

Every drop cries to be saved!

SHARMEEN MURSHID

HOW many monsoons have come and gone since the first day we knew that our ground water is poisoned? How many seasons have passed by offering us opportunities that we failed to avail? How many days have elapsed since the world learnt that Pinjira and her little baby girl died and after her -- another thousand -- from drinking this poison? The world cried for a day and a half and then went back to business as usual forgetting that these deaths were not natural but caused by somebody's negligence. Officially not a question was raised and not a soul taken to task for an incompetence unparalleled in history.

Talk of the past and you create ripples of discomfort all around you. And if you have amongst you a researcher who insists on exploring the past with the irritating obstinacy of a donkey you either want to wish her away or ignore her existence to death. There are few in the government, in the donor community, in the UN agencies or NGOs who wish to search the past for 'avoidable' failures for fear of having to share some of that blame. The lack of interest in the past, however unscientific in the cognitive world, is the unwillingness to learn from the past and the wish to continue with the follies of the time. And the present is a constant reminder of that truth. The negligence grotesquely continues.

When three thousand people died in the terrorist attack on September 11, 2001 the world cried for justice. And the most powerful man on earth, the President of America was called by the Congress to explain whether there were 'avoidable' failures due to negligence that could have prevented the attack. President Bush had to answer to his people. When twelve thousand dies from mass poisoning in Bangladesh and many more wait to die, few ask how did this happen, who did this to us or why should our people suffer for the

wrong policies, wrong decisions of others? No one is called on to answer. Fewer still call for justice. Anger soars and then turns to frustration and gradually to hopelessness to the satisfaction of those who wish to change little. And you no longer seek justice because the injustice is too overwhelming. You don't identify any culprit because you fear that the culprits are too many -- joined together in an unholy alliance. So you let things be. And you are back where you started: Nowhere.

Today, it rained heavily. Today, 20 million people cried. Or is it 75

About fifty people suffering from arsenicosis -- weak and worn out from the years of slow poisoning -- gathered around a pond and decided to act. Rahima picks up a spade, then all the rest follow. They get down into the pond and begin to dredge and clean...it begins to rain. They look up with a quiet excitement. Rahima is eager to preserve the tears of joy. There is hope. The people of Kalashgram have started to collect the raindrops like their ancestors did. They have begun a movement to preserve ponds for drinking water.

million? They had no water to drink. Standing in the heart of rain they were drenched to the soul, their throats parched while the rain kept falling like helpless tears -- crying to be preserved.

The other day, I read a piece in The Daily Star (thank you DS for drawing our attention to the matter) that some national and international 'experts' have reassured the government that Bangladesh can continue to exploit ground water for the next 20 years without having to harness surface water! This has been strongly recommended in the National Water Management Plan. Will some one please explain to me, what is to happen to the arsenic and all the other trace elements found in ground water? Or to the arsenic entering the food chain? What about

the eventual contamination of the topsoil from continuous draining of arsenic contaminated water from irrigation hand pumps? Or the ever sinking water table that no longer can replenish itself? We want answers, scientific and sound.

We don't know what the 'experts' had to say on what would happen to the people drinking this water for the next 20 years. Maybe there will be no people and no water left but one thing for sure is that, there will at least be 20 more years of hand pump business for some unscrupulous multinational and their local henchmen. Bangladesh is weary of

approach or not, the two bucket or the three kolshi system etc. eight years have passed in utter futility with no answer in sight, with no policy in place- and still no water to drink. Where emergency water should have been carried to the people to save lives, where there should have been deep soul searching by government departments, donors and NGOs, where there should have been genuine demonstration of a national commitment to stand by the people in their darkest moment and where this was a rare opportunity for the whole nation to come together against a common enemy...this has degenerated into just another 'development' project bogged down by greed and vested interest. A project for which everyone is scrambling for a share of the pie: the politician, the bureaucrat, the donor and their companies, the NGOs... and far away from this sordid drama, are the affected people who continue to live without a right to water... and life!

Away from this dispiriting spectacle, the little people of Kalashgram have given up waiting for something to happen. About fifty people suffering from arsenicosis -- weak and worn out from the years of slow poisoning -- gathered around a pond and decided to act. Rahima picks up a spade, then all the rest follow. They get down into the pond and begin to dredge and clean...

It begins to rain. They look up with a quiet excitement. Drenched to their soul the people of Kalashgram are full of expectations. There is something festive about the day. Rahima is eager to preserve the tears of joy. There is hope. The people of Kalashgram have started to collect the raindrops like their ancestors did. They have begun a movement to preserve ponds for drinking water.

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Protecting the golden goose through IOM

M.SHAFIULLAH

IN Stockholm Lisbeth Palme, petite widow of slain Swedish Prime Minister Olaf Palme had assured this writer that with institutions like Grameen Bank and BRAC, Bangladesh would be able to come out of the poverty trap. Her optimism emanated from Swedish experience of one million Swedes emigrating to North America some seventy years back to escape the curse of poverty. Sweden had five million population. One-fifth left the homeland to eke out living on foreign soil. Now a country of 12 million population, a high-tech Sweden has become a development partner to 22 countries including Bangladesh in Asia and Africa.

Lizbeth recalled her two visits to Bangladesh as UNICEF adviser in mid eighty's to appreciate the resilience of the calamity torn common men and the quality of leadership in non-government sector. She admired the Bangladesh immigrants working even on weekends and at odd hours under severe winter of Nordic countries to rewrite their fortune.

An activist of Swedish Labour Party, Mrs. Palme provided the insight that migration is neither a recent phenomenon nor confined to poorer countries of Asia and Africa. In fact large scale migration originated in Europe during the First World War. Human dislocation took worst form during and in the aftermath of the Second World War in Europe and also in the Soviet Union. To escape persecution a huge number of Jewish population in particular, swamped the Palestinian territory, then under the British Mandate. For the resettlement of the displaced persons of Europe as a consequence of the Second World War, the Intergovernmental Committee for European Migration (ICEM) was created in 1951.

By the mid-fifty's the ICEM which is the forerunner of today's

International Organization for Migration (IOM) arranged orderly migration of 4,06,000 refugees, displaced persons and economic migrants from Europe to overseas countries. ICEM gradually extended resettlement assistance to Latin America, Africa and Asia. In 1971 during Bangladesh Liberation War ICEM assisted UNHCR in the resettlement of 1,30,000 refugees from Bangladesh and Nepal to Pakistan. The ICEM was transformed into IOM in recognition of its expertise and increasing global role in 1989.

Soon after IOM successfully

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accomplished the enormous task of repatriation of migrant workers stranded by the Gulf War. From September 1990 to January 1991 IOM arranged orderly repatriation of 1,65,000 migrants to various countries. Bangladesh had about 70,000 stranded nationals coming out of Iraq and Kuwait and were flown from Amman airport to Dhaka by IOM chartered flights at an estimated cost of 22 million US dollars. From Bangladesh side the writer supervised the repatriation process from Amman camp office. Bangladesh became a member of IOM on 27 November 1990.

The Gulf War repatriation brought into sharp focus the realization that Bangladesh, having an estimated 13 million unemployed and a fragile infrastructure, amply justify location of an IOM office in Dhaka to build capacity for orderly migration to benefit the country. IOM took the imaginative to set up a regional office in Dhaka in August 1998, focussing on [1] strengthening

labour migration process, [2] combating trafficking in women and children, [3] movement assistance including resettlement, repatriation, transportation and post emergency assistance, [4] technical cooperation and capacity building, [5] migration information analysis and dissemination, in particular public information campaigns and [6] research related to migration management and other services.

Since inception of the Dhaka office IOM commissioned a series of studies to strengthen labour export policy and its management by the

political parties in developed countries have become a complex undertaking. The newly created Ministry of Expatriate Welfare and Overseas Employment needs a pool of dedicated officials in the government as well as in the private sector recruiting agencies to address the challenging issues. It is heartening to note that the IOM has stepped in to develop skills and strengthen capacity building and to enhance understanding of the current complex issues through a scheme shortly to be put in motion to benefit Bangladesh. The current visit to Dhaka of Ambassador Brunson Mckinley, Director-General of Geneva based IOM Headquarters will bring home the dimensions of Bangladesh situation. It is also expected that his presence in Dhaka will enable him to look into the specific needs and services required by the new Ministry so that the golden goose is protected at home and abroad.

Under the weight of Globalization and WTO regimes, countries are obligated to do away with all barriers to free flow of capital, goods and services, among nations. The key element of production, the human factor -- man behind machine --- however, remains immobilized. In addition to this, the trend of population decline and ageing in developed countries calls for a reversal of near prohibitive anti-immigration policy. A liberal immigration policy will discourage pervasive, clandestine migration and trafficking in human cargo. Countries like Bangladesh will be able to earn substantive hard currency in remittance by sending more work force abroad through legal means and ultimately graduate out of aid dependency. IOM has earned the credibility and the prestige to launch a global campaign to create awareness for mobility of workforce beyond borders.

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Falling girders of foot overbridge: Lesson for civil engineers

ENGR Md ALI AKBAR MOLLIK

ON 26 November 2001, one girder out of two of an under construction foot overbridge at Progati Sharani near Natun Bazar corner of Badda fell over on the street. The 34-meter long girder weighed more than 55 ton (55,000 kg), killed one passer by and smashed a public bus partly and a rickshaw completely. On the following day I rushed to the scene and saw that the girder was divided into two parts and kept along the two sides of the street making room for normal traffic. The high-tension strands, which are the vital part of prestressed concrete technology, were not stressed and were simply loose. Another girder was on the top of two supports erected on the footpath of two sides of the street but its stability was yet under question. Sufficient supports were not provided for the girder still although its counterpart fell over on the street the previous day. The people around were not familiar with the high-tension steel strands and they assumed that the wire-like steel strands were the main cause of failure of the girder. They assessed by comparing the wire-like steel strands with the mild steel rebar usually used in the construction of reinforced concrete elements. In fact, the girder neither failed nor collapsed, it simply fell over due to the lack of sufficient lateral supports and poor handling of it by the labours.

So far we could know from the dailies, a good number of engineers

were involved in the project. After the incident, the DCC made an investigation committee and a case was filed against the contractor. Therefore, it was very unexpected that similar incidence might occur again.

But we know of the similar incident occurred on 14 March 2002, another under construction foot overbridge at the Science Laboratory corner. In this case, one girder out of twelve fell over, smashed a running jeep and killed two persons inside it. The 17.5-meter girder weighed about 20 ton. Some local people of the area reportedly told the police box near the corner about the unstable condition of the girder two/three days before the incident. One police personnel made a general diary with the Dhanmondi Thana and failed to find out any person related to the project at DCC. There was plenty of time to take measure and the incident could be avoided. Here the matter turned into a big question about the poor handling of the project by all concerned because it occurred second time and in the same way. Therefore, all under construction foot overbridges of prestressed concrete girder at various places (total nine) of Dhaka metropolitan area became dreaded objects to the Dhaka dwellers.

One week or so after the second incident, all the girders at Science Laboratory corner were removed from overhead to the ground. Also the girder, which was in place at Badda and those at some other places, were removed to the

ground. There was no way but to remove the girders. Now if the girders meet the design strength of concrete, rebar detailing, number of tendons required and the tendon profile etc, then they may be considered for use in the construction of the foot overbridges. But obviously the investigation committee looking into the matter will make the final decision.

Most of the media report did not cover the real cause of falling of the two girders. Although the length of the girder in the second incident was about 58 feet (17.5-m) but more than one sources mentioned it as 35 feet (10.67-m). Most of them addressed the incident as a collapse of bridge or girder etc but in fact neither the bridges nor the girders collapsed. The girders simply fell over due to their unstable condition and lack of sufficient number of lateral supports.

It is necessary to have at least an approximate idea about the shape of the girder, which fell over. It was designed as a prestressed concrete (PC) girder and was rectangular in shape. Its breadth was about 1/4.5th of its depth. If two flanges, one at the top and the other at the bottom of the girder, were provided, more small breadth could do and the girder could be very stable (a very small block was provided at one side of bottom corner, but it was very insufficient). But due to the absence of such flanges, providing higher depth but smaller breadth that had to be in case of PC girder, the girder was unstable due to higher height of center of gravity. Usually the

breadth of an ordinary reinforced concrete girder is half or more than half of its depth. The breadth of PC girder is rather small in comparison with depth, which makes it comparatively unstable.

It is also necessary to have an idea about the plan of the foot over bridge at Science Laboratory corner. Out of total seven spans, four spans were across the street, two in the north side and another two in the south of Mirpur Road. The rest three spans were along the centerline of Mirpur Road supported by four piers. One girder out of two on the middle span of the three, fell over on the street. All the four piers along the center line of the street were subjected to vibration induced by heavy and light passing vehicles, while the girders were in place over a couple of weeks. It should be noted that the two piers, which supported middle-span, were subject to highest vibration, because vehicles from Elephant Road approached to the Mirpur Road and passed across these two piers, in addition to the vehicles those moved towards north and south along the Mirpur Road. Due to the vibration of the two piers, the simply placed girder might have been displaced by some millimeters in unilateral direction in a day. After some weeks from the time of placement of the girder, it fell over on the side of bottom corner, but it was very insufficient). But due to the absence of such flanges, providing higher depth but smaller breadth that had to be in case of PC girder, the girder was unstable due to higher height of center of gravity. Usually the

We also remember the shaking due to a minor tremor that occurred

on 19 December 2001 in Dhaka. In such minor or moderate shaking, the falling over of the girders at Science Laboratory corner was also very likely. Even strong wind say 150 km/hour could be the cause of falling over of the girders. Therefore, since the girders were vulnerable to shaking and lateral forces, they had to be secured by a number of lateral supports that could be determined by engineering calculations. To secure the girders by a number of lateral supports, a platform should be built and that also could be designed by engineering calculations. If such arrangements were made, both the incidents could be avoided. Only engineers know very well how to assure the safety of a construction site and how to handle the operational works to execute the project. The people who are not engineers cannot do the calculations required for the proper arrangements regarding safety measures and other related phenomena. For instance, the function of high-tension steel strands is understood by civil engineers only, not by the persons of other professions.

Since both the Badda and Science Laboratory sites were crowded with traffic and general pedestrians, the girders should not be cast in place but on the side of street on condition that normal traffic would not be disturbed. Since the breadth of the girders was equal to or less than half a meter, so a space of one-meter width along the side of street could enable the

contractor to carry out casting of concrete, especially after mid-night when vehicles on the street are few in number. The stressing operation of the tendons could be done in the same place. Before placing the girders in the appropriate position by using heavy-duty crane, one stage should be built by following engineering design. Especially, buckling of the posts (whether steel pipe or H section) should be checked thoroughly and bracing should be provided accordingly. Since many vehicles are supposed to pass by near the posts, a collision factor should be considered during the design of the posts. so that unexpected collision with the posts

could be avoided.

I think the credentials of civil engineers of the country has been received a punch because the foot overbridge was a civil engineering project and accordingly some civil engineers both in contractor's side and in Dhaka City Corporation were involved thereof. Needless to say that our exportable manpower is heavily dependent on some South East Asian and Middle-Eastern countries where they look for competence. Many civil engineers are jobless in the country at this moment. The civil engineers should not do anything which may put a question mark on the efficiency of the civil engineers of the country.

Due to this incidence, it would be very natural on the part of some foreign donors to think that foreign consultants are a necessity for any construction project in Bangladesh. Although the Khilgaon Flyover project is first of its kind in this country, the Local Government and Engineering Department is taking care of the project. We expect that this fly-over project will be completed without any undesired happenings like that of foot overbridge, keeping "safety first" motto in mind and getting rid of the shameful chapter created by the falling of two girders.

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