

## FOCUS

DYING FORESTS  
The Syndrome Must be Arrested

by Md Asadullah Khan



TREES are the most essential bounties of nature contributing to the sustenance of life on earth. To industrial countries, trees are a treasure trove of biodiversity and greenhouse gas 'sinks' that absorb carbon dioxide and thus keep global warming in check. To the developing nations these trees, so to say, the forests are resources ripe for exploitation: potential farmland, a free source of fuel and a store house of exotic kinds of woods that command high prices in the domestic as well as overseas markets. And these forests and plantation of trees must be continued to maintain ecological balance of this planet earth. Without any contradiction, the world needs a lot of them to store the carbon produced by the growing population that triumphs on industrialisation. Forests work as carbon dumps: trees extract carbon dioxide from the atmosphere, emit oxygen and store carbon in the trunks, leaves and roots. These utilities call for preserving the forests that are still there after massive logging by human beings and restore those that have been destroyed.

Unsurprisingly, in Bangladesh trees are being destroyed the old fashioned way. They are cut down for fuel, in the houses and brick fields and to meet the growing needs of cropland for the burgeoning population. But other than this logging there is another deadly culprit at work that is denuding the forest wealth in the Sundarbans, Cox's Bazar, Sylhet, Mymensingh and in parts of the northern Bangladesh much beyond our knowledge. The disease called "the dying forest syndrome" strikes selectively but with deadly effect. The onset of the disease starts with the dark green branches hanging limply. Between five weeks and three years later, the branches are tinged with yellow and then brown. The weakened tree soon drops its needles and eventually stops growing new ones. It becomes bald at the top and appears stunted, spreading its highest branches outward and upwards like a stork's nest. Roots and trunks begin to twist and shrink. Finally drought, insects and parasites finish off the weakened plant. In the end, it stands like a thin stick stretching toward the sky. In this way, our country and other parts of the world where this 'dying forest syndrome' has started working, face one of the most environmental catastrophes of modern times.

The global scenario of this syndrome unfolds an alarming picture. In France, almost 5,000 hectares (one hectare equals 2.47 acres) of woodland have been seriously damaged and other 30,000 are showing signs of deterioration. In Germany, 34 per cent of its 7.4 million hectares of forest appeared to be visibly damaged. Reports have it that in the south-western part of Germany, home of the black forest, some 75 per cent of the trees have been damaged. In eastern Germany where till before the unification, officials were reluctant to provide data on the extent of the disease, an estimated 86 per cent of the country's 3 million hectares of woodland have been affected.

The epidemic of dying trees which has struck the forest resources of the world, quite

mercilessly still seems to be quite mysterious. This new plague hits young saplings as well as 120-year-old trees. Extensive analysis for the epidemic range from a cyclic change in the environment to a baffling form of tree 'cancer'. But the most convincing evidence points to air pollution, specifically sulphur dioxide and oxides of nitrogen which are spewed into the air by the ton from electrical generating industrial boilers, smelting plants and automobiles.

One school of thought points out that by itself, sulphur dioxide can sap the vitality of trees, so can oxides of nitrogen. But the real problem seems to begin when the two gases work in combination with each other in the atmosphere. Hurled into the air by tall smokestacks, the substances mix with water vapour to form sulphuric acid and nitric acid and in presence of sunlight turn into oxidants such as ozone. When these new chemical mixtures fall to earth as snow or rain or float into forests as wind or fog, they can be far more lethal than the ingredients that went into them. According to experts, the mixing of sulphur dioxide and nitrogen oxides is not 'one plus one equals two', rather it is 'one plus one equals three.'

Acid rain, in the form of

dry-particles — snow and fog — attacks a tree on all fronts. Airborne pollution settles first on the highest tree-tops, acting as a natural windbreak. Acid precipitation filters down to the soil, eats away at the root system and eventually leaches out key nutrients, such as calcium and potassium and mobilises toxic metals like aluminium. Once on leaf or needle, acid rain disrupts the operation of the 'stomata' the tiny openings that permit a tree to 'breathe'. The process of photosynthesis is thrown off balance and subtle changes take place in the internal chemistry of the tree that result in discolouration and premature ageing. Finally, acid rain washes away vital nutrients from the leaves and needles so that the tree slowly starves to death, its respiratory, circulatory and 'digestive' systems crippled. When death comes, it is often due to natural causes like insects, high winds and drought. Much like an AIDS victim whose immune system has broken down, the ailing tree is left defenceless against the ravages of nature.

Scientists are offering much more plausible explanations. They are advancing the argument that it is sun-infused NO<sub>x</sub> or ozone, not acid rain that paralyses a tree's vital functions making it vulnerable

to poisoning or loss of nutrients. "Acid rain is partially responsible," says Adrian Meyer of the Swiss Federal Forest Office in Bern. "But in high altitude environments where the sunshine is more intense, ozone is a prime tree killer."

Most of the pollution that kills these trees is invariably associated with the industrialised country's energy profile which includes industrialised country's heavy reliance on sulphur-rich fossil fuels like coal, relatively little hydroelectric power and an uncertain supply of low-sulphur oil. The deadliest culprit that causes the most disastrous situation is the brown coal mostly available which when burned, emits heavy amounts of sulphur dioxide. Statistics available confirm that eastern Germany (Pop. 16.7 million) spews out 95.6 tons of sulphur dioxide per square mile every year compared with 40.5 tons per square mile in western Germany (Pop. 61.2 million) and only 6.6 tons in the US (Pop. 238.4 million).

Understandably, what makes tracking down the cause of toxic poisoning so frustratingly difficult is the caprice of the wind. Smokestacks built these days which are rising more than 1200ft may spare the surrounding countryside. But they can emit pollutants high into the air, where they travel along wind-formed 'sky ways' that can carry them thousands of miles apart even beyond the country that produced them.

That answers the dilemma of the non-industrialised countries who are not sinners but have to pay a heavy price for other's faults. Interestingly, the most dramatic example of "pollution drift" comes from Great Britain which ranks as the largest generator of sulphur dioxide in western Europe. A report issued by the Environment Committee of House of Commons in the late 1990 estimates that 28 per cent of the 5.1 million tons of sulphur dioxide belched from British smokestacks each year are wind-borne to other countries, principally in Scandinavia.

One year before, the number of sanitary latrines for the same number of families was only 2,446. The Director of NGO Forum for Drinking Water Supply and Sanitation Mr. SMA Rashid, who was presiding over the workshop, said it was not their main objective to only help the people of this area in constructing sanitary latrines, but to motivate them to construct such latrines themselves and change their habit. He said, the movement virtually did not end with the

environmental group. British emissions account for 14 per cent of the pollution in Sweden, and 7 per cent in both Norway and western Germany. Consequently, the resultant downpour of acid rain has already caused 15 per cent decline in timber growth in these areas. Global figure on the emission of pollution and extinction of forest wealth reveals that there are countries which have only a negligible number of factories that emit this toxic chemicals but it could nevertheless suffer forest blight because of other's pollution. Only 23 per cent of sulphur dioxide deposited in the Netherlands is home grown, but 26 per cent of it blows over from western Germany, where smokestacks have disgorged noxious gases into the atmosphere. factories have dumped toxic wastes into rivers and streams, forests have been denuded, lakes polluted with pesticides, underground aquifers pumped dry. It is high time we take into account the possible consequences of this profligacy."

Shockingly, the sinners like Britain have resisted putting teeth into pollution control regulation since they must bear the costs but enjoy few of the benefits. Encouragingly, western Germany long opposed to tough pollution controls, has changed its stance.

The country is now leading the charge for stricter emission standards. So great is the concern there that western Germans mentioned trees more often than the arms race as a problem of importance to them. The dying forest has had a greater impact on Germans than almost any other issue. They look at the forests as being almost more important than their own health. That leads us to think how oblivious and unconcerned we are about our dying forest resources. Any country for its ecological balance needs at least 25 per cent forest resources. But in

our country at the moment, pollution hazard coupled with human assault have brought forest resources down to a shockingly 9 per cent mark.

The country's present bright and lamentable depletion of the forest resources accounts for the drought and climatic variations prevalent in the country. For any country heading for industrialisation, woods are to be considered as an alternative world to industry. The fragrance of flowers has inspired literatures, poets and vocalists in many ways. All romantic heroes felt at home in the woods. Forests bring about a soothing inspiration to people in the world tormented by afflictions, conflicts and hatred. The city planners in our country, in their bid to create unplanned housing in the city have often forgotten the age-old proverb: 'The city was seen as something made by man and the forest as some-

## Towards a Healthy Habit

## Sunamganj Villages Now Have Sanitary Latrines

Onirvan Shahu writes from Sunamganj



Development Corporation Ms. Suzan Muller who attended the concluding ceremony as special guests, saluted the effort towards healthy habit.

The Forum workers attending the workshop informed that the implementation of the programme initially seemed very hard but with the cooperation of the Union Parishad chairman, TNOs, Imams and priests, and representatives of various organisations and, above all, the conscious local people, almost a 100 per cent success could be achieved. Within the one year, not a single person in the three thanas has died of enteric diseases like diarrhea.

At the conclusion of the workshop, the Forum Director Mr. SMA Rashid distributed crest and certificate among the workers. This is believed to work as incentive, and as such it is expected that more such programmes towards imbuing healthy habits in the people will not suffer any lack of enthusiasm.

completion of one year implementation programme, rather people at all tiers of society should try to sustain the suc-

cess achieved. The Deputy Commissioner of Sunamganj Mr. Iqbal Hossain Khan and Programme Officer of Swiss

## The Daily Star Entertainment Guide



## STAR Sports

7:00am High 5 Iff 7:30 Squash Super Series Leeks British Open Cardiffs Hits 8:30 Spanish Football League H1 9:00 NBA Inside Stuff 10:00 The European Tour Peugeot Open De Espana Day 2 12:30 Australian Football League Highlights 1:30 US PGA Tour 1996 Shell Houston Open H1 2:30 Trans World Sport 3:30 World Wrestling Federation Action Zone 4:30 Asian Football League Hits 7:30 The Asian Football Show 8:30 Live The European Tour Peugeot Open De Espana Day 9:00 1995 World's Strongest Man 10:00 World Wrestling Federation Action Zone 11:00 LIVE NBA Playoffs Game 3 2nd Round 4:00 Australian Football League Highlights 5:00 1996 World Speed Skating Champs

## STAR MOVIES

7:30am Comedy Carry On Camping 18 (Arabic Subtitles) 9:30 Family Little Maries 12 (Arabic Subtitles) 11:30 Comedy The Monster Club 12 (Hindi Subtitles) 1:30 Family The Adventures Of Pinocchio 6 (Hindi Subtitles) 2:30 Film Club Le Quai De Brumes PG (English Subtitles) 5:30 Comedy Movie Movie 12 (Hindi Subtitles) 7:30 Family High Lonesome 12? (Hindi Subtitles) 9:00 Bollywoot 9:30 Leading

9:10 Pahal Khushboo 9:25 D45 Karkhan 9:40 Mehmam 10:05 Aap Ki Anwar Maqsood 10:30 English Film: Tarzan 10:55 Milli Nagma 11:00 Khabra 11:10 Meri Pasand 11:35 Janan 12:55 Duran-E-Hakeem 1:02 Bismillah 1:15 Grind 2:05 Lazaw Ep 21: 2:55 Mussool-E-Insaaf & Sports Coaching 3:20 TV Encyclopedia 3:40 Sports Time 4:05 Daastakar 5:05 Medicine 5:25 Computers 6:20 Auto Course 7:00 English News 7:20 PTV Music Library 7:30 Vira Pakistan 7:55 Ghazal Uss Nave Sareen 8:25 Dantana World Of Sports 8:45 Anta 9:00 Break For Headlines News 10:00 Khabarnama & Commercial News 10:35 TBA 11:55 The Flash Point

1:05 Urdu Feature Film: Khas Khabra Close Down

Barker Gong 1:00 Hospital 1:30 Aahaat 2:00 Kuch Dil Ne Kaha

SONY ET

8:30am Kuch Dil Ne Kaha 9:00 Raadon Ki Baarat 9:30 Cine Matinee Hindi Feature Film 12:30 Jaya 1:00 Siddh 1:30 Kaash 2:00 Sunday Ki Sunday 2:30 The Nirlep Rasoi Show 3:00 Khoya Khoya Chand 3:30 Movie Mania 4:30 Humse Barkar Gong 5:00 Rangeela Re 5:30 Mere Massege CD Premier 7:00 Good Show 7:30 Jai Bir Hanuman 8:00 Surf Wheel 8:30 News 6:00 Ankur 6:30 Play Show 5:05 Dhritang Dhritang Boile 5:30 News 6:00 Ankur 6:30 Break For Headlines News 10:00 Western Classical Music 7:00 Saptahik 7:30 Bangla Sambad 12:00 Pehchan 12:30 Humse

Madra 9:00 Jeevan Setu 9:30 Katha D-Kahini 10:00 \* (Drama) 10:30 News and Bengali Sambad

DD 7

8:10am Shastriyo Sangeet 8:20 Binodan 8:30 Gaan Sudhu Gaan 9:00 Athunki Gaan

9:30 Darshakar Darbare 10:00

12:45 Khalsa 3:30 Hollywood To

Bollywood 4:00 Bwi Ho To Aise

7:00 Tarana 7:30 Hit Hai Fit Hai

8:00 Coming Soon 8:30 Break Ke Baat 9:00 Aaj Anadi Kal Khaldi

9:30 Songs 10:00 Barsaa Ki Ek Raat 12:45 Zakhme Aurat

EL TV

8:30am Ched Ched 01:30 Music

Time 02:30 Tarane Aur Fasane 03:30 Best Of The Best 04:30 Dance Dane 05:30 Tarane 09:30

Cheh Chad 07:30 Music: Time

08:30 Tarane 09:30 Break Ke

11:30 Karz 10:00 R D Burman Special 1:00 Rehke Special 2:00

Jeentendra Special 3:00 Fat Or Fit

3:30 Karm 4:00 Teri Bhi Chup

4:30 Moov Usha Uthup 5:00

Peechu 5:00 3:30 Dharmendra

Special 6:30 Mohit Rafi Special

7:30 Zaike Ka Safer 8:00 Jawab

Do 8:30 F Its My Choice 9:00 W W Amar Prem 9:30 F Kal Bh Aaj

Bhi 10:00 Sorry Meri Lorry 10:30 R D Burman Special 11:30 Dharmendra Special

## TOM and JERRY



STAR PLUS

3:00pm Opening Announcement 3:10 Recitation from the Tripak 3:15 Movie of the Week 4:00 News in Bangla 5:00 News in Bangla 5:25 Bengali Folk Songs 6:00 News in Bangla 6:05 Angkar 6:30 Major Mukure 7:00 News in English 8:00 News in Bangla 8:30 Moto-Manush Programme Based on Agricultural Development 9:00 Alking 10:00 News in English 10:30 Drama Series: Dynasty 11:30 News in Bangla 11:35 Tomorrow's programme summary 11:40 Close down

CHANNEL V

6:00am BBC World News 6:20 Britan in View 7:00 BBC World News 7:10 Newswatch 8:00 BBC World News 8:20 Window On Europe 8:30 BBC World Headlines 9:05 Correspondent 10:00 BBC World News 10:20 Face To Face 11:00 BBC World News 11:20 Window On Europe 12:00noon BBC World Headlines 12:05

Tol Mol Ke Bol on Zee TV at 1:00 PM today