



# Development and the Environment: A Global Balance

*The intersecting concerns in these two fields underscore the need for sustainable development.  
The World Bank's response*

Barber B. Conable

**T**he human family, in its quest for change, engages in activities that can go on forever. The environment is finite. This disparity creates the environmental challenge: the critical need to reconcile a potential conflict between human effort and environmental constraints.

The environmental challenge is directly relevant to the World Bank's primary mission: supporting change in developing countries. Development is change. Disadvantaged societies that have not experienced the benefits of development—that have not known change, and lack the resources to undertake change—are themselves the victims of the pollution of poverty.

The Bank's fight against poverty is at the core of our mission. But we have to ensure, as well, that change is constructive, and that

change does not destroy the resources on which human progress is based.

## A new awareness

Just two decades ago at the Stockholm Conference on the Human Environment, there were doubts and skepticism expressed about ecological concerns.

Attitudes have changed during the intervening years, in response to ecological realities. The Bank and others in the development community have learned that protection of the environment warrants specific and discrete emphasis. We have also learned that environmental issues cut across all development sectors and are affected as much by domestic politics as by international trade practices.

A purely technical approach to the environmental challenge, insensitive to social, cultural, and public health considerations, results in a wide array of social problems. Profligate industrial policies assail the world's climate. The basic requirement of food for ceaselessly growing populations is met at the expense of

---

*This article is an edited version of a speech by Mr. Conable at a conference in Tokyo in September 1989.*

degraded soils, making future agricultural efforts more costly. Development resting only on exploitation of nonrenewable resources leaves us poorer in the long run. All these issues and others are intertwined and must be addressed.

That, in essence, is the World Bank's approach to environmental issues as they intersect with the imperatives of development.

### Some key areas

We accept the all-encompassing nature of the environmental challenge. We believe also, however, that it is important to understand and deal with the various components relevant to both development and the environment.

**Global warming.** The "greenhouse effect may be mostly hot air," reported an American magazine earlier this year, in reaction to testimony in the US Senate that "global warming, far from being a theoretical construct, had arrived with stunning certainty." Sharply contending viewpoints on this subject have already generated mythologies regarding global warming. In this exchange of viewpoints, unfortunately, some comments produce more heat than light. For this reason, I wish to review some facts.

A few long-surviving gases generated by industry and agriculture trap some of the radiant heat which the earth emits after receiving energy from the sun. This warming process is similar to the way in which the wraparound glass enclosures of "green houses" built for horticulture trap heat and is known as the "greenhouse effect." Similarly, the heat-trapping gases are widely described as "greenhouse gases."

From the time of the industrial revolution, scientists have feared that man, by increasing emissions of greenhouse gases, would cause an unnatural warming of the earth's climate.

The possible risks are too high to justify complacency or evasion. The international community cannot sit back, hoping that the problem will somehow pass us by.

Accordingly, the Bank closely monitors research on greenhouse gas emissions and climatic change. We will continue to assess the economic and social impact of this interaction, and its repercussions on natural resources. We will actively assist developing countries to formulate appropriate development responses to global warming concerns. In particular, we will support developing country programs to move to cleaner fuels, processes, and systems.

**Energy.** The three major "offenders" among greenhouse gases are carbon dioxide, methane, and chlorofluorocarbons (CFCs). Of these three, the highest cumulative

contribution to global warming is made by carbon dioxide, which alone is responsible for almost one half the world's greenhouse effect. Carbon dioxide, as a global warmer, is produced by the burning of fossil fuels—coal, oil, and natural gas—and by deforestation. Methane, which is created, for example, by the decay of industrial and agricultural waste and by the extraction and transport of fossil fuels, accounts for some 20 percent of the greenhouse effect. CFCs, which currently account for up to 17 percent of the greenhouse effect but are expected to rise to as much as 24 percent, are man made.

Common sense tells us that, if carbon dioxide is the largest contributor to global

*The Bank and others in the development community have learned that protection of the environment warrants specific and discrete emphasis.*

warming, our most appropriate corrective would be to reduce the amount of that greenhouse gas released into the atmosphere. This brings us to the issue of energy and energy policy, because the industrial and domestic use of fossil fuels as energy cause the most emissions of carbon dioxide.

Developing countries reaching out toward prosperity need many transformations. As they seek to revitalize their economies, their demand for energy will increase, whatever the dimensions of their development. The extent to which that increase will be based on greater use of fossil fuels will determine the severity of the threat to the environment.

Developing countries have been advised not to replicate the environmentally unsound policies and practices of the industrialized world. The Bank itself can be used to transfer the knowledge learned from these mistakes. But unless such advice is accompanied by viable alternatives, it implies that developing countries should stagnate in the interests of overall environmental protection. The world's richer nations, for their part, would be free to maintain industry-based wealth and to

engage in environmental depredation. This is unacceptable.

The Bank supports the move toward higher generation of energy, as a corollary of development, accompanied by greater end-use efficiencies. We lend for conservation programs. We look at the scope for increased use of renewable energy. We make it clear, too, that over the long term, science and industry must adapt to forms of energy whose use does not harm the environment.

Until we reach that goal, however, the energy requirements of developing countries will have to be met largely by the use of existing fossil fuels. The choice of fuels then becomes crucial. Expanded use of natural gas, which because of its efficiency releases substantially less carbon dioxide than oil or coal into the atmosphere, will significantly reduce the harmful emissions.

The Bank is prepared to take an active leadership role during this transitional phase. We will take every opportunity to reiterate that greater conservation of energy and energy efficiency in all countries will further reduce the use of fossil fuels. Only a global response can deal with a global problem. We will also stress the need for new resources as part of this global action.

None of the proposed adjustments is cost free. The various actions that developing countries will need to take in their own interest, and in the international interest, require substantial additional costs. These must be folded into the overall development budget. This is not a matter of funds being redirected from one set of development objectives to another, but of genuine additionality. I am encouraged by the increased attention these issues are receiving in rich countries, including Japan, and I urge them to support developing country energy programs with the required additional resources. These measures will help satisfy the yearnings of developing countries for change while also protecting the environment.

**Population.** We must remember, however, that even without economic change in developing countries, the anticipated increase of global population will result in a greater demand for energy. If, for instance, the average amount of energy used per person across the world in 1985 remains unchanged, a 15 percent increase in energy would be needed by the year 2000 to meet the needs of a world population which would then stand at over six billion. That is just one anticipated consequence of unchecked population growth.

Ninety percent of this expected increase in population will be in the developing regions of the world. The resulting additional demands on the resources of those countries will be formidable.

Population will be too large in relation to capital stock—public and private, physical, biological, and human. Infrastructure and other social overhead capital will probably lag the most. Many countries will be pushed further and locked more tightly into the poverty trap.

Unchecked population growth will further aggravate the problem of urban and rural environments. In urban areas, water and air pollution, sanitation and waste disposal will become even more critical. Both urban and rural demand for more food will cause creation and exploitation of more agricultural land in rural areas. Forests will be destroyed; so will flora and fauna. Existing agricultural land will be more depleted to get that extra portion of food from it.

The Bank is well aware that population changes and the lowering of fertility in several countries have often followed economic and social improvements. Unfortunately, unprecedented rates of population growth in many developing regions of the world make it clear that the challenge is too great for us to await the impact of general social improvement on population growth rates.

We cannot neglect aspects of development that influence population trends, but we need also to support programs that directly influence fertility rates.

The role and rights of women, information about the availability of family planning, the voluntary nature of family planning, education, health, employment, and income are all strands that must be effectively intertwined. To achieve that, the global population issue must be made a high priority on the global agenda. The Bank will pursue this objective vigorously in the future, as it has done in the past.

**Industrialized nations.** Another key component relevant to both development and the environment is the responsibility of industrialized countries.

An Asian head of state recently asserted that industrialized countries should shoulder a larger responsibility for preserving the world's environment because, in effect, their economic policies and lifestyles "constitute the greatest threat to the environment." There is logic in the argument that those who have already imperiled our common heritage should compensate by their actions for the damage they have done. It is also true that industrialized countries have the greatest research capacity, particularly in their private sector, to grapple with the technical aspects of environmental protection.

I do not mean to suggest that developing countries should feel free to devastate the environment because some industrialized countries have done so. The care and health

of our planet is a collective global responsibility.

Industrialized countries are also responsible for the damage caused by CFCs. Western industrialized countries are now planning to phase out the use of CFCs by the year 2000, but other nations have just begun large-scale refrigeration programs. The Bank supports a total phasing out of CFCs from use in all countries.

As industrialized countries face the challenge of fulfilling their own responsibilities, perhaps they might think not only of altruism, but also of the rewards to be gained from pursuing "environment friendly" policies.

### Agenda for action

When I became President of the World Bank, I selected the environmental challenge for special emphasis. I am proud of the progress we have made. We are committed to environmental issues and, what is more, this commitment does not detract at all from our primary mission of global development.

We have increased environmental lending, increased lending for population programs, increased forestry lending, increased the resources devoted to the environment by more than 100 staff years, and we have fully integrated environmental issues in the Bank's approach to development.

But we need to do more, and as we move on with our agenda, I expect that in the next three years Bank support for free-standing environmental projects will be near \$1.3 billion. Even that may not be as important as our efforts increasingly to integrate environmental values into our ongoing development program.

During this last year, the Bank's Board of Directors approved more than 100 projects, 35 percent of all Bank and IDA projects, with significant environmental components. Sixty percent of projects approved in the agricultural sector included environmental elements. Other sectors with significant envi-

ronmental work included energy and power, transportation, water supply and sewerage, and urban development. We will do still more in the next 12 months.

We are establishing a Gas Development Unit, which will promote the economic production, consumption, and export of natural gas, the least polluting of fossil fuels.

I am also pleased to announce a tripling of our lending to forestry in the next few years, and a more direct involvement of Bank staff in the Tropical Forest Action Program. The Bank will provide technical contributions and mission leadership for sector missions, and is renewing its commitment to work with co-donors (bilateral donors, the United Nations Food and Agriculture Organization, the United Nations Development Programme, and the World Resources Institute) in all other aspects of this action program.

The Consultative Group on International Agricultural Research (CGIAR)—of which the Bank is a co-sponsor and donor—has re-emphasized the sustainability of agricultural production systems as one of its goals. At its mid-year meeting held last May in Canberra, the CGIAR included tropical forestry in its mandate.

I have stressed the critical links between population, the environment, and development. The World Bank and IDA have lent over \$500 million for population projects over the last five years. We will raise this amount to over \$800 million in the three years—1990 to 1992. We will also expand our funding for health, education, and other sectors which should help support developing country efforts to hold back population growth.

In all these activities, we have sought cooperation with NGOs and benefited from that association.

### Toward a global balance

The World Bank's experience reinforces the view that environmental factors cut across all development sectors. It might even be said that they affect all aspects of human endeavor which make up the "infinite unity of our mutual needs."

Conservation, energy efficiency, natural resource management, population and family planning, resource transfers, justice in the international marketplace, research and development . . . all these and more are part of the environmental challenge. The development challenge is equally compelling. The numbing statistics of poverty need no repetition, but they cannot be ignored. We can meet both challenges effectively only when we are able to create a global balance in which a diversity of interests are reconciled. This is a responsibility for the human family as a whole, not just for its poorer members. ■



**Barber B. Conable**  
*of the United States, has been President of the Bank since 1986. Earlier, he was a member of the US Congress.*