes of stopping terrorism at its

The current strategy is fraught with contradictions and could expose Americans to greater danger, because it is aimed at enhancing US power and influence around the world. not just fighting terrorism, they add, and it appears disingenuous, because the administration did not exhaust alternative means to neutralise the Bin Laden threat.

"We're seeing an emerging shift in focus from rogue states to rogue organisations in an attempt to establish a new level of US domination over the rest of the world," says Phyllis Bennis, a fellow at the Washingtonbased Institute for Policy Stud-

Senior administration officials say their preoccupation with bin Laden's 'rogue organisation' is entirely warranted. Bin Laden is their lead suspect in the Aug 7 bombings of US embassies in Kenya and Tanzania, and is believed to have been planning fresh strikes against US citizens and interests. Those assertions cannot be tested, however, because the evidence against bin Laden remains secret. Bennis notes.

Moreover, emphasis on the 'rogue' nature of US foes rules out deeper analysis and limits US options to retaliatory attacks, according to Stephen Zunes, professor of politics at the University of San Francisco. "Rather than simply branding our foes as rogues and

The threat from terrorists is very real, but as Abid Aslam writes in this Inter Press Service special report, the United States' military response to it may do little to stop global terrorism.

crazies - which Bin Laden my well be — we need to know how they get a following," Zunes argues. "What fans the flames?" Terrorist leaders are able to

exploit the popular perception of the United States as starving Iraqi children because of Washington's insistence on sweeping sanctions against the regime of Saddam Hussein, Zunes explains. At the same time, Washington is vilified for supporting Israeli military occupation of Palestinian and Arab lands and for backing autocratic and unresponsive regimes in the Middle East and elsewhere.

"There's a history that gives rise to outrage at what the US does," Bennis adds. "Until we look at our own policies, we don't have a prayer of stopping terrorism where it starts... You don't start as if history began on August 7th," the day the embassies were bombed.

"However illegitimate the actions of terrorist groups ... they underscore the importance of answering questions about what these people hate so much about the United States, what do they admire, and give us an opportunity to rethink our positions," Zunes argues. He acknowledges that "changes in US policy will be a long-term effort and this doesn't address the

short-term security needs." Neither do counter-terrorist strikes, according to Bennis. Washington launched warplanes against Libya's Moammar Gaddhafi in 1986 and missiles against Iraq's Saddam Hussein in 1993. Both strikes missed their intended targets. killed civilians, and failed to halt terrorism against the

United States, she notes. After the raids, US administration officials said they had pre-empted terrorist attacks but also warned that the risk of retaliatory attacks against US

targets had increased. Equally troubling to various analysts is the administration's justification for bombing the El Shifa pharmaceutical plant in Khartoum, Sudan's capital. Officials here said the factory manufactured "precursor" substances that could be used by Bin Laden's forces to make chemical weapons.

Following the administration's logic, Bennis argues, Iran could claim the right to retaliate against US factories that supplied precursor chemicals used by Iraq in bombing Iran

during the 1980s. Before it was destroyed, the El Shifa plant accounted for 60 per cent of Sudan's supply of medicines, including antimalarial drugs, company sources told IPS in Khartoum. Even accepting US administration charges that the factory was supplying Bin Laden with terrorist material, says Bennis Washington will have to accept some responsibility for any subsequent increase in deaths from diseases preventable or

curable by El Shifa products. Yet, Washington - which helped boost Bin Laden during its proxy war against the Soviet Union in Afghanistan — could have reined in Bin Laden by other means. It had pressured Sudan to expel him in 1996 and, according to Bennis, "there's no question that this could have happened again this year in Afghanistan if they had negotiated seriously.

Bill Richardson, senior US envoy to the United Nations, met with Taliban leaders in April to renegotiate relations between them and Washington. At the time, US officials said they had asked for and received assurances that Bin Laden's activities would be curtailed. The talks reportedly lasted less than a day.

"They clearly could have done more," Bennis says of the US effort. "They've argued Bin Laden is such a great threat to the US and such a financial asset to the Taliban. They could have spent the equivalent of the cost of the Cruise missiles to have Bin Laden handed over" to Washington, a third country, or an international tribunal. The cost of the Tomahawk Cruise missiles used in the attacks has been estimated in press reports at \$79 million.

Rather than neutralise the threat, Washington appears to have opted to use Bin Laden as "a convenient villainous freelancer," says Zunes. "We're looking at a superpower that's looking for new enemies and new ways to sustain its military-industrial interests and global reach."

In his view, the pursuit of stateless 'rogues' provides Washington with new justification for its superpower role after the Cold War and new justification to sustain high levels of spending on armaments and the armed forces.

At the same time, questions by some in the US media about the effectiveness of long-range interventions such as last week's missile attacks, provide an opportunity to advance arguments in favour of maintaining a US military presence overseas, intensifying intelligence operations, and increasing cooperation with and access to foreign governments and their resources.

"It's almost like a protection racket," says Zunes. — IPS/APB Feature

India's Development Model Has Relevance for Africa

by Rajiv Bhatia

Technology transfer from India to Africa has been going on for long, leaving alone the waves of Indians who came to East Africa in the late 19th and early 20th century, equipped with trading and entrepreneurial skills.

▼ NDIA'S development model, with its emphasis ▲ on practical but inexpensive machinery and knowhow for the small-scale sector, has considerable relevance for Africa.

India Tech '98, a major industrial technology exhibition held in Nairobi from September 1 to 4, established this beyond doubt. It also demonstrated that Indian industry's capabilities and many African nations' specific needs are mutually compatible.

Kenya has committed itself to emerging as a newly industrialised country (NIC) by 2020 with the target to ensure that the contribution of manufacturing to the gross national product (GDP) goes up from the present 14 per cent to 35 per cent by then. It is an ambitious and achievable goal, the journey to which passes through technology. Many other countries in the COMESA (Common Market for East and Southern Africa) region share similar situations.

Technology transfer from India to Africa has been going on for long, leaving alone the waves of Indians who came to East Africa in the late 19th and early 20th century, equipped with trading and entrepreneurial skills. Recent history witnessed the inflow of equity-related machinery and technical expertise. Joint ventures such as Pan African Paper Mills and Raymonds in Kenya are prime examples.

Thousands of African students studying at Indian universities and hundreds of African experts visiting India for short-term professional

programmes too represent technological transfer of a unique kind. India Tech '98, however.

helped in laying the foundations of potential transfer of products, knowhow and services in the chosen sectors in a comprehensive and cost effective manner. Its biggest contribution was in: (a) showcasing the range of technologies available in the country and (b) demonstrating their "appropriateness" and competitive pricing to the African people and others.

Views to confirm these assertions were articulated by a number of ministerial and other VIP visitors to the exhibition. Y.F.O. Masakhalia, Kenyan Minister of Industrial Development, observed that Indian technology was "versatile and affordable". A.C. Kiptoon, Minister for Research and Technology, pointed out that the exhibition was "a unique opportunity" for Kenyan businessmen to obtain technological information about what they could obtain from India.

Martin Ogang, President of PTA Bank, speaking about the COMESA as a whole, stated Indian technology achieved widespread acceptance and application in the region." Such perceptions were by no

means confined to politicians and experts. A senior Kenyan government official told me how a group of progressive farmers who visited the exhibition travelling from their Rift Valley villages were much impressed by the agricultural machinery on display. Several ambassadorial colleagues conveyed us their view that India pursued partnership opportunities in a commendable man-

What really made the project worthwhile was the high level of satisfaction articulated by most of the 57 Indian companies which participated in the exhibition. They covered four sectors, - engineering, electronics, telecommunications and computer software. Most of the companies were

pleasantly surprised by the business-like interest shown by Kenyan visitors numbering over 8,000. Interactions lasting four days resulted in quite a few orders for machinery; generated serious enquiries worth several millions of dollars; and helped create a whole range of valuable contacts on the two sides. I was struck by the serious and enthusiastic environment that prevailed in the hall for the entire duration of the exhibition. An important highlight was

the holding of two seminars on the sidelines of the exhibition. The first entitled "Seminar on Trade and Investment Opportunities in Engineering Sector" was jointly organised by PTA Bank, Engineering Export Promotion Council and the Small industries Development Bank of India. The second on "Trade and Investment Opportunities in Electronics and Telecommunications" was jointly organised by Kenya's Investment Promotion Centre. Electronics and Computer Software Promotion Council and the Department of Telecommunications.

The two seminars enabled the participants to appreciate the extent of progress achieved to gauge the scope of technological cooperation with Kenya and to make new contacts. A prominent computer professional reflected a widespread view in stating that India had emerged as a viable alternative source of technology for Africa. "Why can we not benefit from this?" he asked

by India in the relevant sectors.

The Kenyan media gave the event fair and generous coverage. In the process, it proved its immense value in bringing Kenya and India closer together for mutual benefit. Clearly, technology today is the driving force of economic development. It is also a vital factor in the process of harnessing a country's resources efficiently.

As India's Minister of State for Agriculture Som Pal, who was present to co-inaugurate India Tech'98 along with Masakhalia, put it, our objective was "to show that appropriate technologies suitable for countries in different stages of development are available (in India) and can be effectively deployed to enhance the productive utilisation of developing countries' resources" Above all, the exhibition symbolised our commitment to achieving a significant expansion and diversification of India's economic relations with Kenya and other countries in Africa. We are optimistic that India Tech'98 would trigger a growth of mutually attractive business ties in the short and medium terms.

India Abroad News Service

The author is India's High Commissioner to Kenya.











