

In environmental bottleneck

For more than 40 years, through workshops, seminars and rallies, a group of environmentalists has diligently voiced the plight of our ailing planet. What they have prophesied – human activity can wound the earth and extinguish its creatures – has become a rude reality. Dangers that seemed exaggerated a decade or so ago – global warming, ozone depletion, drought, flood and storms and desertification of once arable land – are now real, writes **Md. Asadullah Khan**

TWO YEARS AGO, the world witnessed the harrowing scenes of misery in China brought about by an unprecedented flood, caused in part by rampant deforestation, which killed 3,600 people and left 14 million homeless. Population pressure, squalor and poverty raised Latin America's flood-deaths to nearly 30,000 and created an army of environmental refugees. A cyclonic storm of unprecedented magnitude battered the Coastal belts of Orissa in India late last year. With devastation and death figures rising up, Mozambique is still struggling to cope with the flood situation there. But the situation either in China or Peru or Indonesia or Mozambique is by no means unique. It is mirrored in all developing countries across Asia or Africa or Latin America.

"Economic euphoria may lead us to ignore trends that have the potential to reverse progress – from HIV/AIDS in Africa to falling water tables in India and adjoining places," World Watch Institute President Lester R. Brown, in a sobering annual report card in early

January this year, said. "Caught up in the growth of the Internet, we seem to have lost sight of the Earth's deteriorating health. It would be a mistake to confuse the vibrancy of the virtual world with the increasingly troubled state of the world."

A comprehensive global survey has shown how damage to one system is affecting other systems and made very clear that the earth as a whole is losing its ability to nurture the full diversity of life and the economies of the nations.

Coastal/Marine damage: It has now been seen that coastal areas, home to two billion people around the globe play a vital economic role and feel the full brunt of human impact. Two-thirds of all fish harvested depend at some point in their lives on coastal wetlands, sea grasses or coral reefs, all of which are fast disappearing.

Reports have it that the collapse of the North Atlantic Cod fishery put 30,000 Canadians out of work and ruined the economies of 700 communities. A closer look at the trends is somewhat disturbing.

PAGE (Pilot Analysis of

Global Ecosystems) – a UN-sponsored research group comprising the World Bank, the UN Development Programme, the UN Environmental Programme and the World Resources Institute – points out that there is a difference between current production and capacity. Speaking about the marine life, one group locates oceanic dead zones caused by pollutants flowing to the sea from rivers, another shows the degree to which productive parts of the sea floor have been destroyed by trawling, another highlights how much humanity has altered coastlines. Fishing fleet, the report says, are 40 per cent larger than the ocean can sustain. At that rate more fisheries are bound to collapse as did the North Atlantic cod ground.

Take the situation in Africa's Lake Victoria. A close look at production shows a rosy picture of a giant lake producing 300,000 metric tonnes of Nile perch and tilapia annually, yielding roughly 300 million US dollars in the export market. The two species are not native however, and introducing these species has jeopardised the dynamics of Africa's

largest lake. The invaders have crowded out 350 species of native fish that used to support the local fishermen, most of whom cannot afford the equipment necessary to fish for perch. With the native population reduced more than 80 per cent, malnutrition is more evident in surrounding villages, even as the export market booms. The perch-tilapia take-over has upset the system in other ways as well. Without the *cichlids* type of native species moving up and down the lake and mixing waters, some layers of the lake are becoming stratified and depleted of oxygen. Algal blooms, fed by pollution and agricultural run off, are increasing. Now they have reached a full circle and the lake's instability threatens the perch and tilapia fishery. The report concludes that collapsing fisheries will directly hurt one billion people particularly in Southeast Asia.

Lake Victoria is a salient example before us. As a matter of fact, every ecosystem suffers from the kind of unintended consequences that jeopardise Lake Victoria. What actually happens is, shrimp farmers cut mangroves in Thailand,



The cause: unchecked land reclamation and disappearing mountains

Ecuador, India, Bangladesh and other tropical coastlines, unaware that their increased production comes at the expense of offshore fishermen who catch fish nurtured in mangroves.

Since 1970, global food production has doubled and livestock production tripled, but the consequences have been very alarming: polluted water supplies, exhausted soils and destroyed habitats. On an extensive and thorough survey, it is now evident that one-third of global land has been converted to food production, but three-quarters of this area has poor soil. So far harvests outpace population growth but the future is clouded by loss of land to urban development, soil degradation and water scarcity. Erosion, nutrient depletion and water stress now spell trouble in many places of Latin America, Asia and Africa. Many of the statistics mentioned in the study are staggering. In the past century, half of the world's wetlands have been lost in the past century. Fifty-eight per cent of coral reefs is imperilled by human activity. Eighty per cent of grasslands are suffering from soil degradation. Twenty per cent of dry lands are in danger of becoming deserts. And, crucially, groundwater is being depleted everywhere.

Forest damage and loss of bio-diversity: Home to two-thirds of all species, forests temper climate and capture and store water. The timber collected from the forests has been a useful tool for economic development. Forests store 40 per cent of terrestrial carbon and can slow the build-up of carbon dioxide in the atmosphere.

Reports have it now that except for Russia and Canada, industrial nations have cleared almost all their original forests. Rain forests are also rapidly shrinking. Tropical rain forests are the site of the most of the known damage. Although they cover only six per cent of the land surface, they contain more than half the species of plants and animals of the entire world. The alarming magnitude of habitat loss spells trouble for the planet's reservoir of bio-diversity. Experts estimate that each year about 0.25 per cent or more of the forest species is being doomed to immediate or early extinction.

If there are 10 million species in the still mostly unexplored forests, which some scientists

think possible, the annual loss is in the tens of thousands.

For example, in Bangladesh, the Sunderbans, the largest mangrove ecosystem in the world

covering originally an area of 10,000 square kilometres, has

been reduced to half of what it used to be 150 years ago. Home to 330 species of plants, over 270 species of birds and 42 species of mammals including the Royal Bengal Tiger and spotted deer, this natural ecosystem faces extinction because of over fishing, rampant logging and over-exploitation of plant and wildlife species.

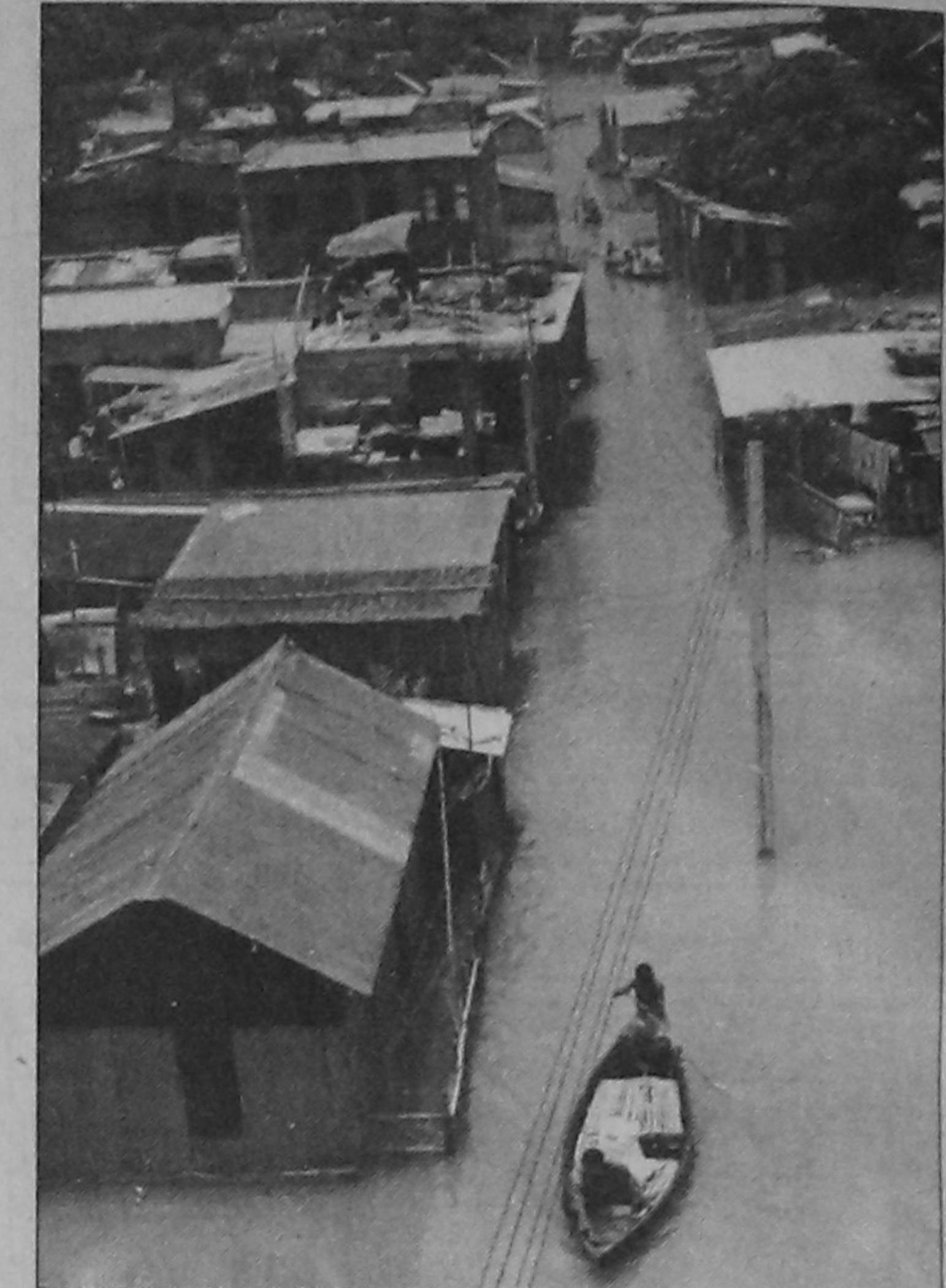
Because of continued assault, the forest area in the country

has come down to 8.6 per cent

from 25 per cent in 1947.

Bangladesh has a land area of 14.4 million hectares and the forest land is estimated to be 2.2

million hectares covering only



... and the effect: more floods, the balance of nature disturbed

increasing demand of freshwater for humans. Even the large rivers like the Yellow river in China, the Nile in Egypt and more so the Ganges, Brahmaputra etc. in India and Bangladesh continue to dry up before getting to the sea. On the other hand, waterways that still remain are laden with noxious chemicals and sewage. Because of the construction of 40,000-plus large dams and many more smaller obstructions, the world's rivers have now turned into a series of interconnected lakes making life harder and spawning disastrous situations.

We are destroying part of the creation, thereby depriving all future generations of what we ourselves were bequeathed. The most unsettling prospect is that even the planet's richest nations may not have the wherewithal to restore a vital balance in our ecosystems. That only underscores the fact that it is far less expensive to halt destructive practices before an ecosystem collapses than it is to try to put things back together later. We must bear in mind that the planet will let us know, in the harshest possible manner, if our words are not being backed by action. Evidently, the new kind of environmentalism values the world's fauna and flora not just aesthetically as the natural heritage of humanity but also as a source of wealth and economic stability. The new approach uniting conservation and economic development may be far from perfect. But it is a promising start. They offer a way out of what will otherwise be a biologically impoverished future. With the world population at six billion and sure to keep on growing rapidly until well into the next century, humanity may have entered a dangerous environmental bottleneck.

There is a silver lining behind an enveloping dark cloud. An infant bio-diversity industry is now taking shape along several fronts. More than 20 pharmaceutical companies have contracted with private and national organisations to push "chemical prospecting" for new medicines in rain forests and other habitats. Such collaborative actions are now most urgent and crucial. For example, in Africa, the desperate shortages of human and financial capital impoverish both their peoples – and their land. The resulting loss of biodiversity carries a price for us all. For instance, the rosy periwinkle, a plant native to Madagascar, has proved potent against childhood leukaemia. Yet other rare species in this small island country found nowhere else in the world are disappearing faster than scientists can catalogue.

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Protected areas or paper parks?

The realisation that inspired efforts to protect what we have not yet destroyed is itself a success story. Sadly, however, the gap between the aspiration behind protected areas and the reality of their management is often embarrassingly wide, writes **Claude Martin** from Gland, Switzerland

MOST OF THE NEWS we read about the environment is bad. Almost every day, it seems, come reports of disappearing forests, destruction of wetlands, death of coral reefs and so on. We hear repeatedly of threats to the tigers, the whales, the elephants, this or that plant or bird – and we know that every year species most of us might never have heard of fade into extinction.

These are serious matters, of course, and we need to be concerned about them, to try to reverse unhealthy trends and to stop the growing toll of damage we so carelessly do to the world about us. Yet when we look at our planet, the news really is not all bad. Sometimes, human endeavour and intervention in the natural world do yield positive results and – while we must never be complacent and always remain aware of our destructive power – we could perhaps once in a while allow ourselves a little pat on the back for the wonderful natural inheritance we are taking into the new millennium.

During a recent visit to Bangkok, I discovered for the first time the magical wildlife sanctuary of Huay Kha Khaeng, in western Thailand. It is a sizeable tropical moist forest close to the Myanmar border, covering 2,500 square kilometres of hilly terrain that is barely accessible by road. The sanctuary, where the conservation organisation WWF runs an education project with young Buddhist monks, may well be the only hope for the Indochina tiger in Thailand. It is also harbours a notable Asian elephant population and, among much other wildlife, no fewer than three different large bovine species: the gaur, the banteng and the wild buffalo.

Huay Kha Khaeng is a place we can be proud of, a rare intact sample of the former jungles of Indochina we have managed to preserve. And it is not alone. At this moment in history the



Wildlife sanctuary of Huay Khaeng in western Thailand. – Photo: WWF Gallery

world has 44,000 protected areas, covering in all a surface greater than the combined territories of India and China, or a total of almost 10 per cent of the land area on the planet. What is more, 45 per cent of this total – that is, about six million square kilometres – is classified as nature reserves and national parks, which means it is strictly protected.

Even during the past decade, alongside steady growth in environmental anxiety and accumulating evidence of the risks of climate change, the area classified under the six categories of protected areas recognised by the World Conservation Union (IUCN) has increased exponentially. This fact prompts two thoughts.

First, it is a clear indication of the increasing pressure on land from agriculture, forestry, mining and other forms of exploitation and of the multiplying threats to ecosystems. Second, though, comes the realisation that our efforts to protect what we have not yet destroyed are something of a success story, because they show a willingness among many governments to think of what we will leave to future generations.

Of course, this does not mean that everything in the garden is lovely, so to speak. The gap between the aspiration behind protected areas and the reality of their management is often embarrassingly wide – there is ample evidence that many protected areas are falling far short of the expectations placed upon them. Economic and social pressures, pollution, poor management techniques and sometimes a lack of political support all continue to leave protected areas vulnerable to degradation.

So even if we can celebrate our relative success in establishing protected areas, we cannot afford to be complacent about their survival. And, such places will be of greater importance in the future than they

have been in the past. Protected areas fulfil a crucial role in the preservation of bio-diversity and as a pool of animal and plant species – not least those species that have medicinal properties. They also contribute greatly to the maintenance of fresh water resources and protection against flooding, with even big cities relying on them for the integrity of their water supplies.

We may take comfort from the fact that we have made a good start, but if protected areas really are to serve the purpose for which they are intended, we must learn to understand them, promote them and care for them. In short, we need to see them positively and value them properly. Otherwise, we risk leaving with nothing more than "paper parks", protected areas that we plausibly declare but then neglect. – **WWF Feature**

The author is Director General of WWF International

inhabited regions – but this is a difficulty that can be overcome by sensible management and should not be seen, as it so often is, as an argument against protection. There are plenty of examples round the world of conservation measures that actually improve the economic position and the livelihood of native and indigenous peoples.

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MTV INDIA

7:00 Non Stop Hits 8:00 MTV

Classic VJ Sarah / Rahul 9:00 MTV

Non-Stop Hits 11:00 MTV Most

Wanted VJ Shehnaz 12:00 MTV

Non-Stop Hits 12:30 MTV Hit Film

Music 1:00 MTV HouseFull V

Nafisa 1:30 MTV Cinemascope 2:30

MTV Non-Stop Hits 3:30 MTV

Loveline VJ Malaika 4:00 MTV

Bakra 4:30 MTV Select VJ Nikhil

5:30 MTV Most Wanted VJ

Shehnaz 6:30 MTV Chill Out VJ

Cyras/Asif/Nikhil 7:30 MTV &

Kenwood Hit List 9:30 MTV Hit

Film Music 10:00 House Full VJ

Nafisa 10:30 MTV Non-Stop Hits

2:00 MTV Loveline VJ Malaika

11:00 MTV The Grind 12:00 MTV Chill

Out VJ Cyras/Asif/Nikhil 1:00 Non-Stop Hits

11:30 MTV Serial: Ardhangan 12:00 Serial: Kamyabi 12:32 Serial: Interze

Aur 12:55 Serial: Kiran 1:00 Serial: Tulsi 1:32 Serial: Agni 2:00 Serial: Deewar 2:30 Samachar 2:40

The News 2:50 Serial: Jagte Raho 3:32 Serial: Aparajita 4:00 Serial: Mitti Ke Rang 4:30 The News 4:32 Serial: Aur Kisan Jagat Utha 5:00 Series For Children: Winnie The Pooh 7:00 Variety Programme 7:30 Samachar 8:02 Chitrabala 8:30 The News 9:00 Samachar 9:32 Serial: Non-Stop Hits

9:30 MTV Serial: Jagte Raho 10:00 Hindi Film:

11:00 MTV Serial: The Strangler Pt. 1 9:35 Heena #79 ("Rakhi Bhajan, Siman Singh, Rahul Bhatt, Nina Kulkarni) 10:05 Tujhe Dil Queran #15 ("Parmesh Sheth, Grush Kapoor, Ronit Roy) 10:45 Movers & Shakers 11:30 Ek Mahal Ho Sapna Ka (Daily Soap) 12:00 Kanyadaan #36 ("Kiran Kher, Poonam Narula) 12:30 Boogi Woogi 1:00 Just Mohabbat #154 "I Love You" #30 Ep. ("Anup Soni, Shreya Usha) 2:00 Movers & Shakers 3:00 Daily Soap: Nazdeekyan 3:30 Cine Nite Film:

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