PROCESS AND PROSPECTS FOR SUSTAINABLE DEVELOPMENT WITH ENVIRONMENTAL CONSIDERATION

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ABSTRACT

Our natural heritage in the form of environmental resources such as forests, quality of soil and ground water, fish in the ocean and lakes, and the wildlife we see today in Tanzania, have been transferred to us because our ancestors. Otherwise they would have depleted, destroyed or simply degraded them before they died. So in order to transfer this natural heritage to the children of our children, it is expected that the present generation should equally show sympathy to the future generation by refraining from destroying the environment. The correct way to achieve this is to plan with the people.

This paper sets out to show that there is no absolute definition of sustainable development. What maters more are the conditions for sustainable development. Sustainable development in environmental terms is the ability of local people to continue and build on project activity when external inputs have ceased. This can only occur where there is full participation and collective action of local people. And, that to obtain their participation there is a planning process to be followed if high prospects for sustainability are to be released.

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INTRODUCTION

This paper is an attempt to show that meaningful discussion on sustainable development can only be made if clear distinction is made between the term "development" and "sustainable development". Therefore the paper sets out to present controversies on definitions on development and sustainable development and eventually presents an example on how development can be sustained.

BASIC DEFINITIONS

The general consensus about sustainable development is that it is complex and contested concept (Pretty 1995, Pearce et al 1990). The complexity hinges on the word development. Development has become a household word but it means different things to different people. For instance, to economists development means economic growth i.e. an increase in goods and services produced in a country (Seidman 1974). To environmentalists development means exploitation, conservation and management of natural resources in order to protect environment (Saree 1991). To social planners development implies putting the last first i.e. improving access to services such as education, health, justice, human rights, equity and peace (ILO). Politicians development means democracy i.e. empowering people to make decisions on matters that affect their lives democratically (Toulmin, 1994); and so on.

It is this controversy in defining development that has brought about confusion also in defining sustainable development because sustainable development seems to be two sides of the same coin. This controversy is born out of differing values, priorities and goals. Everyone assumes that development must be sustainable, But they differ in the interpretations of conditions and assumptions under which

this can be made to occur. (1) Sustainable development therefore has no concrete defined set of technologies, practices and policies. So as conditions, knowledge, and technology change, so must communities be encouraged and allowed to change and adapt too (Pretty 1995). What does this tell us. It means that sustainable development must also change. For instance Pretty (1995:12) asserts:-

> "Sustainable development is not a single model or package to be emulated from one place to another. It is more a process of learning".

Likewise, Pearce et al (1990) cautions readers not to confuse definition of sustainable development with the conditions for achieving it. For they contend that sustainable development is the maintaining and improving the existing levels of environmental assets. For example where practices cause soils to erode these can be considered to be unsuitable relative to those that conserve soil. Planting trees is clearly, more sustainable for a community than just cutting them down. In the following section a representative sample of definitions will be presented in order to highlight the main point of complexity concerning different conditions. Since the Brundtland Commission (1987) defined the concept of sustainable development there has been considerable discussion about what the concept really means. More than seventy (70) definitions have been recorded (Pretty 1995). Some specify what is being sustained, for whose benefit and at what cost. Others are time specific and place specific. And yet others define criteria on which the concept is measured and the conditions in which sustainability has managed to be achieved. The Brundtland Report defines sustainable development as:-

> "development that meets the needs of the present without compromising the ability of the future generation to meet their own needs".

What Brundtland report asserts is that sustainable development must address the issue of poverty because poverty increases pressure on the environment. In the poorest agriculture dependent economies, as poverty prevail, environmental assets are degraded to obtain immediate food supplies. As environment degrade, the prospects for future livelihood decrease.

As stated above some definitions are place specific. For instance, in ASAL (Arid and Semi-arid Lands) countries like the Sahel areas, sustainable development takes a different facet from Wetland or those in tropical forests. In the Sahel, maintaining the output of agriculture on a sustainable basis involves conservation of soil and water by enhancing vegetation cover (1). Here sustainable development is supported to mean regenerative process of the soil fertility by using resource conserving technologies and practices. Soils in the areas have been degraded by poor farming practices, the vegetation cover is stripped by overgrazing leaving the surface exposed to wind and water. Soil nutrients have been removed as crops are harvested or soils washed away by heavy surface run off. Therefore, sustainable development in such areas will definitely take a different dimension compared to other geographical areas such as the Wetland or the tropical forest areas.

In the Amazon forest area sustainable development involves saving the tropical forests by rehabilitation of damaged ecosystems in the areas (3). Whereas in the Wetlands sustainable development means off setting the physical loss and degradation of Wetlands by habitat reconstruction,

habitat transplantation, and habitat restoration (4). The attempt here is to recreate appropriate habitats related to biogeographical region, i.e. by exploiting, replenishing, improving and renewing the degraded habitats.

Other writers who tend to see sustainable development as time specific include J.A. Dixon, D.E. James, and P.B. Sherman (1989) who define sustainable development with reference to ecology as:-

> "the continue physical productivity of a resource over time".

The author agrees with those who contend that precise and absolute definitions of sustainable development are difficult to obtain But also agrees that sustainable development must show persistence and capacity to continue into the far future. Having concurred so, the author defines sustainable development as the ability of the local people to continue and build on project activity when external inputs have ceased. Such a qualification takes a futuristic view aimed at making development achievements last far into the future.

Planning with the People

Planning with the people is a process of empowering the hitherto disadvantaged groups to identify their problems, to analyze them, to find solutions and to implement accordingly. It may be easy to know the country's wants and needs now, but to predict of the future may not be easy. However, in planning one needs vision. To be able to foresee the future consequences of the options taken today.

Planning is not only concerned with picking suitable choices that will shape the future, but it also involves securing their implementation and continuity. Implementation can only be

done if resources are available and continuity can be guaranteed if local people - the implementors - are involved and have continued interest in what is being planned. There is no use of having a so called "good plan" if it remains on drawing board without being implemented. We can therefore advance the debate by defining that planning consists of making choices among alternatives to shape the future and allocating necessary resources, especially human resource, to implement the chosen alternative. But why make choice? For whom is the choice made? Planning would be meaningless if it weren't directed at some end product. And if its process were not clear. The next section highlights how the planning process ought to take place.

Process and Prospects

The main hypothesis in this paper is that a transition to a more sustainable development will not occur without the full participation and collective action of the rural people i.e. the target group. The traditional way of securing local participation used by national and international institutions is through motivation or incentives (5). Incentives like tools, money, clothes, etc. blind people to the need for solving their own problems. People become accustomed to free offers and come to expect them. Besides, such a method is expensive and hides peoples opinions to programme efforts. People become afraid to criticise even where they see things go wrong for fear of losing incentives. On the other hand, governments and NGOs prefer incentive approach to any other method because they are faster. They win over more people very quickly. However, development of sustainable projects that ignores existing local participation is likely to kill local groups and may pose a serious threat to project continuity.

The process for a participatory approach is "give and take". Innovators have a tendency to offer ready made answers to target groups. Participatory approach encourages discussions. In so doing innovators and target groups exchange information, innovators get a chance to know their clients, respect their views and learn from them, share their problems and fears and then bridge existing gaps.

The discussion stage entails problem identification. This is the stage where innovators and target groups need to satisfy themselves that they are aware of the problem and see the need to work out solutions.

The second stage is to analyse the problem. Let the group clearly state the nature, causes and effects of the problem.

For instance, the nature of problem could be lack of firewood in a village caused by overpopulation, cutting down trees etc. and the effect of the problem could be "use of poor quality of firewood". The third state would be to attempt find solutions. Here members could be asked to enumerate possible solutions, their costs and benefits. The fourth stage would be implementation of the solutions. Let the group decide on implementation process that in their view will lead to the problem being solved. For example members may agree to plant trees for firewood. At this point the innovator needs to distribute seedlings and encourage each member to go home and plant. Where and how they plant is what the innovator needs to learn from them (6).

At the implementation stage several things need to be done. The paramount one is to encourage the formation of local groups. The success of sustainable development depends not just on the motivations, skills and knowledge of individual participants but on action taken by groups or community as a whole. Community based action through users groups is

required for continuity of any project. One way of forming such groups is to start with limited number of tasks. Groups starting with too many tasks tend to do them poorly and so cease to function. For example in a village one could have a group dealing only with animal husbandry, a second group with vegetable gardening, third with tree planting, a fourth with farming and so on i.e. it is important that each group specialises in one economic area before taking on other tasks.

A success story of where community based action with the help of motivators have brought better leadership and continuity is the Dodoma Regional Lands Development Office (Ardhi Dodoma) in cooperation with the Netherlands Development Organization (SNV). DLUMP, although intended to spread to other villages, is now operating in two villages: Mzula and Ilolo. The villages lack arable land, soil fertility and suffer from soil erosion (7).

The aim of the project is to prevent further desertification in both villages via land use planning and management to enable people to improve their soil ad water conservation practices and to optimize their use of natural resources in a sustainable development way. In 1993 three experts Mr. Lerie of Ardhi Institute, Professor I. Kikula of the University of Dar es Salaam and Mr. Mwaiselage of Ardhi Institute were appointed by SNV in cooperation with the DLUMP coordinating staff and the Royal Netherlands Embassy to evaluate the project

One of the terms of reference was to evaluate how participatory approach was used in the project. The evaluation team came to the conclusion that participation by villagers in the project was satisfactory. The areas into which villagers were involved are in designing Land Use Plans, plot demarcation, prevention of clearing forests in the hilly areas, and other areas affected by gully erosion, contour farming,

mulching, crop rotation and mxed cropping, leaving crop residues on the soil surface to improve soil organic matter content and the introduction of a team of Land Use Planning Committee sufficiently trained and worked participatory to supervise project activities.

The evaluation team thereafter recommended that the project in Mzula and Ilolo, be expanded to other villages in Mvumi Division because in their view the project is sustainable. Their arguments were that the project has been accepted by the villagers, and therefore the activities are likely to continue even after SNV have left.

For the past six years, the results have been remarkable. No more cattle graze willy nilly. The conserved hills of Chikanga, Mawinjiro, and Chiloloma are covering by their natural growth of trees. Tree cutting, hillside farming and bush fires have stopped after the villagers decision to conserve the hills and impose by-laws. 35 farmers of Mzula who constructed contour bunds and/or used insitu composting farming reported higher yields per unit area compared with previous seasons. Continuity of the project into the future is possible because the villagers are determined never to revert to former practices, they own land titles (33 years title) and have demarcated and enclosed individual plots.

CONCLUSIONS

This article has attempted to identify problems related with defining sustainability. The principle goal of sustainability is continuity of development into the future. Although the author insists that definitions will always depend on the discipline of the writer, the conclusion is that definitions should not be confused with conditions of sustainability.

With that caution in mind the author defines sustainable development as the ability of local people to continue and build on project activity when external inputs have ceased

Secondly, it is the contention of this article that sustainability will be better attained if local groups or action is involved throughout the planning process to maintain continuity into the future. The article has cited DLUMP as an example where sustainable development has been possible. One lesson which can be learnt from the DLUMP experience is that local people must be well organized.

They must first accept a given project, build their confidence, encouraged to form new groups which are likely to continue activities after project completion. Above all, the process of establishing and/or supporting self reliant groups must include efforts to focus on building/local resources, local skills, local interests and local capacity.

FOOTNOTES

1. A quotation by Francis and Hildebrand (1981) cited in Pretty (1995) pg. 11

2. For further information see Pretty (1995) pg. 31

3. A definition given by Greenberg and Gradwohh (1988) saving the Tropical Forests, Earthscan Publication, London.

4. See Kerry Turner (1990) Wetlands; market and intervention failures. Earthscan Publication, London.

5. For further information see Dixon et al (1989) pg. 115

6. See Wakundah. J.M. (1993) Agroforestry Extension Methods. The School Extension Programme. Experiences of KWDP/KWAP: Kenya Published by ETC Kenya Consultants B.V.

7. For further information see Dodoma Land Use Management Project (DLUMP) Annual Report 1994 and 1996.

BIBLIOGRAPHY

1. Darkoh, M.B.K. (1994) Population Environment and Sustainable Development. UNEP Publication.

2. Ghimire, B.K. (1993) Linkages between Population, Environment and Development UNRISD, Geneva.

3. Hentati, A. (1984) Taking Effective Action. Our Planet Vol. 6, No. 5, UNEP.

4. Pretty, J. et al (1995) Regenerating Agriculture, Policies and Practices for Sustainability and Self Reliance. Earthscan Publication. London.

5. Pearce et al (1983) Sustainable Development.

6 Redcliff, M. (1984) Development and the Environmental Crisis, Red or Green Alternative. Earthscan Publication. London.

7. Serve, P. and Smith (1991) One World got One Earth: Serving the Environment. Earthscan Publication. London.

8. Seidman, A. (1969) An Economics Textbook for Africa. Methuen & Co. Ltd. London.

9. Turner, K. (1969) Wetlands. Market and Intervention Failure. Earthscan Publications. London.

10. Toulimin, C. (1995) Empowering the people. Our Planet Vol. 6, No. 5 UNEP Magazine.

11. Brundtland Report.

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