

# Sustaining development

Mark Edwards, Still Pictures

Crowded streets, Dhaka, Bangladesh

Development agencies and governments now claim to be pursuing people-centred sustainable development. The rhetoric may have changed; the practice seems familiar.

Two core themes came together in the 1990s to create a more ambitious development agenda. The first was sustainable development. This term was widely adopted following the Brundtland Report in 1987 and encapsulated the need to protect the environment for the current and future generations—an imperative echoed at the Earth Summit in Rio in 1992.

A second major theme of the 1990s was human development—elaborated in the UNDP's *Human Development Reports*. These reports insisted that the primary purpose of development was not to boost economic growth but to improve people's lives, and that the best way to do so was to expand the choices available to them—to ensure that they had the capacity and the opportunity to shape their own futures.

By the time of the Social Summit in 1995, these ideas had been brought together—as sustainable human development or as people-centred sustainable development, or in any number of other ways. The exact combination is probably less significant than the general intention—to argue that economic growth should not be allowed to degrade the environment; that it should be the kind of growth that benefits the world's poorest people; and that local participation should shape development programmes and projects.

Development agencies accepting these principles would have to operate in a different way. First, they would need a broader vision. They would have to set aside their narrow, sectoral fixations on population, say, or infrastructure or food production. Instead they would have to

be alert to the ways in which all these issues and others form a dynamic and integrated whole. Second, they would need a different way of working. Rather than preparing top-down, central master plans, they would have to be more responsive to local needs and concerns, and co-operate closely with communities and the disadvantaged—letting them set the priorities and facilitate project implementation. All in all, they would work in a more integrated fashion—constantly aware of the complex linkages between economy, society and environment.

This proposed change of direction has yielded a fine new crop of development jargon. Most agency documentation is now peppered with such terms as empowerment, participation, integrated conservation and development, community-based resource management or sustainable livelihoods. Difficult enough to say, but even more demanding to perform. This chapter assesses progress in four areas where initiatives associated with people-centred sustainable development have been prominent: urban planning, agriculture, water management and forest conservation. It also identifies some of the main constraints that make it difficult for development agencies to practise what they preach.

### Sustainable cities

Many of the most pressing social and environmental problems are to be found in cities. In the industrialized countries, three quarters of the population lives in urban areas, and developing countries are moving rapidly in the same direction—74 per cent of Latin American and Caribbean populations already live in urban areas. Africa and Asia have further to go, but one third of their populations are now urban. Globally, 60 per cent of the world's population will live in towns and cities by 2025.

Although cities in developing countries are growing from natural population increase, this

is boosted by rapid immigration from rural areas. New arrivals often settle in slums and squatter settlements. Despite the squalor of slums, most people consider this to be an improvement over rural life. Their new homes may be more crowded and hazardous, but their location also offers some forms of security. In extreme circumstances, city dwellers are more likely to find food and medical care—particularly important for women and infants, who are much less likely to die in cities as a result of childbirth. People in cities also have more diverse opportunities for work, and are less likely to experience extreme poverty than those in rural areas. Beyond the advantages of today, there is also the promise of tomorrow.

In the industrialized countries a century ago, many cities grew more slowly. Some managed to create new forms of social solidarity as communities grew up around factories and workplaces, and people came together in trade unions and tenants' groups. But the mushrooming cities in the developing countries are expanding in very different circumstances. Few of the new migrants to Jakarta or Lima can expect to find formal employment when they arrive, or to live or work in stable communities. Even in modern industrial São Paulo, 43 per cent of the population earns its living in the informal sector.

These and other conditions mean that some city dwellers are difficult to organize. Usually they live in one part of the city and work in another. And they may not be permanent residents. For example, rural men come to find work during the agricultural slack season. And people may only come for short periods.

Another difference today is that the poorest communities in many mega-cities of the developing world are less likely to be found crowded in inner-city tenements. Often the poor live on the urban periphery, sometimes in vastly expanded "villages" that are effectively cities in their own right.

## LOCAL AGENDA 21

The Rio conference considered ways to achieve sustainable development in cities, and spelled out the priorities in Chapter 28 of *Agenda 21*—known as Local Agenda 21. In order to promote this, a new international NGO was created, the International Council for Local Environmental Initiatives (ICLEI).

This has stimulated a wide range of activities. An ICLEI survey conducted in 1996 found that more than 1,800 local governments in 64 countries had Local Agenda 21 activities. Most of these were in industrialized countries that had specific Local Agenda 21 campaigns already under way. But campaigns had also been started, or were about to start, in a number of developing countries, including Bolivia, Brazil, China, Colombia, Malawi, Peru, the Republic of Korea and South Africa.

What has all this achieved? Not enough. One of the problems has been conceptual. Many people believe that the key to success is better urban environmental management—what has been called the "brown agenda". They have assumed that, when combined with more democratic governance, this will automatically lead to sustainable development. But this is not the case. Catalytic converters for cars, for example, may result in cleaner air but do nothing to reduce energy consumption, and may even increase it. And if communities become more adept at waste disposal than at recycling, they will make their environment more pleasant but no more sustainable.

In terms of their use of non-renewable resources, most cities in the South are already probably more sustainable than those in the North, where people consume at much higher levels. But they have done little to enhance their sustainability. Local authorities and development organizations have understandably concentrated on the most pressing issues, such as improving water supplies and managing solid waste. They cloak these programmes in

contemporary green language but do little to further sustainability.

Nor has there been any consistent success in promoting wider participation. While there are many variations on what type of procedure should be followed to promote planning and management of urban sustainable development, two key points are supposed to be adhered to: the planning process should be participatory, and responsibility should be shared between public, private and community interests. In many countries there are two very different types of participatory process. First, there are initiatives dominated by middle-class citizens. In cities of Southeast Asia, for example, the middle classes have become increasingly vocal, determined to break with the autocratic past and play a stronger role in local government. But these initiatives tend to focus narrowly on the quality of life in middle-class neighbourhoods and have little if any relation to issues of poverty or the wider city context.

Second, there are community development projects in poorer neighbourhoods. This is evident in the Philippines, where communities have been concerned with water supply and sanitation and the difficulties of land tenure. Such initiatives tend to involve poor communities assisted by NGOs, and sometimes by international agencies or local government. But, unlike middle-class groups, poor communities are not usually encouraged to get involved in urban political processes.

Few of these initiatives have had much impact on local government or the private sector. In fact, in poorer countries local government itself has scarcely been in a position to plan or control the development of cities. As earlier chapters have indicated, public spending has been constrained by structural adjustment programmes and policies of state sector reform, which have tended to heighten the vulnerability of the urban poor. Participatory urban planning and management may be

helped by global efforts to promote decentralization, but broad-based participation is still often blocked by local political systems based on patronage.

If cities in developing countries are to promote sustainability, they will need to overcome these divisions and the fragmented and piecemeal approaches they encourage. This will require stronger civic cultures. But fostering civic cultures takes time, longer certainly than most development agencies customarily contemplate. Local projects—such as health programmes or efforts to clean up the neighbourhood—can build confidence in the usefulness of working together. But real progress will require more assertive civic movements.

In addition to adopting horizons longer than two or three years, agencies will also need to foster a new politics of cohesion and collaboration. Poor communities have to move beyond self-help and participate more coherently and forcefully both in local government and in the wider urban political process. Until they do, problems of local government corruption, divisive patronage politics and poorly designed and executed programmes are likely to persist.

International development agencies have little experience with this kind of integrated urban development. But there are some precedents—for example, those involving USAID, Swiss and German technical co-operation, the World Bank Metropolitan Environmental Improvement Programme and the UNCHS Sustainable Cities Programme. A recent assessment of aid strategies since the 1996 City Summit shows, however, that while most donors now recognize the importance of urban development, it is generally not a priority in their aid programmes. Many have urban projects, but they often remain isolated and limited activities. There has been no sign of the anticipated increase in international aid for urban development nor of projects that promote sustainable development planning and management.

## Sustainable agriculture

The world has proved remarkably successful at food production. Growing enough to feed 6 billion people is quite an achievement. But distribution is uneven and many of these people go hungry. Although data remain very approximate, the latest estimates from FAO suggest that the developing countries have around 800 million undernourished people.

As figure 8.1 indicates, the greatest numbers of undernourished are to be found in Asia and the Pacific. But more than half the countries there have managed to reduce the numbers over the last two decades. Sub-Saharan Africa, which has almost a quarter of the developing world's hungry people, has been less successful. Only 10 African countries made progress over the period 1980–96, while 28 lost ground.

Malnutrition results from a combination of factors. Often young children are not fed properly with food that is available in the household, and many suffer from parasites and ill health. In some cases there may be an absolute shortage of food in a particular country or area. But more commonly the problem is that people

cannot afford to buy food. Is this situation likely to change in the future? There are various schools of thought:

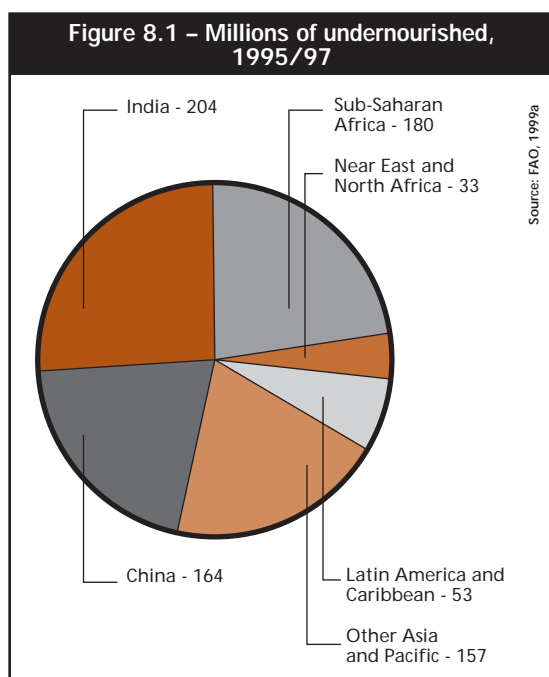
- **Business-as-usual optimists**—They argue that food supply will always expand to meet demand. Farmers will acquire more sophisticated technology and can, if necessary, bring more land under cultivation. Over the past decade there seems to have been no shortage of food, and prices have been falling—down 50 per cent for most commodities.

- **Environmental pessimists**—They follow a neo-Malthusian line, believing that demand will inevitably outstrip supply. Degradation of land and other resources will reduce yields, while more people will be eating beef from grain-fed cattle. The only answer is to reduce the number of consumers by controlling population.

- **Rescuers from industrialized countries**—Industrialized countries produce more food than they need, while many developing countries with weak infrastructure and fragile ecologies will never be able to feed their populations. Better to increase cereal production in the modern farms in industrialized countries and ship it to poor countries—as aid or in exchange for other commodities.

- **New modernists**—They want to continue the science-based Green Revolution-style agriculture. Farmers in developing countries should use fertilizers, pesticides and irrigation more intensively on their best land rather than try to grow more on marginal land. There is also the promise of genetically modified food (box 8.1).

- **Sustainable intensifiers**—They argue for greener production, saying that farmers could grow more in unimproved or degraded areas without damaging the environment. But farmers will only be able to do this if they are given the right incentives and can participate fully at all stages—choosing the best techniques for their own circumstances and exploiting their own knowledge and ingenuity.



Some of these positions overlap, and each country has representatives of all points of view.

During the past decade, many NGOs and international aid agencies have been paying closer attention to sustainability and what it would entail. One notion that has gained currency is that sustainable agriculture involves conserving and expanding many different kinds of capital. These include *natural* capital—land and water, for example, and the many natural processes—along with *physical* capital in the form of roads and other infrastructure. Then there is *financial* capital, whether in stocks of money or access to credit. Also crucial are *human* capital—a healthy and skilled work-

force—and *social* capital in the form of networks, relationships and institutions that bind people together.

Proponents of sustainable agriculture point to the fact that many assets are mutually reinforcing. When people are working together to meet basic food needs, they may reinforce their local culture—which may in turn feed back into a determination to protect their environment. Farmers engaged in sustainable agriculture have to ensure that as many of these assets as possible are husbanded and accumulated rather than depleted.

As with all development buzzwords, there are considerable conceptual difficulties with

### Box 8.1 – Can genetically modified (GM) crops feed the world?

In the early 1990s, GM crops were not produced commercially on farms anywhere in the world. In 1997 they covered 12 million hectares; and in 1998, 29 million, mainly in Argentina, Australia, Canada, Mexico and the United States. The advocates of genetically modified foods argue that they offer an important way to feed the world's hungry. This is a doubtful proposition, especially because the world already produces enough food to feed everyone. Total annual production currently amounts to 354 kilograms of grain per person—enough to provide everyone with a nutritious and adequate diet.

Food is unavailable largely because people are too poor to buy what they need. Farmers could already grow more to feed the hungry if there were sufficient “effective demand”—demand backed up with hard cash. And poor farmers could also grow more on their farms if they were able to use some of the cheap and readily available techniques to improve their farms and livelihoods. These include techniques of nutrient cycling, soil regeneration and the use of natural pests. Interestingly, the best evidence of the success of these sustainable approaches comes from the very countries of Africa, Asia and Latin America that some say are in most need of GM technologies.

But one should not dismiss GM foods entirely. It is important to distinguish between the different types of GM technologies. Those currently on the market have mainly benefited the companies producing them—herbicide-tolerant soya, for example, which locks farmers into buying herbicide from the company marketing the GM seed. But poor farmers could benefit from crops that may appear on the market in the next few years—engineered to have tolerance to drought, say, or salt—if they can afford to buy the seeds. They are more likely to get such access if the technology is produced by public-interest bodies rather than by the transnational seed companies that will want to lock farmers into dependent and expensive relationships.

these new terms (box 8.2). Also, the emphasis on accumulating all kinds of capital and on their mutually reinforcing characteristics may overlook important trade-offs. In practice these forms of capital are interlinked, so using one will usually mean the depletion of another. Building a road means taking up land that might have been used for forest or crops; investing in motorized fishing boats may deplete fish stocks; social conflict as opposed to cohesion may be necessary to achieve more equitable land distribution.

Governments face tough choices in deciding between different development goals, and their decision as to which takes priority is often more political than technical. But the focus on sustainability and these diverse forms of capital has called attention to the need for broader agrarian development strategies that consider economic, social and environmental goals and impacts.

Most modern agriculture is based on a different model. It has undervalued natural and social capital—indeed, it often places no value on them at all. This is because they are difficult to assess in financial terms. How much is a virgin forest worth, or a clean river? What value can you put on a cohesive community? One heroic estimate of the goods and services that come from the world's ecosystems put the value in the range \$16 trillion to \$54 trillion per year. But it is impossible to put a price on many natural assets such as the air we breathe.

The state of many rural workers around the world—living in poor conditions and suffering ill health—also suggests that modern agriculture often erodes human capital. In the Philippines, for example, farmers using modern pesticides have higher incidences of eye, skin, lung and neurological disorders. One assessment of the benefits of boosting production

#### Box 8.2 – Questioning the value of capital

There are dangers in adopting the term “capital”, particularly when referring to nature and social structure or society. Capital can imply substitutability. One capital asset may be exchanged for another and, provided the total asset base is not diminished, this could still be said to be sustainable. The term also implies the possibility of assigning a market price to things that, in society and in nature, are very difficult or even impossible to value. Such presumptions do not take account of the cultural, moral, ethical and spiritual aspects that may be associated with particular assets. Use of the word capital thus implies that nature and society can be turned into bundles of commodities that can be readily exchanged in an increasingly globalized market.

The term “social capital” was popularized in the 1990s, and has served to emphasize the developmental benefits that can flow from relations of trust and reciprocity, and from connectedness and networks. But it is difficult to agree on exactly what social capital is. Some have stressed the importance of collaboration to solve problems. Others emphasize the values of associational activity and organizational density. And some focus on the dark side of social capital—how cohesiveness for one group can mean exclusion for others. After all, a society may be well organized, have strong institutions and reciprocal mechanisms, but be based less on trust than on fear and coercion. Some associations can also act as obstacles to development and sustainable livelihoods, encouraging conformity and inequity.

through intensive pesticide use found they were far outweighed by the health costs.

Modern agriculture appears spectacularly successful partly because it disregards the damage to these natural, social and human assets. Thus between 1970 and 1995, wheat yields in India rose from 1.2 to 2.5 tons per hectare, and rice yields in China rose from 3 to 5 tons per hectare. But this has been at the cost of using much higher quantities of fossil fuels, whether to provide the feedstock for fertilizer production or the fuel to drive irrigation pumps. When efficiency is measured in terms of energy consumption, rather than output per hectare, the picture changes: low-input organic rice produced in Bangladesh or China is around 20 times more energy-efficient than irrigated rice produced in Japan or the United States.

Development agency initiatives associated with sustainable agriculture have attempted to integrate natural processes, such as nutrient cycling, nitrogen fixation, soil regeneration or natural enemies of pests, into food production systems (box 8.3)—and to make fuller use of the local knowledge and diverse skills of farmers. Moreover, sustainable agriculture is multi-functional—it produces food and other goods

for farm families and markets, but it may also contribute to a range of public improvements, such as clean water or flood protection, and may deliver other benefits such as biodiversity and social cohesion.

In recent years, projects seeking to promote sustainable systems have become much more widespread, whether promoted by NGOs or government agencies. An analysis of 45 initiatives across 17 African countries, for example, found that 730,000 households had substantially increased their agricultural output—often increasing yields by 50 to 100 per cent.

#### POLICIES FOR SUSTAINABLE AGRICULTURE

While there is growing awareness in most countries of the benefits of sustainable agriculture, progress in promoting this type of cultivation has been slow. A 1997 review by the Commission for Sustainable Development concluded that implementation of the agriculture and rural development objectives reached at Rio five years earlier was still far from satisfactory. Very few countries provide explicit comprehensive national policy support for sustainable agriculture. Some that do provide it are Austria, Cuba, Denmark, Finland, Sweden

#### Box 8.3 – Reviving land in the Sahel

Large areas of dryland in Burkina Faso and Niger have been degraded. The combined action of wind and water has sealed a thin surface layer that prevents further infiltration by water. Most drylands have been abandoned and are devoid of vegetation.

One way of using the land again is through digging holes—known as *zai* in Burkina Faso and *tassas* in Niger. These holes, 20–30 centimetres deep, are packed with manure to provide organic matter and stimulate termite activity, and are then planted with millet or sorghum. When the rains come, the holes fill with water—especially when used in conjunction with other water retention methods such as stone bunds.

Farmers using these techniques have achieved striking increases in yields and have shifted from deficit to surplus. These methods are labour intensive, however, and are best suited to areas where there is family labour or where farm hands can be hired. In Niger the system has spawned a network of young day labourers who have mastered the techniques and who go from village to village to satisfy the farmers' growing demands.



and Switzerland. Brazil, Germany and India have such policies in place at the level of certain regions or provinces.

A much larger number of countries have reformed elements of agricultural policies through, say, new regulations, incentives or environmental taxes. In developing countries like Bolivia, Burkina Faso, India, Indonesia, Kenya, the Philippines and Sri Lanka, the economic, social and environmental benefits of certain programmes and policies to promote soil conservation, integrated pest management and irrigation management have been impressive.

But the experience is likely to remain localized unless some major constraints are overcome. One is government inertia—most innovations have had to struggle against existing national policies and conservative institutions. Another is the lack of co-operation from the suppliers of fertilizers and pesticides, which will continue to push their wares. But there are also social constraints. Modern agriculture has eroded much of our social capital, both at com-

munity and national levels—particularly our webs of trust. Farmers are often suspicious of environmentalists who, they think, are trying to restrict their freedom. Consumers are suspicious of farmers, whom they accuse of producing second-rate or dangerous food. Many communal and collective institutions have also been weakened. Migration to urban centres or abroad has often weakened rural communities. And rural co-operatives and trade unions in numerous countries have been undermined by both governments and corporations.

A key challenge is to change the policy environment, which does not reflect the long-term social and environmental costs of resource use. At present, many governments subsidize high-input agriculture. So farmers find it expensive to switch to resource-conserving or multi-functional agriculture. Some governments have made piecemeal efforts to add green tinges to modern farms, by offering incentives to improve non-crop habitats such as wetlands or hedgerows. But they have done

little to ensure that policies and incentives are interlinked—and that prices reflect real costs more accurately.

Governments will also need to rethink their economic policies. Structural adjustment programmes—often associated with high interest rates, cheap food imports and weakened public sector technical assistance programmes—have devastated small farms in many countries. And many landless labourers and peasant producers even lack the most basic resource of all—land. Yet land reform seems to have disappeared from the agendas of many governments and development agencies (box 8.4).

Agencies also need to change the way they work with farmers. Instead of trying to deliver a standard package of solutions to which the farmers must adapt, they should co-operate with farmers to explore what works best under local conditions, and respond to farmers' real needs. Farmers often work best when they can make a range of improvements, none of which on its own may seem dramatic. Taken together, however, these changes do not merely accumulate—they multiply. Sustainable agriculture is not a concretely defined set of technologies, it is a process of social learning.

### Sustainable water supplies

Among the most important assets for sustainable agriculture are reliable supplies of water. Attitudes to water management shifted significantly during the 1990s. Changes were reflected in both the Earth Summit and the Dublin International Conference on Water and the Environment in January 1992. The declarations from both conferences merged all the previous agendas—household water supplies, sanitation, irrigation and power generation. From then on, the emphasis in all aspects of water management would be on sustainability.

The new approach was understandable in the light of increasing pressure on global water supplies. Of the water withdrawn by human

beings, about 70 per cent is used for irrigated agriculture, 20 per cent for industry and the rest is for domestic and municipal use. On average all over the world, these activities are currently using around half the 12,500 cubic kilometres of water that are readily available annually. But the resources are distributed unequally. Already, 460 million people live in countries that are highly water stressed—mostly in the Middle East, around the Mediterranean and in sub-Saharan Africa. One quarter of the world's population is moving toward a situation of high water stress.

The total availability of freshwater is, of course, only a part of the problem. More important is the question of access. Thus although the Middle East and North Africa are among the most water-stressed parts of the world, they offer better access to safe water than countries of Latin America and the Caribbean where rainfall is more abundant (figure 8.2).

In the past, it was assumed that water supply would require large-scale infrastructure, primarily the responsibility of the state. But increasingly it is argued that the private sector and communities should take greater responsibility, and that water-management schemes should be on a smaller scale and involve full participation of everyone affected. Water resources planning has therefore shared the same shift in thinking and in rhetoric as the broader field of sustainable development planning. There is, however, a considerable gap between intention and performance.

### DAMNING THE DAMS

Some changes in policy have affected dam construction. By 1997, there were an estimated 800,000 dams around the globe, of which approximately 45,000 were higher than a five-storey building. In recent years, dams have become increasingly contentious—primarily because of the large number of people they displace. In India in recent decades, around

4 million people have been displaced by reservoirs and irrigation schemes. In China, just one project—the Three Gorges Dam—will displace 1.3 million people. Dams also have extensive ecological implications, affecting the patterns of erosion and sedimentation downstream, as well as changing the nature of fish

populations and disturbing many fragile ecosystems, particularly wetlands.

The extensive ecological and social costs of large dams became widely recognized in the 1980s. The response of international financial institutions, government ministries and construction companies was generally to lay down

#### Box 8.4 – Land reform, the forgotten issue

One of the most persistent causes of poverty in rural areas is the maldistribution of land. In most Latin American countries, the richest 20 per cent of farmers control around three quarters of the land. In Southern Africa as well, large farmers hold much of the best land. Even in densely populated countries in South Asia, such as Bangladesh, the richest 20 per cent of households possess more than half the land.

Millions of poor farmers would benefit from land reform, though its character would have to depend on local circumstances. Thus in Latin America, there is considerable scope for redistribution. In South Asia, on the other hand, where even the largest farms are relatively small, reforms could concentrate more on security of tenure and on improving the rights of tenant farmers.

Few countries have implemented wide-ranging land reform measures in recent years. Although there have been numerous land reform laws, there has been little effective enforcement. At the same time, there does not seem to have been much organized pressure for land reform at the national level, except in some countries like Brazil and the Philippines. Where changes in tenure have occurred, they have often come from redistribution of public land—or have been the result of land invasion, a common tactic of the rural poor in Latin America. In sub-Saharan Africa, changes in land tenure have often worked against the rural poor: privatizing what were previously communal systems has weakened security and communal solidarity.

Land reform seems to be less of a priority for international agencies now than it was in the past. Some were enthusiastic about the potential for reform in the 1960s and 1970s. Indeed, FAO held a conference on agrarian reform in 1979, but it was never seriously followed up. Today, in an era of economic liberalization, the preferred approach is market-assisted land reform—extending credit to small farmers to help them buy land from willing sellers. But this has taken place on a limited scale, and the beneficiaries have rarely had the subsequent support they needed.

Some NGOs have played an important role, notably organizations such as Brazil's Landless Rural Workers Movement and the People's Campaign for Agrarian Reform in the Philippines. But many other NGOs have withdrawn from more contentious questions of distribution and popular mobilization, and have concentrated more on achieving better rural services.

If there are going to be serious efforts to achieve people-centred sustainable development, both NGOs and official development agencies will have to look again at land reform.

improved guidelines and carry out social and environmental impact assessments. But these planning approaches can be highly flawed. Impacts often occur in areas far beyond the spatial scope of a particular project, and are thus not recognized by project developers—as occurred in the case of the Pangué and Ralco Dams in Chile. Serious impacts may also occur well after project development, but these are often not examined or anticipated.

In addition, impact assessment requires vast amounts of data that are often extremely difficult to gather. Southern countries often rely on expatriate consultants, who may lack both time and knowledge of particular regions. Their analysis may also lose some of its critical edge, given the competitive commercial environment in which consultants operate—particularly when they conform to narrow terms of reference or when their prospects for future work depend on the conclusions they reach.

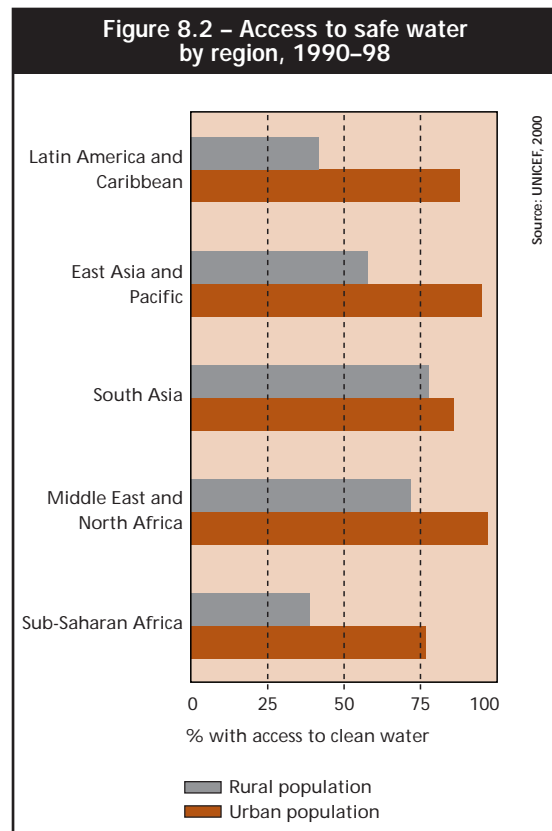
A number of organizations have tried to develop more effective ways of assessing the impact of dams, engaging more directly with the people affected. But it has taken widespread public protest in both industrialized and developing countries for the issue to move to the top of the environmental agenda.

A pivotal protest concerned the Narmada Valley Project in India. This included construction of the Sardar Sarovar Dam, a further 135 medium dams and 3,000 minor dams. Construction began in 1985, with funding from the World Bank. Local communities and NGOs were outraged at the implications—the dam would displace 152,000 people in 245 villages. Their protest movement, Narmada Bachao Andolan (Struggle to Save the Narmada River), organized demonstrations and hunger strikes. International NGOs that were increasingly mobilizing against large dams weighed in—lobbying the US Congress and the World Bank.

Eventually, after a highly critical independent review in 1993, the World Bank withdrew

its support. Under pressure from Friends of the Earth, the Japanese government also suspended aid for the project. The Indian government nonetheless pressed ahead until 1995, when the Supreme Court of India ordered construction of the dam wall to stop at 80 metres high (out of 136 metres), later raising the limit to 85. Meanwhile, the reservoir continued to fill and the protests and arrests persisted.

Although dam building has slowed somewhat in recent years, around 1,600 dams are currently under construction in 42 countries. The scale of international protest against large dams has, however, given international agencies pause (box 8.5). In 1998, the World Bank and the World Conservation Union (IUCN) established the World Commission on Dams—which will present its first report in June 2000. Commissioners range from the chief executives of construction companies to the founder of Narmada Bachao Andolan.



The experience with alternatives to large projects is limited but growing. Smaller scale catchment management systems have been developed, for example, in Bolivia, India, Pakistan and Peru. There have also been some attempts to link floodplain communities with dam managers, and integrate upstream dams with downstream water users, as in South Africa. Nonetheless, the dam construction framework still tends to involve remote planners and politicians weighing up costs and benefits, and taking a decision that is purportedly in the wider national interest. Participation of the communities directly affected rarely comes into it.

#### NEW CHANNELS FOR IRRIGATION

More than one third of all dams are designed primarily to provide water for irrigation—and many other dams have an irrigation component. Other irrigation systems depend on diverting river water or pumping groundwater. But whatever the source of water, many large-scale schemes also have a poor social and envi-

ronmental record—particularly in Africa, where they have proved difficult and expensive to implement. Schemes depending on surface water frequently have their canals blocked by sediment, and those that use pumps often suffer from poor maintenance.

Apart from technical difficulties, there can be social conflict. If the flow of water is unreliable, farmers in various parts of the system—the “topenders” and the “tailenders”—will try to take what they can, when they can. And planners have frequently ignored gender implications, generally targeting support at men, even though in much of Africa farm work is done primarily by women. Extensive irrigation systems can also create pools of standing water, which can cause health problems. In the Gezira Project in Sudan, for example, the canals provide an ideal breeding ground for snails. Around 60 per cent of adults and 80 per cent of children in this area now have bilharzia.

In the 1980s, the poor performance of large-scale irrigation systems was part of the reason

#### Box 8.5 – International protests against dams

Protests against dams have become increasingly internationalized. *The Ecologist*, a British magazine, began to campaign against large dams in the early 1980s; and activities in the United States over the same period eventually produced the International Rivers Network and the newsletter *World Rivers Review*. In 1988 activists met in San Francisco and demanded a moratorium on all new dam projects that failed to ensure participation by those affected. They also demanded full access to information on new undertakings—including data on their potential environmental, health and economic effects.

These demands were reiterated in 1994 in the Manibeli Declaration, named after one of the first villages to be submerged by the Sardar Sarovar Dam in India. The document, which called for a moratorium on loans for large dams until certain conditions were met, was signed by 326 groups and coalitions in 44 countries. It was presented to the World Bank on its 50th anniversary. In March 1997, the first international meeting of a group called People Affected by Dams was held in Curitiba, Brazil. The following month, there was a meeting in Gland, Switzerland, co-sponsored by the World Bank and the World Conservation Union. It was attended by senior IUCN and World Bank officials, critics of large dams, representatives from dam-building companies and agencies, and dam-affected people. It ended with agreement to found the World Commission on Dams.

for a decline in investment. The World Bank and others, on observing that more and more projects were uneconomical, searched for alternatives. Often they decided to reduce the scale of schemes, hoping that smaller ones would be better matched to local needs.

In practice, they did not achieve a great deal. First, they lost the economies of scale: many small dams cost more than one large one. Second, they did not change the nature of the schemes—they merely offered scaled-down versions of large projects, and implemented them in the same over-managed bureaucratic fashion. FAO and UNDP initiated small-scale irrigation schemes in Turkana, Kenya in 1979, for example, but found that they performed erratically, were environmentally destructive, and were also expensive—more than \$20,000 per irrigating household.

By the end of the 1980s, the poor performance of many smallholder irrigation schemes caused yet another re-evaluation. One of the most common solutions was Irrigation Management Turnover (IMT)—making associations of farmers or other private entities responsible for running irrigation schemes in the hope that they would have a stronger interest than local bureaucrats in keeping systems working. This change was also congruent with the general ethos of structural adjustment and privatization.

IMT can take many different forms: in some cases, as in South Asia, farmers' associations co-operate with official irrigation agencies; in others, as in China, Indonesia, Mexico and Turkey, they replace them. This might seem an obvious direction, but it is not an easy option. First, it assumes that the system is actually working—badly designed or poorly functioning schemes are unlikely to be rescued by handing them over to farmers. Second, farmers must see some economic benefit in taking on this commitment. If their participation in running a scheme means they face greater fees and costs,

they must have correspondingly greater economic returns. Third, IMT assumes that the government and its officials are sufficiently flexible to adapt to this new environment. Fourth, and most important, there must be effective user groups. In practice, many lack the necessary technical or management skills—and when they do work, they are often dominated by the richer farmers.

Another approach has been to start from existing indigenous irrigation schemes—expanding them perhaps, or making them more efficient, or introducing more formal user groups. Some traditional irrigation systems have exploited natural flooding in wetland areas; others have involved redirecting normal water flows—as in the hill-furrow irrigation systems of East Africa or the Himalayas. Others have promoted different ways of raising groundwater.

The principle of building on indigenous knowledge has a history of its own. In South Asia, for example, British colonial planners often appropriated and rehabilitated existing canal systems. While it is possible to make useful improvements, there are also dangers—technical improvements may undermine what was working already, and imposing new standard and formulaic systems of management may cause an informal system to collapse.

Informal systems generally have sets of rules about who is entitled to water, and when. But these are built on relationships that are difficult to codify. The Marakwet irrigation system in the Keiro Valley in Kenya, for example, has formal rules, but these are supplemented with many other day-to-day arrangements that include everything from borrowing to stealing.

Whatever the system, it is clear that it has to achieve sustainability and equity. Water resources planning needs to be taken out of the offices and into the villages and town squares. Only then will it address the real bottlenecks in production, and propose manageable tech-

nologies and appropriate institutions for sustainable solutions.

### Forest conservation

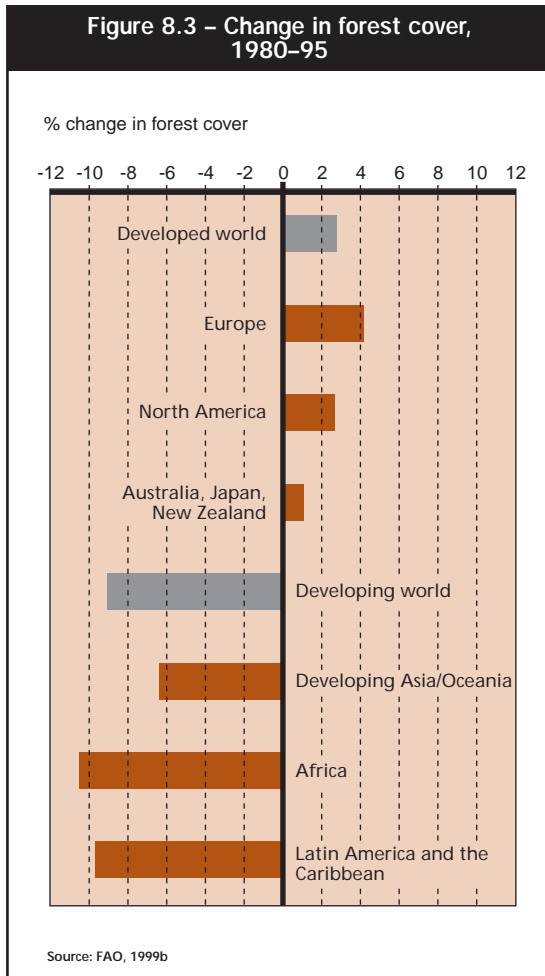
Another key element of sustainable development is the conservation of forests and biological diversity. As the environmental movements of the past two decades have highlighted, world development has frequently been at the cost of the world's forests. And the process appears to be continuing. Between 1980 and 1995, the world's forested area shrank by 180 million hectares. Although there was a 20 million-hectare increase in the developed countries, this was far outweighed by a 200 million-hectare loss in the developing nations (figure 8.3). In much of Africa, the main direct

cause seems to be an increase in subsistence agriculture, while in Latin America the process often has more to do with resettlement, logging, and the extension of commercial agriculture and infrastructure. Asia has been affected by all these phenomena.

While the direct causes vary considerably by country and region, deforestation is primarily driven by market forces, government policies and institutions such as land tenure. International policies promoting trade liberalization and structural adjustment have also accelerated deforestation in some countries. In parts of Southeast Asia, for example, one of the most important factors has been export demand for palm oil, timber and pulp. In 1995 the government of Cambodia awarded 30 companies logging concessions that covered virtually all of the country's remaining forest area. According to the World Bank, Cambodia's forests could be commercially exhausted by 2003. In Brazil, problems have often been linked to resettlement. The government has encouraged the development of the Amazon and other forest regions, encouraging poor farmers or landless labourers to migrate from areas where land ownership was highly concentrated.

Many poor communities have struggled to protect their own environments, but have often been overcome by economic or climatic pressures, or have been overwhelmed by outside forces—especially large-scale resettlement programmes and the activities of logging companies.

But in the 1990s they have had increasing outside support. A number of NGOs have worked with community-based groups in defence of forests and other threatened ecosystems. In the Philippines, for example, NGOs have done a great deal to publicize environmental problems and abuses. Governments have generally been slower to react—but a number of them, along with international agencies, have been making attempts at conservation. They have been doing so in co-operation with local communi-



ties, in what has been called community-based natural resource management. This was a reaction to the failure of previous efforts, which often involved policing vulnerable areas on the assumption that local people, left to their own devices, were likely to overexploit these areas.

Governments and agencies interested in this type of participatory conservation try to take into account the rights and needs of local communities, as well as the need to protect the environment. They attempt to work more closely with community groups and NGOs—often using action-research methodologies, such as participatory rural appraisal. This approach recognizes the value of indigenous knowledge—indeed, it encourages a two-way flow between local people and technical specialists. It also promotes more diverse forms of income generation, so people can survive while sustaining their environment.

This ambitious agenda may be more realistic, but it will necessarily come up against some equally real obstacles. As always, there is a problem of resources. Some agencies that professed themselves keen on environmental protection and sustainable development in the

early 1990s have subsequently switched to more fashionable issues, such as good governance, and are reassessing their funding priorities. For a country like Senegal, which has been in the forefront of attempts to design comprehensive strategies to deal with desertification, this can be particularly worrying. Having spent three years in a participatory planning process, there are concerns that the programme will not be implemented properly because of a lack of financial support from the government and donors.

There have also been real difficulties in switching priorities and methods of operation. Many agencies continue to put trees before people. But very often the success of forest protection or tree-planting schemes requires giving priority to social concerns—such as land tenure and income generation (box 8.6). The development planners' penchant for hastily implemented large-scale projects may also be difficult to overcome. In the Philippines, for example, the National Forestation Programme was implemented on such a scale and so rapidly that it inevitably operated in over-technocratic ways and was unable to work effectively in many areas.

#### Box 8.6 – Community forest management in the Philippines

The Ikalahan are an indigenous group of several thousand people who live in a mountainous area of Luzon, in the Philippines. In 1973, seeing their livelihood threatened by forest fires and encroachment by outsiders, they established the Kalahan Educational Foundation. Its methods of participatory conservation helped protect the environment while offering new income-earning opportunities—including the production of handicrafts, fruit, ginger and other goods destined for green urban markets.

This success has been based on a number of factors, including strong community organization and an education programme that provided training in various aspects of sustainable agriculture. The Ikalahan also managed to achieve security of tenure over their ancestral domain.

Even so, there are concerns for the future. One is that this effort relied heavily on one person, who served as a link between local people and external institutions. Another is that community solidarity could be weakened by commercialization and the expansion of market relations.

Forest and park protection programmes have to engage with complex social issues. Local people may accept a particular project, thinking that it will bring in some outside resources, but they are unlikely to give it much support if it is not compatible with their own livelihood priorities and concerns. Various park protection schemes in South Africa have been affected by these difficulties (box 8.7). Such tensions ultimately mean that many projects will not be sustainable.

Participatory conservation can be thwarted by local power structures as well. When power is in the hands of local elites, it can be extremely difficult both to democratize project design through broad-based consultation, and to ensure that project costs and benefits are distributed equally. Similarly, efforts throughout the 1990s to decentralize responsibility for natural resource management have sometimes

backfired. In the Philippines and Senegal, the central government has responded to social and environmental movements, and international aid, by advocating people-centred sustainable development. But this commitment is often far weaker at the level of local authorities, who have other priorities.

Then there is the wider economic context in which these programmes have to be set—notably the chill winds of structural adjustment. Costa Rica, for example, has received worldwide recognition for its efforts to protect its forests and promote biodiversity. But the structural adjustment programmes of the 1990s reduced the capacity of the state to administer and pay for conservation programmes and policies. At the same time, the demand to boost exports of cash crops, such as bananas, has involved clearing forests and breaking up environmentally benign systems of peasant farming.

#### Box 8.7 – Elusive communities in South Africa

One of the central tenets of rural development in South Africa is community-based natural resource management. This seeks ways for communities to earn income from their land, forests and wildlife, while simultaneously participating in communal programmes to protect them. Once promoted only by left-leaning NGOs, these ideas now receive increasing support from both the government and the private sector. The principles underlying the effort are strongly influenced by Zimbabwe's Campfire movement, which allowed rural communities to generate income from managed hunting and invest it in schools, clinics and other local requirements.

One of the difficulties of applying this model is that officials tend to assume that everyone in a particular community has the same interests at the same time. Yet an investigation inside the Mkambati Game Reserve—to take one example—identified at least seven different clusters of people, including subsistence farmers, those relying on remittances from migrants, and those who make a living by brewing beer. In fact, only two groups made their living from wildlife.

Here, as elsewhere, the "community" can be a figment of the imagination. Project managers and donors may recognize the need to accommodate diversity and communal friction, but they continue to rely on community fora to achieve some kind of consensus. In the politically charged atmosphere of South Africa, however, these are as likely to deepen conflicts as to resolve them.

In practice, it has proved extremely difficult to implement community-based approaches to forest and park protection. They can only succeed if there are supportive institutions and social movements. In South Africa, the post-apartheid government has actively promoted community-based natural resource management in various development programmes. But in some rural areas there is considerable resistance to these initiatives—so much so that policy makers are adjusting their approach. In some areas of natural resource management, they are placing less emphasis on community participation and, instead, are strengthening the capacity of democratically elected local authorities to “deliver development”. Private businesses are also being encouraged to enter into partnerships with local communities.

This situation contrasts sharply with that of rural Mexico. Here there is a long history of communal organizing for local development—and of struggle against the pattern of modernization promoted by the government and international financial institutions. Some grassroots organizations and social movements have found common cause with urban-based NGOs and international agencies promoting sustainable development, and have made use of social forestry, eco-tourism and organic farming initiatives to strengthen local livelihood systems and self-reliance.

The importance of having home-grown institutions, which have gained cohesion through struggle or long experience, is also evident in India. In Andhra Pradesh, village women's associations known as *sangams*, with support from NGOs and the state government, have improved the lives of many very poor rural women, as well as the local environment in the semi-arid Deccan plateau, through activities that included agroforestry and soil conservation. This experience—where poor women themselves are gaining control of their own institutions—contrasts sharply with

another: the Joint Forest Management (JFM) programme, in which the government has attempted since 1988 to ensure that forests not only contribute to conservation but also meet the subsistence requirements of local people. Although the JFM programme set up participatory committees, its success has been undermined in many areas because there has been little transfer of power or benefits to local communities.

### Enduring realities

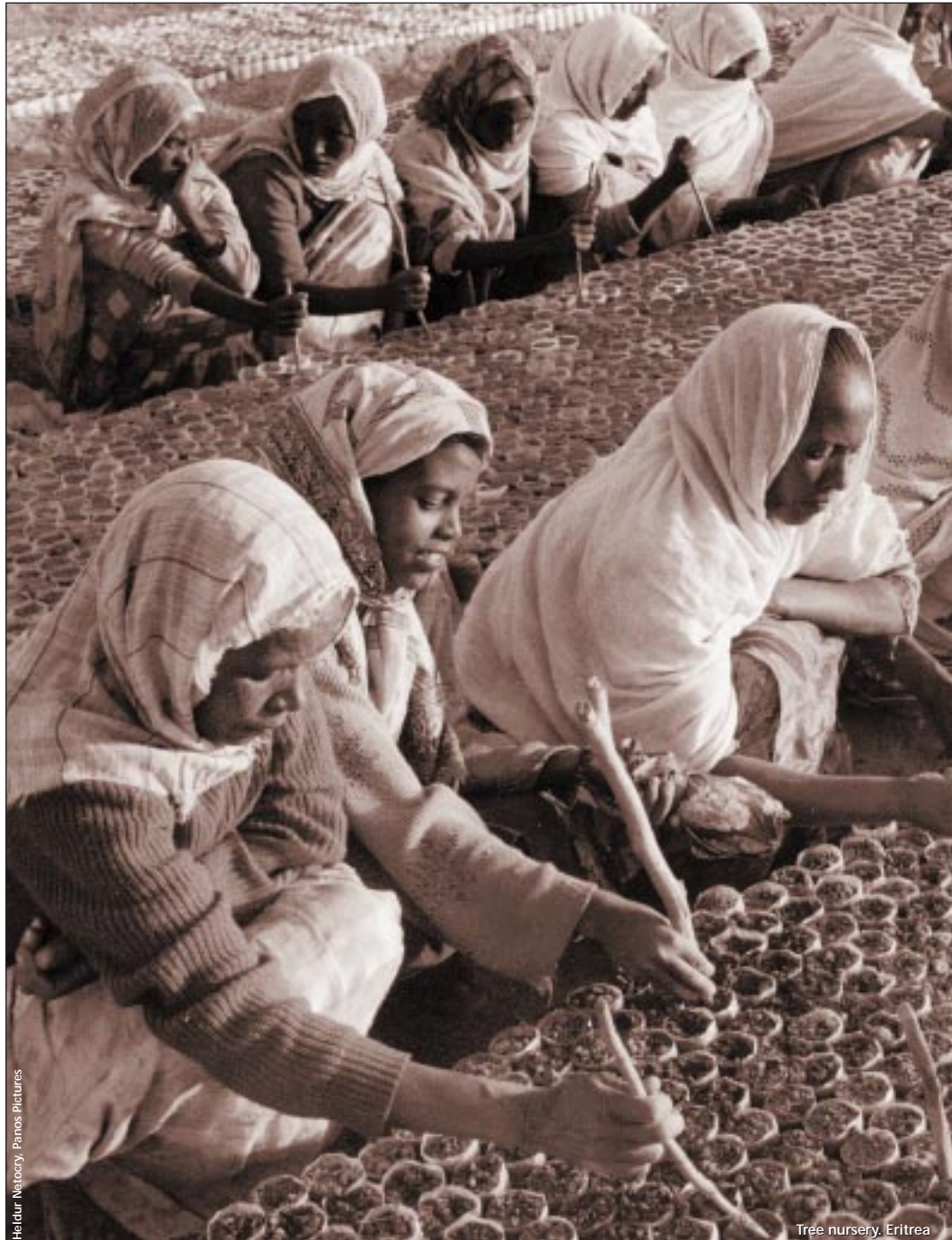
All development agencies, whatever their intentions, come up against an enduring set of problems when they try to pursue people-centred sustainable development. These include:

- **Community conflicts**—Communities may be idealized as harmonious, but in reality are usually heterogeneous, hierarchical and conflictive. All have dense and complex systems of social and political relations—cultural norms, property rights and other power relations—as well as cross-cutting interests, between men and women, rich and poor, and different ethnic groups. Many interventions choose to ignore this complexity and prefer to apply standard prescriptions. As a result, they frequently have unintended consequences. The commonest is that the most powerful group will manage to seize and manipulate any new resources that become available.
- **The survival imperative**—Development projects often proclaim grand objectives that ignore people's most urgent needs. Sustainable development initiatives are particularly prone to this—sometimes restricting people's access to land, forest products or water resources. Although many projects now include income-generating activities, these often prove too limited to be of any real benefit—or collapse when the external agency supporting the initiative withdraws.
- **Technocratic participation**—As a way of addressing local complexities, development projects are now usually predicated on local

participation. But frequently they involve little more than token consultation to legitimate a pre-designed programme. They aim to ensure acquiescence and voluntary contributions of labour and resources from beneficiaries who have no real influence over the course of

events. The current terminology is that beneficiaries should “own” a project—although this may sometimes mean that donors have sold it.

There will always be a contradiction between the instincts of technocrats and the messy world with which they have to deal.



**Box 8.8 – Institutional change?**

Many international development agencies have adopted the language of sustainable development, but changing their practice is more difficult.

***Food and Agriculture Organization***

FAO's constitution incorporated the principal objectives of sustainable development. And FAO has indeed been one of the most vocal international organizations calling for attention to issues such as soil degradation and the loss of biodiversity.

Following the Earth Summit, FAO made some organizational changes. In 1995, for example, it declared that one of its major goals would be Sustainable Agriculture and Rural Development (SARD); and therefore it created a new Department of Sustainable Development. But this did not appear to have much impact on budgets and programmes.

In practice, most of FAO's efforts and resources have gone into agricultural modernization. This kind of development implies losers as well as winners and frequently deprives large numbers of the rural poor of access to land, jobs and livelihoods long before alternative opportunities become available. FAO sometimes acknowledges this dilemma but lacks an effective strategy for dealing with it.

***United Nations Development Programme***

UNDP's programme is diffuse and heterogeneous. It is tugged in different directions by funders who have different views on its priorities. In terms of policy advocacy, one of UNDP's major activities has been the production of the annual *Human Development Report* (HDR). This has performed several important functions. First, it challenges the view that development should be understood primarily in economic terms, and counterposes a more complex definition of well-being that puts people at its centre. This provides a rallying point for the more progressive development thinkers and activists, and offers the international community an alternative interpretation of basic data that competes with that of the World Bank. The Human Development Index (HDI) ranks countries not only on their ability to increase per capita income but also on their effectiveness in improving levels of living.

Critics continue to contest the value of the HDI. But the real value of the *Human Development Report* has been at the political level—arguing the case for human development (and, by extension, sustainable development) with a cogency that has attracted widespread attention and provided ammunition for advocacy groups.

The extent to which these ideas are carried through into UNDP programmes is more questionable. UNDP has to operate within constraints presented by donors. Over four fifths of UNDP's financial resources are provided by voluntary contributions from about 10 of the world's richest states. When citizens of these states read the HDR, they are reminded of the fact that present-day mass poverty and environmental degradation are linked to high-consumption lifestyles that originate in their own countries. But most of them are unlikely to support the profound structural and political reforms that these criticisms imply.

UNDP also has to operate within the constraints presented by the governments of developing countries, which may have to accept some conditions in order to qualify for aid—but tend to balk at anything that smacks of political interference, or threatens the status quo. Yet innovative efforts to promote sustainable development are likely to confront established interests.

***World Bank***

Given that the World Bank has to raise most of its funds in world capital markets at competitive rates, and that its voting system gives greatest weight to the richest OECD countries, it is hardly surprising that the World Bank has not granted the same priority to social and environmental issues in its lending as it

has in its rhetoric. World Bank loans that are not dedicated to social purposes generally have minuscule components for environmental protection and monitoring. Otherwise they would offer unacceptable rates of return.

But the World Bank has made progress. In 1984, following some of its more socially and environmentally disastrous activities in the Amazon basin and elsewhere, it was pressured into action and introduced a policy paper that called for mandatory Environmental Impact Assessments. When ignored, the Bank issued stronger directives, though these still had numerous escape clauses and exempted structural and sectoral adjustment lending, which made up around half the total in the 1990s.

With UNEP and UNDP, the World Bank co-manages the Global Environment Facility. This was created after Rio to encourage work on global environmental problems like ozone depletion and loss of biological diversity. It has been criticized for its small budget (less than \$1 billion per year) and for its rigid, top-down bureaucratic style. Also, it tends to finance discrete projects in developing countries, rather than addressing root causes of environmental degradation linked to market forces and government policies.

In the 1990s, the Bank adopted much of the pro-environment, pro-poor rhetoric of social movements and NGOs—and took on board some of their members as advisors. Nevertheless, their success in transforming the neoliberal agenda has been limited.

#### ***United Nations Environment Programme***

UNEP is the agency most likely to be in tune with sustainable development. And UNEP's 1999 *Global Environment Outlook* is indeed one of the most comprehensive assessments of global environmental issues. UNEP has also been a key actor in promoting international agreements on such issues as desertification and ozone depletion. Unfortunately, UNEP has never been given enough resources to fulfil its mandate. Its core budget for 1998 was around 13 per cent that of FAO and 10 per cent that of UNDP—proportions that roughly mirror the weight of environmental ministries and agencies in UN member states.

#### ***Bilateral aid agencies***

The support that bilateral agencies give to sustainable development largely depends on government policies and social forces in their home countries. It is also conditioned by each state's perceived trade and other foreign policy objectives. Some bilateral agencies have quite innovative programmes and work closely with NGOs. But like UN agencies, their aid programmes are riddled with internal contradictions. Thus in Central America, USAID and other agencies from OECD countries support a multitude of small, decentralized projects that aim to promote popular participation and sustainable livelihoods. At the same time, however, they may also be promoting massive food imports from their home countries or the expansion of capital-intensive, large-scale plantations that are far from sustainable—and may deprive many more people of their traditional livelihoods.

#### ***International NGOs***

Many NGOs, though by no means all, are wholeheartedly devoted to sustainable development. But because they tend to specialize in particular issues, such as the protection of forests or the promotion of civil rights, their efforts can be very scattered. Like UN agencies, their primary responsibility is to their donors, their governing bodies and their staff. Few are systematically accountable to intended beneficiaries. NGOs are also adroit at adopting the latest development language, though again their practice may not match it. Thus WWF International has declared that its new policy of a people-oriented approach to biodiversity conservation amounts to a paradigm change. Given that this would require a significant realignment of the political, scientific and bureaucratic powers on which it depends for funds, this is a tall order.

Participation is a laudable aim, but project planners are often asked to undertake participatory activities for which they lack the skills, cultural sensitivity and political commitment.

- **Political qualms**—Genuine participation and empowerment are likely to upset established power relations and disturb bureaucracies. Therefore communities need resolute support if they are to protect themselves against unsympathetic officialdom, or vested interests such as logging or mining companies. But most mainstream agencies find it difficult to involve themselves in the nitty-gritty of local politics—either because they have little appetite for it or because they fear a clash with the government. Programmes and projects that aim to promote participation and empowerment rarely contain an effective strategy for overcoming political resistance.

- **Dead ends**—Technocrats prefer to work with projects and programmes that have a limited time span. This often means a substantial investment over a brief period. But when the project is finished the personnel move on, leaving behind orphaned organizations and technologies that may not survive their departure. This also makes it difficult to assess impact. What looks like a success or failure after four or five years may appear the opposite after 10 or 20 years.

- **Macro defeats micro**—Initiatives that try to promote people-centred sustainable development often focus narrowly at the local level. They pay less attention to developments at the national or international level that could swamp their efforts and defeat their purpose. Macroeconomic policies, world commodity prices and agrarian development strategies can undermine community-based natural resource management.

### Continuity or change?

Governments and international agencies have adopted sustainable development as a banner

under which all can march. They were urged along this route partly by popular mobilizations against certain aspects of modernization that affect both the middle classes and grassroots organizations. The middle classes in industrialized and developing countries have been concerned about quality of life issues, while grassroots organizations and social movements have been concerned with the marginalizing effects of progress on people's lives.

The term sustainable development has been popular to some extent because it can be used in a neutral way—implying little more than a vague sense of purposeful improvement in economic, social and environmental domains. But it has served a useful purpose in reminding the international community of some fundamental issues: that development demands more than economic growth; that some features of modernization have unacceptable social and environmental costs; and that this requires different economic policies, development strategies and approaches to planning.

Governments and development agencies that accept this outlook will need to refocus their energies and resources. Some have indeed made changes, but for the most part they have merely applied new terminology to what they were already doing—with perhaps a few extra elements bolted on (box 8.8). Why are they resistant to change?

To a large extent the problem is political and ideological. People have very different views about what constitutes an environmental “problem”, what sustainability is and what needs to be done to achieve it. Not long ago, for example, indigenous resource management practices—including some forms of shifting agriculture and the use of certain crop varieties in peasant farming systems—were considered backward by many scientists and development planners. It is increasingly recognized that some such practices may be relatively sustainable and efficient in the agro-ecological and

socioeconomic settings where they are found.

These differences in perspective imply that certain environmental interventions must be based on a negotiated consensus involving various stakeholders. But governments, which are under pressure to meet increasing demand for food, timber, water and other natural resources, are often inclined to pursue quick fixes for reasons of economic and political expediency. They are likely to opt for a single large-scale dam rather than many smaller-scale water management schemes; for large forest concessions rather than community-based schemes; or for modernized rather than sustainable agriculture. They are even more likely to choose this route when their primary base of political support consists of groups that stand to benefit from such measures—for example, urban electorates demanding cheap food or industrialists with agribusiness or logging interests.

Many international development agencies face similar constraints. While they may be more aware of the potentially negative social and environmental costs of growth and modernization strategies, they may run into opposition from governments or those who provide their funds. Their professional profile and corporate culture may also restrict change. Experts—with well-heeled lifestyles—may resist any fundamental change in the way projects and programmes are designed and implemented, and may have difficulties identifying with local communities. They may also resist any significant restructuring of budgets that would redirect a decent proportion of funds to developing countries and poor communities.

If the problem is partly political, so is the solution. Not only do governments and international finance and trade institutions need to be far more sensitive to the social and environmental costs of the policies and projects they promote, they also need to open up the decision-making process to make it more democratic. Some agencies attempted to do this dur-

ing the 1990s. But the process should not begin and end with attempts to improve dialogue with multiple stakeholders or civil society. It also needs to be translated into new policy guidelines, procedures and budgets that make a significant difference to operational practice. The popular mobilizations that helped to get sustainable development on the agenda still have much to do if they want to see it implemented.

In the last analysis, action depends on people's interpretation of what is possible and right. Thus the longer-term nature of mobilization for sustainable development depends not only on activism, but on dominant views about the where the world could—and should—be going. If those views support high-consumption lifestyles, then many hard questions about environmental sustainability will not be seriously addressed. And if they sanction unlimited individual gain, it is obvious that institutions designed to promote the common good will suffer.

Five years after Copenhagen, there is little indication that the fundamental goals and values orienting world development are moving toward greater social responsibility. Incentive structures in everything from education to investment decisions have been reoriented toward improving the options of the profit-maximizing individual. The investor has become much more important than the worker. And the consumer has gained higher status than the citizen.

Questioning extreme individualism and the unbridled power of money—reasserting the value of equity and social solidarity, and reinstating the citizen at the centre of public life—is a central challenge of our time. The “invisible hand” of the market has no capacity to imagine a decent society for all people, or to work in a consistent fashion to attain it. Only human beings with a strong sense of the public good can do that.