



*The*  
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*and the*  
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Ved P. Gandhi



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*International Monetary Fund*

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# The IMF and the Environment

**T**he International Monetary Fund (IMF) was founded in 1944 to promote international monetary stability and cooperation. It does this by providing policy advice, financing, and technical assistance to its member countries. The IMF's policy advice is focused on members' broad macroeconomic and structural policies. In recent years, observers have called on the IMF to pay closer attention to certain issues that do not fall directly within its mandate, such as the environment. The following questions and answers describe the IMF's approach to environmental issues and when and how the IMF integrates environmental concerns into its work.

## **Why is the IMF interested in the environment?**

Severe environmental degradation can affect a country's macroeconomic performance over the long run. If not dealt with appropriately and early, environmental problems could eventually impose a heavy burden on an economy and hamper growth. As IMF First Deputy Managing Director Stanley Fischer has put it, "Studies increasingly confirm that the environment itself may affect macroeconomic conditions. Indeed, research shows that environmental degradation and depletion can give rise to structural balance of payments problems and can reduce economic growth prospects" (Gandhi, 1996). The IMF, which is charged in its Articles of Agreement with "the promotion and maintenance of high levels of employment and real incomes," therefore views severe environ-

mental degradation as a potential threat to strong and stable economic performance over time.

As part of the preparations for the Earth Summit held in Rio de Janeiro in June 1992, the IMF in late 1990 reviewed its work in the environment area and revisited its mandate to see what more could be done to protect the environment and support the wider objective of sustainable development. The review concluded that IMF-supported policy reforms involving price and exchange systems and taxes and subsidies had tended to promote a more rational use of resources and discouraged waste, thereby benefiting the environment. In this way, the IMF had played an indirect—rather than direct—role in environmental issues, and it had not, given its basic mandate (see Box 1), been active in helping countries pursue and support their environmental objectives.

The review also elaborated on the ways in which serious environmental problems could erode trade and budget balances and retard economic growth. In relation to trade balances, for example, the exploitation of natural resources (e.g., fisheries, forests, and mines) at an unsustainable rate could curtail a country's ability to sustain exports in the future and lead to a deterioration in the balance of trade (unless exports of other products could be readily expanded). Likewise, export products produced by a country under polluted and unhygienic conditions (e.g., fish in polluted waters) could face a sharp decline in demand in world markets. Severe coastal erosion in a country heavily dependent on tourism could seriously hurt tourism and foreign exchange earnings. And rapid deforestation, without an effective reforestation policy, could depress future timber exports as well as reduce the supply of fuelwood for domestic consumption, necessitating larger imports of oil and other energy products. Overfishing and continuing fish loss owing to marine pollution could shrink a country's food supply and necessitate an increase in basic food imports.

In relation to budget balances, a country with severe air and water pollution, for example, may have to greatly increase public health expenditures to cope with pollution-related health problems. Countries with rapidly depleting natural resources may need to spend more on social welfare, as the domestic supply of food and fuel shrinks with soil degradation, overfishing, or excessive deforestation. In countries dependent on receipts from export du-

### **Box 1. Purposes of the IMF**

(Article I of its Articles of Agreement)

(i) To promote international monetary cooperation through a permanent institution which provides the machinery for consultation and collaboration on international monetary problems.

(ii) To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

(iii) To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.

(iv) To assist in the establishment of a multilateral system of payments in respect of current transactions between members and in the elimination of foreign exchange restrictions which hamper growth of world trade.

(v) To give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.

(vi) In accordance with the above, to shorten the duration and lessen the degree of disequilibrium in the international balances of payments of members.

The Fund shall be guided in all its policies and decisions by the purposes set forth in this Article.

ties or taxes on export earnings, government revenues could decline if exports stagnated because of environmental problems.

A deteriorating environment could also dampen a country's economic growth. Severe air pollution and water contamination could, for example, impair human health and possibly result in a serious loss of labor productivity. Similarly, soil erosion in a country could substantially reduce agricultural production and limit the supply of raw materials to domestic industries.

Thus, in early 1991, the IMF Executive Board decided that the IMF should pay greater attention to environmental issues that may have an impact on a country's macroeconomic stability over time.



The Board directed IMF staff to become aware of such issues and bring them to bear on the IMF's policy dialogue with member countries (see Box 2). At about the same time, the IMF embraced the concept of "high-quality growth," defined by IMF Managing Director Michel Camdessus (1990) as "growth that is sustainable . . . with domestic and external financial stability . . . that is concerned with the poor, the weak and the vulnerable . . . and that does not wreak havoc with the atmosphere, with the rivers, forests, or oceans, or with any part of mankind's common heritage."

### **Which environmental issues does the IMF deal with?**

Environmental problems can be regional, such as acid rain or forest fires, or international, such as climate change or ozone layer loss. Or they can be national in character, such as overfishing, deforestation, overgrazing, soil erosion, overmining, biodiversity loss, and the loss of cultural heritage. These distinctions are somewhat arbitrary, since problems that start out as regional or international in character can easily have national implications and ultimately become national problems, and vice versa.

Similarly, environmental degradation can have many causes. Some environmental problems may arise owing to a lack of appropriate property rights. Others may stem from inadequate environmental standards and/or from weaknesses in a country's monitoring and enforcement capacity. Still others, especially the excessive exploitation of a country's natural resources, may simply be the consequence of overpopulation and poverty. Certain environmental problems are caused by a lack of environmental policies that correct "market failures," which result from the inability of private markets to price scarce environmental resources according to their value to society. Others arise from "policy failures," or the adoption of economic policies that do not discourage, or may actually encourage, the overconsumption of environmental assets or overproduction of environmental "bads." Not all the causes are equally relevant in all cases of environmental degradation, nor can all necessarily be addressed within the mandate of the IMF.

The IMF generally addresses national environmental problems that result from domestic policy failures and that have a bearing on

## **Box 2. IMF Reviews Its Approach to Environmental Issues**

Economic activities affect, and are affected by, the natural environment in diverse and complex ways, many of which have only recently become the subject of systematic analysis. Meanwhile, public concern about environmental conditions and the impact of economic policies on the environment has mounted. Recently, the IMF's Executive Board considered the extent to which the IMF should address environmental issues, given its specialized role in promoting international monetary cooperation and stability.

The Board concluded that IMF staff should develop a greater understanding of the interplay between economic policies, economic activity, and environmental change. This would help to avoid the possibility that the IMF might recommend policies that could have undesirable environmental consequences, while ensuring that the thrust of its actions—promoting sustainable growth and reducing poverty—also helps mitigate environmental concerns.

The Board further agreed that this should be done in ways consistent with the IMF's mandate and the size and structure of the organization. To achieve this objective, IMF staff should draw upon the expertise of other institutions with environmental competence and responsibilities. IMF staff will benefit from the research and information developed by these other institutions—the World Bank, the Organization for Economic Cooperation and Development, and the United Nations Environment Program, among others—making sure that their findings are properly disseminated among IMF economists. This work will help the IMF's consultation missions to member countries (held pursuant to Article IV of the IMF's Articles of Agreement) and other missions to conduct more informed discussions with national authorities who face macroeconomic policy choices entailing major environmental implications. In exceptional cases where the authorities are confronting particularly urgent environmental issues, IMF missions may include outside experts.

The Board also emphasized that the IMF's work on environmental issues should be evenhanded and universal in scope, giving appropriate attention to problems in countries within each region and at all stages of development.

Source: *IMF Survey*, April 15, 1991.

the near-term macroeconomic outlook of a country. The IMF's work normally involves consultations with economic policymakers at the national level, and this contact provides an obvious point

of focus for policy discussions. IMF staff specializes in national and international issues of macroeconomics, monetary, trade, and fiscal policies and does not have the expertise to tackle broader, more systemic issues. As a result, the IMF devotes much less attention to most regional, transboundary, and international environmental problems.

Even so, not all national environmental problems can be readily addressed by the IMF. This is particularly true for biodiversity loss and loss of cultural heritage, as well as for problems that result from overpopulation and structural poverty. Such problems often call for the development of specific environmental, scientific, or social programs that fall outside the IMF's mandate and area of expertise. Other organizations, such as the World Bank, the United Nations, or the regional development banks, are better equipped to deal with such problems.

On another front, the IMF is intimately involved in efforts directed at incorporating the environment into statistical measures of the economy. The IMF continues to be actively interested in the quality of statistics relating to the performance of the macroeconomy of its member countries, especially the quality of national accounts—measures of performance that form an important part of the IMF's work. For this reason, IMF staff actively participates in the effort to develop further the System of National Accounts at the United Nations, OECD, and other organizations; it also contributes to these organizations' work on the design and implementation of new systems, including green national accounts, which take into account the depletion and depreciation of environmental assets.

## **How does the IMF support national environmental objectives?**

IMF staff typically advises countries on foreign exchange and international trade regimes, monetary and fiscal policies, pricing and incomes policies, and structural reforms. In each of these areas, policies seek to influence the level of aggregate demand and supply while securing a more efficient allocation of resources and market prices that adequately reflect scarcity values. IMF staff often

proposes reforms that help ensure adequate growth, financial stability, and a sustainable external position. The links between these policies and the achievement of national environmental objectives can be readily seen.

Foreign exchange and trade policies that support an overvalued exchange rate and that result in import restrictions often do not properly reward export-oriented farmers and deprive them of earnings needed to finance appropriate soil-reviving and other land improvements. The same regime also lowers the cost of imported fertilizers and other environmentally damaging inputs that enter into the agricultural production process of many developing countries. Such policies cheapen the imports of industrial chemicals and other raw materials used in the production of industrial outputs, some of which may be environmentally damaging. Thus, policies supportive of an overvalued exchange rate and import restrictions are obvious candidates for reform and the IMF normally recommends that they be reformed. Such advice also tends to benefit the environment in an indirect way.

Monetary and interest rate policies that subsidize capital end up promoting capital-intensive industries, including industries that exploit natural resources. To the extent such a policy regime encourages the use of capital-intensive technologies, and discourages the use of labor, it tends, over time, to increase unemployment and push the poor to exploit natural resources in search of basic food and fuel. Such a regime is another obvious candidate for reform, and the IMF normally offers its reform proposals in the interest of macroeconomic stabilization, but they also benefit the environment.

Fiscal policies that support large and growing budget deficits are bound to cause inflation, and inflation is the worst enemy of the environment—it hurts the poor the most and drives them to an excessive use and exploitation of natural resources. IMF policy recommendations, aimed at taming inflation, normally feature fiscal reforms. Such reforms often include gaining control over growing public expenditures including, among others, budgetary subsidies for energy, fertilizers, pesticides, insecticides or other chemicals that directly or indirectly harm the environment. The IMF also recommends revenue-raising measures such as, among others, increases in petroleum excises, if considered low, or the raising of

charges for previously subsidized supplies of energy, irrigation, and potable water or fees for government leases of farming, forestry, and mining lands. The IMF's advice to countries facing macroeconomic instability and large budget deficits, thus, normally includes some fiscal measures that also support the country's environmental policy objectives.

The core of the IMF's policy advice to its member countries concerns macroeconomic and structural policies, which refer to measures used by governments to influence gross national product, inflation, and unemployment. Macroeconomic policy reforms are often directed at improving the efficiency of production and moderating the level of aggregate demand to match available supplies. Simultaneously, this means moderating the society's demand for natural and environmental resources as well. Such reforms therefore tend to be quite supportive of a country's environmental objectives and are considered "win-win" for both the economy and the environment. For this and other reasons, many environmentalists rightly regard macroeconomic reforms as a necessary, if not sufficient, condition for environmental protection.

As Agenda 21—the global plan for sustainable development established at the 1992 Earth Summit—notes, "Experience has shown that sustainable development requires a commitment to sound economic policies and management . . . [such] policies are necessary to correct misdirected public spending, large budget deficits and other macroeconomic imbalances, restrictive policies and distortions in the areas of exchange rates, investment and finance, and obstacles to entrepreneurship" (United Nations, 1992, paras. 2.6 and 2.31). This message also emerged clearly in a review of the macroeconomic stabilization programs of Côte d'Ivoire, Mexico, and Thailand carried out by the World Wide Fund for Nature. The review stressed the importance of macroeconomic stability for environmental protection while identifying its limitations for poverty alleviation and sustainable development. "The three case studies concluded that macroeconomic stability is necessary for sound environmental management but not sufficient to ensure long-term environmental sustainability. . . . However, macroeconomic stability and increased economic efficiency would not and could not address other basic developmental issues, such as income inequality and cost internalization . . .

[or the] government failure to implement complementary policy reforms" (Reed, 1996).

Despite the positive role that IMF advice on macroeconomic policy and structural reform often plays, the IMF recognizes that protecting the environment in its multiple facets may require more than just macroeconomic and structural reforms aimed at ensuring macroeconomic stability. Indeed, it is possible that some IMF-supported macroeconomic and structural reforms, instead of furthering the environmental objectives, may sometimes have an adverse impact on some aspect of the environment. The appropriate solution in such situations is for the country to adopt adequate and effective environmental policies as a complement to macroeconomic and structural reform. But many of the complaints voiced by certain environmental nongovernmental organizations (NGOs) concerning IMF-supported adjustment programs ignore the fact that the macroeconomic reforms entail benefits as well as costs. Once such benefits and costs are considered simultaneously and are given due weight, the complaints of environmental NGOs could lose their force (see Box 3).

This also suggests that the adoption and effective implementation of proper environmental policies and regulations are necessary complements to macroeconomic and structural reforms, and so are strong regulatory and enforcement institutions tailored to the specific needs and circumstances of individual countries. On these specific matters, the IMF has little in-house expertise and normally seeks the advice of other institutions, such as the World Bank.

## **How does the IMF integrate environmental issues into its work?**

In recent years, environmental concerns have increasingly entered into the IMF's policy dialogue with member countries, especially when environmental issues are expected to have a significant bearing on domestic or external stability. For example, in countries where active discussions on green tax reform have taken place (as in Germany) or energy policies have been debated (as in the United States), the IMF has included these issues in its annual re-

### Box 3. Responses to Environmental NGOs

**NGOs:** *The IMF urges countries to boost exports to pay back debts, creating pressure on countries to exploit nonrenewable resources for cash. Exchange rate depreciation has a similar effect.*

**Response:** If adequate royalties and taxes existed for nonrenewable resources, and were effectively collected, any excessive depletion of these resources could be mitigated. Exchange rate depreciation, by raising the costs of importing environmentally damaging intermediate and final products, can protect the environment. Depreciation also improves the capacity of exporters to undertake environmental investments. The flow of external aid and investment is very much dependent upon the country honoring its past debts.

\* \* \*

**NGOs:** *Cuts in food and fuel subsidies encourage the urban poor to exploit marginal lands for food and to cut forests for fuelwood. An across-the-board reduction in public expenditures often reduces social spending, including spending on environmental protection.*

**Response:** Control of inflation, through a fiscal deficit reduction strategy, helps the urban poor to survive some cuts, if any, in food and fuel subsidies. (Fuel subsidies are indefensible on environmental grounds anyway because they encourage an excessive demand for energy.) Besides, improvements in revenue buoyancy, resulting from domestic and external stability, enhance the capacity of governments to undertake larger social expenditures and support for environmental protection programs. In fact, a recent study (*IMF Survey*, February 23, 1998) shows an increase in social spending in a sam-

view of the member economies and in its recommendations on possible macroeconomic policy reforms.

For programs supported by the IMF's Enhanced Structural Adjustment Facility (ESAF)—which provides concessional financing in support of macroeconomic adjustment and structural reform in low-income countries—IMF Policy Framework Papers (prepared by the national authorities with the assistance of IMF and World Bank staff) frequently include a discussion of the major environmental issues. In those cases where environmental issues are particularly important, a program may specifically include a reform of relevant environmental policies or the implementation of measures that may be necessary for the conservation and protection of the

ple of 66 countries with IMF-supported programs during the 1986–96 period.

\* \* \*

**NGOs:** *Reform of interest rate policies, which reduces credit subsidies, curtails small farmers' access to financing for land improvements and other investments. Such reforms induce farmers to switch to extensive farming techniques that contribute to deforestation and soil erosion.*

**Response:** Interest rate reforms reduce “hidden” subsidies to capital and promote labor employment. By improving employment prospects, interest rate reform discourages deforestation and other environmental damage that any growth of unemployment would have brought about. Removal of credit subsidies also reduces heavy industry’s access to financing, thereby limiting the expansion of capital-intensive industries, which may be heavy polluters. Finally, interest rate reforms provide an incentive for small farmers to reduce their investment in, and the use of, environmentally harmful fertilizers and pesticides.

\* \* \*

**NGOs:** *IMF-supported stabilization programs unduly compress the economy and depress growth in the short run, thereby contributing to poverty-induced environmental degradation.*

**Response:** IMF-supported programs cause temporary austerity, if any. Over the longer term, macroeconomic stability enhances growth prospects and increases employment and incomes. Stability also ensures that the right price incentives will work to preserve environmental resources.

country’s natural resources. Normally, such policies are included as time-bound “structural benchmarks,” but never as a “conditionality.” While progress in meeting these benchmarks in a timely manner is taken into account by the IMF Executive Board in its periodic reviews of a country’s program, and failure to meet these benchmarks may undermine a program’s viability, it may not in itself trigger a cessation of disbursements under an IMF-supported program.

Some recent IMF-supported adjustment programs in which environmental policies have played an important role are described below. They illustrate how the IMF has incorporated various environmental policies in some of its programs.



### ***Cambodia: Forestry policy***

The management of forestry resources in Cambodia has been impeded by two problems during recent years. First, uncontrolled logging for export has led to rapid deforestation and serious environmental damage. Second, revenues from logging activities have been largely diverted away from the budget to off-budget funds. The government's efforts to control the situation by creating a National Protected Area System of more than 3 million hectares and controlling logging in designated forests have been undermined by frequent exemptions granted to powerful interest groups. Illegal logging and log exports also constituted a major source of income for the Khmer Rouge in the northwestern part of the country. Although a ban on logging and log exports has been officially in place since May 1995, agreements to export large volumes of logs, concluded in early 1996 with a number of foreign companies, led to renewed concerns about transparency in the forestry policy.

The preparation and publication of a revised forest management code as well as the preparation and adoption of a National Environmental Action Plan constituted structural benchmarks in the 1995 ESAF arrangement for Cambodia. Additionally, concerns about the conduct of forestry policy played a prominent role in the completion of the midterm review; in fact, the review was delayed until the government rededicated itself to the proper implementation of the forestry code.

### ***Lao People's Democratic Republic: Forests and land management***

The major environmental problems of the Lao P.D.R.—deforestation and unsustainable logging practices—have caused the depletion of the forest cover and reduction of the ground water level. In the 1950s, the forests covered 70 percent of the land, but they have been reduced to only 47 percent in recent years. The reduction of forest area has been caused both by the lack of an appropriate forest management strategy and the continued random export of timber. Government policy toward the environment has, therefore, focused on overall resource management, including sustainable forest management and land use plans in vulnerable areas, a reduction of “slash and burn” cultivation, an audit of the logging activities of the companies controlled by the Ministry of

Defense, and the establishment of an effective regulatory framework and new conservation areas. Furthermore, to control the growing domestic demand for energy and to obviate the need for constructing an unnecessarily large hydrocarbon power plant, the IMF urged the authorities to raise electricity tariffs to levels that would be consistent with international energy prices.

The structural benchmarks in the 1995 ESAF program of the Lao P.D.R. called for the implementation of the new decree on forestry use and the adoption of a new land use management system based on community participation.

### ***Mauritania: Fisheries management***

At the heart of the concern with sustainable fisheries management in Mauritania is the problem of overfishing. The IMF has discussed with the authorities reforms of the fisheries sector that involve measures aimed at reducing, over time, the overfishing of certain species.

Conservation of fishery resources constituted an important element of the IMF-supported adjustment strategy. Reforms of the fisheries sector covered in a 1995 ESAF arrangement included increasing transparency and efficiency in the allocation of fishing rights, strengthening the surveillance of illegal fishing by national and foreign operators, introducing and implementing a licensing system for non-national fleets exploiting demersal fish (that is, fish living near the bottom of the sea), and collecting fines levied on fishing violators. In addition, the ESAF arrangement included important benchmarks relating to the management of natural resources and the development and implementation of a soil management policy.

### ***Bolivia: Natural resource management***

A 1991 ESAF-supported program with Bolivia included a five-year moratorium on new timber concessions and the development of a new Forestry Law by 1993. It also called for the introduction of legislation for the protection and rational use of natural resources, implementation of a National System of Protected Areas, and the adoption of measures to strengthen institutions involved in enforcing environmental norms.

Under another ESAF-supported program that began in 1994, the passage and implementation of a new hydrocarbons law formed an important policy measure in support of ensuring sustainable development in the medium term. It called for determining and applying environmental obligations to all new investments in the hydrocarbons and mining sectors and enforcing emission and discharge standards of water, air, and solid waste in the mining and industrial sectors. Regulations for the Forestry Law were also to be implemented.

### ***Côte d'Ivoire: Forestry management***

Deforestation is one of Côte d'Ivoire's main ecological problems. The dense forest that covered 12 million hectares in 1960 has now shrunk to 3 million hectares. Soil degradation, overfishing, and pollution are other serious environmental problems.

During an ESAF-supported program of 1994, the IMF urged authorities to slow logging operations and to rehabilitate forest resources by imposing limits on timber exports, adopting reforestation plans, and extending protected areas. In addition, the authorities were urged to adopt a National Environmental Action Plan, which they did in June 1995.

An ESAF-supported arrangement covering 1998–2000 also includes important structural benchmarks relating to the environment. Among other things, it requires the authorities to halt illegal occupation of—and impose strict control on cultivation in—designated forest areas. The arrangement calls for the introduction of a resource-based taxation system on timber in place of the existing system based on sawn timber and processed wood products. It also requires authorities to promote reforestation by the private sector. The implementation of the previously adopted National Environmental Action Plan forms yet another benchmark in this most recent IMF arrangement.

### ***Equatorial Guinea: Timber concessions***

Structural benchmarks under a 1994 ESAF-supported program with Equatorial Guinea included the implementation of an existing forestry rehabilitation plan and the formulation of a long-term nat-

ural resource management strategy. The program also called for annual renegotiation of all timber concessions and for a study of land use in the continental region.

## **Can the IMF attach environmental “conditionality” to its adjustment programs?**

According to Article I (v) of the IMF’s Articles of Agreement, the IMF provides temporary use—under adequate safeguards—of its financial resources in support of a member country’s policies aimed at correcting its balance of payment problems (see Box 1). The set of domestic and external policies that are contained in the adjustment programs must have as their main purpose a quick and efficient correction of the country’s external payment imbalances. Only those policies considered absolutely critical for this objective form the “conditionality” associated with IMF financial support. This way the IMF attempts to safeguard that the member will be able to repay the financial resources it has borrowed and will be thus only a temporary user of IMF resources.

The Executive Board of the IMF, which reviews and approves the use of IMF resources by a country, is the ultimate judge of what conditions are required of a country using IMF resources. Periodic reviews by the Executive Board of financial arrangements of the IMF with its member countries, then, help formalize the rules of “conditionality.”

IMF financial support does not involve environmental conditionality. The conditionality has at its core remained associated with resolving the member country’s balance of payments problems and/or dealing with the causes of its macroeconomic instability in the short run. However, the IMF conditionality continues to evolve.

## **How does the IMF work with other international organizations to further the cause of environmental protection?**

The IMF continues to work closely with the World Bank and the United Nations on environmental issues. World Bank staff pos-

sesses extensive knowledge of the sectoral and environmental issues in individual countries, and the IMF relies heavily on the work done at the World Bank, integrating the results of World Bank studies into its own policy dialogues with country authorities. In fact, the sectoral and environmental policy recommendations of the World Bank often find a prominent place in the Policy Framework Papers, which form the basis of IMF-supported ESAF arrangements with many low-income developing countries.

The IMF and the World Bank have also collaborated on a study of the interaction between macroeconomic policies and the environment at the request of the Philippines' authorities.

The IMF and the World Bank have put in place a joint initiative for Heavily Indebted Poor Countries (HIPC Initiative). The Initiative is aimed at reducing the debt-service burden of eligible countries to sustainable levels and helping them exit from the debt-rescheduling process, provided they adopt and pursue strong and sustained programs of adjustment and reform. Total nominal debt service relief of almost \$6 billion is being provided to assist six countries—Bolivia, Burkina Faso, Côte d'Ivoire, Guyana, Mozambique, and Uganda—and discussions are under way with at least two others that have plans to persevere in their adjustment and reform effort. Implementation of this Initiative should help eliminate external debt as an impediment to achieving sustainable development.

The IMF has worked with the UN Statistics Department on the revisions of the System of National Accounts and the development of satellite accounts on the environment. It continues to participate in addressing the analytical and methodological issues related to the development of green accounts and to alternative approaches that link national accounts with physical indicators of the environment.

The IMF has participated in the work of the UN Commission on Sustainable Development, especially on issues relating to the financing of Agenda 21, which was established at Rio's Earth Summit and contains a set of measures to be followed by national governments and international agencies in support of achieving sustainable development. IMF staff has produced papers on the domestic and international instruments of financing sustainable development and has presented them at the Commission's Manila

and Santiago Expert Group Meetings on Financial Issues. IMF Managing Director Michel Camdessus addressed the Earth Summit at Rio in June 1992 and, since then, high-level staff has represented the IMF at the annual Commission meetings, including the Earth Summit+5 held in New York in 1997.

The IMF follows with great interest the discussions of intergovernmental bodies of the United Nations, World Bank, and other forums on trade and environment, including the interrelated issues of trade liberalization, environmental standards, competitiveness, and market access. It also continues to monitor the environmental work of other international organizations, such as the World Trade Organization (WTO), the Organization for Economic Cooperation and Development (OECD), and the United Nations Development Program (UNDP), as well as various national and international research institutions.

### **What is the IMF doing to enhance its understanding of the links between the macroeconomy and the environment?**

Following an informal meeting between IMF Managing Director Michel Camdessus and environmentalists at the Earth Summit in Rio, the IMF held a seminar with environmental NGOs at its headquarters in Washington in May 1993. The purpose was to increase the IMF's awareness of NGO concerns and to learn from NGO experiences in the field. Twenty leading environmentalists from around the world participated in the seminar, and a summary of the seminar was published in the *IMF Survey* (June 14, 1993). The dialogue with NGOs has continued since then and the IMF has benefited from the analytical work done by NGOs. IMF staff is thus fully aware of the work done at the World Wide Fund for Nature on the structural adjustment programs of 11 countries and that done at the World Resources Institute on the Philippines, Suriname, and Venezuela. IMF staff places great value on this exchange of ideas with environmental NGOs.

In May 1995, the IMF held a follow-up seminar with academics and researchers working in the environment area to learn about the results of their analyses on the interrelationships between macroeconomics and the environment. The seminar was attended

by staff of the IMF and World Bank, as well as by participants from academic institutions and nongovernmental groups. The conclusions of the seminar were summarized in the *IMF Survey* (June 5, 1995), while the papers and proceedings of the seminar were published in a book entitled *Macroeconomics and the Environment* (Gandhi, 1996).

The IMF staff continues to keep abreast of research carried out at the International Institute of Sustainable Development in Canada as well as at similar institutions specializing in environmental issues of other countries.

### **Can the IMF do more to address specific environmental problems?**

The extent to which the IMF can take account of environmental issues in its operational work is limited by its mandate and by the expertise of its staff. Furthermore, the World Bank emphasizes environmental issues and supports an extensive work program on environmental and other sectoral issues. The Executive Board of the IMF decided early on that the IMF should not duplicate the work of the World Bank in this area. The IMF's involvement is, thus, limited to only those areas that have a serious and perceptible impact on the macroeconomic outlook of a country or on the effectiveness of macroeconomic policy instruments in achieving domestic and external stability.

Even in these respects, the IMF sometimes runs into obstacles. At times, a member country does not have a National Environmental Action Plan or a stated national strategy to protect the environment. In some cases, even where such plans or strategies do exist, they are not specific enough to allow the IMF staff to consider their macroeconomic implications. Sometimes, the authorities themselves are not fully committed to environmental objectives because of pressure from one or more interest groups or because these objectives conflict with short-run economic growth or with some other objective of the country's policymakers.

Whatever the limits and obstacles, ultimately the IMF can integrate environment into its policy dialogue only to the extent that member countries allow it to do so.

## What would help the IMF do more in the area of the environment?

The analytical work on the interrelationship between macroeconomics and the environment is still in its infancy. Few academic and research institutions are working in this area. While macroeconomic issues and policies are normally discussed in a shorter time frame, the problems of environmental degradation normally manifest themselves over a much longer time frame and sometimes in a relatively imperceptible fashion. The questions for the macroeconomist working on a given country, then, are how to recognize and assess the seriousness of slow-growing environmental problems and how to adjust and incorporate these concerns into a short-term macroeconomic policy framework.

The more complicated questions arise when there is a conflict between the long-term protection of the environment and the short-term stability of the macroeconomy: in such situations how should the conflict be resolved and how far should one set of objectives be traded off with other objectives? The available literature offers little guidance on such trade-offs. Economists have yet to develop a generalized analytical framework incorporating the relevant macroeconomic and environmental variables that would allow tracing the longer-term time path of the economy of a country and of its environment. In addition, country-specific frameworks are necessary if country policymakers are to make rational decisions on such trade-offs. Once such a framework becomes available, and the decisionmakers' tolerance for trade-offs is established, it should be more feasible for the IMF to advise country authorities on the design of macroeconomic policies consistent with their environmental objectives. The economics profession and country policymakers have yet to reach that stage, especially in most developing countries.

The current System of National Accounts also needs further extension to shed light on the problems of the depletion of environmental resources and the degradation of the environment. The methodological issues involved in the "greening" of national accounts are still far from resolved. Even after they are resolved, it will be quite some time before such accounts can be used by individual countries to formulate their economic policies. The IMF is



not a producer of national accounts and must await their availability (in many developing countries, GDP data following even the current System of National Accounts remain unreliable). As countries develop reliable green accounts, the IMF would be able to use them in its policy dialogue and in formulating its advice on macroeconomic policies.

Most important, the authorities of the countries themselves must begin taking environmental objectives seriously and start incorporating them into their economic policies, recognizing and accepting the potential trade-offs. The IMF must respect the sovereignty of its member countries, and its staff can only work within the framework of the objectives the country authorities themselves consider important and the trade-offs they find politically acceptable. As countries start paying more attention to environmental issues, IMF staff will increasingly find itself integrating these issues in policy advice.

## Bibliography

- Boote, Anthony and Kamau Thugge, 1997, "Resolving Remaining Debt Issues for Low Income Countries Through Innovative Approaches," in *Finance for Sustainable Development: The Road Ahead, Proceedings from the Fourth Expert Group Meeting on Financial Issues of Agenda 21* (New York: United Nations).
- Camdessus, Michel, 1990, Remarks Before the United Nations Economic and Social Council in Geneva on July 11, excerpted in *IMF Survey*, July 30, pp. 235–38.
- Cuervo, Javier and Ved P. Gandhi, 1998, "Carbon Taxes: Their Macroeconomic Effects and Prospects for Global Adoption—A Survey of the Literature," IMF Working Paper 98/73 (Washington: International Monetary Fund).
- Gandhi, Ved P., ed., 1996, *Macroeconomics and the Environment* (Washington: International Monetary Fund).
- , 1997a, "[The IMF and the] Implementation of Agenda 21," address to the Ad Hoc Committee of the Whole, United Nations General Assembly, Special Session on Earth Summit+5 (June 23, 1997).
- , Dale Gray, and Ronald McMorran, 1997b, "A Comprehensive Approach to Domestic Resource Mobilization for Sustainable Development," in *Finance for Sustainable Development: The Road Ahead, Proceedings from the Fourth Expert Group Meeting on Financial Issues of Agenda 21* (New York: United Nations).
- Gupta, Sanjeev, Kenneth Miranda, and Ian Parry, 1995, "Public Expenditure Policy and the Environment: A Review and Synthesis," *World Development*, Vol. 23, No. 3, pp. 515–528.

- "Harnessing Macro Policy Instruments to Strengthen the Global Environmental Effort," 1996, *IMF Survey*, August 12, p. 263.
- Levin, Jonathan, 1990, "The Economy and the Environment: Revising the National Accounts," *IMF Survey*, June 4, pp. 161–69.
- , 1991, "Valuation and Treatment of Depletable Resources in the National Accounts," IMF Working Paper 91/73 (Washington: International Monetary Fund).
- "Linking Macroeconomics and The Environment," 1995, *IMF Survey*, June 5, pp. 172–75.
- McMorran, Ronald T. and David C. L. Nellor, 1994, "Tax Policy and the Environment: Theory and Practice," IMF Working Paper 94/106 (Washington: International Monetary Fund).
- McMorran, Ronald and Laura Wallace, 1995, "Why Macroeconomists and Environmentalists Need Each Other," *Finance and Development*, Vol. 32, No. 4., pp. 46–49.
- Muzondo, Timothy R., 1993, "Alternative Forms of Mineral Taxation, Market Failure, and the Environment," *Staff Papers*, International Monetary Fund, Vol. 40, No. 1, pp. 152–77.
- Reed, David, ed., 1996, *Structural Adjustment, the Environment, and Sustainable Development* (London: Earthscan).
- "Seminar Explores Links Between Macro Policy and the Environment," 1993, *IMF Survey*, June 14, pp. 177 and 187–92.
- "Social Spending Rises and Indicators Improve With IMF-Supported Programs," 1998, *IMF Survey*, February 23, pp. 52–54.
- Sorsa, Piritta, 1995, "Environmental Protectionism, North-South Trade, and the Uruguay Round," IMF Working Paper 95/6 (Washington: International Monetary Fund).
- Subramanian, Arvind and Peter Uimonen, 1994, "Trade and the Environment," in *International Trade Policies*, Vol. II, *The Uruguay Round and Beyond: Background Papers*, ed. by Naheed Kirmani and Nur Calika, World Economic and Financial Surveys (Washington: International Monetary Fund).
- United Nations, 1992, *Earth Summit—Agenda 21: The United Nations Program of Action from Rio* (New York: United Nations).