

Death of a nation – What can be done?

I want to say a few words about an enormous problem that the Maldives and many low-lying countries of the world will have to face in the very near future. This particular problem is quite unlike any problem that we have discussed so far. All the problems that we have considered in this meeting, whether political *or* economic, are problems that are somehow capable of being solved. We understand those problems and we have ~ fair idea *of* how to go about them. I mean the world at large, *or* the international community has the means to solve all those problems if there is a real commitment or a real will to solve them.

What I want to talk about is entirely different. We don't know what's going on. We don't know what to do about it.

There is growing scientific evidence that the seas *of* the world are rising, and that they will continue to rise in the years to come. Oceanologists believe that there will probably be a global sea-level rise of about 50 cms to two metres (18 inches to six feet) in the, next 100 years.

What effect will such a rise in sea-level have on the world?

A two metre (or six feet) rise will:

a) in the United States inundate major portions of Louisiana and Florida, as well as beach resorts along the coasts.

b) in the Netherland\$ reduce by 10 percent the safety of the advanced coastal defence infrastructure presently protecting the country.

c) in Egypt erode up to 20 percent of the nation's , arable land, displacing up to 21 percent of the i country's population or over 10 million people.

d) I in Bangladesh swamp up to 27 percent of the total land area, displacing up to 25 million people.

As for the Maldives, we cannot even consider such a rise. On average, our islands are only three to six feet above mean sea-level. The rise will be sufficient to submerge our entire country. It will be the death of a nation.

A one metre (or three feet) rise will:

a) in the United States destroy 50 to 80 percent of coastal wetlands.

b) in the Netherlands, threaten by erosion, salination or increased vulnerability to storm surges, the tidal wetlands, areas of high agricultural and horticultural importance, and densely populated urban industrialised zones, including the Rotterdam harbour area.

As for the Maldives, such a rise will lead to a situation where a storm surge would be catastrophic and possibly fatal; that will also be the death of a nation.



Streets in Male' were flooded during high seas which swept ashore in April 1987, washing away 30% of the capital island's reclaimed land.

I have mentioned the predicted effects on these countries because there are case studies on them conducted by a number of scientists and organisations, including the UNEP, UNESCO's Man and Biosphere Programme and the US Environmental Protection Agency. Of course, many other parts of the world will also be seriously affected.

What is the cause of this fearsome environmental trend?

Many scientists believe that the fundamental cause of the present sea-level rise is the increased concentration of the chlorofluorocarbons, carbon dioxide and other greenhouse gases in the atmosphere, a process which is leading to a global warming; of the atmosphere. An increase of 0.4 degrees centigrade in atmospheric temperature has been observed over the last 100 years. This warming of the atmosphere is thermal~ expanding the seas and oceans. Not only that. The warming of the atmosphere will also lead subsequently to the melting of the polar ice-caps, which process will further increase the rate of sea-level rise in the next 200 to 300 years.

Many scientists believe that the fundamental cause of the

The depletion of the ozone layer is also linked to this phenomenon. In fact, the so-called hole in the ozone layer has also been caused by concentrations of the greenhouse gases in the stratosphere. The recent Montreal meeting and the signing of the Montreal Protocol, an agreement to reduce the worldwide use of chlorofluorocarbons signed by 24 nations, is of course a positive step taken in the right direction to protect the human environment from further damage.



The sea, our friend or foe? This dhoni was one of many which suffered damage in the high seas around Male' in April 1987.

Although many of us around this table, while agreeing that the sea-level rise does constitute a very real threat to the low-lying areas of the world sometime in the future, may think that there is time to take protective measures.

Unfortunately, that is simply not true. Many countries of the world have already begun to experience natural disasters which are of quite unusual magnitude and of unusual frequency. We have all heard of the series of massive floods that caused much havoc in Bangladesh this year. We in the Maldives have experienced this year three episodes of high tidal swells, in April, June and September, that caused widespread destruction throughout the archipelago. Never before have we been faced with such ferocious tides or wave action during our known history -certainly not since the turn of this century. These tidal waves were unusual not only in their ferocity but also in their frequency.

As a result of these tidal surges at high water time, in Male' a large portion of reclaimed land was washed away. A

significant length of the retaining wall on the eastern sea front and almost the whole retaining wall on the southern sea front were eroded and washed ashore. Houses were damaged and residents had to be evacuated. The flooding gave rise to an outbreak of serious diarrhoeal diseases.

On the adjacent island of Hulhule where Male' International Airport is situated, retaining walls were wrecked, causing flooding to part of the runway. Approach lights of the runway and the T-V ASIS units were damaged. Sections of the harbour breakwater collapsed and the seaward end of the fuel jetty damaged.

On other islands of the archipelago, extensive damage was caused to the agricultural sector and to tourist hotels. Two islands were split into two.

What can be done?

The answer is that we simply don't know. But since the present sea-level rise is caused by the damage being done to the environment by the concentration of industrial waste, we strongly believe that the industrialised nations have a moral obligation to save developing low-lying countries from the colossal danger posed by environmental degradation, more particularly the adverse consequences of sea-level rise. We did not contribute to environmental degradation and we should not be left to suffer its consequences. Advanced nations like the United States and the Netherlands have the means, the technology and the necessary resources to defend their coastal regions and to avert any major calamity. We, the small states and the developing countries, have neither the technology nor the resources to cope with the impending threat.

I would suggest to my distinguished colleagues around this table that we request the Secretary-General to set up a group of experts to do an in-depth study of the problem with a particular emphasis on the effects of the projected sea-level rise on low-lying countries of the Commonwealth and the dangers it poses to the physical infrastructure and resources of those countries; and identify effective, practical and feasible protective measures that could be taken to safeguard the territories, the economies and, above all, the peoples of those countries.

The Commonwealth has always given special consideration to the particular needs of small states. I believe this is a area in which the Commonwealth is well placed to do something.

The economic, technical and technological resources are available collectively. It is not too late to save the world. It is not too late to save the Maldives and other low-lying island nations. Only the vital collective commitment is missing. And I believe that the Commonwealth can initiate such a commitment.