

Ten Principles of the New Environmentalism

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A quiet revolution has been under way during the 1990s as environmental sustainability has gradually become an important theme in policymaking around the world.

ECENT years have witnessed a profound change in our understanding of the links between economic development and the natural environment. The key propositions of sustainable development laid out in the Brundtland Commission Report in 1987 and in the Rio de Janeiro Earth Summit's Agenda 21 in 1992 were controversial at the time but are now broadly accepted—even among mainstream economic policymakers. Among such propositions are the following:

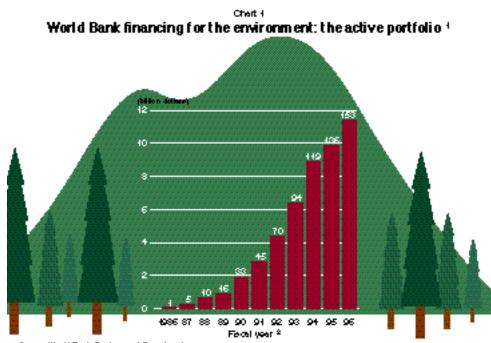
- there is a crucial and potentially positive link between economic development and the environment;
- the costs of inappropriate economic policies on the environment are very high;
- addressing environmental problems requires that poverty be reduced;
- economic growth must be guided by prices which incorporate environmental values; and
- since environmental problems pay no respect to borders, global and regional collaboration is sometimes needed to complement national and regional actions.

Broad acceptance of these propositions, however, has not assured their effective

implementation. Most environmental problems continue to intensify, and in many countries there are few grounds for optimism. Nonetheless, in a growing number of other countries, awareness is leading to action, as policymakers begin to bring their money and political capital into line with their rhetoric. About 100 countries have now prepared national environmental strategies, and tangible changes in addressing environmental issues are apparent in about half this number.

Sixty-eight countries are currently receiving financial and technical support from the World Bank for environmental policy reforms and associated investments. Active Bank loans for these purposes currently total more than \$11 billion. If cofinancing and the countries' own financing are added in, these investments total more than \$25 billion. (See Chart 1 for trends in World Bank lending.)

These investments cover a wide variety of environmental problems, ranging from



Gource: World Bank, Environment Department.

1. Adive World Bank projects whose objectives are primarily environmental are included here, but Clobel Environment Fadility projects are not. The number of projects approved in each financial year appears on top of the corresponding vertical bar.
The lotel financing made available in each financial year is measured by the height of the corresponding vertical bar.

2. The World Bank's fiscal years stend from July 1 of the preceding year to July 30 of the specified year. For example, fiscal year 1995 ran from July 1, 1995 to June 30, 1996.

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industrial pollution and coastal-zone management to protected-areas management and biodiversity conservation (see box). Despite this variety, however, some important common distinctions are becoming clear. A "new environmentalism" is emerging, as policies are being adopted that differ from those traditionally implemented by industrial nations. A recent review of the World Bank's environmental lending portfolio identified ten principles undergirding this "new environmentalism." Although these principles may seem straightforward and uncontroversial today, a decade ago they were not. And they stand in sharp contrast to most environmental policymaking in member countries of the Organization for Economic Cooperation and Development (OECD) over the past thirty years.

Principle 1: Set priorities care fully. The seriousness of environmental problems and the scarcity of financial resources have required tough prioritization and the phasing of remedial actions. The Eastern European Environmental Action Plan—prepared by the World Bank, the European Union, and all of the countries in the region—was a pioneering and influential effort in this regard. Based upon

technical analysis of the health, productivity, and ecological impacts of environmental problems, the plan identifies the problems that must be addressed immediately. This approach differed radically from that of previous efforts to address Eastern Europe's problems, which, by failing to establish priorities, favored a broad, shallow, and expensive approach to problems. Thailand was another pioneer in the field; when a priority-setting exercise in 1992 identified lead pollution as one of the country's most critical problems, a full-scale effort was mobilized and leaded gasoline was phased out in just four years. Probably about 50 countries in the developing world have undertaken serious priority-setting exercises so far. The best of these combine the "sharp pencil" approach to carrying out analysis with participatory prioritization at the community level.

Principle 2: Make every dollar count. Most environmental policies, including the successful ones, have been unnecessarily expensive. Developing countries cannot afford the high-cost approaches traditionally used in industrial countries, and a new emphasis on cost-effectiveness is therefore taking root. Countries like Chile,

the Czech Republic, and Mexico have led this effort. The new emphasis on cost-effectiveness is allowing much more to be achieved with limited resources. It requires a multidisciplinary approach—one that calls for environmental specialists and economists to work together to identify the lowest-cost methods of addressing key environmental problems. Chart 2 illustrates how this approach can help to reduce carbon emissions in Ukraine. It shows that the costs of different options for reducing these emissions vary substantially. The net costs of introducing gas metering and improving industrial efficiency are actually estimated to be negative, because in each case the value of the resulting energy savings exceeds the costs, while the costs of introducing coal-fired or gas-fired district heating are estimated to be both positive and substantial. By identifying a country's leastcost options, the required reduction in its emissions can often be achieved at moderate, or even negative, cost. The effort to reduce Ukraine's carbon emissions is just one of many such efforts currently under way.

Principle 3: Harness "win-win" opportunities. Some gains in the environment will involve costs and trade-offs.

Others can be achieved as by-products of policies designed to improve efficiency and reduce poverty. Given the scarcity of resources that can be devoted to solving environmental problems, the latter kind of policies should form the first line of attack.

Reducing subsidies on the use of natural resources is the most obvious "win-win" policy. There is some good news here: preliminary calculations suggest that energy subsidies in developing countries and Eastern Europe have fallen by about half (from around \$200 billion per year) since the early 1990s. A growing number of countries, led by Bangladesh and Indonesia, have eliminated pesticide subsidies; and a surprising number of countries, including China and India, have begun to reduce subsidies on irrigation water, which accounts for more than 80 percent of all water use.

Clarifying and reallocating property rights is often another "win-win" policy. Countries such as Azerbaijan, Colombia, the Philippines, and South Africa are now embarked upon market-based and negotiated land reform, which, in turn, is expected to have beneficial impacts on the environment.

The World Bank's environmental portfolio

The World Bank is currently financing efforts by 62 countries to improve environmental management. Projects are of three types: those designed to address pollution and urban environmental problems, those addressing rural environmental issues, and those seeking to build in-country institutional capacity for environmental management.

World Bank's portfolio of active environmental projects

(as of July 1996)

Project focus	Number of projects	Number of countries	World Bank contribution (loan or credit) (billion doll		Average size of loan or credit (million dollars)
Pollution and the urban environment 1	58	31	6.9	17.3	118
Rural environmental management 2	69	41	3.6	7.0	52
Environmental institutions 3	26	23	0.9	1.6	36
Total	153	62	11.5	26.0	75

Source: World Bank, Environment Department.

- ¹ Typically includes capacity building, funds for on-lending to enterprises and agencies, direct investment in pollution prevention and abatement, and support for policy reform for improved environmental management.
- ² Addressing issues including biodiversity conservation, management of forests, and conservation of land and water resources.
- ³ Aimed at strengthening national and local environmental management capacity.

In addition to these three categories of environmental projects, the Bank also implements the Global Environment Facility (GEF) and the Montreal Protocol (MP). Over the past year, \$126 million was committed for 15 new GEF projects, bringing the total GEF portfolio to \$506 million for 59 projects over the four focal areas: Biodiversity, Climate Change, Ozone Depleting Substances (ODS) Phaseout, and International Waters. The MP portfolio has also grown during the same period and now totals \$214 million approved for 461 subprojects.

Principle 4: Use market instru ments where feasible. Market-based incentives to reduce environmental damage are best in principle and often in practice as well. They stand in sharp contrast to the traditional command-and-control and technology-driven regulations that have been the norm until recently. A number of developing countries are experimenting with innovative approaches involving emissions and effluent charges, market-based extraction charges, and tradable permits. For example, Chile and Peru have recently introduced new fishing laws involving tradable harvesting permits; China is enforcing new charges on sulfur dioxide emissions; Thailand is experimenting with performance bonds for hazardous waste; and Malaysia has recently strengthened its system of effluent charges.

Principle 5: Economize on administrative and regulatory capacity. In developing countries, administration and enforcement capacity is often as scarce as money. Many countries are recognizing that they cannot adopt the highly "enforcement-intensive" approaches of industrial countries and consequently are experimenting with more self-enforcing policies (such as deposit-refund schemes and performance bonds) and blunter instruments (such as fuel taxes or import bans on certain types of pesticide) with fewer points

of intervention and are recognizing that nongovernmental and community groups can help foster compliance. Informed public opinion can also play a powerful role in exposing and holding accountable private firms and government agencies that abuse the environment. Recognizing this, in 1996, Indonesia, with support from the World Bank, introduced a five-star system for rating the environmental performance of industrial enterprises. Such public disclosure and public education campaigns can often have a much more powerful impact than more traditional regulatory approaches.

Principle 6: Work with the private sector, not against it. Recognizing their limited regulatory capacity and the need for accelerated private investment, many governments are switching from a controldominated attitude toward the private sector to one that involves dialogue and negotiated, monitorable programs. In some countries, governments are working with private sector environmental leaders to encourage environmental improvements throughout the value chain (including supplying industries). Self-enforcement and independent certification schemes (such as ISO 14000, a system for certifying that companies have sound environmental management systems in place) are also playing a much larger role. Innovative ways are

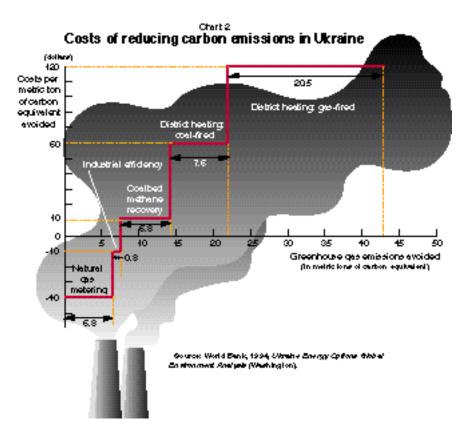
being found to catalyze private financial flows in the service of the environment. This year, for example, the World Bank Group's International Finance Corporation (IFC) launched a Biodiversity Venture Capital Fund and is planning to launch similar funds to promote the use of renewable energy. Private finance is also being channeled into environment-improving activities, such as waste-treatment facilities and energy-efficiency improvement. The World Bank Group is helping to encourage this trend by providing partial risk guarantees and other instruments.

Principle 7: Involve citizens thoroughly. When a country's environmental problems are addressed, the chances of success are greatly enhanced if local citizens are involved. This has been well known for years for rural programs and is now becoming equally evident in efforts to manage pollution and waste in urban areas.

Such involvement is needed for four reasons. First. local citizens are often better able than government officials to identify the priorities for action. Second, members of local communities often know about cost-effective solutions that are not available to governments. Third, the motivation and commitment of communities are often what sees an environmental project through to completion. This is especially true, for example, for soil conservation and afforestation projects. Whether one looks at the soil clubs of northeast Brazil in the 1980s or the Sahelian community-based land management programs of the 1990s, the message is clear: participation works! Programs are much more successful if they are developed with the beneficiaries rather than for them.

The *fourth* reason for citizen involvement is that it can help build constituencies for change. Most environmental reforms will be opposed by those who have benefited from the right to pollute and degrade without penalty. Following through on environmental reform therefore requires a public constituency for change to act as a counterweight. This is why a growing number of concerned governments are investing in public awareness campaigns and fostering a vibrant nongovernmental environmental movement.

Principle 8: Invest in partnerships that work. Smart governments are realizing that they are often most effective in dealing with environmental issues when they work in partnerships. Most countries now involve nongovernmental specialists in their priority-setting exercises, and



tripartite relationships—including the government, the private sector, and community organizations—are increasingly common. The value of such partnerships stems from not only the different perspectives and skills that are brought to the table but also the necessity of carrying out concerted actions to address some environmental issues.

Forest management is a good example. Moving from current unsustainable practices to those which incorporate new knowledge about sustainable harvesting and processing often requires concerted action by private, community, and governmental actors. This past year, the World

Bank helped establish a Forest Management Transformation Initiative that will bring together leading private enterprises, nongovernmental and community specialists, and international financial institutions to help remove constraints to adopting sustainable practices throughout the forest-product value chain.

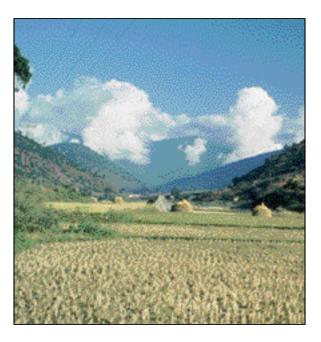
Effective partnerships are also becoming more common at the transnational level. Since the Earth Summit in 1992, for example, regional seas programs have made important progress in the Baltic, Mediterranean, Black, and Aral Seas and in Lake Victoria. The sharing of international rivers is also being addressed, albeit slowly. One encouraging recent example: the 12 countries of the Southern African Development Community (SADC) recently signed a protocol for managing the 18 international rivers in the region.

Principle 9: Remember that management is more important than technology. The old-fashioned, technology-driven approach to the environment is giving way to a recognition of the crucial role of good management. Improved management practices are always a complement to, and sometimes a substitute for, investment in equipment.

Good managers can achieve large improvements in the environment at little cost. Examples abound. In Eastern Europe, lead smelters have shown a 60–80 percent reduction in air pollution and lead dust as a result of improved housekeeping and modest investments. In Latin America, improved efficiency stemming from the privatization of mining activities has sharply improved the management of tailings and wastewater. And in Egypt, recent

technical assistance provided to improve the management of steel plants has transformed their environmental performance from among the worst to among the best in the developing world.

Conversely, bad managers can wipe out the benefits of new technologies. Thousands of heavily polluting industrial plants around the world have purchased equipment incorporating expensive environmental technologies that is currently either unused or poorly maintained. The new environmentalism, therefore, gives strong emphasis to good housekeeping and managerial improvements and to the reform of public enterprises.



Principle 10: Incorporate the envi ronment from the start. When it comes to protecting the environment, prevention is much cheaper—and more effective—than cure. Most countries now seek to assess and mitigate potential damage from new infrastructural investment. But it is now becoming clear that such activities may be carried out too late in the cycle to have optimum impact. A small but growing number of efforts are now being made to move "upstream" to factor environmental concerns into the formulation of countries' sectoral strategies. Countries such as Nepal and Vietnam are currently seeking to take environmental costs and benefits into account when designing their country-wide, least-cost energy strategies. Such sectoral environmental assessments are expected to become standard practice in the coming few years.

Methodologies for carrying out such sectoral environmental assessments are still evolving, and a good deal of research is currently under way. The World Bank, for example, recently launched an important learning exercise entitled "global overlays" in which issues of biodiversity and climate change will be factored into sectoral policies in agriculture, energy, transportation, and infrastructure.

Moving upstream in environmental policy is also occurring in the design of macroeconomic, trade, and fiscal policies. Countries such as Côte d'Ivoire, the Czech Republic, Mexico, Peru, and Poland have explored how their economic reforms may

affect the environment and are seeking to put in place complementary environmental policies. A recent World Bank review analyzes the experience of 12 such countries. This year also saw the dispatching of the first joint IMF-World Bank mission (to the Philippines) assigned to explore the relationships between fiscal and trade policies and the environment.

The unfinished agenda

The ten principles outlined above are helping to guide a new generation of environmental policymaking around the world. The new environmentalism—characterized by greater rigor in factoring environmental costs and benefits into policymaking—puts local people at the center of environmental strategies, diagnoses and addresses behavioral causes

of environmental damage, and recognizes the political dimensions of environmental reform. This revolution in environmental management is not complete. Rather, it is just beginning. In most countries, environmental conditions are continuing to deteriorate, in many instances in an irreversible manner. Pursuing the new environmentalism is therefore a very urgent challenge—one that economists, as well as ecologists and technical specialists, need to be fully engaged in meeting.

For more details on the World Bank's work on the environment, see the October 1996 issue of Environment Matters, which can be obtained by writing to the Environment Department, World Bank, Washington, DC 20433, USA.