FACILITATING INTERNATIONAL COLLECTIVE ACTION

competitive pressures can enhance the state's effectiveness at home. But the challenge of reforming the state does not stop at the state's borders. In an increasingly interdependent world, one country's actions will often have implications for its neighbors and for the rest of the world. And there is a growing recognition that some needed public goods and services can only be secured through international cooperation. Thus, building state capability will mean building more-effective partnerships and institutions internationally as well as at home.

The need for international cooperation stems from global and regional manifestations of the problems described in earlier chapters, such as missing markets and the presence of externalities. World peace, a sustainable global environment, a single world marketplace for goods and services, and basic knowledge are all examples of international public goods. They will be underprovided without conscious, concerted, and collective efforts to provide them. Development aid, although not a public good in the strict sense, also justifies international cooperation because of global equity considerations.

This chapter discusses the ways in which governments might help ensure more effective global provision of international public goods. It begins by examining the voluntary mechanisms already established to coordinate international collective action. Although the evidence is clear that cooperation to achieve global collective goals brings global benefits, not every such action will bring benefits for all. Hence it will not always be in every country's interest to participate. Some international public goods may simply not be valued as highly by some countries as by others, and sometimes the domestic costs of complying with an agreement may outweigh the benefits. A major lesson of experience with voluntary agreements is that

they achieve little when countries have signed on without fully understanding, or accepting, the likely costs.

Funding and provision of international public goods

Not so long ago the standard policy advice with regard to the provision of public goods relied almost exclusively on state intervention. Depending on the circumstances, the prescription might be to introduce a subsidy, a tax, a new liability rule, a new regulation, or a new program for direct public provision of the good in question. But this approach usually fell flat when it came to the provision of international public goods. In a world of sovereign nations, voluntary cooperation becomes the only answer. But why would countries undertake cooperatively actions that they have little or no incentive to carry out individually?

Experience and a better understanding of how economies work have since led us to recognize a richer set of motives for collective action and to devise better institutional arrangements for carrying them out, be they national or global. As previous chapters have shown, states are setting aside monopolistic, command-and-control approaches to governing in favor of a more participatory approach involving civil society, markets, and local authorities. At the global level, the participatory approach goes a step further, since it relies on international cooperation without the use of coercive power. Today, the key mechanisms for the provision of international public goods are based entirely on voluntary action.

In international markets for trade and investment, countries have collaborated to develop common rules and norms of conduct and to institutionalize them through various formal arrangements. These have included regional arrangements such as the Asia-Pacific Economic Cooperation (APEC) forum and Mercosur in South America, as well as multilateral ones such as the

World Trade Organization (WTO) and its precursor the General Agreement on Tariffs and Trade (GATT). Although all these arrangements are based entirely on voluntary participation, they have attracted growing memberships, contributing hugely to growth in world trade and improvements in the participants' welfare. Organizing and operating these arrangements are costly, but members have deemed the benefits sufficient to justify the costs.

When is cooperation desirable?

For any country, the decision to cooperate in important international endeavors will be a complex one, conditioned by the country's social values and by its assessment of the long-term national interest. The balance of the costs and benefits of cooperating depends on the type of activity, the mechanisms proposed, and the social and economic conditions the country faces.

There is greater recognition today not only of the existence and benefits of international public goods, but also of the implications of failing to provide them adequately. History has shown what can happen when the community of nations is more fragmented, by war or by trade and investment barriers, than it is today. Without a forum for nation-states to discuss and negotiate orderly changes in national policies and standards, small economies may end up having to adopt the practices of the dominant economic powers, in a process of "imperial harmonization." And failure to provide effective foreign aid or support for basic research to meet the needs of poor countries diminishes the prospects of those countries ever developing into vibrant economies and profitable trading partners. International cooperation is critical to making events turn out significantly better.

But again, not all countries will in all cases wish to participate in the provision of international public goods. At the very least, cooperation can restrict a country's freedom to act. Often the benefits will exceed the costs of ceding some national autonomy, but not always. In many areas—macroeconomic policy coordination is one—there is inevitably some uncertainty about what kind of joint action to take. In others, such as environmental protection and climate change, there is uncertainty about the extent to which the key players will participate. Uncertainties such as these blunt the likely effectiveness and dilute the expected benefits of cooperation.

Even when the relevant facts are more certain, differing perceptions and priorities can still preclude cooperation. Many developing countries, for example, are reluctant to adopt the labor laws and pollution standards of the richer countries for fear of losing their competitive advantage and jeopardizing growth. And some countries may choose not to cooperate in certain activities out of a belief that private research and experimentation will ultimately produce cheaper solutions.

Collective provision of public goods generally requires balancing three principles: openness, diversity, and cohesion. Each has considerable merit, but pursuing any one to the extreme risks compromising the others. Openness to the global economy involves a commitment to transparency and clear rules, for example prohibiting discriminatory trade practices. Yet openness without diversity could lead to backsliding by countries that desire more freedom to differ, and thus to greater fragmentation of the world economy. Likewise, acceptance of diversity—for example in the mutual recognition of different national standards—fosters innovation but may be detrimental to cohesion among countries or among communities within a country. Cohesion, of course, is also generally desirable, but not when it involves sacrificing too much openness and diversity.

These considerations suggest that although there is much need for collective provision of international public goods, it is not the answer to all problems for all countries. Each country has to decide, on a case-by-case basis, whether to participate. An appropriate global framework for organizing collective action must therefore allow for multiple arrangements and institutions, all based on voluntary participation. One possible approach to organizational design is to think in terms of a series of groups, each with a different objective:

- Functional groups to deal with specific issues such as macroeconomic policy, environmental protection, labor standards, and international conflicts (for example, the International Labour Organisation and the Bank for International Settlements)
- Regional groups to deal with multiple issues of interest to neighboring countries (but preferably open to all that wish to join), including trade and investment (for example, the North American Free Trade Area, or NAFTA, and APEC)
- Coordinating groups to link the functional and regional groups and create a broader network for all members (for example, the OECD).

This framework provides for a reasonable balance among openness, diversity, and cohesion and may well be adequate to prevent fragmentation and imperial harmonization. Individual countries' interest and participation in the various arrangements at any given time will vary, and groups may be relatively inactive for long periods. But when the timing is right, with ideas and circumstances converging, groups may witness a surge of interest in their activities, as occurred, for example, in the concluding stages of the Uruguay Round negotiations of the GATT.

Ensuring more effective cooperation

There is no guarantee that participating states will always fully comply with external commitments. In the absence

of some global authority with universal jurisdiction and coercive power, enforcing international agreements and treaties is up to the states themselves. Hence mechanisms are clearly needed to ensure compliance when commitments are not being honored voluntarily. Recent experience in international law suggests a few such mechanisms.

Countries fail to comply with international commitments for different reasons. The incentives to comply may be weak, because of changes in political priorities or in underlying economic conditions. Or the necessary capability, including the technical expertise and organizational skills needed to ensure timely action, may be lacking. Perhaps most common among developing countries, the requisite financial resources may not be available.

Where its incentives have become incompatible with fulfilling its international obligations, a country may need to reconsider its participation. The effectiveness of the agreement (or international organization) will be undermined if many members simultaneously face strong incentives not to abide by its provisions. In practice, however, states have perceived their self-interest broadly, recognizing the impact of their actions on the community of nations, on their own reputation, and on the possibility of entering into future reciprocal arrangements.

Lack of capacity and financial resources is often more manageable. Many international agreements take the capacity and financial constraints of some members into account. Provisions can be included to ensure that necessary personnel and financial resources are available to all members. Where such needs are not fully anticipated, mechanisms for communication and supervision can be devised to address emerging issues. Allocating responsibilities realistically and providing for necessary resource transfers in advance can improve implementation and reduce violations.

Traditional legal mechanisms often fail to address the root cause of compliance problems, instead relying on breach of the agreement to trigger action. This approach highlights the violation of commitment and is confrontational. Necessary remedial actions may come too late—the damage may have been done. Relations among members may sour, making future cooperation more difficult.

An alternative, more process-oriented approach promotes the observance of commitments on a continuous basis. The goal is not to condemn wrongdoing but to keep states in compliance with their obligations and prevent violations. This approach relies to a much greater extent on communication, consultation, monitoring, the sharing of information, and technical and financial assistance.

Recent conventions, particularly in the environmental domain, incorporate mechanisms for monitoring and facilitating compliance. These include conferences among the parties, separate secretariats, and financial assistance arrangements that ensure the submission and review of implementation reports by member countries. These bodies, however, lack enforcement power. They also have limited capacity to verify implementation unless countries cooperate in providing information. More sophisticated legal agreements, including some recent environmental conventions, add the element of supervision. A supervisory body can help by following up on reporting requirements and by disseminating information on the impact of the convention at the domestic level.

The procedure for noncompliance established under the Montreal Protocol on Substances that Deplete the Ozone Layer is a good example of this new approach. Any party to the agreement that has doubts about the correct application of the protocol by another party can initiate the procedure, as can the secretariat itself or any party having trouble meeting its commitments. NGOs and individuals also have access to this procedure: they can transmit information about possible noncompliance to the secretariat. The Committee on Implementation may try to bring about an amicable settlement, or recommend technical or financial assistance if the failure to apply the protocol is due to lack of capacity. It can also suspend the rights and privileges of parties in violation.

Continuous cooperation among national agencies is the foundation of this process-oriented approach. The building blocks include such facilities as permanent communication networks, periodic reporting or implementation, periodic review of legal provisions, and regular meetings of decisionmakers and staff. All these help maintain awareness among responsible officials of the goals being sought by the agreements and the means for achieving them, and keep the public informed of emerging issues. The Geneva-based International Register of Potentially Toxic Chemicals, which is founded on national regulatory decisions rather than international regulatory action, is a good example of such a facility.

Current provision of international public goods

This section reviews some of challenges and opportunities facing states as they seek in five selected areas to balance self-interest and the common interest in an increasingly interdependent world.

Expanding world markets

The liberalization of trade and investment laws around the world has contributed to an enormous increase in the volume of world trade and foreign direct and portfolio investment, whose impact on the welfare of participants has been considerable and for the better. Multilateral and regional agreements have supported market expansion, as greater economic interdependence has made it necessary to maintain and extend an international system of liberal trade and investment. Invigorated by buoyant trade, the global economy has grown rapidly, and that growth shows little sign

Box 8.1 The World Trade Organization—an international mechanism for bringing credibility to national policy

The WTO was established in January 1995 to administer multilateral trade agreements negotiated by its member countries. The WTO can be regarded both as an institution embodying a set of rules and principles on the use of policies that affect trade flows, and as a 'market' in which members exchange market access concessions and agree on rules of the game. The WTO requires its members to ensure that their trade policies are largely nondiscriminatory and their rules and enforcement procedures transparent. The WTO also provides legal mechanisms for countries to signal the seriousness of their commitments, and improved dispute settlement procedures for resolving conflicts between member states.

In the first two years of its existence, the WTO dispute settlement system received a total of sixty-two cases involving more than forty-three distinct matters.

of abating. International migration of people in search of work is the laggard in this story. As World Development 1995 showed, annual migratory flows from developing countries are no greater now, relative to total population, than in the 1970s. Most workers in poorer countries are only beginning to experience the benefits—and the costs—of global migration. But the expansion of markets and the increase in competitive pressure will leave some unprepared countries highly vulnerable to unforeseen shocks and policy mistakes. As Chapter 3 explained, countries will need to adopt prudent, consistent, and credible policies at home to prepare for the new global environment. International collective action can help support these efforts by offering ways for countries to make external commitments that will give these policies more credibility.

The growing global consensus on the benefits of more liberal trade and international market expansion is reflected in the large and growing membership of the WTO (Box 8.1). The most recent series of multilateral negotiations toward trade liberalization, the Uruguay Round, led to significant reductions in both tariff and nontariff barriers to trade in goods and services, particularly among developing countries.

Yet reducing border barriers is only one of the preconditions for participating more actively in the global trading system. Countries also need a competitive exchange rate, good availability of foreign exchange, and a transport infrastructure that can support expanded trade. Thus, despite spreading trade liberalization, the share of trade in GDP fell in forty-four of ninety-three developing coun-

Of these matters, two have completed the entire process, and two further panel reports have been issued. Countries can no longer block the establishment of arbitration panels or ignore their findings, as they could under the GATT. And although they may appeal, the decision of the appeals body is final. Every stage of the process is subject to strict time limits, and countries that fail to comply face authorized trade sanctions.

The largest trading nations and customs territories continue to dominate the dispute settlement process, and the credibility of the system depends on their willingness to comply with judgments against them. But encouraged by the nature of the WTO system, including the right to redress, developing countries are turning to the dispute settlement process far more often than they did under the GATT.

tries between the mid-1980s and the mid-1990s. Such disparity in the speed and extent of integration reflects how well different regions have succeeded in raising their volume of trade with the rest of the world. While East Asia, for instance, has consistently expanded its trade over several decades, that of Sub-Saharan Africa has actually fallen.

In addition to liberalizing trade, more countries are also gradually removing restrictions on cross-border movements of capital, either unilaterally or as part of regional initiatives. The number of countries with liberal or mostly liberal capital regimes has grown from nine to thirty in the past two decades, while the number of countries with relatively restrictive rules has dropped sharply, from seventy-three to fifty-three (Figure 8.1).

Just as countries differ markedly with respect to growth in trade, so there is considerable disparity in countries' ability to attract foreign capital. Although worldwide private and official capital flows have expanded by about a factor of ten in the past two decades, developing regions have fared unequally in attracting these flows. Much of the expansion has been in private flows, and among developing regions most of these go to East Asia and Latin America. One estimate suggests that more than half the population of the developing world has been little touched by this aspect of globalization.

Of particular concern to developing countries is the composition of these growing private capital flows. Whereas many developing countries actively seek foreign direct investment, they regard portfolio investment with ambivalence. Foreign portfolio investors can help develop

Number of countries 45 40 35 30 25 1975 1985 1994 20 15 10 5 0 Liberal Mostly liberal Parti, liberal Restrictine very restrictive

Figure 8.1 Many countries are loosening restraints on international capital

Rules governing foreign capital transactions

Note: Data are for 102 industrial and developing countries. Liberal means no restrictions in mostly liberal means a few restrictions by industrial partly liberal means many restrictions on the size and timing of transactions: restrictive means that domestic investment by foreigners or toreign investment by domestic residents requires official approval. Very restrictive means that all cross-border transactions require official approval. Source: Adapted from Gwartney, Lawson, and Block 1996.

local financial markets by providing liquidity and by influencing the regulatory framework and corporate governance. But they also bring the risk of sudden capital flight, whose destabilizing effects were dramatically illustrated by Mexico's crisis of 1994–95.

Managing the risk of capital flight, and of large capital flows generally, has been a challenge for most developing countries. Increasingly the risk is regarded as a welcome source of government discipline, which discourages capricious and irresponsible policies, and many countries have relaxed capital controls (see Chapter 3). Still, large flows in either direction can accentuate a country's vulnerabilities through large external imbalances, rising inflation or interest rates, or exuberant credit expansion that could compromise the soundness of banks.

The means at governments' disposal to keep themselves out of trouble are almost all a matter of domestic policy: in particular, prudent fiscal policies, credible monetary and exchange rate regimes, a sound and prudent banking system, and, possibly, measures that reduce the public's expectation that the government will bail them out if investments turn sour.

But the international community has important interests at stake in addressing the risks associated with capital

flows. A better understanding of these risks and greater confidence in managing them would encourage countries to participate more actively in world markets. More-open and better-functioning capital markets in developing countries would improve the use of global resources and increase portfolio diversification.

What kind of collective actions could help achieve these benefits? Closer consultation among central banks and financial regulators could help upgrade national regulatory frameworks and financial practices. And greater cooperation among national authorities could help establish procedures for mutual assistance in crises, such as the IMF's new facility to help member countries absorb external shocks.

Another concern is growing regionalism. The past two decades have witnessed a sharp increase in the number of regional market-opening agreements, including NAFTA, Mercosur, and APEC. Regionalism is not simply about trade. In the case of the European Union, for example, it also reflects the desires of neighboring nations for greater political integration in response to common security concerns, for cost sharing for infrastructure and institutions, and for increased bargaining power in international negotiations.

Opinion is divided on the merits of regional arrangements, and the evidence remains inconclusive. Some argue that regionalism will divert attention and resources away from the more important multilateral processes and undermine progress toward global nondiscriminatory trade rules. Others contend that regionalism enables states to undertake innovative market-opening measures that will eventually serve as building blocks for multilateral initiatives. Regional partners have indeed pioneered arrangements later adopted in multilateral agreements; an example is the European Union's treatment of trade in services.

Some of the concerns about regionalism may be legitimate. But regional arrangements can be made more consistent with more-open and integrated world markets. One way is to open membership in such arrangements to any trading partners that wish to join, rather than restrict it to countries within the region. Another option is to establish, through a multilateral mechanism, a time-bound convergence process for cutting differences between internal and external trade barriers to a stipulated minimum.

Supporting basic research and the creation of knowledge Knowledge is an international public good whose benefits accrue to all. International collective action can direct research toward the needs of developing countries, where most research activities that exist are fragmented, poorly funded, and inadequately directed. International assistance can help in assessing needs, developing a cost-effective agenda, encouraging international exchange and collaboration, and providing additional funding where it is needed. Successes such as those of the Consultative Group on International Agricultural Research (CGIAR) and the World Health Organization suggest that the return on investment in research in developing countries can be substantial.

Basic research is a classic—and global—public good. The benefits, although uncertain beforehand, and hard to measure after, often prove exceptionally high. The transformation of the global economy and of entire societies has as its basis the knowledge gained from new discoveries. Yet the incentives to conduct and fund basic research are extremely weak: the benefits of greater knowledge are nonexcludable, and few constituencies lobby for more research. Governments in rich countries often regard research as a luxury. Governments in poor countries seldom pay it much attention.

Perhaps the greatest mismatch between potential returns and actual investment in research is to be found in developing countries. The scope for building human capital there is enormous, but the process is complicated by childhood malnutrition, debilitating diseases, and degradation of the natural resources that support agricultural

production. New knowledge can make a dramatic difference in people's lives, as it did with the eradication of smallpox, the containment of malaria and river blindness, and the significant increases in agricultural productivity made possible by the green revolution. But these successes are few and far between. And new breakthroughs are unlikely in the absence of assured continued support for well-directed efforts.

In developing countries research suffers from several disadvantages. First, research activity in these countries is usually given low priority. In Sub-Saharan Africa, for example, less than 2 percent of health budgets is spent on health research; the result is shortages of research institutions, facilities, and scientists. Second, the limited funding that is devoted to research is usually misallocated. Pneumonia and diarrheal diseases account for 15 percent of the disease burden in developing countries, yet only 0.2 percent of medical research funding in developing countries is directed toward studying these diseases. This misallocation often reflects a lack of basic information and of the skilled personnel needed to develop an appropriate research agenda. Third, there is little coordination and exchange by researchers across developing-country borders; the results are a considerable overlap in research activities and missed opportunities for cost saving.

The international community can do more to assist developing countries in generating the new knowledge that will address their needs. Through foreign aid, donors can help governments develop a research agenda based on careful assessment of needs, and help finance a higher but sustainable level of research spending. The industrial countries can also help alleviate brain drain—the exodus of skilled developing-country researchers—by providing competent researchers and scientists to work with institutions in developing countries to develop training capacity and research programs that encourage the retention of local personnel. Donors can help establish and fund regional research institutes to encourage cross-fertilization of ideas and limit redundant research activities. And international institutions can help disseminate the new knowledge gained to promote productivity, more effective treatment of diseases, and healthier lifestyles.

The scope for such efforts has been well illustrated by successful cooperation in many areas of research and dissemination. The CGIAR, for example, was instrumental in developing more productive crop varieties and promoting more efficient and environmentally friendly agricultural methods. A network of sixteen agricultural research centers around the world, the CGIAR is supported by fifty nations in its primary goal of alleviating hunger in developing countries. But the benefits of its activity have not been limited to those countries (Box 8.2).

International cooperation in health research has also led to important advances. The World Health Organization, for example, played a major role in the eradication of smallpox. But much scope remains for collective action. Of total worldwide spending on health research in the early 1990s, an estimated 95 percent was devoted to health problems of concern mainly to industrial countries, and only 5 percent to the health needs of developing countries.

Several research activities especially warrant more international support:

- Improving the understanding of tropical diseases, particularly those affecting children and rural dwellers of Sub-Saharan Africa
- Controlling the spread of the human immunodeficiency virus (HIV), which causes AIDS
- Improving treatment and prevention of noncommunicable diseases, which affect an increasing number of people in developing countries
- Finding or developing disease- and pest-resistant varieties of such crops as cotton, cocoa, rice, and yams, which play a key role in many economies
- Developing mining and farming technology to minimize soil erosion and deforestation.

Protecting the global environment

A severe threat to development comes from environmental degradation, at both the global and the local level. Particularly worrisome global environmental issues include climate change (Box 8.3), loss of biodiversity, and protection of international waters. At the local level the most pressing problems are urban air and water pollution, deforestation, and soil and rangeland degradation. International collective action can help mitigate these problems through better coordination, increased public awareness, technology transfers, cost sharing, and consultation to help shape national and local policies and practices.

International cooperation is now recognized as the cornerstone of a sustainable environmental regime. In the past two decades the number of international environmental agreements has grown significantly. The wide array of interests at stake means that activities must be coordinated at the international level to ensure stable and predictable patterns of behavior and to establish cooperative management systems. Although willingness to participate in international collective action implies recognition of a common objective, different countries have different interests at stake, and these, too, must be recognized. Article 4 of the 1992 Climate Change Convention, for example, requires that parties to the convention give full consideration to the interests of (among others) small island countries; countries with low-lying coastal areas,

Box 8.2 How international agricultural research benefits donors as well

In 1993 the United States produced about 12 percent of the world's wheat crop. The United States is also a major rice exporter, accounting for nearly 18 percent of international trade in the commodity. Most wheat and rice varieties grown in the United States were developed through crop improvement research. Many were developed through the work of two research centers in the CGLAR network: the International Center for Maize and Wheat Improvement (known by its Spanish abbreviation CIMMYT) and the International Rice Research Institute (IRRI). Both are supported in part by contributions from the U.S. government.

A recent study sought to measure the benefits to the U.S. economy from CGIAR research. It was estimated that, during 1970-93, gains from the use of improved wheat varieties developed by CIMMYT amounted to \$3.4 billion to \$13.7 billion. The benefit-cost ratio for U.S. government support of CIMMYT was as high as 190 to 1, IRRI research was linked to \$20 million to \$1 billion in gains in rice revenues, yielding a benefit-cost ratio of as much as 17 to 1. Thus even though U.S. investments in international agricultural research on wheat and rice were made primarily on humanitarian grounds, they have yielded direct benefits to the U.S. economy that far outweigh the costs of supporting the CGIAR. And as the study concludes, international agricultural research is an investment in international stability and economic growth overseas, which reaps further rewards for the United States and other donor nations."

arid and semiarid areas, forested areas, or areas vulnerable to forest decay; and countries with areas prone to natural disaster.

Institutional and financial support is often needed to enable certain countries to meet their obligations. One of the outcomes of the 1992 U.N. Conference on Environment and Development in Rio de Janeiro, for example, was a commitment by the industrial countries to provide financial resources to meet the costs incurred by developing countries in implementing obligations set out in the conference's Agenda 21. The Global Environment Facility, conceived to finance the incremental costs of

Box 8.3 The challenges of global climate change for international cooperation

Although some doubts remain about the magnitude of global climate change and the urgency of dealing with it, a consensus is emerging that the problem is real and potentially dangerous, and that reasonable and appropriate measures should not be postponed. The Intergovernmental Panel on Climate Change has predicted that over the next 100 years the earth's surface will warm by an average of 1.5 to 6.3 degrees Fahrenheit, and sea levels will rise 6 to 38 inches. These changes would bring more frequent and intense droughts, the spread of disease, the retreat of mountain glaciers, and storms of greater malevolence.

What challenges does climate change pose for international cooperation? Under the auspices of the United Nations Framework on Climate Change. signed in 1992 and ratified by 159 countries, an international agreement to limit the greenhouse gas emissions that contribute to climate change is being negotiated and may be adopted by the end of 1997. But climate change, if it brings the dire effects that are predicted, will take far bolder cooperation—political, economic, and financial—to meet needs projected to reach \$50 billion a year by 2040.

Recent analysis of climate change provides a strong economic rationale for adopting market-based instru-

ments, such as tradable carbon emissions entitlements, to reduce greenhouse gas emissions. In a tradable permits system, permits corresponding to a targeted ceiling of greenhouse gas emissions would be issued, and emissions without a permit would be prohibited. Countries for which the costs of reducing carbon emissions are low would have an incentive to undertake those reductions and sell their unneeded permits to countries for which the costs of emissions reduction are high. A recent World Bank study estimates that cutting emissions in the countries of the OECD by 20 percent at least cost could require global trading of entitlements worth \$30 billion to \$40 billion annually. Allowing trading would generate savings equivalent to 65 percent of global abatement costs.

The barriers to implementing this global market are largely political. The market's very existence depends on governments willingness to create and regulate it. (The financial resources for purchasing entitlements are expected to come from the private sector.) A crucial step in establishing the market will be the initial allocation of entitlements—this will have to be determined by a global climate change protocol. Although many formulas have been suggested, this contentious issue has not yet been resolved.

projects that have global environmental impact, plays a crucial role in implementing these obligations (Box 8.4).

Many of the most immediately pressing environmental problems facing developing countries, such as urban water and air pollution and soil degradation, are mainly local rather than global. But they have major implications for productivity, health, and the quality of life within these countries' borders. Progress in alleviating these problems has been slow, with lack of capacity and political will, at both the national and the local level, a major stumbling

The lesson of recent experience is that bringing about both local and global environmental integrity and sustainability will require a coordinated international effort, one that blends careful attention to financial incentives, market forces, laws, and national interests. Equally important, the international community must help raise public awareness of the dangers of environmental degradation, so as to change the political incentives facing leaders, which often work against the goal of environmental integrity.

Preventing and controlling conflict

For most of the twentieth century the world has lived under the specter of major war. The first half of the century witnessed two global conflicts, catastrophic destruction of lives and resources, and decades of rehabilitation and reconstruction. During the second half the Cold War loomed large, with the threat of even greater destruction from nuclear weapons. Global tensions led many countries to devote a substantial share of national output to the military. Only in the past ten years have these tensions begun to subside, providing an opportunity for nations to reduce military spending and reap the dividends of peace (Box 8.5).

The threat of nuclear war has been replaced by a proliferation of smaller conflicts, bringing costly problems of refugee relief and rehabilitation. Existing cooperative mechanisms have had limited success in managing these conflicts, or in helping to avoid them. The problems often spill over and engulf neighboring countries, as they did in Southeast Asia and much of southern Africa in past decades and are doing now in Central and West Africa.

These conflicts are not confined to the poorest countries, but can also break out in middle-income countries such as the former Yugoslavia and Lebanon. The challenge facing the international community is to find new ways to prevent such conflicts or to manage them at an early stage before they turn into tragedies.

The end of the Cold War brought rising optimism that many of the issues that had contributed to instability and conflict throughout the world would be resolved. Instead at least thirty major armed conflicts (defined as those causing more than 1,000 deaths in a year) have taken place worldwide in recent years. The fragile peace settlements in Cambodia and Mozambique now seem the exception rather than the norm. We have seen:

- A rising number of refugees and internally displaced persons, and a disproportionate number of women and children who lack access to the basic resources needed for repatriation or rehabilitation (Figure 8.2)
- A rise in the number of humanitarian emergencies, from an average of five a year in 1985–89 to twenty in 1990, twenty-six in 1994, and twenty-four in 1995
- The erosion or total collapse of legitimacy and authority in many states, including Afghanistan, Liberia, Rwanda, Somalia, and the former Yugoslavia, as a result of extended civil war or genocide.

The relationship between refugees and the state is inextricable. States are major actors in responding to and defining refugee crises. Indeed, international law defines "refugee" in relation to the state. Although NGOs and receiving countries and communities play essential roles in providing for displaced persons, the scale of displacement in recent years has required that states—unilaterally or within the framework of multilateral organizations—mobilize and deliver protection, relief, and assistance. In addition, states acting together, or as members of international organizations, have initiated the negotiations that have brought to an end several refugee-generating armed conflicts, including those in Cambodia, Mozambique, and the former Yugoslavia.

Nevertheless, the disincentives to cooperate on refugee issues are powerful. One is the difficulty in securing commitments in situations where a state may perceive no direct interest of its own. Another is the prospect of burden-sharing arrangements that require a state to accept refugees into its territory, often at high political and financial cost. The case of Rwanda illustrates the high cost of providing relief in large-scale humanitarian emergencies. Between April and December 1994 the international community allocated about \$1.4 billion for relief in Rwanda and neighboring countries. Rehabilitation efforts were gradually introduced,

Box 8.4 Sharing the burden of environmental protection

The Global Environment Facility (GEF) was set up in 1991 to help developing countries finance the incremental costs of new environmental investments with global benefits in four areas: climate change, preservation of biodiversity, protection of the ozone layer, and protection of international waters. A joint undertaking of the United Nations Environment Programme, the United Nations Development Programme, and the World Bank, the GEF has led to new institutional arrangements for the provision of collective goods.

The GEF has more than 165 member states and is governed by a board of representatives from thirty-two countries, each representing a constituency. There are sixteen constituencies for developing countries, fourteen for industrial countries, and two for Eastern Europe. The countries in each constituency choose a board member and an alternate, and each constituency determines its own process of consultation and decisionmaking. New members join an existing constituency. This innovative arrangement thus combines representativeness with efficiency

but by late 1996 an external refugee population of about 1.5 million remained dependent on international assistance.

States also differ in their ability to avoid or limit refugee flows. Stronger states are more effective at denying entry to refugees and asylum seekers. It is often the weaker states, with the most limited resources, that shoulder the greatest burden in protecting refugees and repatriating them when conflicts end.

Today's international collective response to refugee problems relies heavily on multilateral organizations. The Office of the United Nations High Commissioner on Refugees has seen its budget doubled and its mandate stretched in the 1990s. It has provided in-country humanitarian relief in Bosnia, cross-border operations in Somalia, assistance to internally displaced persons in Sri Lanka, and repatriation of refugees in Central America and Mozambique. These activities have required highly complex coordination: in Mozambique, for example, relief operations in 1991 involved twenty-six United Nations agencies, forty-four bilateral donors, six other multilateral institutions, and 180 NGOs. It is estimated that more

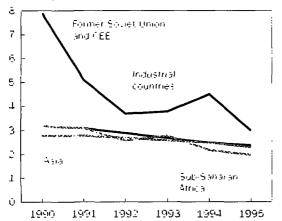
Box 8.5 How large the global peace dividend?

Global military spending has fallen significantly, from about 4 percent of GDP in 1990 to 2.7 percent in 1994 to 2.4 percent in 1995 (see figure). This drop, in sharp contrast to the rising trend of the previous two decades, resulted from the breakup of the Soviet Union, a changing global political climate, increased democratization, and a fall in military aid.

But has the reduction in military spending improved growth and welfare? The relationship between military spending and economic development depends on a variety of factors and circumstances Empirical results vary depending on the assumptions and methodologies used. Some studies show that global reductions in military spending have indeed generated a peace dividend in the form of faster output growth. Others suggest that the relationship between military spending and growth is not linear but quadratic; at low levels of military spending, increased spending contributes to faster growth: at higher levels further military spending slows growth. Once the highest-spending nations are evaluded from the sample, the relationship between military spending and growth is not significant for most developing countries (in peacetime). In such cases the biggest dividend ultimately may come from a country's perceived security and increased investor confidence, rather than from reductions in military spending per se.

Military expenditure by industrial, developing, and former Soviet bloc countries

Percentage of GDP



Note: Oara are averages of the countries in each group weighted by GDP. Source, Gupta, Schiff, and Clements 1996.

than 16,000 NGOs are working to provide relief and humanitarian assistance worldwide.

Improving the effectiveness of foreign aid

Foreign aid is not strictly a public good, but it can be justified by considerations of international equity, particularly concerning the future productivity and well-being of people in poor countries. A vital part of improving the climate for development assistance must be to make foreign aid more effective from the standpoint of both the borrower and the donor. Recent research suggests that this can be achieved by linking aid more closely to recipients' policies.

The success or failure of aid-financed development projects, even in the social sectors, is particularly dependent on the quality of a country's macroeconomic policies. A project to expand primary education, for example, is more likely to succeed where macroeconomic policies are sound. If projects are the vehicle for development, macroeconomic policies can be seen as the fuel and lubricants that keep the vehicle going.

Moreover, only in a good policy environment will foreign aid have an impact on growth. In countries that have pursued the key economic policies for growth—which empirical research has identified as ensuring fiscal discipline, preventing high inflation, and maintaining a reasonably open economy—foreign aid has significantly increased economic growth (Figure 8.3). Countries that have achieved a good policy environment and received significant amounts of aid in recent years—Bolivia, El Salvador, Mali, and Uganda, for example—have grown faster than would have been predicted by their policies alone.

The clear implication is that foreign aid would be more effective if it were either more systematically targeted to poor countries with good economic reform programs or used to promote good policies. At the same time, donors share much of the responsibility for ensuring that foreign aid is dispensed responsibly and effectively.

The past decade has seen a trend toward economic liberalization in the developing world, indicating an improving climate for effective assistance. For example, India and Vietnam—populous countries that undertook good reform programs in the early 1990s—have built environments where foreign aid is likely to have a greater impact on growth and poverty reduction. But the track record of targeting aid to poor countries with good policies was generally weak between 1970 and 1993. Bilateral aid showed no tendency to favor good policies, whereas multilateral aid reflected only modest favoritism toward countries with good policies (as shown in a study that controlled for income and population). Clearly, a high priority for aid agencies is to channel resources more systematically toward poor countries with good policies.

Figure 8.2 Refugees have been flooding Africa, Asia, and Europe

Note: Dara include refugees, returnees, and internally displaced persons. Source: Office of the bilited Nationa High Commissioner for Refugees, 1995.

Can aid help poor countries improve their policies and institutions? This is a difficult but critical question for the allocation of aid. There has been little systematic research into this question, but the available results are suggestive.

Structural adjustment lending to support policy reform has been more successful where local "ownership" of the reform program has been strong. Although adjustment lending can provide a useful support to an existing reform program, it is not likely to generate reform on its own: experience strongly suggests that donors cannot "bribe" governments to introduce policies for which there is no domestic support.

Where domestic social and political forces have initiated programs to reform policies and institutions, foreign aid can provide effective support by bringing technical expertise and lessons from other countries into a receptive environment. Good examples of such positive interaction are Indonesia, Mauritius, and Uganda. But where there is little domestic movement toward reform, assistance aimed at institution building and policy reform has had little impact.

Thus, in some environments it may be difficult for foreign assistance to accomplish anything beyond peace-keeping and emergency relief. But once domestic social and political forces have generated momentum for reform, foreign aid can provide important support for both policy reform and institutional development. And

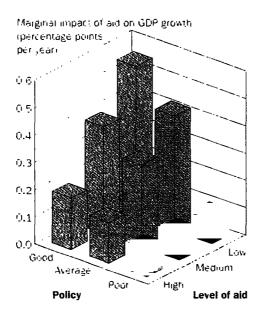
once good policies and good institutional structures are in place, financial assistance can accelerate the transition to a more rapid growth path. The experience of successful economies shows that the need is temporary: as a track record of good policies and performance develops, private capital flows increase and gradually eliminate the need for foreign aid.

Strategic options: Furthering the provision of international collective goods

More effective international cooperation can expand opportunities and help nations cope with the new global challenges. Each country has to evaluate the merits of each proposed cooperative endeavor and decide on a case-bycase basis whether or not to participate. But this chapter has pointed to several areas where cooperation could be of great value:

- Expansion and preservation of open world markets, including mitigation of the risk associated with volatile capital movements. Many developing countries are concerned about more-open capital markets because of the possibility of sudden outflows that can destabilize economic management.
- Basic research directed at the needs of developing countries.
 The green revolution, made possible by the support of the CGIAR, shows that investing in research and

Figure 8.3 Poor policies nullify the effect of aid



Note: Each value is an average for a group of countries. Results are based on a regression using data from (rfty sir countries for the period 1970–73 to 1990–93. The level of aid is measured as a percentage of the recipient country's GDF. Source: Adapted from Burnside and Dollar 1996.

development can bring rich returns—for both the donors and the intended beneficiaries.

 Protection of the environment. International collective action can help mitigate both global and local environ-

- mental problems by improving coordination, increasing public awareness, transferring technology, and providing incentives for appropriate national environmental policies and enforcement.
- Peacekeeping and the prevention of armed conflicts. The high human and financial cost of wars—and of associated relief and rehabilitation efforts—is well known, but existing mechanisms have had little success in preventing conflicts or in resolving them before they become large-scale human tragedies.
- Improving the effectiveness of foreign aid. Linking aid more closely to recipients' policies can make aid more effective: for any level of foreign aid available to a country, economic performance rises with the quality of policy and governance. Recipients' policies appear to have influenced the allocation of multilateral but not of bilateral aid.

The appropriate catalyst for greater cooperation will vary, both according to the goal and according to the range of countries likely to participate. In several areas, new functional or regional groups may be useful in helping coordinate and enforce more effective voluntary collaboration. These groups can seek to develop common rules and mechanisms for pursuing designated objectives. But the credibility and effectiveness of any such effort will rely critically on striking the right balance among the competing values of openness, diversity, and cohesion. They will rely, too, on the political incentives—and the commitment—of participants. Attempts to improve the effectiveness of international collective actions, like similar domestic efforts, will bear fruit only if leaders are willing not merely to promise change, but to take the steps required to deliver it.