WHAT IS SUSTAINABLE DEVELOPMENT ?

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Origin of the concept of sustainable development

Many of the ideas that are now embedded in the idea of sustainable development have been around for a long time – from as long ago as the work of Malthus on population growth in the late 1700s. But the concept appears really to have emerged during debate in the early 1970s following of a range of key publications drawing attention to man's over-exploitation of the environment, focusing on economic development and the growing global concern about development objectives and environmental constraints, and examining the inextricable links between environment and development. Some notable examples include:

- *How to be a Survivor: A Plan to Save Spaceship Earth* (Paul Erlich 1971);
- *The Limits to Growth* (Meadows *et al*. 1972) by the Club of Rome;
- *A Blueprint for Survival* (The Ecologist, 1972) promoting a movement for man to live 'with' nature and calling for a stable (and sustainable) society with a diversity of physical and social environments ;
- *Only One Earth* (Barbara Ward and Rene Dubos, 1972) for the UN Conference on the Human Environment in Stockholm in that year; and
- *Small is Beautiful* (Schumacher 1973).

Barbier (1987) distinguishes two strands of debate at this time about economic development: one focusing on basic needs with emphasis on helping the poor; the other stressing that real development was impossible without consideration of the environment and without taking into account local social and cultural values and enabling stakeholder participation.

The gradual emergence of the concept of sustainable development has also built on a range of other concepts, e.g. 'sustainable yield'. 'eco-development', 'deep ecology',

Definitions

Whilst earlier literature discussed a wide range of issues around the emerging concept of sustainable development, the following statement from the World Conservation Strategy (IUCN/WWF/UNEP, 1980) appears to be the first actual attempt to define sustainable development:

> "For development to be sustainable, it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long-term as well as the short-term advantages and disadvantages of alternative action"

The World Conservation Strategy was frequently criticised for being concerned mainly with ecological sustainability rather than sustainable development *per se*. The most universally quoted definition is that produced in 1987 by the World Commission on Environment and Development (WCED), otherwise known as the Brundtland Commission (after its Chairperson, Gro Harlem Brundtland, Prime Minister of Norway):

> "Economic and social development that meets the needs of the current generation without undermining the ability of future generations to meet their own needs".

Following the publication of the Brundtland report, there was a rapid escalation of alternative definitions of sustainable development and lists are given by several authors provided lists (e.g. Pezzey 1989, Pearce et al. 1989, and Rees 1989). Mitlin (1992) notes that, in general, definitions involve two components: the meaning of development (i.e. what are the main goals of development: economic growth, basic needs, rights, etc.); and the conditions necessary for sustainability.

Despite the wealth of references to the Brundtland definition, it is not supported by professional consensus. As Banuri (1999) observes, “there is considerable professional disagreement about this definition, mostly on how to put the idea of sustainable development into operation, but also to do with questions of definition and on its claims to synthesis”.

Building High-Level Commitment

Over the past two decades, sustainable development has emerged as the preferred way of dealing with the rapid degradation of the natural environment. The first global meeting on this issue, the U.N. Conference on the Human Environment in 1972, focused mainly on the environmental issues that were most evident in the wealthy nations, and associated with industrial development and a rapid growth in consumption, e.g. pollution and waste. Much less attention was given to the needs of lower income countries in the South for stronger and more stable economies, as well as environmental improvement. Although the need to combine development and environment goals was becoming evident, more emphasis was placed on the "limits to growth" arising from shortages in resources such as metals and fossil fuels.

The new concern for what later became labelled "sustainable development" is evident in the Cocoyoc Declaration of 1974, which addressed the issue of how to respect the "inner limit" of satisfying fundamental human needs within the "outer limits" of the Earth's carrying capacity. But it was the World Conservation Strategy of 1980 that launched sustainable development into the international policy arena, stressing the importance of integrating environmental protection and conservation values into the development process. Subsequently, the Brundtland Commission paved the way for the UN Conference on Environment and Development (UNCED), otherwise known as the Earth Summit, in 1992 in Rio de Janeiro. This conference approved a set of five agreements:

- *Agenda 21*: a global plan of action for sustainable development, containing over 100 programme areas, ranging from trade and environment, through agriculture and desertification to capacity building and technology transfer.

- *The Rio Declaration on Environment and Development* - a statement of 27 key principles to guide the integration of environment and development policies (including the polluter pays, prevention, precautionary and participation principles).

- *The Statement of Principles on Forests* - the first global consensus on the management, conservation and sustainable development of the world's forests.

- *The Framework Convention on Climate Change* - a legally-binding agreement to stabilise greenhouse gases in the atmosphere at levels that will not upset the global climate system.

- *The Convention on Biological Diversity* - a legally-binding agreement to conserve the world's genetic, species and ecosystem diversity and share the benefits of its use in a fair and equitable way.

Implementing the Idea

Now that high-level legal and political commitments have been made to sustainable development, attention is focusing on what the concept actually means and how to operationalise it, for example, by preparing policies for sustainable agriculture, directing support at sustainable forestry, or developing national sustainability strategies. The Brundtland Commission's definition, whilst widely used, provides little guidance of how to implement sustainable development. The absence of a clear definition has allowed some to claim that they are practising sustainable development, while essentially repackaging 'business as usual' approaches.

Part of the problem lies in the confusion that surrounds what is actually "sustained" by "sustainable development". Although the term "sustainable" is most widely used to refer to the maintenance of ecological systems and resources, it has also been applied to the economic, social and even cultural spheres.

This broad application of "sustainability" is perhaps not surprising, since sustainable development is by nature an interdisciplinary concept, drawing on social and physical sciences, as well as law, management and politics. It is also a dynamic approach which, according to the Brundtland Commission, is "a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations".

What the Earth Summit did make clear is that meeting human needs forms the bedrock of sustainable development. Thus, according to the World Health Organisation, "the most immediate environmental problems in the world are the ill-health and premature death caused by biological agents in the human environment in water, food, air or soil".

Meeting the goals of sustainable development

A commitment to meet the needs of present and future generations has various implications. "Meeting the needs of the present" means satisfying:

- *Economic needs* - including access to an adequate livelihood or productive assets; also economic security when unemployed, ill, disabled or otherwise unable to secure a livelihood.

- *Social, cultural and health needs* - including a shelter which is healthy, safe, affordable and secure, within a neighbourhood with provision for piped water, drainage, transport, health care, education and child development, and protection from environmental hazards. Services must meet the specific needs of children and of adults responsible for children (mostly women). Achieving this implies a more equitable distribution of income between nations and, in most cases, within nations.

- *Political needs* - including freedom to participate in national and local politics and in decisions regarding management and development of one's home and neighbourhood, within a broader framework which ensures respect for civil and political rights and the implementation of environmental legislation.

Meeting such needs "without compromising the ability of future generations to meet their own needs" means:

- *Minimising use or waste of non-renewable resources* - including minimising the consumption of fossil fuels and substituting with renewable sources where feasible. Also, minimising the waste of scarce mineral resources (reduce use, re-use, recycle, reclaim).

- *Sustainable use of renewable resources* - including using freshwater, soils and forests in ways that ensure a natural rate of recharge.

- *Keeping within the absorptive capacity of local and global sinks for wastes* - including the capacity of rivers to break down biodegradable wastes as well as the capacity of global environmental systems, such as climate, to absorb greenhouse gases.

Drifting towards unsustainability

At present, these 'preconditions' are rarely being met. As a result, the world appears to be locked into a number of downward trends, which are moving away from, rather than toward, sustainability. The roots of this decline are many, but can be clustered into two broad groups: *market failures*, where economic transactions fail to take account of social or environmental costs, and *policy failures*, where governments inadvertently encourage environmental degradation, for example, through subsidising energy and water use. The issue is thus not one of *whether* governments should intervene to steer development towards sustainability, but *how*.

Balancing Objectives

Sustainable development aims to reverse these downward trends. There is a growing consensus that sustainable development means achieving a quality of life that can be maintained for many generations because it is:

- *socially desirable*, fulfilling people's cultural, material and spiritual needs in equitable ways.

- *economically viable*, paying for itself, with costs not exceeding income, and

- *ecologically sustainable*, maintaining the long-term viability of supporting ecosystems.

Sustainable development will entail integration of these three objectives where possible, and making hard choices and negotiating trade-offs between objectives where integration is not possible. These negotiations will be greatly influenced by factors such as peace and security, prevailing economic interests, political systems, institutional arrangements and cultural norms. For example, the role of women in shaping policies and actions may be more restricted in muslim countries, and the ability of the public to participate in this process may be more limited under authoritarian systems. There is no blueprint for sustainable development. It needs to be defined to meet and respect the particular needs and circumstances of individual countries, societies and cultures.

Traditionally, societies have attempted to set social, economic and environmental goals, but often in isolation from one another. Thus, nature conservation targets have been set without regard to the goals for economic growth or poverty reduction. The result has been the creation of short-lived 'green islands' in a sea of unsustainability. Decision-makers are now

becoming aware that environmental goals can only be achieved by integrating them into mainstream social and economic policy-making.

Making trade-offs

A pragmatic way of tackling the question: "How best to achieve sustainable development?" is to start with the premise that development intrinsically involves *trade-offs* between potentially opposing goals, such as between economic growth and resource conservation, or between modern technology and indigenous practices. Theses conflicts are often real, but vary according to circumstances. Poverty is often cited as a cause of environmental degradation, but there are many examples of poor societies improving their environment For example, in Karachi in Pakistan, the Welfare Colony of 1000 households has installed its own sanitation system. Similarly, it is often stated that population growth in developing countries is inevitably on a collision course with the resource base. However, there are cases where population growth has been associated with better management of resources (e.g. in the Machakos area in Kenya) . Equally, there is no necessary link between economic growth and environmental damage: the policy challenge is to drive a policy wedge between rising incomes and resource use and pollution, a task that has proved hard to realise in practice.

The aim of sustainable development is thus to optimise the realisation of a society's many and different social, environmental and economic objectives at one and the same time. Preferably, this should be achieved through an adaptive process of integration, but more usually it will require bargains (trade-offs) struck amongst the different interest groups concerned. Critical to this process is the recognition that different perspectives on environment and development are both inevitable and legitimate. There could be, for example, very different environmental priorities between aid donors, recipient governments and the poor of developing countries.

One way of looking at these trade-offs is to take an economic approach and identify the human and natural capital stocks that are needed for development. Explicit policies are required to maintain and enhance our natural capital and the services it provides for development, such as raw materials, freshwater and a stable climate. Within natural capital, distinctions will need to be made between critical stocks, which are irreplaceable and which should not be traded-off against social and economic goals, and those which can be exchanged in return for building up technological capital, thus maintaining constant levels of overall capital stocks.

The participation principle

The question then arises: who should make the decisions on trade-offs ? Here, Agenda 21 calls for the widest possible *participation* in international negotiations, such as UNCED, in national and local sustainable development strategy-making exercises and in project design and implementation. Participation is crucial not only for the effectiveness and legitimacy of actions, but also because of the relative lack of "scientific" tools and indicators which can give policy makers instant answers. Developing and using consensus-building and conflict resolution techniques will therefore be an important element of sustainable development. Much effort is being put into defining indicators of sustainability. But it is very difficult to say what is sustainable; it is far easier to say what is unsustainable. New performance indicators are needed, such as improved "rates of change" environmental indicators, as well as "barometric" indicators of progress towards or away from sustainable development.

National governments are responsible for providing the conditions which both permit and facilitate the necessary dialogue and negotiation between all sectors and interest groups in society. The development of national strategies for sustainable development, called for in

Agenda 21, could lead to greater democracy, encourage an overhaul of institutional arrangements, administrative procedures and legislative frameworks, as well as fostering consensus among different strata and groupings in society. Aid donors can support such home-driven processes in recipient countries by coordinating their activities, by not imposing external models and by refocusing existing investments to bring them in line with national goals for sustainable development.

Why is sustainable development important ?

Note: The following text is drawn from a DFID Key Sheet (DFID 1999)

"Economic inequality, social instability and environmental degradation are common features of unsustainable development. Poor people bear the brunt of these problems because their livelihoods are precariously balanced on volatile economic opportunities and environments vulnerable to change. They lack opportunities for meaningful participation in the decisions that affect their livelihoods. Systems of governance and institutional arrangements can add to this dilemma by reinforcing the influence of certain sectors on decision-making processes.

There can be no lasting development if governments, donors and civil society choose the short term view. To effectively eliminate poverty all aspects of sustainable development should be taken seriously. This means not only focusing on vigorous economic growth, but encouraging economic growth that benefits the poor and is based on sound management of the environment. More specifically, this means creating sustainable livelihoods for poor people.

Only governments can create the right political and economic framework for sustainable development. One part of the framework is effective co-ordination with other stakeholders. Ministries, civil society organisations, industry and donors can often work within their own spheres, without reference or responsibility to each other, inevitably leading to unsustainable policies and programmes. There is a need to build capacity for participatory planning for sustainable development between these organisations.

National strategies for sustainable development (nssds) are a tool to assist countries in overcoming these sorts of problems and start to strengthen their capacity for sustainable development.

> ***Definition***: A national sstrategy for sustainable development is 'a strategic and participatory process of analysis, debate, capacity strengthening, planning and action towards sustainable development.'

Nssd processes offer the opportunity to redress the balance between consideration of economic growth, environmental sustainability and social progress. They serve as a catalyst to assess the success of a country's existing strategies, plans and programmes, to identify constraints to integration of different sector objectives and means of overcoming them. They encourage a process of fair representation for the integration of different priorities into developmental processes.

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