



University of Moratuwa, Sri Lanka.  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)


## CHAPTER ONE

## **SUSTAINABLE DEVELOPMENT.**

Present day the notions of sustainable development has become a popular concept all around the world. It has become a more fashion rather than its proper use among the professionals. This is because of the lack of identification and definition of the sustainable development.

### **1.1. Introduction to Development.**

Development is usually defined in terms of economic growth. When countries experience increased growth in economic sectors and expansion of their productive capacities they experience “development”.

When we speak about development, development is often confused with growth, growth conveys the idea of physical or quantitative expansion of the economic system.  By contrast development is a qualitative concept incorporating notions of improvement and socio-economic as well as environmental dimensions.

The development of human beings could be also considered as the social and economic upward mobility of the society.

When considering development the immediate question which arises is to what extent the development can be measured?. The most familiar indicator of development is the Gross National Product (GNP) of the country. GNP statistics record the productive utilization of resources, whether or not these resources are renewable. Moreover, if productive activity is associated with the costs of economic growth through pollution control, for example, this is also entered under GNP. Deforestation, bringing with it a loss of resources is usually treated, for example as a net contribution to capital growth (Pearce 1986). From an environmental standpoint, then GNP is particularly an inadequate guide to development since it treats sustainable and unsustainable production alike and compounds the error by including

the cost of unsustainable economic activity on the credit side, while largely ignoring processes of recycling and energy conversion which do not lead to the production of goods or marketable services.

In this situation, we have to incorporate the notions of sustainability, when we speak about development.

## 1.2. Concept of Sustainability

Sustainability is not entirely a new concept. It could be seen in the practices of many traditional societies even today.

Sustainability could be defined as “Meeting the basic needs of all extending to all the opportunities to satisfy their aspirations for better life.” (Brundtland 1989) For many people, growing affluence has made luxuries into needs; Yet the least well off are unable to attain basic necessities, let alone satisfying their modest aspirations.



University of Moratuwa, Sri Lanka  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

As a goal, the sustainable approach is a concept of enormous persuasiveness as well as of increasingly recognized validity. It seeks to merge and thus to resolve the apparently competing goals of economic growth, socio-cultural continuance and ecological balance. (UNCHS, 1990 : v)

The sustainability of any civilization depends on how the resources are utilized, the sustainability of the environment, this becomes central to both growth and economic development, while business, agriculture and industry have responsibilities to sustain the environment. Consumers also have a responsibility to efficiently utilize resources and conserve the environment for future generations. All actions or omissions of consumers have an impact on the sustainability of the environment.

### 1.3. Definition for Sustainable Development.

“Sustainable Development” has become a key term during the last few years in many fields both at National and International levels.

“Before that, world redefined open rural development, Integrated Development, Urbanization and Industrialization for progression. But now it is accepted that all these have to be done within the frame work of Sustainable Development.” (Chandrasekara,1996:13)

Meaning of sustainable development is elusive because the concept is vague and complex. Its vagueness encourages environmentalists, politicians ,architects among many to claim to be pursuing sustainable goals. Its complexity stimulates a wide range of potential definitions which can be used to support divergent objectives.

According to Brundtland, sustainable development is “Path of human progress which meets the needs and aspirations of the present generation without compromising the ability of future generations to meet their own needs.” (Brundtland 1989)

Brundtland (1987) also state that “ Sustainable development does not imply a fixed state It is a process of change in which economic and fiscal policies, trade and foreign policies energy, agricultural and industrial policies all aim to induce development path that are economically socially and ecologically sustainable”.

For long term sustainability the development proposals should be:

- a. Technically feasible
- b. Economically viable
- c. Socially desirable
- d. Politically acceptable , and
- e. Environmentally friendly.

In conventional terms, the concept of sustainable development encompasses;

1. Help for the poorest, because they have no option but to destroy their environment.
2. The idea of self-reliant development, within national or local boundaries and within natural resources constraints.
3. The idea of cost-effective development, but often on different, time scales to traditional economic criteria; that is to say development should not degrade environmental quality. How should it reduce productivity in the long run.
4. The great issues of health control, appropriate technologies in food, self-reliance, clean water and shelter for all.
5. The notion that people-centered initiatives are needed; human beings are the resources in the concept.

The call for sustainable development in Agenda 21 is not simply a call for environmental protection. Instead, sustainable development implies a new concept of economic growth - one that provides fairness and opportunity for all the world's people not just the privileged few, without further destroying the world's natural resources and without further compromising the carrying capacity of the globe. Sustainable development is a process by which economic, social environmental, fiscal, trade, agricultural and industrial technological policies designed and are mutually supportive in such a way as to bring about development which is economically, socially and environmentally sustainable. ( fig:01) This is the message of Agenda 21 of United Nations and is reflected in its structure and logic.

The Agenda 21 also states that “sustainable development” will not be achieved by accident but must be consciously planned and worked for at all levels from the international to local.

The world Commission on Environment and Development (WCED) has defined sustainable development as “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 potentials to meet human needs and aspirations” (Brad, 1990:33)

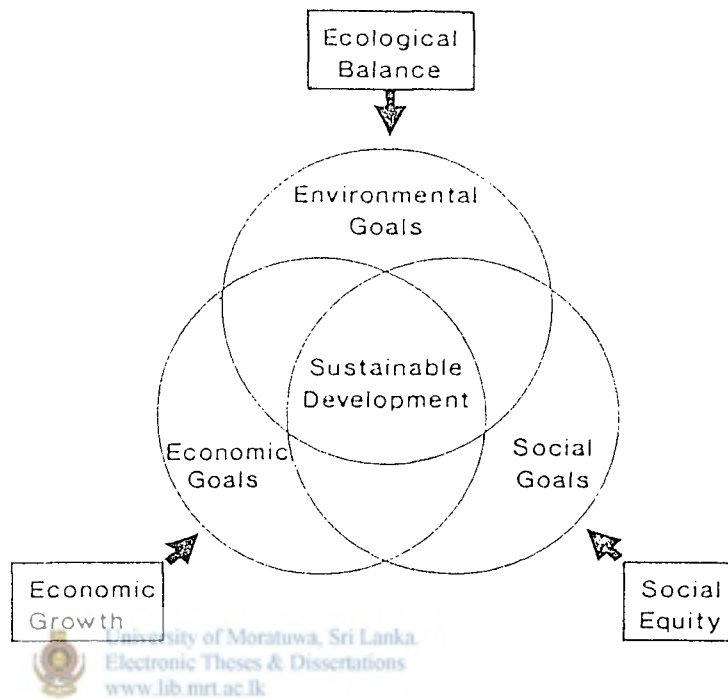


Fig: 01. Sustainable Development Model of Jacob & Sadler  
( Source: UNESCO-UNEP. 1992)

Houston (1989:26) further argues that, sustainability calls for wholeness and not fragmentation, and defines it in a formula as,

$$\begin{aligned}
 & \text{Wise use of natural resources} \\
 & \quad + \\
 & \text{Equitable and just development Strategies} \\
 & \quad + \\
 & \text{Population and Family Planning} \\
 & \quad = \\
 & \text{Sustainable Development}
 \end{aligned}$$

Further, Blowers ( 1993;7 ) argues that “ Sustainable development is an integrating concept bridging together local and global, short and long term environment and development. It urges the need for action now to defend the future”. He also presents the goals of sustainable development.

- a. Resource conservation.
- b. Built development
- c. Environmental quality
- d. Social equality
- e. Political participation

Finally we can identify there are two key concepts containing within the definitions for sustainable development.

- \* The concept of “needs”, in particular the essential needs of the world’s poor to which overriding priority should be given;
- \* The idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs.

#### **1.4. Need for Sustainable Development.**

The problem of reconciling the imperatives of economic growth on one hand and safeguarding the ecosystem and socio-cultural system on the other is one of the greatest issues in the present era.

When we consider the development and the environment, they are linked with each other, in other words without conserving the environment you cannot have development, and without development there is no necessity for environmental conservation.

Development also has conflicts, that is if we want to have development, the price to pay would be a loss in environmental quality. Therefore the need for long term development has to be identified, as such the terms “ecodevelopment”, “environmentally sound development” and “sustainable development” have come into widespread use.

“Due to the increasing awareness of the adverse repercussions of industrialization biased development and population growth the necessity of evolving a new strategy for development” has been raised by governments and international institutions world over. As a result the notion of sustainable development to combat the degradation of the environment and the depletion of the limited resources available, while sustaining the development has come into the fore” (Ranasinghe, 1996).

“The concept of sustainable development provides a framework for the integration of environment policies, and development strategies. The term ‘development’ being used here in its broadcast sense. The world is often taken to refer to the processes of economic and social change in the third world. But the integration of environment and development is required in all countries, rich and poor. The pursuit of sustainable development requires changes in the domestic and international policies of every nation” (WCED. 1996 : 40)

Though there is a need, the sustainable development will not be achieved by accident but must be consciously planned and worked for at all levels. Therefore the need for a better foundation has arisen for sustainable development.

### **1.5. Foundation for Sustainable Development.**

The satisfaction of human needs and aspirations is so obviously an objective of productive activity that it may appear redundant to assert its central role in the concept of sustainable development. All too often poverty is such that people cannot satisfy



their needs for survival and well-being even if goods and services are available. At the same time, the demands of those, not in poverty may have major environmental consequences.

Therefore if we could provide some kind of establishment which could satisfy the need and aspirations of the human, it would become the more suitable foundation for sustainable development. Good shelter is the best solution for this situation.

As a example, (Cooper, 1975) established the list of basic human needs. He accounts for both conscious and unconscious human motivations and personality. In brief, this hierarchy of needs confirms to the following schema.

- |       |  |                 |
|-------|--|-----------------|
| 1.    | Physiological needs<br>(homeostasis, food consumption, sexual behavior)  | Primary level   |
| <hr/> |  |                 |
| 2.    | Safety needs<br>(security ; stability ; dependency ; protection ; free from fear, anxiety and chaos; need for structure, order, law, limits.....)  | Secondary level |
| 3.    | Belongingness and love needs.<br>(stable affectionate relations with people and places, including homes and neighborhoods.....)  |                 |
| 4.    | Esteem Needs.<br>(firstly, for strength achievement adequacy, mastery and competence ; for confidence, independence and freedom ; secondly for reputation, prestige, status fame and glory, dominance, recognition, attention, importance, dignity and appreciation) |                 |
| <hr/> |  |                 |
| 5.    | Need for self-Actualization<br>(individual differences are significant at this level)  | Tertiary level  |
| 6.    | Cognitive capacities<br>(the desires to know and to understand are the preconditions for the basic need satisfactions)   |                 |
| 7.    | Aesthetic Needs<br>(need for order, symmetry, closure, system and structure.)  |                 |

The above mentioned hierarchy of human needs show us how important a role could be played by housing to satisfy them. Therefore the list of basic human needs could be modified as follows by giving the prominent place for the shelter than others.

1. shelter
2. security
3. comfort
4. socialization and self expression
5. aesthetics

Shelter is a basic need of human beings and most professionals are getting involved in giving solutions for that particular problem, but the complexity of the society and the changing user needs have made it a more complicated problem. And the inter-relationship between the house and the human being may be the most strong one, compared to the other relationships between built environment and user groups, because they spend most part of their lives within the house; Hence the environment of houses and the needs of householders may be more complex when we consider houses and housing schemes, because of the complexity of the users. Therefore, the study of sustainability of environment of housing schemes on user needs may produce much more importance to the sustainable development.

Besides, it is widely believed that housing could also facilitate the realization of other human needs which are of a qualitative nature. As Angel (1986) outlines, housing from a more complex point of view is seen as a product as well as a process of interrelated aspects having physical, psychological, cultural, ecological and economic dimensions.

Eventhough there are qualitative environmental aspects for better living condition, it is apparent that housing today has somewhat deviated from these multi-dimensions towards selected aspects or just the provision of physical entities.

The above mentioned hierarchy of human needs show us how important a role could be played by housing to satisfy them. Therefore the list of basic human needs could be modified as follows by giving the prominent place for the shelter than others.

1. shelter
2. security
3. comfort
4. socialization and self expression
5. aesthetics

Shelter is a basic need of human beings and most professionals are getting involved in giving solutions for that particular problem, but the complexity of the society and the changing user needs have made it a more complicated problem. And the inter-relationship between the house and the human being may be the most strong one, compared to the other relationships between built environment and user groups, because they spend most part of their lives within the house; Hence the environment of houses and the needs of householders may be more complex when we consider houses and housing schemes, because of the complexity of the users. Therefore, the study of sustainability of environment of housing schemes on user needs may produce much more importance to the sustainable development.

Besides, it is widely believed that housing could also facilitate the realization of other human needs which are of a qualitative nature. As Angel (1986) outlines, housing from a more complex point of view is seen as a product as well as a process of interrelated aspects having physical, psychological, cultural, ecological and economic dimensions.

Eventhough there are qualitative environmental aspects for better living condition, it is apparent that housing today has somewhat deviated from these multi-dimensions towards selected aspects or just the provision of physical entities.