



# SUSTAINABLE DEVELOPMENT: Linking Economy, Society, Environment

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## ABSTRACT

Sustainable development is the key term that presently being deliberated every where. It has become a wide ranging term that can be applied to almost every facet of life on Earth, from local to global scale and over various time periods. The world's natural resources are being battered on all fronts. As the Earth's human population has increased, natural ecosystems have declined and changes in the balance of natural cycles has had a negative impact on both humans and other living systems. The most important task for sustainable development must be to motivate people to get involved in community action and to ensure public's participation in environmental protection and management projects. Ways of living more sustainability can take many forms from reorganizing living conditions (e.g.- eco-villages, eco-municipalities and sustainable cities), reappraising economic sectors (perm culture, green building, sustainable agriculture) or work practices (sustainable architecture) using science to develop new technologies (green technology, renewable energy) to adjustments in individual life styles that conserve natural resources. The main purpose of this paper is to review the approaches for paving the way for an ecologically and economically more sustainable development.

**Key words: Sustainability, Resources, Ecosystem, Population, Consumption, Biodiversity, Ecosystem.**

The term "Sustainable Development" became prominent after the Rio Earth Summit in 1992 which prioritized global environmental discussions and improved upon the initial frame work introduced at the United Nations Conference on the Human Environment, Stockholm in 1972. There are many definitions of the term "Sustainable Development", but the most widely accepted is the one used in the publication "Our Common Future", some times referred to as Brundtland definition:

**"Development which meets the needs of the current generation without compromising the ability of future generations to meet their needs".**

Sustainability "concerns the specification of a set of actions to be taken by present persons that *will* not diminish the prospects of future persons to enjoy levels of consumption, wealth, utility, or welfare comparable to those enjoyed by present persons ". At present the average per capita

consumption of people in the developing world is sustainable but population numbers are increasing and individuals are aspiring to high consumption of Western life styles. The developed world population is only increasing slightly but consumption levels are unsustainable. The challenge for sustainability is to curb and manage urban consumption while raising the standard of living of the developing world without increasing its resource use and environmental impact. This must be done by using strategies and technology that break the link between, on the one hand, economic growth and on the other. Environmental damage and resource depletion.

The world's natural resources are presently under increasing pressure, soil erosion, desertification, acid rain, the extinction species and the green house effect have all contributed to the present deterioration of environmental systems. In view of the potential danger of the concept of sustainable development becoming an quotation of contemporary environmentalism, a thorough analysis and discussion of the concept is therefore required.

Sustainability is studied and managed over many scales of time and space and in many context of environmental, social and economic organization. The focus ranges from the total carrying capacity of planet. Earth to the sustainability of economic sectors, ecosystems, countries, municipalities, neighbourhood, home gardens, occupations, lifestyle, behavior patterns and so on.

## **Consumption – Population, Technology, Resources :**

The overall driver of human impact on Earth Systems is the destruction of biophysical resources and especially, the Earth's ecosystems. This impact depends both on population and impact per person, which in turn depends in complex ways on what resources are being used, whether or not those resources are renewable.

Careful resource management can be applied at many scales, from economic sectors like agriculture, manufacturing and industry to work organizations; the consumption patterns of household and individuals and to the resource demands of individual goods and services.

## **Environmental Impacts:**

At the global scale and in the broadest sense environmental dimensions involves the oceans, freshwater systems, land and atmosphere, but following the sustainability principle of scale it can be equally applied to any ecosystem from a tropical rainforest to a home garden.

## **Atmosphere:**

Management of the global atmosphere now involves assessment of all aspects of the carbon cycle to identify opportunities to address human-induced climate change and this has become a major focus of scientific research because of the potential catastrophic effects on biodiversity and human communities.

**Freshwater and Oceans:**

Water covers 71% of the Earth's surface, of this only 2.5% is freshwater. Increasing urbanization pollutes clean water supplies and much of the world still does not have access to clean, safe water.

**Land Use:**

Land use change is fundamental to the operations of the biosphere because alterations in the relative proportions of land dedicated to urbanization, agriculture, forest, woodland, grassland and pasture have a marked effect on the global water, carbon and nitrogen biogeochemical cycles and this can impact negatively on both natural and human systems.

**Human Consumption:**

Consumption of goods and services can be analyzed and managed at all scales through the chain of consumption; starting with the effects individual lifestyles choices and spending patterns, through to the resource demands of specific goods and services, the impacts of economic sectors through national economy to global economy. Analysis of consumption pattern relates resource use to the t environmental, social and economic impacts at the scale or context under investigation.

**Water:**

Water and food securities are interlinked. Currently towards 35% of human water use is unsustainable, drawing on diminishing aquifers and reducing the flows of major rivers, this percentage is likely to increase if climate change worsens, populations increase, aquifers become depleted and supplies become polluted and unsanitary. From 1961 to 2001 water demand doubled-agricultural use increased by 75%, industrial use by more than 200% and domestic use more than 400%.

**Food:**

A sustainable food system also encourages local production distribution of infrastructure and makes nutritious food affordable to all. The environmental effects of different dietary patterns depend on many factors, including the proportion to animal and plant food consumed and method of food production. The World Health Organization has published a global strategy on Diet, Physical Activity and Health which was endorsed by the May 2004 World Health Assembly it recommends the Mediterranean diet which is associated with health and longevity

At the local level there are various movement working towards local food production, more productive use of urban wetlands and domestic gardens including perm culture, urban horticulture, local food, slow food sustainable gardening and organic gardening.

## Social Impact:

Sustainability issues are generally expressed in scientific and environmental terms but implementing change is a social challenge that entails international and national law, urban planning and transport, local and individual lifestyles and ethical consumerism.

Broad-based strategies for more sustainable social system include: improved education and the political empowerment of women, greater regard for social justice notably equity between rich and poor both within and between countries and intergenerational equity. Depletion of natural resources increases the likelihood of "resource wars". This aspect of sustainability has been referred to as environmental security and creates a clear need for global environmental agreements to manage resources.

There is a wealth of advice available to individuals wishing to reduce their personal impact on the environment through small, cheap and easily achievable steps. But the transition required to reduce global human consumption to within sustainable limits involves much larger changes, at all levels and contexts of society. The United Nations has recognized the central role of education, and have declared a decade of education for sustainable development, 2005-2014, which aims to "**challenge us all to adopt new behaviors and practices to secure our future**".

## Economic Impact :

There has been a close correlation between environmental degradation and economic growth; as communities grow so the environment declines unsustainable economic growth has been openly compared to the uncontrollable growth of a cancer because it eats away at the Earth's ecosystem services which are its life-support system

However, in present-day society, although we recognize our dependence on the Earth's resources- its water, oxygen and other natural elements- perhaps we do not recognize the connection between the economy and the Earth. Perhaps the profundity of such interdependence has been buried by our search for happiness through materialism and economic growth. Of Course it is important to reduce pollution, plant trees, clean the rivers, maintain biodiversity, adopt cleaner technologies and so on however much more fundamental change is required if the destructive tendencies of the modern world is to be reversed.

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