

**Link: SUSTAINABLE DEVELOPMENT: HARNESSING DEVELOPMENT TO PROTECT THE ENVIRONMENT\***

Ambassador Chandrashekhar Dasgupta

Mr Chairman, Excellency, Ladies and Gentlemen,

I am greatly honoured to address this forum. The Water Resources University is the premier institute of higher education in Viet Nam in the field of hydrology and management of water resources. It has also made a significant contribution to strengthening academic ties between Viet Nam and India through its cooperation with the Indian Institute of Technology at Roorkee. There is a long tradition of friendly relations between Viet Nam and India and these have recently risen to new heights as a result of the successful visit to India by His Excellency The President of the SRVN.

I was a career diplomat for 38 years, from 1962 to 2000. For most of this period, global environmental issues hardly ever figured on the diplomatic agenda. The first UN summit on the environment was held in Stockholm in 1972. Only two Heads of Government attended the conference – the prime minister of Sweden, the host government, and the prime minister of India, Mrs. Indira Gandhi. Twenty years later, no fewer than 108 Heads of State or Government graced the UN Conference on Environment and Development, held in Rio de Janeiro in 1992. Environmental issues, linked to development and growth, have climbed to the top of the global diplomatic agenda. Environment and development are now core issues of 21st century diplomacy.

Nowhere are these issues more important than in Asia. Asia has witnessed unparalleled rates of growth in recent decades. Its share of global trade and investment flows has risen dramatically. Most importantly, poverty levels have registered a significant decline in most parts of Asia. Future historians will celebrate the 21st century as the period in which Asia, for the first time in its long history, succeeded in freeing itself from the phenomenon of mass poverty. Some Asian states have already achieved this status and there are good reasons to hope that by the latter half of this century, virtually all Asian countries will be able to provide their citizens with the basic requirements of food, shelter, health care and education. Asia is taking a giant step forward.

*An interdependent relationship*

However, concerns have been voiced about the environmental impacts of rapid economic development – impacts on the quality of air, soil and water. The loudest expressions of concern relate to the implications for climate change, the most urgent global environmental challenge of our times. These concerns will be the sub-text in the climate change negotiations in Durban in December, as well as in the UN Rio+20 summit to be held next year.

These concerns are largely misplaced. Economic development- in particular, industrialization - does, indeed, generate increased pollution and added stresses on the environment. However, at the same time, it also provides the financial and technological resources needed not only to take remedial measures to counter pollution but also to improve

---

\* Lecture delivered at the University of Water Resources, Hanoi, on 20 October 2011.

the quality of the local environment. Indeed, development enables us to protect and even enhance the quality of our environment.

When we look around us, we see that developed countries generally have cleaner water supplies, superior sanitation and waste disposal systems and better urban air quality than poorer countries. Most industrialized countries have higher environmental standards than developing countries. The explanation stares us in the face. Developed countries possess the resources needed to tackle pollution effectively. Developing countries lack adequate resources to protect and enhance the environment.

Some environmentalist activists take a narrow view of conservation, opposing any major human interference with “nature”. This romantic view presupposes the existence of some past golden age when nature was “unspoilt”, existing in all its pristine glory. The reality, of course, is that the environment has been in a state of continuous evolution ever since the planet came into existence, mainly due to the operation of natural forces. Natural forces were responsible for the cyclical onset and retreat of an Ice Age, bringing in its wake sweeping changes in the earth’s environment.

Human activities have until now played only a secondary, and relatively modest, role in shaping our environment. Every step in the advance of civilisation has had an impact on the environment. The invention of fire led to the rotational clearing of forests associated with shifting cultivation. The invention of iron enabled human beings to permanently clear large tracts of forests for farming and livestock breeding. Irrigation works modified the environment. Expansion of trade led to migration of many varieties of edible plants and other species. The environmental impact of the Industrial Revolution in its early stages is bemoaned in the 19<sup>th</sup> century literary classics of all major European languages.

Not all the changes wrought by man have been beneficial for the environment; but on balance, the changes have undoubtedly been for the better. Men and women live longer and healthier lives than in any previous age. Human existence is no longer “nasty, brutish and short”, to quote Hobbes’ description of an earlier age. The natural environment is more conducive to human life and well-being than in any imaginary “unspoilt” age in the past. Historically speaking, there can be no question that, on the whole, economic development has benefited the environment.

We cannot prevent change in our environment. Change is inevitable, not only due to human activities but also the operation of the natural forces. The aim of environmental policy is to ensure that, on balance, the changes are conducive to human life and well-being. Wherever feasible, we should employ part of the resources generated by development to repair any damage caused to the environment. Where the specific damage cannot be repaired, it should be compensated by enhancing the quality of the environment in other spheres. After balancing environmental gains and losses, there should be net increase in our environmental inheritance. Sustainable development requires us to ensure that there is no net loss of our environmental capital.

At the UN Conference on Environment, held in Stockholm in 1972, the Indian Prime Minister, Mrs. Indira Gandhi, demystified the links between development and environment. She forcefully pointed out that “environment cannot be improved in conditions of poverty”. To quote her further:

“The environmental problems of developing countries are not the side-effects of excessive industrialization but reflect the inadequacy of development. The rich countries may

look upon development as the cause of environmental destruction, but to us it is one of the primary means of improving the environment for living, or providing food, water, sanitation and shelter, of making deserts green and the mountains habitable.”

Indira Gandhi was deeply conscious of the need to protect India’s environmental heritage. This was reflected, for example, in her historic contributions to protecting our primeval forests and endangered species. She was also acutely conscious of the fact that only economic growth could generate the resources required to protect and enhance the environment. She understood clearly that development and environment protection were not conflicting goals but interdependent objectives.

There is an interdependent relationship between development and environment. If we squander our environmental heritage, we will certainly imperil the prospects of long-term development; and at the same time, if we fail to achieve rapid development, we will fail to protect the environment for lack of adequate resources. In planning major development projects, we should conduct environmental impact assessments and take environmental costs into account. An appropriate part of the profits generated by the project should be employed to remedy or offset any environmental damage. It will not always be possible to fully reverse the changes wrought to the local environment. In such cases, compensatory or offset measures should be taken to enhance local environmental quality in other directions. The objective should be to ensure that there is no overall depletion of environmental capital.

Let me now sum up the first part of my argument. The contention of some environmental activists that a balance must be struck between development and conservation suffers from a basic flaw. Development is an essential condition for protecting the environment. Development yields the resources needed to improve the quality of the environment. In combination with sensible environment impact assessments, remedial measures and accounting of environmental assets, development enables us to protect and improve our environment. Asia’s economic rise will open the door to enhancing the quality of our local or domestic environment.

### *The challenge of climate change*

Let us now turn from local to global environmental issues. A global environmental problem is one in which human activities in any country have an environmental impact that is not confined within the borders of the country, or even its neighbourhood, but extend to the planet as a whole. Indeed, the main environmental impacts of human activities in one region may fall on other countries or regions. For this reason, global environmental problems raise complex issues of international burden-sharing and cooperation.

Climate change is undoubtedly the most pressing global environmental problem of our times. No other environmental issue has a comparable profile in the UN agenda. What is the nature of the climate change issue and what are the interactions between development and climate change?

Our planet has experienced several cyclical climatic changes over the ages because of the operation of the forces of nature. The current phenomenon of global warming is, however, unprecedented because it is caused by human activities, not cyclical natural forces. Its primary cause is the ever-increasing consumption of hydrocarbon fuels – coal, petroleum and natural gas – since the beginning of the Industrial Revolution. Combustion of increasing quantities of hydrocarbon fuels has generated a corresponding increase in emissions of carbon dioxide – the main greenhouse gas – into the atmosphere. Since carbon dioxide has a life of well over a

hundred years, these emissions have led to a progressive build-up, or concentration, of greenhouse gases in the atmosphere, causing the phenomenon of climate change or, in popular parlance, global warming. Unlike the cyclical changes of past ages, the phenomenon we are confronting today has been caused by human beings.

The increased carbon dioxide emissions have originated mainly in the developed countries ever since the Industrial Revolution. They are associated not only with high levels of past and present industrial activity and mechanised agriculture, but also with affluent lifestyles involving heavy fuel consumption for private transportation, heating and other domestic uses. Thus per capita emissions in North America, Europe and Japan are far higher than in typical developing countries and the disparity becomes even starker when past emissions are taken into account.

If all countries had the same per capita emissions as a developing country such as Viet Nam or India, the climate change problem would not have arisen. The problem has arisen because of excessively high levels of past and present per capita emissions in the North. Hence the UN Convention on Climate Change (1992) makes a clear distinction between the respective commitments of developed and developing countries, recognising the responsibility of the former for causing climate change, as well as their greater financial and technological capabilities for responding to the problem. It explicitly notes that the “largest share of historical and current emissions of greenhouse gases has originated in the developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs.”

Thus, the convention requires developed countries to stabilise and reduce their emissions in a time-bound manner. Developed countries are also required to provide ‘such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing [agreed] measures.’”

The Kyoto Protocol (1997) assigned a quantified emission limitation or reduction target to each developed country, with the aim of reducing the aggregate emissions originating in these countries by 5.2 percent, compared to 1990 levels, in the first commitment period, ending 2008-12. The protocol specifically requires the developed countries to adopt further reduction targets for subsequent periods, after 2012.

Developing countries have a general commitment – a commitment common to all countries - to implement measures to mitigate and adapt to climate change. This commitment, in the case of developing countries, is conditional upon receipt of financial and technological support from developed countries. The convention states explicitly that,

“The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.”

#### *Deadlock in negotiations*

The UN convention and the Kyoto Protocol provide an equitable basis for international cooperation on climate change. Unfortunately, however, the developed countries are unwilling

to proceed with cooperation strictly on the basis of these agreements. They are calling for a new agreement or, alternatively, a radical revision of the Kyoto Protocol, in order to impose new legally binding commitments on developing countries. They are now insisting that developing countries should take on binding emission commitments in some form – even though this is inconsistent with the universally accepted UN convention. The developed countries are determined to shift a major part of their responsibilities under the convention to the shoulders of the developing countries. Moreover, the developed countries are now insisting that developing countries should also take on binding emission commitments in some quantifiable form, even though this is not required by the UN convention or the Kyoto Protocol. In other words, the developed countries are determined to shift a major part of their responsibilities under the convention to the shoulders of developing countries.

Partly in order to accommodate these demands, many developing countries have announced ambitious voluntary targets to moderate their emissions. For example, India and China have set for themselves impressive emission intensity reduction targets – that is, to reduce emissions per unit of GDP.

These voluntary initiatives on the part of developing countries have so far failed to elicit an adequate response from developed countries. In many cases, even the limited commitments announced by developed countries are subject to conditions and loopholes that make them problematical. For instance, one developed country has made its commitment conditional on passage of domestic legislation – a condition which admittedly cannot be met in the near future. Another developed country has made its commitment conditional on passage of legislation in a neighbouring country! Even if we disregard all these conditions and assume that all the commitments pledged by the developed countries are implemented in full, the scale of aggregate emission reductions would fall far short of the minimum 25 percent reduction target that they themselves have endorsed.

Why have the developed countries become so reluctant to honour their moral and treaty obligations in letter and in spirit?

In the first place, experience has shown that emission reductions involve substantial costs – notwithstanding the optimistic predictions of some economists. Developed countries blessed with abundant petroleum and coal deposits have been particularly reluctant to adopt, or implement, carbon emission reduction commitments since these involve reduced dependence on these fuels. In contrast to these countries, the European Union has adopted relatively significant – though still inadequate – emission reduction commitments.

Second, recent recessionary trends in most developed countries, including the United States, European Union and Japan, have not been conducive to ambitious emission mitigation measures. Attention has been focused on economic recovery, rather than emission reductions.

Last but not least, the rise of the so-called “emerging economies” has triggered off competitiveness concerns in the developed countries. Influential industrialists and trade unionists in these countries are arguing that emission reduction policies raise their costs relative to developing countries. They fear losing of domestic and export markets, as well as jobs. Not only are they reluctant to take on new emission reduction commitments but they are also pressing their governments to levy countervailing border taxes in some form on imports from developing countries. Protectionism is raising its ugly head in the developed countries.

*Climate change strategy for developing countries*

The reluctance of the developed countries to fulfil their international obligations under the UN convention and the Kyoto Protocol in letter and in spirit poses a major dilemma for the developing countries. Though developed countries are mainly responsible for causing climate change, the impacts of climate change will fall most heavily on developing countries. Low-lying deltas, such as the Ganges-Brahmaputra and the Mekong basins, together with small islands will be the most severely affected by sea-level rise. In view of the refusal of the developed countries to bear their proper share of the burden of mitigation, should developing countries make an heroic effort to shoulder an unjust burden by moderating their greenhouse gas emissions even at the cost of restricting their energy options and slowing down their development? Or should they focus, instead, on adaptation to climate change by building up their capacity to cope with its impacts? For a developing country, what is the most effective response to the threat of climate change?

Developing countries are extremely vulnerable to the impacts of climate change because of their flimsy infrastructure and their inability to adopt new techniques and technologies. Dwellings, particularly in rural areas, are often so flimsy that they are unable to withstand even seasonal changes such as heavy monsoon rains or strong winds, leave alone the expected impacts of climate change. Roads, bridges and culverts, flood control and water storage infrastructure need to be greatly upgraded and expanded in order to give a developing country even a modest capacity to cope with the extreme weather events and changes in rainfall patterns associated with climate change.

Traditional farmers in developing countries are highly vulnerable to variations in temperature and rainfall patterns. They lack the financial resources – and often also the skills – required to adapt to climate change by switching over to such measures as drought resistant plant varieties, drip irrigation, large-scale water conservation measures, etc.

The point is that adaptation to climate change will require a wide range of responses including massive construction of new physical infrastructure, watershed management, coastline protection, improved disaster management capacities, etc. Poorer countries will be unable to implement these measures on a significant scale – unless they are able to generate the required resources through rapid development.

In the final analysis, an effective climate change strategy for a developing country must be based on rapid development. As the UN Framework Convention on Climate Change states, “economic and social development and poverty eradication are the first and overriding priorities of the developing country parties”.

For poorer countries, slowing down development in order to contain emissions is a prescription for disaster. It would leave future generations in these countries without any significant capacity to cope with, or adapt to the impacts of climate change.

This does not mean that developing countries do not need to implement appropriate mitigation measures. There is a range of win-win mitigation measures that involve no significant additional costs and, therefore, do not result in diversion of scarce resources from development priorities. These measures can promote development, while yielding co-benefits in terms of mitigating climate change.

The most important of these win-win measures are cost-effective energy efficiency and energy saving programmes. These simultaneously promote our development and mitigation goals. Wasteful energy consumption retards and unnecessarily increases emission levels. Not

surprisingly, countries like India and China have adopted national energy intensity reduction goals as the centrepiece of their mitigation actions.

Secondly, Developing countries can explore possible synergies between their health related social development goals and climate change mitigation. For example, the switchover from diesel to CNG in Delhi's public transportation system was primarily aimed at reducing air pollution and promoting public health but it also reduces carbon emissions. While advancing a developmental goal, it also promotes climate change mitigation as a co-benefit.

Finally, in pursuing energy security as a developmental goal, oil importing developing countries should explore cost-effective options for switching to renewable energy sources such as hydroelectric, solar and wind power. We are likely to witness a gradual transition from hydrocarbons to renewable energy during the next several decades. We should position ourselves advantageously to derive the maximum advantage from this transition in order to promote our development and mitigation goals.

In short, while pursuing their development priorities, developing countries should seek out possible opportunities for obtaining co-benefits in the area of climate change mitigation. However, as we saw earlier, it would be folly for them to slow down development since it would leave them without any capacity to adapt to climate change.

#### *Conclusion*

Madam Chairperson,

Allow me to sum up my argument. Economic and social development is a prerequisite for effectively protecting and enhancing the quality of our local environment. Only through rapid development can we acquire the resources needed to repair damage and to enhance the quality of our environment.

Global - as distinct from local - environmental problems raise more complex issues if the countries primarily responsible for causing the problem are unwilling to accept their responsibility for preventing damage or compensating the victims. Climate change is an example. Developed countries are primarily responsible for causing climate change but they are refusing to shoulder the full burden of an adequate response, posing a dilemma for the poorer countries. Developing countries should lose no opportunity to implement development options that also yield mitigation co-benefits but it would be a flawed strategy on their part to slow down development in the interests of mitigation. Such a strategy would deprive future generations in poorer countries of any significant capacity to cope with climate change.

Thank you for your patience.