

Another View on Global Warming

Professor Bjorn Lomborg, economist at Denmark, has been raising a number of counterpoints against the much publicized views on global warming. He has to his credit two books on the subject that have attracted much attention. (1). Lomborg must be complimented for bringing out in sharp focus some of the issues which are often missed in the debate on global warming. We shall respond here to some of the points in this paper.

Lomborg has been arguing that the concern expressed by scientists that if the global warming is permitted to continue as at present, we shall be reaching the tipping points where the impacts will be irreversible, is as extreme a position as the other view that it is all a hoax. He would rather prefer to strike a middle path where the arguments can be mediated. Lomborg has however reached the conclusion, from extensive studies referred earlier, that the cost of reducing carbon emission is prohibitive compared to that for adoption of protective measures and other means to meet the challenge of global warming. Having taken a firm stand against efforts to reduce emission as proposed in the Kyoto Protocol, he has left little space to accommodate arguments from the other side. Concentrating attention only to protective measures against the adverse effects of global warming is like attending to the diseased leaves of a plant ignoring the toxicity of the soil which caused the disease.

Lomborg argues that since mortality from heat would be less than deaths from cold, a warmer world would be beneficial for humanity. Notwithstanding warming up over the past century, mortality from diseases has declined and man's expectation of life has increased. The point of view can be better appreciated by people living in the temperate zones. People living in the southern hemisphere may however have a different view about the matter. It is too early to come to a favourable conclusion about warmer world as reached by Lomborg. Neither the IPCC Fourth Assessment Report, nor the WHO reports support any such conclusions. As for the improvement of the mortality rates, WHO Annual Report 2007 observed that advances achieved in the past century was due to development of medicines as antibiotics, DDT and other disinfectants, killing germs and bacteria of different kinds. By the end of the century, however, most of these antidotes lost their effectiveness giving birth to new kinds of resistant genes. This led not only to resurgence of the dreaded old genes, but also emergence of entirely new type of diseases. HIV/AIDS was first recognized in 1981. HIV/AIDS continues to be the most serious infectious disease and has been defying all attempts to develop a cure or vaccine.

Lomborg considered that it would only require 2 per cent of Kyoto Protocol cost to distribute mosquito nets and medicines to meet the risk in the rise of incidence of Malaria. The people in the third world are well conversed with the use of mosquito nets which are useful for preventive measures, but the problem is of development of new medicines to cure the patients affected by the new strains of Malarial parasites. There is no quick fix solution. It will require intensive period of research and development efforts to find

suitable drugs for the new germs. One cannot hazard any guess for the time and the cost that is likely to be involved in the exercise. The US Government alone has funded more than 20 billion dollars by 2007 for combating HIV/AIDS in America and other parts of the world without achieving significant results. The same is true for other vector-borne diseases and a host of other diseases surfacing with rise in the temperature.

Lomborg finds fault with politicians rushing to witness melting of glaciers in Greenland not being aware of the fact that ice was accumulating in another part of Greenland. It is however normal for the precipitation of rains to freeze into snow over the mountains and ice sheets in the polar regions and melting of ice on the glaciers and ice shelves to take place simultaneously in nature maintaining the equilibrium over the ages. It is the loss of this delicate balance by net reduction of the volume of ice from rise in global temperature in the present century that has been causing major concern among the scientists. Lomborg has been selective in picking up one, among a number of models, predicting Antarctica actually accumulating ice rather than shedding it, making sea levels two inches lower by 2100. It is presumptuous to suggest that Antarctica has been accumulating ice in the face of the fact that a big chunk of West Antarctica, Larsen B, the size of the Rhode Island state, broke off from the main mass of the ice sheet in 2002. Antarctica has been witnessing collapse of large chunk of ice in the fast-warming regions. Robin E. Bell of Columbia University has been studying the mechanism of ice collapse in Antarctica over a number of decades. Her findings, reported in Nature, Feb 22, 2007, warns of much greater volume of ice melting than considered hitherto. Most of the scientists concerned with development in the polar region agree that the ice sheets are going to be affected adversely by global warming.

Lomborg's comment on the threat to the polar bears from the breaking up of polar ice-caps follows from his inadequate knowledge of the phenomenon of the melting of ice in the polar regions as observed earlier. His prescription for the banning of slaughter of polar bears is entirely unwarranted. There would be few polar bears for slaughter if the break-up of the ice-caps continues at the present rate.

IPCC reported an increase in the level of ocean by one foot over the past 150 years. As temperature continues to rise from global warming, melting of ice is likely to accelerate. One would expect therefore that it would take less number of years to raise the sea-level to the same extent. The best estimate of IPCC predicts a rise of another one foot within the 100 years in the present century. It can be surmised that it will take even less number of years in the following period for the sea level to rise by one foot further. Lomborg felt that since the world took one foot rise of sea-level in its stride and little land was lost, it will be possible to meet the rising tide by raising levees and other measures to protect the land. That would be more cost effective. However, reports are already reaching from the residents along the coastline and the islands on the Bay of Bengal how people have been moving to safer areas after being affected by loss of land in the ocean.

Lomborg's perception for protection of land from the ingress of sea is also coloured by the experiences of the dykes in Holland where the heights of the dykes are raised to meet the rising sea over the centuries at huge costs. The conditions in the third world are

entirely different. The long coastlines are often intersected by deltaic regions where large river systems meet the sea. The rivers bring down silt from the mountains rich in nutrients and minerals contributing to productivity of the soil. The sea has a useful role in formation of new landmass by pushing back the silts deposited by the rivers. Such areas are densely populated where barriers of mud are erected with limited height that serve the dual purpose of protecting the land from rising tides from the sea and also permitting the flood waters from the rivers flow over into the sea. Embankment by the riverside has the risk of being washed away by the flood or tidal surges. But these can be repaired by easily available local earth with cheap human labour. To replace the existing structure with stronger materials of cement and steel, huge cost will be involved which is beyond the means of the people living in the countries. What is now of major concern for the people living in these regions is the apprehension if the rise in the level of the sea will not reverse the traditional role of the tides resulting in loss of land mass sustaining them.

Lomborg has been highly selective in presenting information to support his views. Lomborg picks up a figure of 20 dollars being the cost of reduction of 1 tonne of CO₂, as against the damage from a tonne of CO₂ valued at only 2 dollars with confidence unusual for scientists. . He does not refer to other information presenting the contrary view, although they were available at the time of his writing. The cost of reducing emissions was separately estimated by Nicholas Stern, head of the Economic Services under the Government of the United Kingdom in a Report submitted to the Government in October 2006. The cost, according to Stern could be limited to around 1 per cent of Global GDP per year to avoid worst impacts of climate change. As for the damages, the Report observed that “if we don’t act, the overall costs and risks of climate change will be equivalent to losing at least 5 per cent of gross domestic product each year, now and forever”.(The Economics of Climate Change. The Stern Review, Cambridge, January 2007.)

Statistical information is usually presented with some measure of confidence about the precision of the estimates provided. IPCC results are accompanied by the degree of confidence attributed to them by the scientists. Secondly, a statistician needs to acquaint himself with the basics of the science for interpreting the data related to the subject. Professor Lomborg has not been careful in these respects.

(1) Bjorn Lomborg. The Skeptical Environmentalist. Cambridge University Press 2001.

_____ Cool It. Knopf. / Cyan-Marshall Cavendish 2007

Deb Kumar Bose