

GLOBAL WARMING

Changing Himalayan ecosystem matter of great concern

PINAKI ROY

SONAMW Sherpa lives in a village called Jiri, 4300 metres above the sea level, near mount Everest. He works as a tour guide. The Everest bound mountaineers start walking from Jiri camp. The Everest base camp is fifteen days walk from his village.

Now Sonam is 40 years old. Most of his life he spent without facing the mosquito menace. They never had to use mosquito net at night. But now things are changing and villagers in Jiri cannot do without mosquito net.

Historically the mountain community never needed to worry about saving their single crop potato from rodents. But now they have to. They have been experiencing invasion by pests like rats for last few years.

The Himalayan climate is getting warmer day by day and new species of insects and pests are moving towards the higher altitudes. "For the last few years we have been experiencing mosquitoes and also suffering from bacterial diseases like diarrhoea, a new phenomenon here," said Sonam.

Sonam W. Sherpa came to

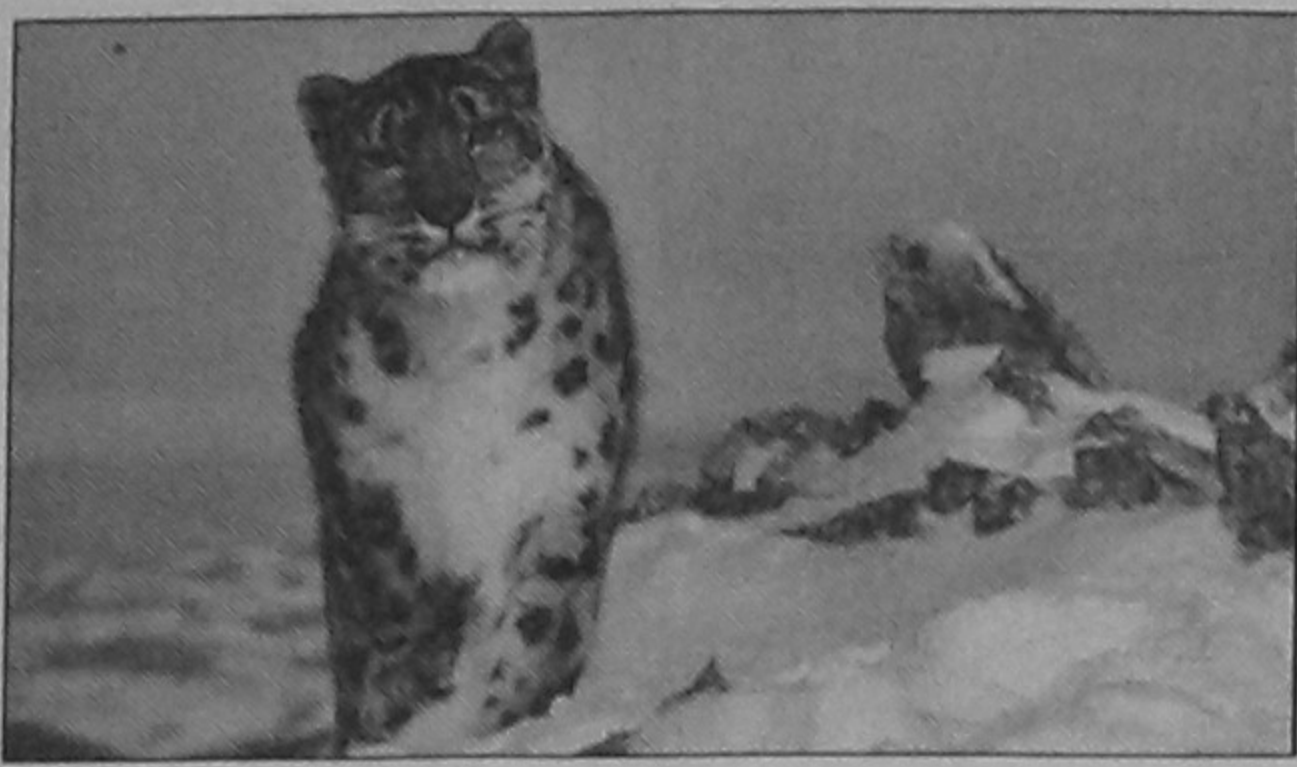
attend the South Asian Climate Change summit, held at Kathmandu, Nepal on August 31 and September 1 where he shared his experience.

While describing the changes in the ecosystem, he said they have also spotted some species of snakes at much higher altitude, which was an exception before.

Though no major study has been conducted on the Himalayas in this regard so far but the experts say, about 1.2 degrees Celsius rise in temperature has been experienced in the Himalayas over the decades. The warm weather has been causing serious concern for the tens of millions of people living in countries in and around the Himalayas, the sweet water tower of Asia.

Glaciers of North Pole and South Pole were the centre of concentrations (melting) over the years -- what is going to cause sea level rise and inundation of small islands countries and parts of floodplains like Bangladesh. But now experts say, the Himalayan glaciers have been melting faster than any other glaciers in the world, though no significant scientific study has been conducted on the Himalayas

The Himalayan glaciers are the source of nine major rivers of Asia including the Ganges, Indus, Yellow, Brahmaputra, Mekong, the sweet water sources for almost one-third people of the world living in this region. All these rivers might die as 67 percent glaciers of the Himalayas, the source of these rivers, have been retreating at a rate of about 10 metres every year.



Endangered snow leopard and blue sheep (right).



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Now climate change is the harsh reality the globe is facing, and is being treated as very severe threat to mankind.

Earlier, during different ecosystems of sea, desert, floodplains, islands, forests and glaciers of the North Pole and South Pole the scientists of Inter-governmental Panel of Climate Change (IPCC) said in 2007 in their fourth assess-

ment report that 'Climate change is irreversible'.

But interestingly in that report, the IPCC did not present any assessment about the Himalayan ecosystems. They mentioned the entire Himalayan region as a 'white spot' in the IPCC report as the scientists did not have any study about it.

But now the scientists and experts have started working on the Himalayas and are

saying that the ecosystem of the Himalayas is changing fast. Much faster than they imagined it could be.

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Himalayas, the source of these rivers, have been retreating at a rate of about 10 metres every year, said the experts at the conference. These retreated glaciers created around 7,500 lakes in the Himalayan countries, including India, Bhutan, Nepal and Pakistan, and are increasing flood risks for downstream Bangladesh.

It is not a threat for downstream countries only, in the mountains too, the glacial

lakes are causing concerns for people living in some parts of India, Nepal, Bhutan and Pakistan as some of these can burst anytime.

Of the 2674 glacial lakes in Bhutan, 24 have been identified by a recent study as candidates for Glacial Lake Outburst Flood (GLOF). International Centre for Integrated Mountain Development (ICIMOD) study identified 27 lakes as dangerous. A glacial lake holds millions of cubic meters of water and may burst suddenly anytime washing away bridges, hydropower and other structures and crops.

One of the major barley producing areas of the Tibetan Plateau was destroyed by GLOFs in August 2000. More than 10,000 homes, 98 bridges and dykes were destroyed and the loss was estimated as about \$75 million.

The gradual rise in temperature in the Himalayas is changing its ecosystem pushing the Himalayan people and wildlife almost on the verge of extinction.

Now snow leopards and spotted leopards are sometimes seen at the same spot what never happened before. Spotted leopards are moving towards the higher altitudes but snow leopards cannot as

the snow is melting fast and they have nowhere to move and hunt.

The scientists and wildlife experts know the behaviour of these leopards is most unlikely now but they are yet to ascertain what other changes are taking place in the Himalayas since they do not have proper research.

The Himalayan blue sheep live in the altitude between the grass line and snowline, but as the snowline is now moving higher, these blue sheep too are under the threat of extinction.

Not only the wildlife, the increasing temperature in the Himalayas is projected to play havoc with agricultural sector in the region and frequent catastrophes like, floods and droughts might occur.

Besides reduction of black carbon emissions by emerging giant industrial countries like China and India, the experts see basin wise management of the rivers also could reduce the loss of property and lives.

Forgetting the political boundaries, the experts urged all the governments in the region to work together to minimise the risks.

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NIJHUM DWIP

What to do with the deer?

REZA KHAN

CONCERN over the Nijhum Dwip deer of Mr Sikander Ahmed (Daily Star, 6th August) and many others, who had given their opinion earlier on the issue is genuine. Their suggestions regarding these deer are most plausible but perhaps impractical in the present context of both the lack of long term planning and wildlife management resources of the government Forest Department (FD) and the existing meagre forest resources of the country. We must remember that man-made problems cannot be solved by the nature itself rather to be done away by ourselves.

In the first place FD had no clue what would they do with the surplus deer of the Nijhum Dwip when they start producing offspring at an unprecedented rate in the absence of top carnivores -- the Bengal Tiger, Leopard (in Bangladesh) and/or Asiatic Lion (in Gir forest, Gujarat in India) -- that naturally keep deer population under control.

We must not dream that man produced excess deer from Nijhum Dwip would survive in any forest from where all species of deer -- such as Barasingha or swamp deer, Sambar, Hog deer, Chital or spotted deer and barking deer or Muntjac -- have already been decimated by the

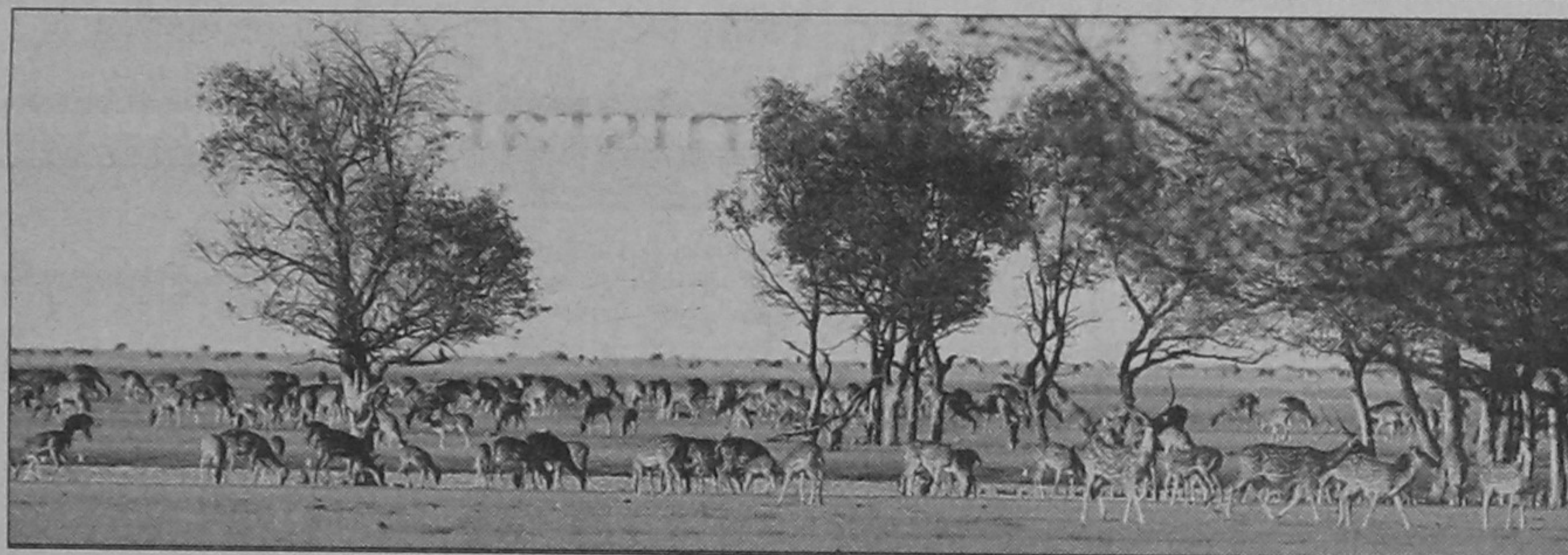
human folk. Possibly within first few days of their introduction to any of the existing forests in the larger Chittagong Hill Tracts they would be killed by hundreds of gun toting tribals, plain-land Bengalis settled there and even our forces with arms. They may have their field days of sport hunting the deer. Some officials and local elite are likely to find great pleasure in hunting these poor deer.

Even if not killed by hunters the deer would definitely leave the forest and venture into the nearby jhum rice and other crops fields. Then they are likely to be poisoned by the locals.

Also one should remember that the character of all forests in Bangladesh, barring possibly the Sundarbans, has changed due to the faulty practice of the government Forest Department, Jhum cultivation by the ethnic people and log removal by lumber poachers and illegal timber merchants. We have now more man-made forests than natural forests. But carrying capacity of all these forests has been reduced to bare minimum that cannot support large population of herbivores.

Question of returning Nijhum Dwip deer to the Sundarbans does not arise because Bengal Tiger, Chital, Rhesus Macaque and Wild Boar are living in such a harmony that there is no scope for

Government may take up a temporary programme of making all subadults and adult males neutered through a mass capture programme involving the services of the wildlife biologists and the veterinarians of the animal husbandry department. This will stop further proliferation or there will be a zero growth at least for few years when government can chalk out a long term solution to the problem through creation of a new Wildlife Department.



any reintroduction of a new population of an existing animal species. Sundarbans ecosystem is operating efficiently for the past couple of 1000 years in spite of massive human interference during the past half a century or so.

Moreover, nobody knows what kind of disease Nijhum Dwip deer will carry and introduce the same to the Sundarbans. Also these deer have no fear of predator, as they have never seen one, and human being. Both tiger and people will over kill them.

Our FD is ill equipped to handle massive capture, marking and transporting of most animals to a new location. Forestry policy and FD personnel seem to be geared for cutting trees and giving revenue to the government exchequer and, allegedly stashing away some amount possibly to their own coffer. This department usually takes up short or long term projects either from the point of view of getting additional finance or creating more posts for

absorbing manpower from various projects or new recruits.

Earlier someone suggested that Bengal Tiger should be introduced in and around Nijhum Dwip to control the deer population. It will be a murderous decision. Tigers will possibly not kill the deer but cattle and human being finding it is easier than deer-hunt.

Government has many options to handle the deer problem it has created by its own forest department. First

and foremost is that the surplus deer population must be removed from the Dwip area. To do this government can outright sell the additional numbers through public auction.

In the absence of a separate Wildlife Department and allegation of questionable transparencies in forest resources disposal the government can organise the auction through a committee formed with representatives of the FD, wildlife advisory board and a few concerned citizens,

including scientists and media personalities, so that the process becomes transparent and open.

Before selling the deer their health to be checked by proper veterinarians who could determine whether these are fit for human consumption. People buying these can keep them as pet, start their own deer breeding farm or consume the meat.

The same committee can issue hunting permits just for killing a fixed number of male deer each having an antler size of at least 20 inches in length, or the size and the number to be determined by scientists to be appointed by this committee.

Each hunting permit should be valued at taka one lac or more. After securing a permit a hunter must go to the FD to make arrangements for going on a hunt within a stipulated period and in specified block or patch of forest for which FD must provide a trained guide or a Shikari at a predetermined price.

The hunter to be given a fixed time table to go for the hunt is to bear all expenses for taking the guide and returning him back to the forest office. If a hunter fails to hunt his deer within the fixed time his permit will be cancelled and no money returned.

The above committee can also start a deer breeding farm involving islanders and others living along the borders of the

forests with a view to marketing the meat through reputed supermarket chains in the country and leather and antlers through renowned outlets. Or exporting both to suitable destinations. This can also generate an alternative livelihood for the low income people living in the buffer zone of various forests.

If above programmes cannot be taken up now government may take up a temporary programme of making all subadults and adult males neutered through a mass capture programme involving the services of the wildlife biologists and the veterinarians of the animal husbandry department. This will stop further proliferation or there will be a zero growth at least for few years when government can chalk out a long term solution to the problem through creation of a new Wildlife Department.

To handle nature delicately government must think of starting a new Department of Wildlife to handle all problems related to it and saving the wildlife wealth of the country in a sustainable manner through public awareness campaigns and loose partnerships with the stake holders unlike the existing forest department mandated to cut and, often, plant trees.

Dr Reza Khan is a nature lover.

BRICK EXPORT

Not too wise a decision, perhaps

S. K. LAHA

BRICK EXPORT starts brick export to Tripura's news item published in different national dailies on August 20, 2009. Salient features of the news are: a) 40 crore bricks will be exported; b) Foreign Exchange earning will be boosted by Tk. 283 crores or \$ 40.43 million approximately. That will reduce the trade gap between India and Bangladesh to the same extent. The trade gap in fiscal 2007-2008 was quoted to be \$ 3.016 billion.

All this indicates a positive step forward, initiated by IBCCI and actively pursued for six months that has resulted in achievement of the deal. For a common citizen, this achievement will appear to be excellent. But is it really so? There are many associated issues that need to be carefully studied before arriving at a conclusion whether this really has been a good move or bad for Bangladesh.

First and foremost reason is environmental. Mr. Abdul Matlub Ahmed, President, IBCCI himself has said, "Every industry has an impact on environment and the same is true for brick fields. We will ensure brick export from only those who ensure environ-

mental norms." These norms basically are: a) The brick fields will be located at quite some distance from residential areas; b) The chimneys for emission of smoke will have to be of a definite height; c) Timbers must not be used in burning of bricks.

There is no reason to doubt the sincerity of IBCCI to enforce the above norms. But it is perhaps not practical. It is highly unlikely that felling down trees can be or will be stopped. "Loggers reign supreme" is the headline of another news item published in The Daily Star on August 26, 2009, which continues as:

"Half of Mirzapur's reserve forest disappears; Timber Market, brick kilns thrive on Tangail greens." Such being the situation, it is only a wishful thinking that IBCCI can effectively enforce regulations in this respect.

Hope against hope, let us assume, timbers will not be used for burning these bricks. Then what fuel will be used is the question that automatically follows. Can it be natural gas? The answer has to be negative as Bangladesh does not have enough reserve nor the requisite pipeline to supply gas to distantly located brick fields.

The most rational solution to this fuel problem can be

Our country being a small one and of a high density population that still primarily and mostly depends on agriculture for sustenance must protect this top soil as this is our most valuable national wealth. Destruction of the same for immediate small gain will be like killing the golden goose for collecting golden eggs all in one time.

coal. Now since we do not have enough coal reserve in our country, this coal will have to be imported. For financial reasons, the brick manufacturers are unlikely to import best grade coal or coke. It can be predicted that cheap quality coal will be used, which will have impurities that on burning will emit harmful sulphurous and other gases along with carbon dioxide (CO₂) and carbon monoxide (CO). In a news item headlined "Brick kilns to get green energy" in The Daily Star of August 26, 2009 it has been stated that "Brick making in Bangladesh is a highly energy intensive and carbon emitting activity and one of the largest sources of gas emission estimated to be around 3 (three) million tonnes of CO₂ annually."

It is a grave situation that needs immediate arrest. We are making deals that will add to the danger for reduction of a trade gap of \$ 3.016 billion by an amount of US\$ 40.43 million or by an even significantly



much lesser amount when the import cost of the coal for burning these bricks are taken into account.

The world is in the throes of recession never before seen since the Great Depression of 1929. To make matters worse, the threat of climate change is

very real and its impact would be most severely felt here in Bangladesh. It is now imperative that focus be given on conservation of energy and implementation of environment friendly practices. Earth climate has changed during the past century and will

continue to change significantly in near and distant future. Further, these changes have not been and will not be evenly distributed over the entire planet. Climate changes are more felt where large population dwell and rely on ecosystem for their sustenance.

Bangladesh best befits the above and can be described to be sitting on a climate tinderbox most vulnerable to threats like rise in sea level or catastrophic storms.

Another highly important aspect that needs to be attended is the materials from which these bricks will be produced. The material is clay, or the top soil on the earth's crust.

We can destroy it but cannot recreate it. Our country being a small one and of a high density population that still primarily and mostly depends on agriculture for sustenance must protect this top soil as this is our most valuable national wealth. Destruction

of the same for immediate small gain will be like killing the golden goose for collecting golden eggs all in one time. We must understand that 40 crore bricks mean a total quantity of 3.41 million cubic feet of clay equivalent to 4726 bighas of land 1'-0" deep. Supposing the same quantity of brick will be exported for five years will mean Bangladesh will lose 4726 Bighas of agricultural land for earning an amount of 5x40.43 = US\$ 202.15 million.

This 4726 bigha of land will be lost for agricultural use once for all which otherwise would have yielded crops from now onwards up to eternity. Together with this the brick production for domestic use which must be many times more, if allowed to continue unabated is an excellent example of ridiculous ignorance or indifference to the importance of conserving our nature, our wealth and our future. We cannot afford the luxury of export of bricks and must take up effective measures to gradually decrease use of bricks for our domestic construction as well.

We must find out alternative materials that are environment friendly in their production process; that does not damage our valuable resources. Such materials are already in use in many coun-

tries who do not produce bricks. We should also try to find out, why India, being such a larger country having great reserves of forest, gas and coal, has decided to import bricks. Is it because, they are conscious about sustainable development, while we are not. Time has come to ask ourselves: are we being guided by greed and not prudence in taking vital decisions?

"Strong support due for Dhaka" is the headline of another news item of The Daily Star dated August 30, 2009, where the Hon'ble Prime Minister has been quoted as follows: "Bangladesh is one of the countries most vulnerable to climate change. It deserves strong international support as the country is being terribly affected by global warming for no fault of its own."

We have to act in a manner to prove that the statement cannot be questioned. But are we doing it?

The Ministry of Commerce, the Ministry of Environment, conscious citizens of Bangladesh will hopefully explore answers to these questions fast, before this is too late.

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