Using the poor as shock absorbers

orrying evidence has emerged in recent months to indicate that extreme weather events are on the rise. These include increasingly powerful and destructive storms, more intense rainfall events and more severe droughts. These events are consistent with current understanding of climate change. In some cases warmer seas and atmospheres facilitate more energetic hurricanes, cyclones and typhoons. In others, wind shifts and changed ocean currents divert drought-breaking rain. Parts of the Amazon are currently experiencing severe drought, as are many areas in Africa. Malawi, Zimbabwe, Somalia and Niger are all famine-struck.

Hurricane Katrina: a glimpse of the future?

The current record-breaking hurricane season in the Caribbean and North Atlantic has seen three category 5 (the strongest) hurricanes. Katrina, Rita and Wilma have severely damaged infrastructure, business and morale, including in the U.S. states of Florida, Mississippi and Louisiana. The tourist 'paradise' in Cancun, Mexico is the latest victim. Wilma recorded the lowest atmospheric pressure ever observed. In July, the Indian city of Mumbai was flooded by more than 1000 millimeters of rain, falling within just a few days. This caused the deaths of more than 1000 people as well as immense discomfort, hardship and chaos.

Most famously, the storm surge and rainfall of Hurricane Katrina breached the poorly maintained levee banks of the city of New Orleans, flooding large parts of this historic city, much of which lies below sea level. Infilling of wetlands also contributed to the damage. If intact, these wetlands would have absorbed some of the storm surge. (The low pressure of these storms temporarily elevates local sea level, effectively creating a partial vacuum which sucks water skyward.) Several oilrigs in the Gulf of Mexico were dislodged. Some cost more than U.S.\$1 billion to install. Collectively, the damage from these storms far exceeds that of the world's previous most expensive storm, Hurricane Andrew, in 1992. The global insurance industry, long aware of the risk climate change poses to its financial integrity, must be starting to despair.

Florida has now experienced 7 hurricanes in less than 18 months [as of November, 2005]. Insurance rates are rising sharply, for those able to afford it. However, in New Orleans, the most severely affected people, including the majority of those trapped by floodwaters, were not insured at all. For several days the world watched, amazed and appalled by the inability of the world's richest nation to rescue its own people. But most stranded in New Orleans were black and almost all were poor. Lacking cars, many were unable to escape the storm by driving inland. Public transport in this part of the U.S. is also very patchy. As well, the offer of an Amtrak train to transport refugees was not accepted until it was too late for the train to enter the city.

I hope I am wrong, but I fear that the disproportionate suffering of the poor in New Orleans provides a chilling glimpse of our likely common future: a climate and ecosystem damaged world in which the poor are treated with contempt, becoming the most numerous victims of the growing global environmental crisis. The poor are disproportionately likely to constitute those whose houses and dwellings will be damaged by storms and sea level rise. It is the poor whose health will be most harmed by insufficient food, whether due to drought, flooding, or caprice and mismanagement, as in Zimbabwe. The poor are also most likely to suffer the ill defined 'land sickness' which in some areas (including India) is slowing or even reversing the growth of crop yields. The poor are least likely to be insured and are likely to remain uninsurable. They are also likely to be disproportionately displaced, eventually swelling the numbers of environmental refugees into the tens of millions.

Loss of environmental freedom and growth of authoritarianism

As global consumption and population rise, personal environmental freedom falls. While ample physical space remains for all of us, its quality is declining steeply. Humans leave a diminishing fraction of this space for other species and future generations.

Like all other animal species, *homo sapiens* are territorial, whether as individuals, families, tribes, castes, clastes (see BODHI Times #15), nations or coalitions. Reduced environmental space (defined not only as productive land but also as resources of fish, fresh water, oil, wilderness and the waste land which provides a useful boundary) provokes a territorial response. Sometimes, this may occur when the reduction is anticipated rather than actual. Human territorial behaviour manifests as anxiety, posturing or overt violence. As our perception of available environmental space shrinks, so too does our sense and experience of environmental freedom.

Tensions must mount as groups jostle to retain or increase their share of environmental space. The rate of growth of human population and consumption has exceeded the limited capacity of technology (eg by extracting fossil fuel from deep underground or doubling crop yields) to expand the sum of per capita environmental space.

More powerful groups prefer violence to a voluntary reduction in their own share of environmental space, The 2003 invasion of Iraq is the most flagrant and costly example, but numerous less visible also occur, such as the land grabbing and violence against tribal and minority populations in Vietnam, Bangladesh and Assam and the displacement of hundreds of thousands of people in the Sudan's Darfur. Separatist movements in the southern Philippines and Thailand have also developed in response to the unwillingness by dominant groups to genuinely share power. More contentiously, Al Qaeda and its

mirror organisations can be considered as selforganising responses to the grotesque blight of global inequality (1).

The decline of environmental freedom has important implications for other forms of liberty. Most of the contraction of each person's use of environmental space will be self-imposed, although at a psychological cost. However, some reductions will be enforced by more powerful groups. This will worsen inequality, resentment, resistance and authoritarianism. In addition to soaring human numbers, other factors contributing to the loss of environmental freedom include accelerating oil depletion, worsening climate change and stubbornly elusive large scale technological fixes.

Using the poor to absorb the shock

Interlocking, systematic factors operate to maintain the relative position and affluence of privileged groups in almost every society. In the past, the robber baron class monopolised political and military power. In many countries, the democratic franchise is now theoretically universal, but inequalities persist: those who are wealthy monopolise the best jobs, the greatest opportunities and the best education for themselves, their friends and their families.

Powerful, well-fed populations in many developing countries use another strategy to maintain their relative position. The evidence that underconsumption of energy-rich food and essential micronutrients (especially iron, iodine and vitamins) harms brain development, learning capacity and physical stamina is overwhelming. Bangladesh and India are two of the worstaffected countries in this regard. The Food and Agricultural Organisation of the U.N. estimates that the loss of the loss of earning potential due to cognitive underdevelopment and nutritionally related fatigue is 8% and 6% respectively of total gross national product in these countries. What is not said but logically follows is that underfed populations, on the whole, are less assertive, more easily manipulated and less capable of organised resistance. What also follows is that some of these people may also be used just as cold-bloodedly to attack those who are more powerful.

The good news

Ultimately, using the poor to absorb the growing shock will fail. Either the poor will strike back or environmental space will decline until even the wealthy are squeezed. Both could happen simultaneously, creating a downward spiral. Using the poor as shock absorbers reduces awareness, among the well-off, of our growing predicament. As a strategy, it is as dangerous and immoral; changing it would be very good news indeed.

References

1. Butler C.D., Inequality and conflict. In: *In Search of Sustainability, e*ds Goldie J., Douglas R.M., Furnass, B.), Melbourne, CSIRO, 2005, pp. 33-48.