

The Meaning of Sustainable Development

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Abstract: The discussion of sustainable development has frequently proved confusing. Some writers are concerned with the sustainability of the natural resource base, others with present or future levels of production and consumption. Similarly, there are marked differences of opinion over the way in which sustainable development might be achieved. We need to examine the different dimensions of sustainability separately, to consider the kinds of international policies that would be required to achieve them, and the extent to which global solutions are either possible or available. This paper addresses these issues of theory and divergent intellectual tradition, and considers the problems and possibilities of reaching agreement between the countries of the North and those of the South.

Introduction

Sustainable development is a term which is subject to considerable interpretation, depending on the context of the discussion, and the audience for the debate. The discussion of sustainability has revealed some major differences between protagonists, during the 5 years since the Brundtland Commission published its report *Our Common Future*. Today, 'sustainable development' expresses different views of development itself. The absence of any agreement about what 'sustainable development' actually means, still less whether it can be achieved in the real world, does not mean that the concept is useless, but it does mean that its use requires close attention. The idea of 'sustainable development' remains a powerful one, but it raises some awkward questions, which need to be addressed as a matter of urgency. In my view sustainable development still provides a useful point of entry in discussing development and the environment. It can point up areas of convergence and divergence in the discourse about development and the environment, and in the way these processes are understood.

In *Our Common Future* the Brundtland Commission placed the emphasis in sustainable development on meeting human needs, rather than the protection of nature or the biosphere. The best known quotation from the Commission's report speaks of "development which meets **the needs** of the present, without compromising the ability of future generations to meet their own **needs**" (BRUNDTLAND COMMISSION, 1987, emphasis added). Similarly, the report speaks of sustainable development as enhancing "both current and future potential to meet **human needs** and aspirations" (*ibid.*, p. 46). Although the report does not elaborate a theory of human need (DOYALL and GOUGH, 1991) it makes constant reference to the centrality of needs, and the role of the environment in meeting them. Unfortunately this is also the basis of several confusions about social, economic and biological systems, and their inter-relationships, which need to be explored before we can make satisfactory use of the idea of sustainable development.

Ecological Parameters

From within a radical Green perspective what needs to be sustained, in the course of pursuing sustainable

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development, is the natural resource base. This is cogently expressed by REES (1990, p. 18) who argues that "the emerging ecological crisis reveals fatal flaws in the prevailing world-view. Our mechanical perception of the biosphere is dangerously superficial and our continued belief in the possibility of sustainable development based on the growth-oriented assumptions of Neo-Classical economics is illusory." In his opinion the term 'sustainable development' has been stripped of its original concern with ensuring future ecological stability as it has come to be embraced by the political mainstream. In Rees' view it is no longer a challenge to the conventional economic paradigm, but rather a laboured excuse for not departing from continued economic growth.

This view of the primacy of ecological considerations, although given most emphasis in radical Green thinking, is an important component of a broader current of opinion. This tradition concentrates attention on the resource base, and particularly renewable resources, as the 'object' of sustainability. The major threat to the long-term sustainability of the Earth's resources is identified in the key indices of resource degradation, in the loss of soil and water quality, and the inability of the atmosphere to absorb air pollution. The ethical manifestation of this tradition is contained in the idea of 'stewardship', of human societies as merely the tenants of the Earth, holding resources on trust for the future. In more technical terms, this stewardship tradition is concerned with sustainable yields from renewable resources, and in placing emphasis on natural capital stocks, rather than the income flows which these can generate for human populations.

A concern with the sustainable yield of renewable natural resources can lead us to pose questions about the way these resources are used in human societies. Sustainable development, on this reading, requires successful answers to the following questions:

- (1) How can development activities maintain ecological processes (soil fertility, waste assimilation, water and nutrient cycling) and not exceed the capacity of these processes?
- (2) How can development processes conserve genetic variety, in nature and in the laboratory?
- (3) To what degree are renewable resources being replaced? Is the natural capital stock being given

priority over the flows of income which it makes possible?

We might add that, since most natural resources are subject to some form of ownership and management, we need to know who owns and controls the environment, and according to what principles it is managed.

Economic and Political Parameters

Not all advocates of sustainable development regard ecological objectives as having primacy over human commitments. BARBIER (1987, p. 103) argues, for example, that "sustainable economic development is. . . directly concerned with increasing the material standard of living of the poor at the 'grassroots' level, which can be quantitatively measured in terms of increased food, real income, educational services, health-care, sanitation and water supply, emergency stocks of food and cash. . . in general terms, the primary objective is reducing the absolute poverty of the world's poor through providing lasting and secure livelihoods". The emphasis here is very clearly on meeting social and economic objectives, rather than ecological ones.

Other economists writing about sustainable economic development attach even more importance to economic objectives than Barbier. PEARCE (1987), for example, writes that sustainable economic development "involves maximising the net benefits of economic development, **subject to maintaining the services and quality of natural resources over time**" (emphasis added). The priorities are thus reversed: economic development can proceed, subject to the provision of adequate resources for succeeding generations. The emphasis on the human purposes to which sustainability should be dedicated is illustrated even more clearly by BARTELMUS (1987, p. 12) who argues that "sustainable development maintains a particular level of income by **conserving the sources of that income**, the stock of produced and natural capital" (emphasis added). Conservation, on this reading, means more than the conservation of the planet's life-support systems. It also includes the physical infrastructure and services, the 'man-made' capital, that makes up much of the built environment. We have come a long way from radical Green Views of sustainability.

According to these definitions of sustainable development it is not the environment which needs to be sustained, above everything else, but present and future levels of production and consumption. What is required is sustained levels of production, from resources provided by the physical environment, to meet future demand from increasing populations. It should come as no surprise, therefore, that one of the key ethical principles in this view of sustainable development is finding the correct balance between population and consumption, which in its most 'extreme' form takes a Neo-Malthusian position—population provides a constant check on the possibilities to which we can put resources. If the Green perspective, in its radical ecology form, places the onus on us to make fewer demands on the resource base, the economic perspective usually seeks to limit our rapaciousness by limiting the size of our population. Since most Neo-Classical economists look upon the market as the mechanism through which resources are allocated, the economic perspective also seeks to interfere with resource allocation by using market mechanisms, such as carbon taxes, to ensure that the real environmental costs of economic activities are counted.

If we take sustained levels of production to meet present (and future) demand as the key element in sustainable development, we are also led to ask some searching questions of the development process. These include the following:

- (1) Is *per capita* resource consumption declining or increasing, and at what level? (This is a particularly important question given the very different levels of resource consumption, *per capita*, in the North and the South.)
- (2) Is non-renewable energy use (especially fossil fuels) increasing? Is there a significant level of investment in renewable forms of energy use, while the exploitation of non-renewables is being scaled down?
- (3) Are 'cleaner' technologies being transferred from the North to the South, as *per capita* energy consumption rises there?
- (4) Do production statistics measure the environmental costs of resources over their lifetime, or merely at their point of sale? That is, do they reflect utilization values, rather than simply market values?

Again, there are some awkward questions which

must be resolved before we can speak at all confidently about sustainable levels of production to meet future levels of demand. In particular, is future demand to be determined by the existing global distribution of resources and patterns of consumption? If this is the case, then it is unlikely that future development can be sustainable, since present levels of resource consumption in the North are unlikely to be replicated in the South.

Similarly, there are similar questions arising from the nature of human needs, as well as the distribution of the means to satisfy them. Are human needs a 'given', as the Brundtland Commission seems to have assumed? If they are culturally produced, then they cannot be frozen in time and met by economic development. It can be argued that 'development' itself entails the development of 'needs', as well as the means to satisfy them. In other words, how can the needs of the present be defined independently of development, if it is the process of development (initiated by the North, and transferred to the South) which creates and defines needs? We soon find ourselves in a state of some confusion, if we attempt to generalize about needs, and place the responsibility for meeting them with the process of economic development alone. We can begin by looking beyond the economic system to the cultures and values which define our identity.

Sustaining Cultural Systems and Peoples

If we acknowledge the importance of different cultural definitions of 'needs', and the possibility of departing from established historical experience in meeting them, we immediately open up the exciting possibility that sustainable development might be defined by people themselves, to represent an ongoing process of self-realization and empowerment. The 'bottom line', in practical terms, is that if people are not brought into focus through sustainable development, becoming both the architects and engineers of the concept, then it will never be achieved anyway, since they are unlikely to take responsibility for something they do not 'own' themselves.

However, we should also recognize that social, economic and biological systems cannot simply be 'made' more sustainable, without any additional costs. Poor

people often have no choice but to 'choose' immediate economic benefits at the expense of the long-run sustainability of their livelihoods. The central objective of sustainable development, therefore, would be to ensure that the poor have access to sustainable and secure livelihoods. This frequently involves trade-offs between economic and social gains and the conservation of valuable natural environments. Sometimes poor people can be enlisted in projects to conserve the natural environment, but this is not invariably the case. Often the poor are alienated from their environment, or depend for their livelihood on practices which are not sustainable. The environment is frequently an arena of conflicting interests and needs. If the concept of sustainable development is to prove useful it must help us make difficult choices, rather than simply occupy the high moral ground.

Elaborating the Principles of Sustainable Development

Some of the underlying principles of sustainable development are discussed in the second World Conservation Strategy, *Caring for the Earth*, published in 1991. This is an interesting document in that it represents an important departure from the first World Conservation Strategy, published in 1980, which placed emphasis on the need to conserve biological systems, without much attention being paid to the human populations which depend upon these systems. At least at the level of international report writing, the new World Conservation Strategy reflects the spirit of the Brundtland report, in which the social and political institutions responsible for managing the environment assume at least as much importance as the environment itself.

The two key elements in the new strategy underline the importance of global solutions to environmental problems. The first is to recommend reductions in resource consumption in the Northern, industrialised countries. The second element is to assist the developing countries of the South in adopting resource-efficient technologies, which are sustainable, but ultimately dependent on financial and technical support from the North. The report uses definitions of 'development' and 'conservation' which are, ultimately, complementary. Development is defined as "how people meet their needs and improve their lives"

(p. 8) and conservation is about "how people maintain the natural capital from which development can draw the income." Both definitions represent a marked shift from earlier positions: development is no longer seen in exclusively economic, or material terms. The view taken of conservation marks a more radical departure, however. The view now taken is that we need to conserve in order to develop, rather than the reserve. Ten years earlier, in the Brandt Commission's report, for example, the route to better conservation was for poorer countries to get rich, and to stay rich, in order to pay for conservation (BRANDT COMMISSION, 1980).

The following, in summary form, are the eight principles of sustainability set out in the second World Conservation Strategy:

- (1) Limit the human impact on the biosphere to a level that is within carrying capacity.
 - (2) Maintain the stock of biological wealth through: (a) life support services, (b) preserving the variety of life forms, and (c) conserving renewable resources within the capacity for renewal.
 - (3) Use non-renewable resources at rates that do not exceed the creation of renewable substitutes.
 - (4) A more equitable distribution of the benefits and costs of resource use and environmental management.
- (Three key policy areas are identified for redressing inequalities in resource distribution: liquidate the external debt, improve the terms of trade for low-income countries, and improve the transfer of environmentally-sound technologies.)
- (5) Promote technologies that increase the benefits from a given stock of resources.
 - (6) Use economic policy to help maintain natural wealth.
 - (7) Adopt anticipatory and cross-sectoral environmental policies and planning, rather than placing emphasis on *ex post* remedial action.
 - (8) Promote and support cultural values compatible with sustainability, through more attention to environmental education and other cultural perspectives on sustainability.

If these are the principles on which sustainable development might be based, we also need to consider the policy criteria which, in the real world, should govern

the implementation of these principles. These are as follows:

(a) *Priority issues*: The first set of issues are about scale: does the problem occur globally or does it only occur in a small number of places? Second is the question of reversibility: can the damage to the environment be reversed, or rectified? Third, we need to consider urgency: what will happen if action to improve the environment is delayed?

(b) *Priority actions*: Similarly, we need to consider priority actions for sustainable development: likely effectiveness (will it work?), the ease with which the goal of the action is communicated, and the extent to which the people involved are fully aware of the consequences. Practicality: will the people involved undertake the action necessary? Will the action be cost-effective? Do incentive systems exist which encourage poor people to participate? How easily can projects be monitored, and to what extent do they reduce risks of uncertainty for those affected? Has enough thought been given to addressing several problems through one set of policies? For example, the introduction of carbon taxes might prove useful in alleviating several environmental problems, although designed to target one.

The Retreat from Political Economy

It will be clear from what has been written above that there is no consensus about sustainable development, and that differences reflect disciplinary biases, distinctive paradigms and ideological disputes. In my view (REDCLIFT, 1987) there are at least two sets of *contradictions* which soon become evident when sustainable development is discussed.

First, embedded in much of the 'sustainability' thinking is an important difference of emphasis. Some writers view sustainability as a serious issue because nature is a major constraint on further human progress. They are concerned, basically, with the price paid by the conventional growth model if the warnings we receive from the environment, the 'biospheric imperatives', are ignored. The solution, then, is either to develop technologies which avoid the most dire environmental consequences of development, or to take measures to assess environmental losses in a

more realistic way, thus reducing the danger that they will be overlooked by policymakers.

Other writers take a rather different view. For them the principal problem is that 'human progress' carries implications for nature itself, and should cause us to re-examine the 'ends' of development, as well as the means. This view is shared by a variety of people: radical ecologists (GORZ, 1980; BAHRO, 1982; RYLE, 1988), eco-feminists (MERCHANT, 1980) and Deep Ecologists (DEVALL and SESSIONS, 1985). For writers of these different ideological persuasions finding technical solutions to environmental problems, **including ways of costing environmental losses such as those advocated by Pearce and colleagues**, is ultimately self-defeating.

Second, considering 'sustainable development' within a North-South framework requires attention to the contradictions imposed by the structural inequalities of the global system (BRUNDTLAND COMMISSION, 1987; REDCLIFT, 1987). Green concerns in the North, such as alternatives to work and ways of making work more rewarding, can often be inverted in the South, where the environment is contested not because it is valued in itself, but because its destruction creates **value**. In the South struggles over the environment are usually about basic needs, strategies to survive, rather than 'life-styles', and the cost to the individual of pursuing individual self-interest is often carried by the group or collectivity (the basis of the 'tragedy of the commons' argument). There is no point in appealing, under these circumstances, to idealism or altruism to protect the environment, when the individual and household are forced to behave 'selfishly' in their struggle to survive.

In Chap. 3 of *Blueprint for a Green Economy* PEARCE *et al.* (1989, p. 52) argue from a declared interest in environmental quality that environmental improvements are equivalent to economic improvements "if (they) increase social satisfaction or welfare". Their resolve is to demonstrate to economists that there are economic costs in ignoring the environment. This is the position I outlined above, and the position which is growing in influence within international development agencies, such as the World Bank, the United Nations agencies and the Overseas Development Administration. It has become, within

a short space of time, almost synonymous with environmental management in many people's estimation.

One of the problems with this position is that it works better for developed than for developing countries. As the tables in Chap. 3 of PEARCE *et al.* (1989) demonstrate, there is widespread popular concern about the environment in the developed countries, where environment quality is often placed before economic growth in surveys of public opinion. In their work most Neo-Classical economists use the 'willingness to pay' principle (PEARCE *et al.*, 1989, p. 55) as a means of assessing environmental costs and benefits. Pearce argues that the emphasis in environmental policy should be shifted towards this principle to avoid future, anticipated damage to the environment. It is not difficult to appreciate some of the difficulties when we consider developing countries. In developing countries the creation of value is linked to **sacrificing** environmental quality rather than improving environmental quality, because the cumulative effects of economic growth on the poor are so often negative. In an area of tropical forest (Choco), currently a Biosphere Reserve on the Colombian coast, which I visited with officials from the Colombian Environmental Agency (INDERENA) in October 1988, men involved in (illegal) forestry operations whom we met were being paid U.S. \$10 per a cubic meter for cutting hardwoods. The forested area lies adjacent to the Pacific Ocean, and illegal forestry operations meant that people were, literally, risking their lives to cut this wood. This involved taking a small boat into dangerous coastal waters to find suitable forest, and 'catching the tide' by navigating the Pacific Ocean for 5 hr at a time before returning to the port of Buenaventura. If one man did not cut the wood others would cut it.

The implications of these facts are important for the methods we use to assess environmental costs. In this case the revaluation of tropical forest, to include the environmental costs of unsustainable activities, would do little to prevent forest destruction, although it might highlight the scale of the problem. Colombia's foreign debt, enables transnational companies like **Carton de Colombia**, which bought the hardwoods in the Choco, to pose as national saviours, rather than national vandals. (This corporation was active in sponsoring environmental meetings!) There

are also reasons for refusing to overlook the highly unequal context of landholding which forces poor men and women to colonise the tropical forests, and other untitled land. In situations like that of tropical Colombia we need to specify greater equity, or the reduction of poverty, as a **primary objective**, before the question of environmental poverty can be fully addressed.

Equity considerations, in this context, are not a minor element in total utility, as PEARCE *et al.* (1989, p. 48) suggests but the driving force behind indiscriminate resource degradation. The discussion of sustainable development should not be confined to an assessment of environmental and economic 'trade offs', for to do so implies ignoring other essential points of reference, including the regional and national political economy of resource use. It also tacitly endorses a highly ethnocentric, and 'North'-biased, view of the development process. It fails to take seriously the integrity of other cultures, and their view of sustainability.

The Multiple Dimensions of Sustainable Development

To establish an adequate conceptual framework within which to explore the idea of sustainable development we need, then, to identify the multiple dimensions of the concept. There are three dimensions which require our urgent attention: the economic, political and epistemological dimensions.

The economic dimension

As we saw in the discussion of environmental accounting, much of the economic argument has been conducted at the level of present and future anticipated demand, assessing the costs in foregone economic growth of closer attention to environmental factors. It was John Stuart Mill, in his *Principles of Political Economy* (1873), who emphasized the idea that we need to preserve Nature from unfettered growth if we are to preserve human welfare before diminishing returns begin to set in. With hindsight we can appreciate the full significance of Mill's observations.

This tradition, what we would identify today as part of the alternative, sustainable tradition of thought, was largely opposed to the views of most orthodox economists, who either followed Malthus or, later, Ricardo. The Malthusian tradition emphasised the importance of the ratio of population to natural resources, and has given rise to a 'population ethic', espoused by Neo-Malthusians like HARDIN (1968). In contrast, the Ricardian tradition, which has been at the centre of economics this century, took a much more 'optimistic' view of the relationship between economic growth, populations and resources. The optimistic Ricardian view was that, following the promethean spirit, human ingenuity and the advances of science were capable of 'putting back' the day of judgment, when population would begin to overtake resources. This optimism was shaken, but not essentially destroyed, by the publication of *Limits to Growth* in the early 1970s (MEADOWS *et al.*, 1972).

The political dimension

The political dimension of sustainability comprises two separate, but related, elements: the weight to be attached to human agency and social structure, respectively, in determining the political processes through which the environment is managed; and the relationship between knowledge and power in popular resistance to dominant world views of the environment and resources. In both cases it is useful to draw on a body of emerging social theory, which has evolved and gained currency while environmentalism has risen to prominence.

The problem of human agency in relation to the environment is well recognised in the literature, especially by geographers (O'RIORDAN, 1989). It is also a central concern of sociologists, although rarely linked to environmental concerns *per se*. The British sociologist Anthony Giddens has devoted considerable attention to what he describes as a theory of 'structuration', which would enable us to recognize the role of human beings within a broad structural context, in seeking to advance their own, or group, interests (GIDDENS, 1984). GIDDENS (1984, p. xxii) notes that "human agents . . . have as an inherent aspect of what they do, the capacity to understand what they do while they do it". It is their

knowledgability as agents which is important. Although Giddens does not apply his ideas specifically to environmental questions, they have clear utility for any consideration of the political and social dimensions of sustainability.

An examination of the way power is contested helps us to explain human agency in the management of the environment, as well as the material basis of environmental conflicts. In this sense it is useful to distinguish between the way human agents dominate nature—what we can term 'allocative resources' (GIDDENS, 1984, p. 373)—and the domination of some human agents by others—'authoritative resources' in Giddens' phrase. Environmental management, and conflicts over the environment, are about both processes: the way groups of people dominate each other, as well as the way they seek to dominate Nature. Not surprisingly the development, or continuation, of more sustainable livelihood strategies carries important implications for the way power is understood between groups of people, as well as for the environment itself. The 'Green' agenda is not simply about the environment *outside human control*; it is about the implications for social relations of bringing the environment within human control.

The second question of importance in considering the political dimension of sustainability is the relationship between knowledge and power, a dimension often overlooked by observers from developed countries when they turn their attention to poorer societies. As we shall see in a moment, the consideration of epistemology in sustainable development carries important implications for our analysis, since it strikes at the cultural roots of quite different traditions of knowledge. It is also important to emphasise, however that knowledge and power are linked, as Foucault observed in much of his work (SMART, 1985; SHERIDAN, 1980). We can, following Foucault, distinguish three *fields of resistance* to the 'universalizing' effects of modern society, and these fields of resistance are particularly useful in delineating popular responses, by the rural poor in particular, to outside interventions designed to manage the environment in different ways.

(1) The first type of resistance is based on opposition to, or marginalisation from, production relations in rural societies. This is resistance against *exploitation*,

in Foucault's terms, and includes attempts by peasants, pastoralists and others to resist new forms of economic domination, which they are unable to control or negotiate with.

(2) The second form of resistance is based on ethnic and gender categories, and seeks to remove the individual from *domination* by more powerful groups, whose ethnic and gender identity has conferred on them a superior political position. In many cases the only strategy open to groups of people whose environmental practices are threatened by outsiders, and whose own knowledge, power and identity is closely linked with these practices, is to seek to distance themselves from 'outsiders' by, for example, reinforcing ethnic boundaries between themselves and others.

(3) Finally, poor rural people frequently resist *subjection* to a world view which they cannot endorse, in much the same way as people in developed countries often have to confront 'totalising' theories, such as psychoanalysis or Marxism. In developing countries the development professionals frequently have recourse to a body of techniques for intervening in the natural environment, which are largely derived from developed country experience: 'environmental managerialism' is one way of expressing these techniques. The refusal to be subordinated to a world view dominated by essentially alien values and assumptions marks what Foucault termed resistance against subjection. In no way is it implied that resistance can be equated with political struggle, whatever the basis of the resistance itself. Frequently people who are relatively powerless, because their knowledge-systems are devalued, or because they do not wield economic power, resist in ways which look like passivity: they keep their own counsel, they appear 'respectful' towards powerful outsiders, they simply fail to cooperate.

The epistemological dimension

Sustainable development is usually discussed without reference to epistemological issues. It is assumed that 'our' system of acquiring knowledge in the North, through the application of scientific principles, is a universal epistemology. Anything less than 'scientific knowledge' hardly deserves our attention. Such a view, rooted as it is in ignorance of the way we ourselves think, as well as other cultures' epistemology, is less than fruitful. GOONATILAKE (1984)

reminds us that large-order cognitive maps are not confined to Western science, and that in Asia, for example, systems of religious belief have often had fewer problems in confronting 'scientific' reasoning than has the Judaeo-Christian tradition. The ubiquitousness of Western science, however, has led to traditional knowledge becoming 'fragmented knowledge' in the South today, increasingly divorced from that of the dominant scientific paradigm. This observation echoes contemporary 'Green' thinking, too: in his conversation with Capra, Schumacher noted that "because of the smallness and patchiness of our knowledge, we have to go in small steps. We have to leave room for non-knowledge" (CAPRA, 1988, p. 230).

The philosopher Feyerabend, in his influential book *Farewell to Reason*, has distinguished between two different traditions of thought, which can usefully be compared with 'scientific' and 'traditional' knowledge. The first tradition, which corresponds closely to scientific epistemology he calls the *abstract tradition*. This enables us "...to formulate statements only in accordance with the rules (of logic, testing and argument) and events affect the statements only in accordance with the rules. ... it is possible to make scientific statements without having met a single one of the objects described" (FEYERABEND, 1987, p. 294). He gives as examples of this kind of tradition, elementary particle physics, behavioural psychology and molecular biology. In contrast the kinds of knowledge possessed by small-scale societies, in particular, Feyerabend would label as *historical traditions*. In these epistemological traditions "...the objects already have a language of their own. ...": the object of enquiry is to understand this language. In the course of time much of the knowledge possessed by people outside mainstream science, especially in developing countries, becomes encoded, in rituals, in religious observations, and in the cultural practices of everyday life. In societies which make an easy separation between 'culture' and 'science' such practices can easily be ignored, although they are frequently the key to the way environmental knowledge is used in small-scale rural societies.

Conclusions

This paper has sought to extend our definition of 'sustainable development' by enlarging the compass

of debate, and considering the dimensions of sustainability which usually lie outside the parameters of most Northern environmental policy intervention. As such it represents little more than a small beginning, although there is evidence that more urgency is currently being given to the links between environmental knowledge, political processes and the management of resources (McNEELY and PITT, 1985; IUCN, 1990; NORGAARD, 1985). We have seen that the environmental discourse being promoted by development agencies today does represent an improvement on the past, but at the same time fails to take adequate account of both international (structural) and cross-cultural factors in sustainable development. By enlarging the discussion it is hoped that we can begin to get at the texture of 'actually existing' sustainable practices, and thus make more qualified decisions about the direction that future policy should take.

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