

# SOME STRATEGIES TOWARDS SUSTAINABLE DEVELOPMENT

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Achievement of sustainable development is at the very forefront of development objectives, as we approach the close of the 20th century. Despite many efforts by global and international agencies to motivate and convince developing countries to adopt policies and other necessary measures, the goal of sustainable development will, no doubt, remain one of the greatest challenges for many years through the next century. The complexity and severity of social, economic and cultural issues faced by developing countries will demand a more meaningful and rational definition of sustainable development and for a feasible set of policies and actions to be pursued. Such policies and actions must be affordable and acceptable to the country concerned since there is no single model of sustainable development that could be replicated.

A desirable level of development, one may argue, would be the attaining of a higher rate of economic growth and maintaining it over a fairly long period. Higher economic growth requires productive resources in larger quantities. The higher the utilization of resources, it is averred, the greater the possibility for environmental damage. An ideal situation would be aiming at an ecological balance compatible with maximum economic efficiency.

By development, a country expects to achieve a relatively high rate of growth and a better quality of life for the people. Quality of life can be determined as the level of achievement in terms of several basic factors such as health, education, life expectancy, infant mortality, morbidity, and living environment. A desirable quality of life, once achieved, should be sustainable over a fairly long period of time. From a layman's viewpoint, sustainable development could be the level of development that ensures the continuous supply of goods and services to the satisfaction of man. However, sustainable development has not been defined in so simple a manner as this.

The concept of sustainability rests basically on resource consumption or utilization. Many world organizations view sustainable development in terms of a time scale and wish to describe it as economic development which does not decrease the total stock of natural resources in a particular area or region. A recent FAO definition is more complex than ones that preceded it. An FAO Council Document of 1988 states:

"Sustainable development is the management of the natural resource base and orientation of

the technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such development conserves land, water, plants, animals, and other genetic resources and is environmentally non-degrading, technically appropriate, economically viable, and socially acceptable".

This paper attempts to examine briefly the different perspectives, and to identify key areas of focus in the formulations of policies and strategies for sustainable development in developing countries, keeping Sri Lanka particularly in view.

Development is the output of many economic activities which transform resources into goods and services. Resources going into production, in the context of our theme are grouped into two main categories, i.e. natural capital (water, soil, forests, minerals etc.) and man-made capital (roads, electricity, irrigation channels etc.) Exhaustibility and non renewability are two major characteristics of natural capital and it is these characteristics that motivated a few intellectuals in the West to advocate sustainability to the rest of the world,

which they did, in 1987, in "Our Common Future".

For us in the developing world, development itself is a precondition for sustainability. Development or economic growth requires productive resources in large quantities over a fairly constant period of time. The continued extraction of natural resources will result in their gradual depletion or degradation. On the other hand the process of production may also contribute to environmental pollution by way of various effluents, emissions, of residues.

At the global level, conservation, in other words, conservation of the earth's resources, it has been argued, is a pre-requisite for sustainable development. However, it may be unfair to expect from developing countries a restriction in their consumption of these resources, when their per capital share of consumption is already at the very bottom of the scale. But yet, the validity of this concept of sustained development cannot be dismissed since developing countries will benefit the most by implementing conscious measures aimed at conservation.

The options available for sustainable development are many. Agenda 21 proposes a series of recommendations covering almost all areas of the socio-economic political spectrum. As a pragmatic approach, this paper identifies 4 areas needing careful assessment and briefly discusses some of the actions to be pursued by way of policy and strategy. These are resource conservation, sound technology, public awareness, and integration of environment into planning.

### 1. Resource Conservation

Development activities involve utilization of natural resources, both renewable and non-renewable. In the process of production, these resources are subject to depletion or

reduction. Conservation is understood to be the utilization of resources without waste, and by recycling, or by substitution. Through all those methods, the carrying capacity of a given natural resource will be lengthened, making it available for a longer time, and indeed for future generations as well. Therefore all possibilities for resource conservation must be given serious consideration in the context of Sri Lanka, a country possessing limited natural resources but with a relatively large and dense population.

From an economic view point, conservation of resources is effectively ensured only by maximizing their efficient use. Theoretically, maximising efficiency in production and allocating resources under a system of perfect competition will ensure conservation. However, in economies where market distortions are created through government intervention, it would be misleading to claim that conservation could take place through a mechanism of efficiency maximization.

From the practical management view point, conservation, when applied as an action strategy, could bring about a range of positive results. It will prevent wasteful use of natural resources, reduce environmental stress from over-exploitation or over-extraction, save resources for prolonged use allowing economic activities to be carried out in a viable manner- all of which lead to sustainable development. For Sri Lanka, where the major part of economic activity is concentrated on the primary sector, pursuing a policy of conservation may be viewed with scepticism. For example, in the case of the rural marginal farmer, he would want to exploit as much land as possible to earn enough to feed his many children. As he is poor he will not be able to increase the efficiency of his farming by investing in the

necessary inputs. His farming methods will also not be very efficient and his output will be low. Such a farmer may not be convinced that conservation is meaningful or acceptable.

A similar situation could be seen in the secondary sector too. The macro-economic policies pursued in favour of rapid industrialization and the uninhibited drive to maximise profits will lead to over exploitation of resources. Furthermore, the adoption of obsolete and inefficient technologies, which is quite common, will result in severe environmental pollution by way of industrial waste, effluent, emissions etc. These create an unhealthy living environment posing a threat to the general well-being and the quality of life of the people.

The strategies to be pursued towards sustainable development need to identify more telling measures which are also acceptable to mobilize both producers and consumers towards conservation. Reduction of waste, substitution, and recycling are three measures that could be pursued towards conservation.

Substitution could be advocated where resources are already diminishing. For example, in the construction industry, cement, timber, etc. could be substituted by other suitable materials. Recycling could also be an area that needs to be encouraged through attractive incentives. These measures will contribute towards a substantial saving of resources, increasing both efficiency in their use and their life span. Overall conservation policies need to be embodied in all sectoral development plans, particularly in sectors like agriculture, industry, construction, and energy, with suitable public policies to support action.

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## 2. Sound Technology

The type of technology used for the production of goods and services is another crucial area in sustainable development. Sound technology is synonymous with appropriate technology or, as it popularly known in environmental circles, environmentally friendly technology.

Many environmentalists in the West put the blame directly on modern technology for environmental damage such as global warming and ozone depletion. It is observed that, over the past few years, there has been an appreciable consumer response to the call for self-restraint in the consumption of goods and services which produce negative environmental effects. Recycling, reusing and refraining totally from use, are some community supported

measures adopted towards this end. A similar trend could be observed in agriculture related areas too. Demand for fruits and vegetables grown under organic farming methods is on the increase as against fruits and vegetables grown with the application of chemical compounds as fertilizer, pesticides etc. Surely these are slow but steady measures towards sustainable development.

For us in the developing world, economic viability and social acceptability are major criteria to look for in sound technology. Some modern technologies which are classified as economies of scale may not be viable if the country concerned does not have adequate stocks of natural resources as raw materials. Some countries may not possess the advanced know-how or expertise

to handle sophisticated technologies. For some countries, labour intensive technologies could be the most appropriate and advantageous. These are some crucial factors that need to be taken into consideration when deciding on sound technology options. Moreover, these factors must be fully assessed and evaluated in setting sustainable development targets, priorities, and modalities.

Many countries in Asia have acquired a lot of experience in innovating appropriate technologies. These countries support technology oriented environmental studies and strategies for development activities dealing with major sectors, particularly, agriculture, energy and industry.

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