

# CHAPTER 2

## Sustainable Development and the Need for Strategic Responses<sup>1</sup>

### The opportunity for a strategic approach to national development

There has been unprecedented progress in development over the past 30 years. Life expectancy in developing countries has risen by more than 20 years, infant mortality rates have been halved and primary school enrolment rates have doubled. Food production and consumption have increased around 20 per cent faster than population growth. Improvements in income levels, health and educational attainment have sometimes closed the gap with industrialized countries. Advances have been made in the spread of democratic, participatory governance, and there have been forward leaps in technology and communications. New means of communication support opportunities for mutual learning about national development processes and for joint action over global challenges.

Notwithstanding this remarkable progress, there are also pressing constraints on development, and entrenched negative trends. These include: economic disparity and poverty; the impact of diseases such as HIV-AIDS and malaria; over-consumption of resources in the industrialized countries, contributing to climate change; and environmental deterioration and pollution of many kinds, including the impacts of intensive farming, depletion of natural resources and loss of forests, other habitats and biodiversity. The trends, and important international responses to them, are discussed in more detail later in the chapter.

Negative trends – and the complex, dynamic and, therefore, difficult-to-grasp interactions between them – represent a vast range of challenges to efforts at national development in all countries, whatever their current level of economic development. Nations have agreed, through processes such as the 1992 Earth Summit, that development should be *sustainable*. This means, in a straightforward definition, that nations are able to achieve positive economic and social development, without excess environmental degradation, in a way that both protects the rights and opportunities of coming generations and contributes to compatible approaches elsewhere.

*Much progress on many development fronts ...*

*... is compromised by entrenched poverty and environmental degradation, and other challenges*

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<sup>1</sup> This chapter has benefited from review comments and additional material provided by Professor Michael Carley, Herriott Watt University, Edinburgh

*To maintain progress and to resolve problems demands a strategic approach*

The achievement of sustainability in national development requires a strategic approach, which is both *long-term* in its perspective and *integrated* or 'joined-up' in linking various development processes so that they are as sophisticated as the challenges are complex. A strategic approach at the national level implies:

- linking long-term vision to medium-term targets and short-term action;
- 'horizontal' linkages across sectors, so that there is a coordinated approach to development;
- 'vertical' spatial linkages, so that local, national and global policy, development efforts and governance are all mutually supportive; and
- genuine partnership between government, business, and community and voluntary organizations, since the problems are too complex to be resolved by any group acting alone.

Over the last decade, governments, the private sector and civil society in countries across the world have struggled to meet the challenges of sustainable development through a wide array of approaches to develop such visions, linkages and partnerships at national and local levels.

This resource book draws from this broad experience, assessing what has worked well and less well, setting out principles and characteristics for a more permanent, coordinated approach to strategies for sustainable development – on which there is growing international consensus among practitioners. It presents, for the first time in a consolidated way within a comprehensive volume, the mechanisms, processes and tools which can be used to support the development and implementation of national sustainable development strategies (NSDSs). It emphasizes coordinated, multi-stakeholder approaches providing for continuous learning and improvement. It is increasingly clear that NSDSs can facilitate the creation of 'win-win' opportunities in national economic and social development while also helping efforts to preserve the enormous diversity of ecosystems on which economies and social systems depend. Examples are offered of good practice in the various tasks required to achieve sustainable development. However, as efforts have so far been largely ad hoc, discontinuous and uncoordinated, there are not yet examples of strategies that combine good practice on *all* fronts.

The World Summit for Sustainable Development (WSSD), to be held in Johannesburg in August/September 2002, is focusing minds and attention once again on the challenges of sustainable development. It will take stock of progress since 1992 and seek ways in which to make progress through real behaviour change – and not merely in aspirations and exhortations. NSDSs offer a key set of processes and mechanisms to help achieve this goal.

The WSSD, its preparatory process and associated events and activities provide an unprecedented opportunity to recognize the difficulties and grasp the chance to make a serious commitment to sustainable development through NSDSs. But just negotiating agreed accords and communiqués – as in the past – will be insufficient. Given the progressively deteriorating environmental and social trends discussed in the next section, there is an urgent need for genuine political commitment for taking action: to establish in each country the environment in which stakeholders can engage effectively in debate and action; to develop real partnerships between government, the private sector and civil society; to agree roles and responsibilities for sustainable development; to establish effective coordination mechanisms; and to work together on agreed priorities. Now is the time to commit to a new systematic and strategic approach to sustainable development.

*We now know how to make strategic approaches effective*

### Organization of this chapter

The next section (page 7) looks in more detail at the trends and major challenges that stand in the way of achieving sustainable development. Recent attempts to achieve sustainable development are examined, ranging from global initiatives to technological advances and economic instruments (page 11). The subsequent sections look at the different governance contexts and contemporary twin processes of decentralization (which can empower local groups for sustainable development) and globalization (which

presents potentials for involvement of the private sector in sustainable development) (page 18). Next, recently available guidance on integrated national strategies is explored (pages 23 and 25). The final section (page 27) provides a fuller explanation of what we now know to be effective, strategic approaches to sustainable development.

## **The challenges of environment and development**

### **Trends and major challenges**

The many urgent challenges and negative trends which remain to be overcome are well reviewed by regular, global assessment initiatives. Although these tend to focus on either environmental, social or economic concerns, they increasingly adopt a more holistic approach. Useful resources include:

- *Global Environment Outlook 2000; Global Environment Outlook 3* (UNEP 1999, 2002) (Box 2.1).
- *World Resources Report* (WRI/UNDP/UNEP/World Bank 2000).
- *DAC Development Report 2000* (OECD DAC 2001b).
- *Human Development Report 1999* (UNDP 1999, 2001a).

These reports, and many others, reveal a range of pressing and interrelated challenges to the achievement of sustainable development:

### **ECONOMIC DISPARITY AND POLITICAL INSTABILITY**

The economic fortunes of most nations have risen steadily in the past 20 years, but still too many nations have experienced economic decline and falling per capita incomes. The recent downturn in Asian economies demonstrates how growth may be fragile. Disparity in incomes between the rich and poor within nations, between wealthy and poorer nations, and between many multinational companies and the countries in which they operate (or avoid), continues to widen. This means that a relatively small percentage of the world's people, nations and corporations control much of the world's economic and natural resources. This, as well as the marginalization of ethnic and other minorities from processes of governance and economic opportunity, contributes to instability. Political instability, sometimes leading to violent conflict, further hinders socio-economic progress in many countries and regions.

#### **Box 2.1 The Global Environment Outlook project**

The Global Environment Outlook (GEO) project was launched in 1995 by UNEP with two main components:

- 1 A participatory and cross-sectoral global environmental assessment process, incorporating regional views and perceptions and involving studies by a coordinated network of collaborating centres (multidisciplinary institutes with a regional outlook, which work at the interface of science and policy) around the world, and associated centres. Advice and support is provided by expert working groups on modelling, scenarios, policy and data.
- 2 GEO outputs in printed and electronic formats.

*Global Environment Outlook 2000* reports on a comprehensive integrated assessment of the global environment at the turn of the millennium (UNEP 1999). *GEO-2000* draws from a participatory process involving the work of experts from more than 100 countries. It also provides a vision for the 21st century and documents many policy successes in the recent past, and stresses the need for more comprehensive, integrated policy-making, especially given the increasingly cross-cutting nature of environmental issues. *Global Environment Outlook 3* offers a more forward-looking perspective, setting out a range of environmental scenarios and their possible consequences (UNEP 2002). The report is accompanied by a CD-ROM containing the full GEO-3 text and a compendium of data from 249 countries and aggregations used in preparing it.

### **EXTREME POVERTY**

Even in these prosperous times, extreme poverty still ravages the lives of one out of every five persons in the developing world. In 1993, more than 1.3 billion people were living on less than US\$1 per day (UNEP 1999) – nearly 1 billion of these in the Asia and Pacific region. The highest proportion of the poor and the fastest growth in poverty are both in sub-Saharan Africa where half the population was poor in 2000. The social ills associated with poverty are on the rise in many countries with high rates of poverty. These include disease, family breakdown, endemic crime and the use of narcotic drugs.

### **UNDER-NOURISHMENT**

Currently, global food production is adequate to meet overall human nutritional needs, but problems with the distribution of economic resources and foodstuffs mean that some 800 million people remain under-nourished. Although world food production is still rising, several trends will make it more challenging to feed a growing world population. The rate of increase in the yields of major grain crops is slowing down, and post-harvest losses remain high. Soil degradation from erosion and poor irrigation practices continues to harm agricultural lands, jeopardizing production in some regions. In general, without a transition to more resource-efficient and less polluting farming methods, it will be difficult to meet world food needs in the future without increasing the environmental burden that stems from intensive agriculture.

### **DISEASE**

HIV-AIDS and malaria are serious diseases that erode both the productive capacity and the social fabric of hard-hit nations. In the worst affected countries, HIV has already had a profound negative impact on infant, child and maternal mortality. In addition, nearly 500 million people suffer from acute malaria every year, of whom 1 million die.

### **MARGINALIZATION**

Many countries are struggling under the combined pressures of slow economic growth, a heavy external debt burden, corruption, violent conflict and food insecurity. These problems can be exacerbated by actions taken in the North, such as trade protectionism. Many of the residents of these countries suffer from a lack of access to social services, energy supplies and infrastructure. Their ability to develop their potential economic assets is also hampered by lack of access to resources, to credit or to the means for influencing national policy. At best, some become refugees or economic migrants. As a result of these processes, poor countries and poor people are continually marginalized from the opportunities presented by the global economy.

### **POPULATION GROWTH**

Population growth is expected to exacerbate these pressures, although it is usually people's localized concentration or their resource consumption levels that matter more than their mere numbers. World population now stands at nearly 6 billion and, while it is growing more slowly than predicted a few years ago, it is still expected to increase substantially before stabilizing. Ninety-seven per cent of the estimated increase of 2 billion people over the next 20 years will live in the developing world.

### **CONSUMPTION**

The demands of people in high-consumption, developed economies can have a more dramatic environmental impact than in countries with low levels of per capita resource consumption. Consumption of natural resources by modern industrial economies remains very high – in the range of 45–85 metric tons per person annually when all materials (including soil erosion, mining wastes and other ancillary materials) are counted. It currently requires about 300 kilograms of natural resources to generate an income of US\$100

in the world's most advanced economies. Given the size of these economies, this volume of materials represents environmental alteration on a massive scale. Consequently, if the emerging economies of developing countries were also to be based on such an intensive use of resources, this would put extreme environmental pressure on the world's resource base.

### **GLOBAL ENERGY USE**

Since 1971, global energy use has increased by nearly 70 per cent and is projected to continue to increase by over 2 per cent per year over the next 15 years – despite the fact that 2 billion people are still largely unconnected to the fossil fuel-based economy. While this increase will mean that more people will have access to energy services, it will raise greenhouse gas emissions by 50 per cent over current levels, unless there are serious efforts to increase energy efficiency and reduce reliance on fossil fuels. Although there has been considerable growth and technical progress in the use of renewable energy sources such as wind, solar, geothermal, hydro-electricity and others, public infrastructure and the convenience of fossil fuels and their low prices seriously inhibit any large-scale switch to the use of such clean energy sources in the foreseeable future.

### **CLIMATE CHANGE**

In the late 1990s, annual emissions of CO<sub>2</sub> were almost four times the 1950 level with atmospheric concentrations of CO<sub>2</sub> reaching their highest level in 160,000 years (UNEP 1999). According to the Intergovernmental Panel on Climate Change, 'the balance of evidence suggests that there is a discernible human influence on global climate change' (IPCC 2001). This is expected to result in shifts of climatic zones, changes in the productivity of ecosystems and species composition, and an increase in extreme weather events. This will have substantial impacts on human health and the viability of natural resource management in agriculture, forestry and fisheries – with serious implications for all countries. Developing countries, and notably the least developed, are expected to be the most vulnerable to the impacts of global climate change, although their current contribution to the problem is minimal.

### **NITROGEN LOADING**

Intensive agriculture, dependent on high levels of fossil fuel combustion and the widespread cultivation of leguminous crops, is releasing huge quantities of nitrogen to the environment, exacerbating acidification, causing changes in the species composition of ecosystems, raising nitrate levels in freshwater supplies above acceptable limits for human consumption, and causing eutrophication in freshwater and marine habitats. Nitrogen oxide emissions to the atmosphere also contribute to global warming. There is growing concern among scientists that the scale of disruption to the nitrogen cycle may have global implications comparable with those caused by disruptions of the carbon cycle.

### **NATURAL RESOURCE DETERIORATION**

Environmental deterioration continues to increase with serious depletion of natural resources, including soil erosion, and loss of forests and fish stocks. Deforestation (most often due to conversion to farms, pastures, human settlements or for logging) continues to reduce the extent and condition of world forests. Some 65 million hectares of forest were lost between 1990 and 1995 (UNEP 1999). In the Amazon and Indonesia, recent forest fires have caused extensive forest loss and damage. Fragile aquatic environments such as coral reefs and freshwater wetlands are under considerable threat from land-based pollution, destructive fishing techniques and dam construction, as well as climate change. It is estimated that almost 60 per cent of the world's reefs and 34 per cent of all fish species may be at risk from human activities.

Current patterns of production and consumption, and global climate change, raise questions about the continued capacity of the Earth's natural resource base to feed and sustain a growing and increasingly

urbanized population, and to provide sinks for wastes. As a result of environmental degradation, the biodiversity of the Earth's ecosystems and the availability of renewable natural resources have declined by 33 per cent over the last 30 years while demands on these resources have doubled.

### LOSS OF DIVERSITY

Biologically derived products and processes account for an estimated 40 per cent of the global economy. Much of this production is based on the cultivation of an increasingly narrow range of species and genes, with many large-scale production processes in agriculture and forestry dependent on eradicating local biodiversity and replacing it with mono-cultural production. However, there is also growing realization of the value of biodiversity, both for providing insurance in case of failure of given species and genes (due to disease, climate or economic change), and for providing 'intellectual property' to develop new uses. Yet that same pool of biodiversity is increasingly coming under the control of the powerful companies that have been reducing its extent. At the livelihood level, many poor groups may be very dependent on a diversity of habitats, species and genes, especially for dealing with changed circumstances – and they may be good managers of biodiversity. However, there are often few institutions to integrate livelihood and biodiversity needs, and to look after local rights.

At the same time, cultural diversity (which has evolved alongside biodiversity) is reducing. The globalization of production, communication, knowledge generation, work and leisure patterns brings with it a loss of tradition which could have been a valuable resource for resilience.

### POLLUTION

Most countries now experience anything from moderate to severe levels of pollution, which places a growing strain on the quality of water, soil and air. Despite clean-ups in some countries and sectors, a massive expansion in the availability and use of chemicals throughout the world, exposure to pesticides, heavy metals, small particulates and other substances all pose an increasing threat to human health and the environment.

### GROWING WATER SCARCITY

Global water consumption is rising rapidly, and availability of water is predicted to become one of the most pressing and contentious issues in the 21st century. One-third of the world's population lives in countries already experiencing moderate to high levels of water shortage. That number could rise to two-thirds in the next 30 years, unless serious efforts are made to conserve water and coordinate watershed planning among water uses. Some 30–60 per cent of the urban population in low-income countries still lacks adequate housing with sanitary facilities, drainage systems and piping for clean water.

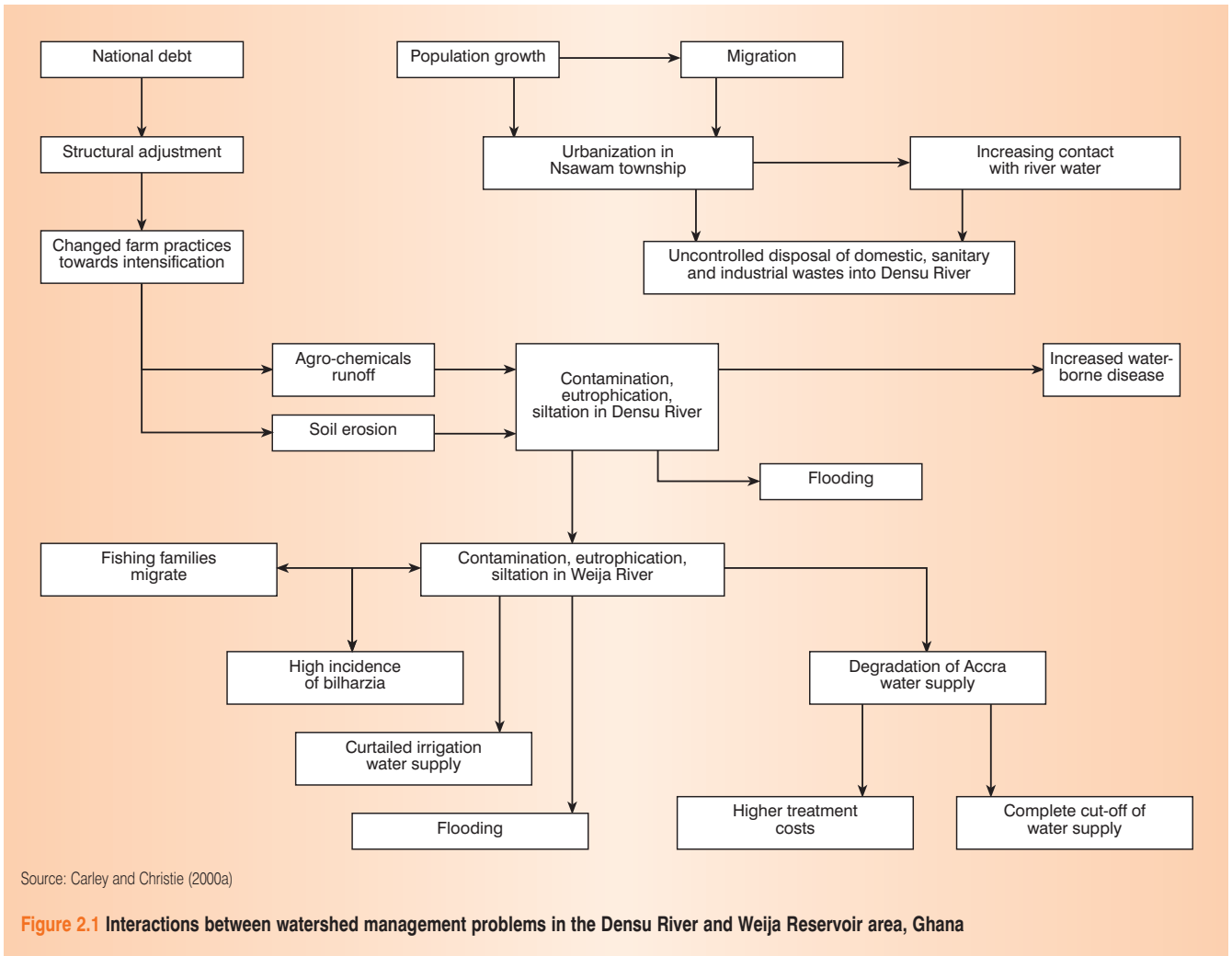
### OTHER URBAN PROBLEMS

Continuing urbanization and industrialization, combined with a lack of resources and expertise, and weak governance, are increasing the severity of environmental and social problems, which reinforce one another in densely populated areas. Air pollution, poor solid-waste management, hazardous and toxic wastes, noise pollution and water contamination combine to turn these urban areas into environmental crisis zones. Children of poor households are most vulnerable to the inevitable health risks.

### INTERACTIONS BETWEEN SOCIAL, ECONOMIC AND ENVIRONMENTAL PROBLEMS

There are extensive interactions between many of the challenges described above, which make it necessary to take a strategic approach to sustainable development. Figure 2.1 is just one illustration, from a relatively well-defined area, of just how complicated the interactions are.

*Environmental, social  
and economic  
problems interact in  
complex ways*



## International responses to the challenges of sustainable development

### THE EMERGENCE OF SUSTAINABLE DEVELOPMENT AS A COMMON VISION

Recognition of deteriorating environmental trends led to the 1972 UN Conference on the Human Environment in Stockholm which, in turn, led to the creation of UNEP and IIED. Since then, worldwide acceptance of the importance of environmental issues has grown enormously. The World Conservation Strategy (IUCN/UNEP/WWF 1980) and, subsequently, the report of the World Commission on Environment and Development – the Brundtland Commission (WCED 1987) – were developed in response to increasingly informed analyses of the links between environment and development. The World Conservation Strategy emphasized the need to ‘mainstream’ environment and conservation values and concerns into development processes.

The report of the Brundtland Commission emphasized the social and economic dimensions of sustainability, revealing links between, for example, poverty and environmental degradation. The follow-up to the World Conservation Strategy, *Caring for the Earth: A Strategy for Sustainable Living* (IUCN/UNEP/WWF 1991) went further, elaborating principles for the practical integration of environmental, social and economic concerns (Box 2.2).

*‘Sustainable development’ means more than ‘environmentally sound’*

### Box 2.2 Sustainable development – a guiding vision to tackle interacting problems

The 1987 Brundtland Report defined sustainable development as ‘*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*’. At the heart of the concept is the belief that social, economic and environmental objectives should be complementary and interdependent in the development process. Sustainable development requires policy changes in many sectors and coherence between them. It entails balancing the economic, social and environmental objectives of society – the three pillars of sustainable development – integrating them wherever possible, through mutually supportive policies and practices, and making trade-offs where it is not (Figure 2.2).

This includes taking into account the impact of present decisions on the options of future generations. However, sustainable development has often been mistakenly interpreted in a narrow sense as an environmental issue. This ignores the power and utility of the concept in its integration of economic and social development in the context of high quality environmental management. Given these complexities, however, it is understandable that the concept of sustainable development presents a challenge to communicate (see Box 7.4).

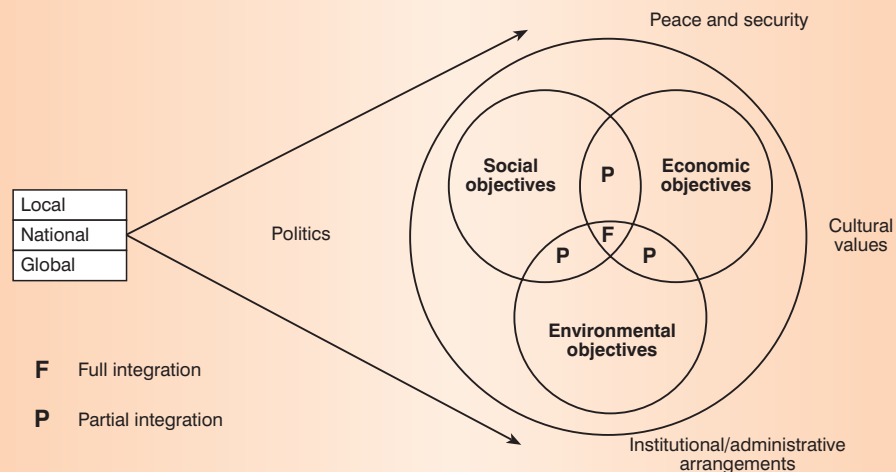
Approaches to sustainable development have been varied, reflecting the diversity of challenges faced by individual countries. Thus, while sustainable development is a universal challenge, many practical responses can only be defined nationally and locally. For example, in Thailand, sustainable development is defined as holistic development which involves six dimensions: economic, social, environment, politics, technology and knowledge, and mental and spiritual balance.

Reaching agreement on how to address the challenges requires a degree of pluralism and room for negotiation. This depends on factors such as peace and security, prevailing economic interests, political systems, institutional arrangements and cultural norms. In Bolivia, for example, good governance is seen as a central component of sustainable development – and is not just a ‘means to achieve’ it.

The practical outcomes of sustainable development processes tend to be described in two categories:

- 1 *Institutions and mechanisms* which produce decisions to balance social, economic and environmental objectives, and which ensure they are implemented. For example: particular planning and policy processes and procedures such as EIA and stakeholder fora.
- 2 *Activities on the ground* which add good environmental, social and/or economic practice to what might otherwise have been narrower goals. For example: new forms of natural resource management or integrated development projects.

There is a common, but mistaken, perception of ‘environmental sustainability’ as synonymous with ‘sustainable development’. It is understandable how this has arisen: it has most often been the environmental ‘pillar’ of sustainable development that has been missing to date, and there has had to be considerable attention to this area.



Sustainable development will entail integration of objectives where possible; and making trade-offs between objectives where integration is not possible.

Source: Dalal-Clayton et al (1994), modified from Barbier (1987)

**Figure 2.2** The systems of sustainable development

**Box 2.3 Agenda 21 on national strategies for sustainable development****Preamble**

*[Agenda 21's] successful implementation is first and foremost the responsibility of governments. National strategies, plans, policies and processes are crucial in achieving this. International cooperation should support and supplement such national efforts.*

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*Governments, in cooperation, where appropriate, with international organizations, should adopt a national strategy for sustainable development based on, inter alia, the implementation of decisions taken at the Conference, particularly in respect of Agenda 21. This strategy should build upon and harmonize the various sectoral economic, social and environmental policies and plans that are operating in the country. The experience gained through existing planning exercises such as national reports for the Conference, national conservation strategies and environment action plans should be fully used and incorporated into a country-driven sustainable development strategy. Its goals should be to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations. It should be developed through the widest possible participation. It should be a thorough assessment of the current situation and initiatives.*

Source: Agenda 21 (UNCED 1992)

Agenda 21 and the conventions and agreements reached at the Earth Summit in 1992 comprise a global programme of action for sustainable development.<sup>2</sup> They cover 40 different sectors and topics and pay particular attention to national legislation, measures, plans, programmes and standards, and the use of legal and economic instruments for planning and management.

Arguably, Agenda 21 has become the most prominent and influential – but non-binding – instrument in the environment and development field and is a guiding document for sustainable development in most regions of the world. Its most important impact has been to focus attention on the core concept of sustainable development, providing policy-makers with a point of reference for linking environmental, social and economic issues. It stresses the importance of NSDSs and supporting policy instruments for giving these effect, although little guidance is given on NSDSs (Box 2.3).

Apart from the Earth Summit, the 1990s also saw a number of UN conferences on a variety of issues concerned with sustainable development and the challenges that need to be overcome to achieve it (see Box 2.4). Despite this concern, however, commitment and knowledge of best-practice instruments for NSDSs remain elusive. International initiatives on NSDSs have been based largely on international institutions' ideas of the agenda and methods to be applied, tempered by political constraint, rather than on locally proven practice.

*'Sustainable development' unites environmental, social and economic concerns and initiatives*

<sup>2</sup> Agenda 21 – the action plan of UNCED: Chapters which describe the need for national plans: Preamble 1.3; Social and Economic Dimensions 2.6; Combating Poverty 3.9; Changing Consumption Patterns 4.26; Demographic Dynamics and Sustainability 5.31, 5.56; Protection and Promotion of Human Health 6.40; Promoting Sustainable Human Settlement Patterns 7.30, 7.51; Integrating Environment and Development in Decision-Making 8.3, 8.4, 8.7; Protection of the Atmosphere 9.12; Integrated approach to the planning and management of land resources 10.6; Combating Deforestation 11.4, 11.13; Fragile Ecosystems, Desertification and Drought 12.4, 12.37; Sustainable Agriculture 14.4, 14.45; Biodiversity, objectives (b); Biotechnology 16.17; Oceans 17.6, 17.39; Freshwater and water resources 18.11, 18.12, 18.40; Toxic Chemicals 19.58; Solid Wastes 21.10, 21.18, 21.30; Local Authorities 23.2; Financial Resources 33.8, 33.22, 33.15; Science 35.7, 35.16; Education 36.5; National Capacity Building 37.4, 37.5, 37.7, 37.10; International Institutions 38.13, 38.25, 38.36, 38.38, 38.39, 38.40; Information 40.4; Rio Declaration – Principle 10; Convention on Biodiversity – Article 6; Convention on Climate Change – Article 3, 4, 12.

**Box 2.4 Key multilateral environmental agreements****Biodiversity**

Convention on Biological Diversity (CBD), Nairobi, 22 May 1992 [[www.biodiv.org](http://www.biodiv.org)]

**Climate**

United Nations Framework Convention on Climate Change (UNFCCC), New York, 9 May 1992 [[www.unfccc.de/](http://www.unfccc.de/)]

**Desertification**

United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (CCD), Paris, 17 June 1994 [[www.uncod.de/](http://www.uncod.de/)]

**Endangered species**

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 3 March 1973 [[www.wcmc.org.uk/cites/](http://www.wcmc.org.uk/cites/)]

**Hazardous waste**

Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal (Basel), Basel, 22 March 1989 [[www.unep.ch/basel/index/html](http://www.unep.ch/basel/index/html)]

**Heritage**

Convention Concerning the Protection of the World Cultural and Natural Heritage, 23 November 1972 [[www.unesco.org/whc](http://www.unesco.org/whc)]

**Migratory species**

Convention on the Conservation of Migratory Species of Wild Animals (CMS), Bonn, 23 June 1979 [[www.wcmc.org.uk/cms/](http://www.wcmc.org.uk/cms/)]

**Ozone**

Vienna Convention for the Protection of the Ozone Layer, Vienna, 22 March 1985; and Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 16 September 1987 [[www.unep.org/org/ozone/](http://www.unep.org/org/ozone/)]

**Sea**

United Nations Convention on the Law of the Sea (UNCLOS), Montego Bay, 10 December 1982 [[www.un.org/depts/los/losconv1.htm](http://www.un.org/depts/los/losconv1.htm)]

**Wetlands**

Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), Ramsar, 2 February 1971 [[www.ramsar.org/](http://www.ramsar.org/)]

**MULTILATERAL ENVIRONMENTAL AGREEMENTS (MEAs)**

A few historic international environmental treaties were signed many decades ago, such as the 1900 Convention for the Preservation of Animals, Birds and Fish in Africa. But it was concern about pollution and the depletion of natural resources in the 1960s that gave rise to the negotiation of a series of binding MEAs. The first generation of these were mainly single-issue, sectoral agreements and legislation, addressing allocation and exploitation of natural resources such as wildlife, air and the marine environment.

Overlapping with, and supplementing these, a second generation of agreements is more cross-sectoral, system-oriented and holistic. Some of the key MEAs are listed in Box 2.4.

Through these MEAs and other instruments of international law, a number of sustainable development legal principles are emerging: for example, polluter pays, prior informed consent and the precautionary principle. These are discussed in Chapter 8. There is, however, growing concern about the implementation,

*Multilateral environmental agreements promote some aspects of sustainable development, but can compromise social and economic objectives*

compliance with and effectiveness of the MEAs – and about their coherence with each other and with multilateral economic and trade agreements, notably the World Trade Organization (WTO). The increase in the number of uncoordinated MEAs and non-binding instruments has led to more and more onerous reporting requirements and bureaucratic burdens.

### ENVIRONMENTAL MONITORING AND ASSESSMENTS

In the last two decades, a wide array of monitoring regimes have been established to track environmental change, some connected to the MEAs described above such as UNEP working in partnership with various UN organizations to coordinate terrestrial, oceanic and climate observing systems. Periodic reviews and assessments of trends and conditions are undertaken by the UN and other international organizations (some on a global basis, others regional or sectoral). There are also regular, independent assessments of global and regional trends and progress on international agreements, such as the annual *State of the World* reports of the Worldwatch Institute (Brown 2001) and the *Yearbook of International Co-operation on Environment and Development* (Bergesen et al 1999). Given the many serious constraints on sustainable development described in the section on trends and major challenges (pages 7–11), a major challenge for the 21st century is to understand the vulnerabilities and resilience of ecosystems so that ways can be found to reconcile the demands of human development with the tolerances of nature. Responding to this need, the Millennium Ecosystem Assessment is an important effort organized and supported by a wide range of governments, UN agencies and leading scientific organizations. It was launched at the UN in June 2001 and is a global scientific assessment of ecosystems, taking into account regional, national and local assessments. In addition to its assessment function, it aims to build capacity at all levels to undertake integrated ecosystem assessments and to act on their findings. The Millennium Ecosystem Assessment followed a year-long Pilot Analysis of Global Ecosystems (PAGE), which assessed five major ecosystem types: agro-ecosystems, forests, freshwater, grasslands, and coastal and marine systems. The results were reported on in the *World Resources Report 2000–2001* (WRI/UNDP/UNEP/World Bank 2000). It is now moving on to assess the effectiveness of different response options.

There have also been a number of regional assessments of the state of the environment, and of challenges to sustainable development. A good example is *State of the Environment in Southern Africa* prepared by Southern African Research and Documentation Centre in collaboration with IUCN and Southern African Development Community (SADC) (SARDC 1994). This report examined the natural resources of the region – particularly ecological zones shared by countries – provided details of the most serious environmental issues, and discussed the impacts of global warming and scenarios for the future of the region.

At the national level, the 1980s and 1990s saw a plethora of different kinds of environmental studies and reports, many prepared in response to the requirements of international agreements. Examples include profiles, strategies and action plans covering biodiversity, climate, conservation, environment and forestry; state-of-the-environment reports; UNCED national reports; Agenda 21 national reports; and OECD environmental performance reviews. Many of these are listed in the *World Directory of Country Environmental Studies: An Annotated Bibliography of Natural Resources Profiles, Plans and Strategies* (WRI/IIED/IUCN 1996).

### ECONOMIC INSTRUMENTS

Sustainable development entails private individuals, corporations and communities behaving in ways that will balance private benefits with public benefits such as securing environmental services, or improving equity. Regulations are only partially effective in this. The 1992 Earth Summit stressed the need for economic incentives to promote more sustainable patterns of production and consumption and to generate resources to finance sustainable development. But economic reform has been slow and there has been

*International environmental monitoring programmes have improved awareness of sustainability problems*

*Governments are increasingly using economic instruments to secure environmental benefits where regulations lack impact*

**Table 2.1 Commercializing environmental services**

Environmental service	Commodities	Sources of demand
<b>Watershed protection</b> (eg reduced flooding; increased dry season flows; reduced soil erosion; reduced downstream sedimentation, improved water quality)	Watershed management contracts; tradable water quality credits; salinization offsets; transpiration credits; conservation easements; certified agricultural produce	<i>Domestic/regional</i> – hydroelectric companies; municipal water boards; irrigators; water-dependent industries; domestic users
<b>Landscape beauty</b> (eg protection of scenic ‘view-scapes’ for recreation or local residents)	Ecotourism concessions; access permits; tradable development rights; conservation easements	<i>Domestic/international</i> – local residents, tourist agencies; tourists; photographers; media; conservation groups; foreign governments
<b>Biodiversity conservation</b> (eg conservation of genetic, species and ecosystem diversity)	Bio-prospecting rights; biodiversity credits; biodiversity management contracts; biodiversity concessions; protected areas; development rights; conservation easements; shares in biodiversity companies; debt-for-nature swaps; land acquisition	<i>Domestic/international</i> – pharmaceutical, cosmetic and biotechnology companies; agri-business; environmental groups; foreign governments; the global community (eg Global Environment Facility)
<b>Carbon sequestration</b> (eg absorption and storage of carbon in vegetation and soils)	Carbon offsets/credits; tradable development rights; conservation easements	<i>Domestic/international</i> – major carbon emitters (eg electricity, transport and petrochemical companies); environmental groups; foreign governments; consumers

Source: Landell-Mills (2001)

limited use of market-oriented instruments, despite proposals in many (mainly developed) countries for ‘green taxes’, for example on emissions, mineral oils and pesticides for the purpose of internalizing social and environmental costs in market mechanisms. Only a few countries have so far introduced such taxes (eg Sweden and the UK). Promising new economic instruments involve markets in environmental services (Table 2.1). Market-based approaches can permit service provision to be concentrated where it is most cost-effective – which would often benefit developing countries. Attention is also being given to the removal of ‘perverse’ governmental subsidies that move society away from sustainability rather than towards it. Examples of such subsidies include support for intensive, environmentally degrading agricultural practices in many OECD countries and tax breaks for fossil fuel energy production. Chapter 9 discusses economic instruments in more detail.

### ENGAGING THE PRIVATE SECTOR

In many countries, the last decade has seen some progress towards more sustainable business, with companies committed to sustainable development strategies through partnerships with customers, suppliers, government, NGOs and the general public. More openness is evident, for example, in publication of company environmental reports and implementation of voluntary environmental self-regulation schemes in some countries. But such appropriate policy responses remain few and more concerted action is still required to begin to achieve sustainable production and to encourage consumers to embrace sustainable consumption patterns.

*Business is  
organizing itself to  
benefit from  
sustainable  
development ...*

Thus the goal of sustainable development has also become a concern of the private sector. For example, the World Business Council for Sustainable Development (WBCSD) was formed during the Earth Summit preparations to ensure business played a part. It now has over 130 fee-paying member corporations, mainly from industrialized countries. Membership is by invitation to companies committed to the concepts of sustainable development and responsible environmental management. Members are expected to provide in-kind and personnel support, including financial backing for individual working groups, and the active participation, including secondment, of their staff in the WBCSD work programme. Participation is sought at the highest level, normally from the chief executive officer or equivalent.

The WBCSD has four objectives:

- 1 *Business leadership*: to be the leading business advocates on issues connected with the environment and sustainable development.
- 2 *Policy development*: to participate in policy development in order to create a framework that allows business to contribute effectively to sustainable development.
- 3 *Best practice*: to demonstrate progress in environmental and resource management in business and to share leading-edge practices among its members.
- 4 *Global outreach*: to contribute through its global network to a sustainable future for developing nations and nations in transition.

The views of the WBCSD on sustainable development are now actively sought in many international negotiations (eg on climate change). It has made policy prescriptions on various issues such as trade and environment, financial markets, the paper industry, freshwater access and sustainable forestry. For a review of the role and impact of the WBCSD, see Najam (1999).

Speaking at the 1999 World Economic Forum in Davos, the UN Secretary-General, Kofi Annan, called for a new 'global compact of shared values and principles' between business leaders and the UN, particularly on environment. The Global Compact is a value-based platform to promote and showcase good corporate practices and learning experiences in the three areas of human rights, labour and environment (for which it upholds nine principles). It provides an entry point for the world business community to work in partnership with UN organizations. The Compact asks business leaders to:

- Make a clear statement of support for the Global Compact and the core values set out in its nine principles, and engage in public advocacy for the Compact.
- Post once a year on the Global Compact website [[www.unglobalcompact.org](http://www.unglobalcompact.org)] a concrete example of progress made or lessons learned in implementing the principles. This can take many forms; for example, changes in internal management policies or concrete operational experiences.
- Engage in partnership with UN organizations by undertaking activities that further the implementation of the principles, or by entering strategic partnerships in support of broad UN goals, such as the eradication of poverty.

## NEW TECHNOLOGIES

In some cases, industry has found it financially profitable and environmentally beneficial to adopt the concept of cleaner production, involving re-designed products and production processes intended from the outset to minimize resource use, waste and harmful emissions. Many industries in developed countries have established clean production methods on a voluntary basis. UNEP is a good source of advice for governments on how to encourage cleaner production strategies and policies in domestic industry (UNEP 1994).

*... and is engaging with the United Nations*

*Sustainable development policies are too commonly viewed as constraints, but they also can be drivers of innovation – for new technologies*

...

A similar approach, called eco-efficiency, has been promoted by the WBCSD. This is defined as:

*the delivery of competitively-priced goods and services that satisfy human needs and improve quality of life while progressively reducing ecological impacts and resource intensity, throughout the life cycle of the product, to a level at least in line with the Earth's estimated carrying capacity (WBCSD 1995).*

Life cycle assessment (LCA) is now being used to evaluate the 'cradle-to-grave' effects of a product on the environment over its entire life cycle. LCA is being used for a range of purposes, such as comparing the environmental performance of new and older products, setting eco-labelling criteria, and in developing business strategies and investment plans.

### FINANCING SUSTAINABLE DEVELOPMENT

... and new financing mechanisms

At the 1992 Earth Summit, it was agreed that new, additional sources of funding were required to implement Agenda 21. Some resources might be provided by each country's public and private sectors, but it was agreed that low-income countries would require substantial additional funding through Official Development Assistance (ODA) or foreign capital investment. The UNCED Secretariat estimated, at the time, that the full implementation of Agenda 21 would cost low-income countries, on average, more than US\$600 billion annually between 1993 and 2000.

In practice, ODA has been declining in recent years, owing to budgetary pressures in donor countries and other reasons. Only four nations consistently attain the UN target for ODA of 0.7 per cent of GNP (Denmark, The Netherlands, Norway and Sweden) – a target re-affirmed by high-income countries at the Earth Summit. However, this decline in aid may have been partially balanced by the rapid increases in private capital flows to low-income countries – by over 300 per cent since 1992. According to the World Bank's Global Development Finance 2000 report, net long-term flows to developing countries totalled US\$291 billion in 1999. Of this, only US\$52 billion took the form of official aid, while private flows amounted to US\$238 billion (US\$192 billion of this was foreign direct investment). However, private flows have been concentrated on a few countries with dynamic economies (mainly in Asia, Europe, and Central and South America). The poorest countries continue to struggle to attract resources for development. They face a continuing need for aid to help them create the conditions that will promote market investment, self-sustaining growth and reach the internationally agreed goals for development (Boxes 2.9 and 2.10).

At the same time, however, the international finance community has begun to correlate good corporate financial performance with corporate provisions for sustainable development. Various sustainability indices have emerged, and there is evidence that finance houses are beginning to use them (Chapter 9).

### Governance – and the twin trends of decentralization and globalization

Sustainable development balances needs from local to global levels

The challenges discussed on pages 7–11 are primarily about making decisions on social, environmental and economic priorities, and on new forms of investment, production and consumption. They must be dealt with by governance systems at local, national and global levels. It is important to recognize that the architecture and operation of governance systems at different levels differs between countries, as well as the meaning of terms such as national, provincial and district, and that the processes of governance are changing (Box 2.5). Moreover, two major trends, which can be either complementary or contradictory, are increasingly relevant for governance: decentralization and globalization. While it is being increasingly recognized that many social and environmental issues are most effectively dealt with on a decentralized basis, issues arising from globalization processes require, by definition, global rules and governance systems. The challenge for strategies for sustainable development is therefore threefold:

**Box 2.5 Governance structures in flux**

**Trends in governance:** The term governance refers to the *process or method by which society is governed*, or the *'condition of ordered rule'* (Rhodes 1997). It reflects the structures and processes of regionalization and decentralization, which have tended to build on previously informal interactions between government and other actors.

In this regard, the position of sub-national governments is changing. For example, elected local authorities find themselves 'sharing the turf' with a whole range of bodies also exercising governmental powers at the local level. Local governance, barely discernible a decade ago, has become a reality (Wilson 2000). It is now the *active inclusion of a wide range of public, private and voluntary sector actors in carrying out policy on the ground*.

For many sub-national governments, the innovative nature of many of their partnerships and mobilization efforts is a direct response to the attempts to control the policy process by the national government. As Stoker (2000) puts it, the challenge is in 'achieving collective action in the realm of public affairs, in conditions where it is not possible to rest on recourse to the authority of the state'.

Thus, paying too much attention to formal governmental structures ignores the policy capacity that now exists for a range of actors – governmental and non-governmental – in developing sustainable development strategies.

**Principles:** The European Union has defined principles of good governance: openness, participation, accountability, effectiveness and coherence (CEC 2001). These principles are echoed by the World Bank, which operates a set of aggregate governance indicators based on: voice and accountability; political instability and violence; government effectiveness; regulatory burden; the rule of law; and graft (Kaufmann et al 1999).

**Typology:** Countries can be classified relatively simply according to the nature of their national and regional governance (Table 2.2).

**Table 2.2 Classification of national and regional government authorities**

Nation-state form	Regional level characteristics	Examples
Federal	<ul style="list-style-type: none"> <li>■ Wide ranging powers</li> <li>■ Elected parliament</li> <li>■ Budgetary powers</li> <li>■ Legislative rights</li> <li>■ Right to levy taxes</li> </ul>	Germany: Länder Canada: Provinces Belgium: Provinces
Regionalized states	<ul style="list-style-type: none"> <li>■ Advanced powers (political regionalization)</li> <li>■ Elected parliament</li> <li>■ Limited budgetary powers</li> <li>■ Limited right to levy taxes</li> </ul>	Spain: Autonomous communities India: States Italy: Regions
Devolving unitary states	<ul style="list-style-type: none"> <li>■ Limited powers (regional decentralization)</li> <li>■ Elected parliament</li> <li>■ Limited budgetary powers</li> <li>■ Substantial financial transfers from central government</li> <li>■ Limited right to levy taxes</li> </ul>	Mexico: States France: Regions Netherlands: Provinces
Classic unitary states	<ul style="list-style-type: none"> <li>■ No powers (regionalizing without creating a Regional level)</li> <li>■ No elected parliament</li> <li>■ No budgetary powers</li> <li>■ All financial resources transferred from central government</li> <li>■ No right to levy taxes</li> </ul>	UK: Local authorities Sweden: Counties

Authorities at a more local level exhibit a much wider degree of variety than at the regional level, and the meaning of terms differs. For example, the French *commune* is a self-administering community of local inhabitants rather than an organization controlled by elected representatives, and is thus similar to the German *Gemeinde*. Examples of basic and intermediate-level local authorities are shown in Table 2.3. However, the powers and status of each of these levels can only be understood within their specific contexts.

**Table 2.3** Sub-national/local government authorities

Country	Basic level	Intermediate level	State or region
Australia	Local Councils		States
Brazil	Municipalities		States
Canada	Towns/Cities	Metropolitan and Regional Municipalities, Counties and Regional Districts	Provinces
France	Communes	Departements	Regions
Germany	Gemeinden	Kreise/Kreisfreie Städte	Länder
India	Panchayats		States
Spain	Municipios	Provincias	Comunidad Autonomas
Switzerland	Communes		Cantons
UK	Non-Metropolitan Districts/ Unitary Authorities/ Metropolitan Councils	Non-Metropolitan Counties/ Greater London Authority	Devolved States (Wales and Scotland)
USA	Municipalities/Towns	Counties/City Councils	States

Source: Adrian Reilly, Brunel University (personal communication)

- to determine which issues are best addressed at which level;
- to ensure coherence between policy options pursued at different levels; and
- to find ways of ensuring local people are involved, even where it appears the policy agenda is best focused at national or international initiatives.

### DECENTRALIZATION

Decentralization aspires to foster development policies and strategies suited to local social, economic and environmental conditions. Done in an appropriate manner, it can promote localized governance structures responsive to citizens' needs and allow the downsizing and streamlining of centralized government institutions. As such, decentralization provides an opportunity to establish effective mechanisms for sustainable development.

However, the underlying principles of decentralization are as yet poorly understood and capacities for managing the process are frequently inadequate. Successful decentralization depends on a clear definition of the respective roles of local, regional and national-level authorities and the development of effective institutions at each level for planning and decision-making, involving actors at those levels. Unless these requirements can be put in place, the risks of inappropriate decentralization include the reinforcement of local elites, socio-political fragmentation along ethnic lines, marginalization of less dynamic regions, the weakening of national cohesion, and associated conflicts. A major problem is that decentralization, like participation, means different things to different people (Box 2.6).

*Decentralization is under way almost everywhere, but with contrasting perspectives on what it should achieve*

**Box 2.6 Decentralization**

*Decentralization* is the transfer of the locus of power and decision-making either downwards (vertical decentralization) or to other units or organizations (horizontal decentralization). The power that is transferred can be political, administrative or fiscal. Five aspects of decentralization are commonly recognized: devolution, deconcentration, delegation, deregulation and privatization; though, in reality, most situations entail a mixture of all types. French usage is more specific: decentralization corresponds to the English devolution.

*Devolution* or '*democratic decentralization*' is the transfer of power from a larger to a smaller jurisdiction; for example, from national to sub-national political entities such as states or local government. This transfer may be total (eg to make all decisions) or partial (eg transfer to local communities of the powers needed to manage the renewable resources on their village lands).

*Deconcentration* or *administrative decentralization* is the vertical decentralization of the power to act – but not to decide or, ultimately, control – within the administration or technical institution (eg from the ministry of interior to a governorship or from the national directorate of a service to the regional directorate).

*Delegation* may be vertical or horizontal transfer of limited executive – but not decision-making – authority from an administrative service to local government, parastatals or private companies.

*Deregulation* is the lifting of regulations previously imposed by a public authority.

*Privatization* is the transfer of the ownership and/or management of resources, and/or the transfer of the provision and production of goods and services, from the public sector to private entities (commercial or non-profit).

Governments often intend *administrative decentralization* – a transfer of activities within the structure of governance to local outposts – but without ceding any real authority over decision-making or resource allocation. NGOs, on the other hand, feel that decentralization should be about *devolution* of powers from central to more local authorities, so that local people have a real stake in making decisions which affect their lives and the local environment.

Administrative decentralization has often been tried in response to the failure of centrally controlled rural development and service provision but has enjoyed only limited success, since problems encountered centrally are merely displaced to the local level without any increase in local accountability or management effectiveness. Nowadays, *devolution* is being promoted as a panacea for local development, on the basis of institutional evidence. At best, devolution can redress legitimate concerns about the constraints and inefficiencies of centralized government, but at worst it is never completed beyond a mere public relations exercise to sweeten the sometimes bitter pill of structural adjustment. In Indonesia, new decentralization laws provide real devolved authority as well as substantial financial resources, but they were hastily introduced and have many flaws. It remains to be seen how they will be implemented (Box 2.7).

Moreover, decentralization, even with the best intentions, can fail if it does not address 'invisible' institutional problems such as: individuals seeking financial gain from assets they control but do not own; patronage; personal power struggles; negative attitudes to participation, and so on. More recent attempts at devolution show promise, especially in socially homogeneous areas with poor natural resources. Priority is best given first to social issues and providing infrastructure for education and health, rather than attempting immediately to devolve control over income-generating activities or the management of natural resources.

Examples of successful local development initiatives, which do include the management of natural resources, are as yet rare with lessons seldom fed into wider processes of development. One reason is that natural resource management requires that politically sensitive issues are addressed before devolution, such as land tenure and control over resources. Often, these issues are highly contentious and seen as threatening

**Box 2.7 Decentralization in Indonesia**

Under the rule of President Suharto, Indonesia was unusually centralized for a country of its size and diversity. The central government allocated natural resource concessions in the regions, without consulting local governments and without regard for existing land uses or local customary rights. Local governments received only a small share of revenues from natural resource exploitation.

Under the post-Suharto governments, central government authority in the regions largely collapsed and illegal exploitation of resources and environmental degradation were proceeding apace.

In 1999, new decentralization laws were introduced hastily by the government of President Habibie, fearing that the process would run out of steam if prolonged. The legislation provides for the transfer of real authority for local public works, infrastructure and services and substantial funding increases to the regions. However, it mainly empowers district (city and *kabupaten*) governments, which are now entitled to receive 80 per cent of government revenues from forestry, fisheries, non-oil and non-gas mining. But there is a severe deficiency of skills and capacity in some local governments to make use of such powers. The provincial governments, which generally have greater capabilities, have been by-passed by the new legislation.

Noting the anomalies in the system, World Bank experts argued that decentralization should first be undertaken to provincial level, with associated constituency- and capacity-building, prior to decentralizing further to district level; and also that it should occur in a phased manner among the provinces, according to their capacity.

Source: Aden (2001) *Asia Environmental Review*, vol VI, no 1, May 2000

by local and national elites. In short, while decentralization might have a facilitating role, it is neither a prerequisite nor a guarantee of good local management.

To be effective, decentralized systems must have:

- sufficient devolved power for the exercise of substantial influence over political affairs and development activities;
- provision of sufficient financial resources to accomplish important tasks;
- adequate capacity (both technical and institutional) to accomplish those tasks;
- reliable accountability mechanisms.

Two factors seem key in designing support programmes to meet these requirements:

- 1 They should be realistically tailored to the local context rather than idealized, desired outcomes or imported principles.
- 2 They need to acknowledge the highly political dimension of local development processes, and thus place special emphasis on means to address the 'invisible institutions problem' in a pragmatic and non-antagonistic fashion.

**GLOBALIZATION**

The process of globalization is being driven by factors such as trade liberalization, rapidly improving and cheaper communications, the consequent growth and spread of multinational corporations with increasing levels of foreign investment, technological innovation, and the proliferation of multilateral institutions and agreements. On the positive side, globalization is fuelling economic growth, creating new income-generating opportunities, accelerating the dissemination of knowledge and technology, and making possible new international partnerships.

But globalization may also have profound and worrying implications for sustainable development in developing countries. These include:

*Globalization brings new technology, and rising incomes and influence, to some people ...*

- the external political, cultural and economic shocks associated with globalization;
- the vulnerability of national economies;
- the marginalization of knowledge, individuals, businesses and indeed whole countries and cultures that this may cause.

For example, the continuing Asian economic crisis has had serious social and environmental impacts, which have affected the poor disproportionately. The achievement of sustainable development will require a good understanding of the effects of globalization in relation to national and local governance, assets and vulnerabilities. It calls for appropriate policy responses in many areas; for example, structural adjustment, trade, foreign investment, development assistance and policy coherence (see Box 2.8).

Globalization has thus far only been weakly addressed in strategies for sustainable development. There is a particularly urgent need for a new approach to the international dimension of national strategies, and for helping to develop resilience to external economic shocks – fostering inclusion, not marginalization. The private sector (both big and small) needs to be involved in meeting this challenge.

#### Box 2.8 Some challenges of globalization for sustainable development

Globalization has profound implications for sustainable development. But the impacts of globalization have been weakly addressed in strategies for sustainable development so far, and there is a particularly urgent need for a new approach to the international dimension of national strategies.

Trade and investment provide a critical source of capital for driving economic growth in developing countries, and are becoming increasingly important with the decline in aid flows. Increased trade and investment could have a significant impact on the environment if increased productive activity (such as mineral extraction and new manufacturing processes) is not accompanied by robust social and environmental controls. Inequalities within developing countries could also widen, as poor people find themselves less able to exploit new economic opportunities and become more vulnerable to a loss of access to resources and environmental degradation associated with privatization and industrialization.

Steering globalization towards the objectives of sustainable development depends on the capacity of governments to stimulate and regulate market access arrangements that prevent environmental degradation, and ensure that economic benefits are widely distributed. Critical policy areas include:

- **Structural adjustment:** Stabilization and adjustment can exacerbate unsustainable use of natural resources and environmental degradation, due to weak institutional capacity and regulatory frameworks and lack of clear tenure over resources. In many cases, the poor are the worst affected by these impacts. This is a central issue for national strategies for sustainable development.
- **Trade:** Export-led development is now regarded as a major route to prosperity for poor nations, but the least developed countries are still constrained by barriers to trade, notably in agriculture and textiles. To date, developing countries have been wary of attempts to link trade and environment in policy-making, fearing a new wave of 'green protectionism'. The challenge is to find ways in which developing countries can make positive links between export growth and sustainable development.
- **Foreign investment:** Recent OECD negotiations for a Multilateral Agreement on Investment have highlighted the need for developing country governments to balance the need for a secure investment regime (to attract and retain foreign capital) with mechanisms to encourage corporate responsibility for social and environmental performance.

### Focus on national strategies for sustainable development: a Rio commitment and one of the seven international development goals

We have noted how, at the 1992 Earth Summit, governments made a commitment to adopt NSDSs (see page 13). Such strategies were foreseen as highly participatory instruments intended 'to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations' (Agenda 21, UNCED 1992).

*... but also social and economic shocks, vulnerability and marginalization to weaker groups*

*Decentralization and globalization both determine sustainable development prospects, yet sustainable development plans and policies tend not to get to grips with them*

*An NSDS can provide a conduit between Agenda 21 commitments and changed stakeholder behaviour, by mobilizing capacities and rethinking governance*

**Box 2.9 International development goals**

In 1996, the Development Assistance Committee (DAC) of the OECD selected an integrated set of goals for sustainable development which aim to provide indicators of progress. These goals were based on targets formulated and agreed by the international community over the last decade through UN conferences, which addressed subjects important to sustainable development: education (Jomtejn 1990), children (New York 1990), environment (Rio de Janeiro 1992), human rights (Vienna 1993), population (Cairo 1994), social development (Copenhagen 1995) and women (Beijing 1995).

**Economic well-being**

- The proportion of people living in extreme poverty in developing countries should be reduced by at least one half by 2015 (Copenhagen).

**Social and human development**

- There should be universal primary education in all countries by 2015 (Jomtien, Copenhagen and Beijing).
- Progress towards gender equality and the empowerment of women should be demonstrated by eliminating gender disparity in primary and secondary education by 2005 (*Cairo, Beijing and Copenhagen*).
- Death rates for infants and children under 5 years should be reduced in each developing country by two-thirds of the 1990 level by 2015 (*Cairo*).
- Rate of maternal mortality should be reduced by three-quarters between 1990 and 2015 (*Cairo, Beijing*).
- Access should be available through the primary health care system to reproductive health services for all individuals of appropriate ages no later than 2015 (*Cairo*).

**Environmental sustainability and regeneration**

- There should be a current national sustainable development strategy (NSDS) in the process of implementation, in every country, by 2005, so as to ensure that current trends in the loss of environmental resources are effectively reversed at both global and national levels by 2015 (derived from a commitment agreed at UNCED in *Rio de Janeiro*).

At the meeting of the DAC on 11–12 May 1999, aid ministers endorsed a note clarifying the role of development cooperation in assisting partner developing countries in the formulation and implementation of NSDSs. This note was based on lessons emerging from the DAC project to develop policy guidance on NSDSs, which are amplified in this resource book. It accepted that the timeframe set out in the above goal should be interpreted as one for achieving progress, rather than as a strict deadline.

Source: OECD DAC (1997a)

NSDSs were expected to provide focal points for integrating environment and development in decision-making, and for defining and implementing sustainable development priorities. The importance and value of such strategies is a strong theme throughout Agenda 21 (Box 2.3).

The OECD's *Shaping the 21st Century* strategy (1997a) called for the formulation and implementation of a sustainable development strategy in every country by 2005. This is one of the seven international development goals (IDGs) agreed by the OECD (Box 2.9).

In 1997, the Special Session of the UN General Assembly met to review progress since the Rio Summit, and noted that there had been continued deterioration in the state of the global environment under the combined pressures of unsustainable production and consumption patterns and population growth. This assessment led governments to set a target date of 2002 for *introducing* national sustainable development strategies.

More recently, 147 heads of state signed the Millennium Declaration in September 2000. The associated Millennium Development Goals (Box 2.10) include one relating to environmental sustainability, with a target (but no date) to: 'integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources' (UNGA 2001). Initiatives towards sustainable development strategies should, therefore, also contribute to the achievement of this particular target.

**Box 2.10 The millennium development goals**

Each goal is accompanied by various targets and a range of indicators. Only those for Goal 7 are shown.

- Goal 1 Eradicate extreme poverty and hunger
- Goal 2 Achieve universal primary education
- Goal 3 Promote gender equality and empower women
- Goal 4 Reduce child mortality
- Goal 5 Improve maternal health
- Goal 6 Combat HIV-AIDS, malaria and other diseases
- Goal 7 Ensure environmental sustainability
- Goal 8 Develop a global partnership for development

**Goal 7 Ensure environmental sustainability – the targets:**

*(9) Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environment resources*

*Indicators*

- Proportion of land area covered by forest
- Land area protected to maintain biological diversity
- GDP per unit of energy (as proxy for energy efficiency)
- Carbon dioxide emissions (per capita)\*

*(10) Halve by 2015 the proportion of people without sustainable access to safe drinking water*

*Indicator*

- Proportion of population with sustainable access to an improved water source

*(11) By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers*

*Indicators*

- Proportion of people with access to improved sanitation
- Proportion of people with access to secure tenure

\* Plus two figures of global atmospheric pollution: ozone depletion and the accumulation of global warming gases

Source: UNGA (2001)

## Guidance to date on strategies for sustainable development

It is nearly ten years since the UNCED agreement, but very little official guidance has emerged on how to fulfil the NSDS commitments. Nevertheless, a body of literature has described the activities to date of developing and developed countries in respect of NSDSs and similar initiatives.

Most notably, in 1994, IIED and IUCN published a handbook on the planning and implementation of NSDSs, drawing from international experience of conservation strategies, environmental action plans and similar processes, the result of both independent analysis and discussions at regional meetings of practitioners. This document was widely distributed and used (Carew-Reid et al 1994), but had no official status. This, and other key reviews, have been used to compile the current resource book; they are listed in Box 2.11. Abstracts and full texts of many documents can be found on the NSDS website [www.nssd.net].

More recently, in policy guidance endorsed by aid ministers in April 2001, the OECD DAC has sought to clarify the purposes and principles underlying effective national and local strategies for sustainable development; to describe the various forms they can take in developing countries; and to offer guidance on how development cooperation agencies can support them (OECD DAC 2001a). Following from this commitment, this resource book provides a more detailed elaboration of this policy guidance. It draws

*Agenda 21 promoted NSDSs in 1992, but official guidance on NSDSs has only just been released*

**Box 2.11 Selected reviews of, and guidance on, strategic planning for sustainable development**

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Bass, S M J, Dalal-Clayton, D B and Pretty, J (1995) *Participation in Strategies for Sustainable Development*, Environmental Planning Issues no 7, International Institute for Environment and Development, London

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Bressers, H and Coenen, F (undated) *Green Plans: Blueprints or Statements of Future Intent for Future Decisions*, Center for Clean Technology and Environmental Policy, CSTM, University of Twente, Enschede, The Netherlands

Carew-Reid, J (ed) (1997) *Strategies for Sustainability: Asia*, IUCN in association with Earthscan, London

Carew-Reid, J, Prescott-Allen, R, Bass, S and Dalal-Clayton, D B (1994) *Strategies for National Sustainable Development: A Handbook for their Planning and Implementation*, International Institute for Environment and Development (IIED), London, and World Conservation Union (IUCN), Gland, in association with Earthscan, London

Carley, M and Christie, I (2000a) *Managing Sustainable Development*, 2nd edn, Earthscan, London

Coenen, FHJM (1996) *The Effectiveness of Local Environmental Policy Planning*, CSTM Studies and Reports, University of Twente, Enschede, The Netherlands

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Dorm-Adzobu, C (1995) *New Roots: Institutionalizing Environmental Management in Africa*, World Resources Institute, Washington, DC

EAP Task Force (1998) 'Evaluation of Progress in Developing and Implementing National Environmental Action Programmes (NEAPs) in CEEC/NIS', paper produced for *Environment for Europe*, Aarhus, 23–25 June 1998, OECD, Paris

Earth Council (2000) *NCSD Report 1999-2000: National Experiences on Multi-Stakeholder Participatory Processes for Sustainable Development*, Earth Council, San José, Costa Rica

ERM (1994) 'Developing Plans and Strategies', paper II prepared for the Ministry of Housing, Spatial Planning and Environment in The Netherlands and presented to the *First Meeting of the International Network of Green Planners*, 30 March–1 April 1994, Maastricht, The Netherlands, Environmental Resources Management, London

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Hill, J (1993) *National Sustainability Strategies: A Comparative Review of the Status of Five Countries: Canada, France, The Netherlands, Norway and the UK*, The Green Alliance, London

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heavily on the experience of eight developing countries in developing and implementing such strategies, based on reviews by country teams commissioned as inputs to the OECD DAC policy guidance.<sup>3</sup>

Building on the OECD DAC policy guidance and other experiences (including strategies in industrialized countries), UN DESA (2002b) has also produced guidance on approaches to developing NSDSs, in preparation for the World Summit on Sustainable Development.

## Why a strategic approach to sustainable development is needed

### The need for structural changes

Achieving sustainable development will require deep structural changes and new ways of working in all areas of economic, social and political life. Economic growth patterns that actively favour the poor should be promoted. Fiscal policies that negatively affect the poor or promote environmental damage will need to be reformed. In the longer term, countries will want to ensure that their net wealth, including natural, man-made and human capital, remains constant or increases. Innovation and investment in actions that promote sustainable development should be encouraged. Among other things, this will require the development of a market pricing structure in which prices reflect the full social and environmental costs of production and consumption.

Issues of inequity and inequality of access to assets and resources need to be confronted in a more open and progressive manner. For example, in many countries it will be necessary to reform land tenure policies so as to increase access to resources for disadvantaged and marginalized groups. Equally, it will be important to build and strengthen social capital, and to devise formal 'safety nets' to enable vulnerable economies and groups of citizens to better cope with both external and domestic shocks.

*Achieving sustainable development requires deep structural and governance changes on many fronts. A strategic framework can help to organize this ...*

<sup>3</sup> Bolivia, Burkina Faso, Ghana, Tanzania, Namibia, Pakistan, Nepal, Thailand

Sustainable development therefore has important governance implications. At the national and local level, it requires cross-sectoral and participatory institutions and integrating mechanisms which can engage governments, civil society and the private sector in developing shared visions, planning and decision-making, a topic addressed in subsequent chapters. Governments, corporations and development cooperation agencies will also need to be more open and accountable for their actions. More generally, economic planning and policy-making will have to become more participatory, prudent and transparent, as well as more long term so as to respect the interests of future generations. The difficulty of these challenges does not mean they can be shirked. A strategy can offer a framework to organize and coordinate action to address them.

### Difficulties in introducing changes

There are many technical and political difficulties in integrating social, economic and environmental objectives and in adequately addressing the intergenerational dimension of sustainable development. In general there is little documented experience in most countries of developing such mechanisms, and no tried and tested methodologies. Integrating and making trade-offs between sustainable development objectives will therefore require experimental approaches, learning and backing by strong legislative and judicial systems. These institutions are often very weak in developing countries.

As suggested earlier, different challenges need to be addressed at different spatial levels. Some challenges must be addressed at the global level, such as climate change and ozone depletion; some challenges are most effectively addressed at the national level, such as economic, fiscal and trade policy, and legislative change; and some challenges can only be addressed at the local level, such as alterations in patterns of resource use. The impacts of decisions taken at different levels need to be taken into account in an integrated and coherent way. Their consequences must be considered, particularly implications across different sectors and for different interest groups.

There will certainly be short-term conflicts between global, national and local sustainable development priorities, but there will also be complementarities. For example, the conservation of global biodiversity requires the preservation of local habitats, while the need to feed growing populations implies their conversion to agriculture. However, for long-term sustainability, the need to preserve habitats for ecosystem services such as crop pollination, flood controls and water purification ultimately benefits agricultural production. Another example is improved energy efficiency leading to reduced local air pollution, with corresponding health benefits and reductions in greenhouse gas emissions.

Often there are costs involved in establishing or harnessing mechanisms to move towards sustainable development, such as establishing regular fora for participation, taking time and effort to engage in the process, establishing mechanisms for collecting information, investment screening, and monitoring achievement on a range of sustainable development indicators. Costs for such mechanisms may be high in the short term, a particular problem for developing countries and poor groups of residents. But the costs of taking no action are likely to be much greater and assistance must be made available.

All these issues need to be taken into account in steering a track towards sustainable development. They cannot be effectively dealt with on an ad hoc or piecemeal basis. They require a strategic approach.

### What being strategic means

The need for such a strategic approach is increasingly being recognized as countries assess why past efforts towards sustainable development have been less effective than desired, and as young nations and states – latterly East Timor – seize the concept of sustainable development as an opportunity to chart the direction of nation-building. More and more strategy documents now contain language which acknowledges the need to build national capability in strategic policy-making and planning (Box 2.12).

*... by coordinating plans and activities at different spatial levels ...*

*... and by uniting the required mechanisms – of participation, communications, information, investment and monitoring ...*

**Box 2.12 Affirming the need for a strategic approach to sustainable development**

*Truly sustainable development must systematically provide for linkages among social, economic and environmental concerns, so as to fit them together into coherent strategies ... The Federal Plan for Sustainable Development is designed to promote the effectiveness and internal coherence of government policy with respect to sustainable development. (The Federal Plan for Sustainable Development, 2000–2004, Belgium (SSESD 2000))*

*The policy choices and solutions provided in this document are the guidelines for the years to come. Transitions require vision, courage and perseverance from everyone involved. The question is not whether it is possible, but how it is possible. An on-going re-evaluation will occur as new circumstances present themselves. Accordingly, the approach must not be rigid, but flexible, not dogmatic, but creative, while learning to deal with uncertainties. (4th National Environmental Policy Plan, The Netherlands (VROM 2001))*

*We must strengthen our working relations to overcome shared problems. This means talking with one another constructively and analytically, and sharing information on what has been done and what is planned... In a country the size of East Timor, we have to ensure that we are all working together to address some of the considerable development hurdles before us ... To achieve a stronger partnership, we need to improve communication and coordination between us all. (Emily Pires National Planning and Development Agency, East Timor (in Anderson and Deutsch 2001))*

Being strategic is about developing an underlying vision through a consensual, effective and iterative process; and going on to set objectives, identify the means of achieving them, and then monitor that achievement as a guide to the next round of this learning process.

Being strategic requires a comprehensive understanding of the concept of sustainable development and its implications, but not necessarily a comprehensive set of actions – at least at any one time. More important than trying unsuccessfully to do everything at once, is to ensure that incremental steps in policy-making and action are moving towards sustainability – rather than away from it, which is too frequently the case.

A strategic approach to sustainable development therefore implies new ways of thinking and working so as to:

- move from developing and implementing a fixed plan, which gets increasingly out of date ... towards operating an adaptive system that can continuously improve;
- move from a view that it is the state alone that is responsible for development ... towards one that sees responsibility with society as a whole;
- move from centralized and controlled decision-making ... towards sharing results and opportunities, transparent negotiation, cooperation and concerted action;
- move from a focus on outputs (eg projects and laws) ... towards a focus on outcomes (eg impacts) and the quality of participation and management processes;
- move from sectoral planning ... towards ‘joined-up’ or integrated planning;
- move from a focus on costly ‘projects’ (and a consequent dependence on external assistance) ... towards domestically driven and financed development.

Taking a strategic approach will assist countries to participate more effectively in international affairs – providing opportunities to consider both the adverse social and environmental effects of globalization and how nations might benefit from its advantages. It should also enable improved dialogue with other governments, to negotiate new ways of working towards, and supporting, the process of sustainable development at both national and international levels.

*... into an adaptive system for continuous improvement*

*An NSDS can help a country's fitness for dealing with globalization and international relations*