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Sustainable Development: A Conceptual Dimension

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Abstract*: With the growing relevance of sustainable development in our society today, it has become mandatory to first of all comprehend the concept of sustainability and understand the concept of sustainable development through the most relevant definition given by the Brundtland Commission in 1987, the concept reached a new zenith with the adoption of Agenda 21 in the famous Earth Summit at Rio in 1992. This research paper is an attempt for understanding the fundamental characteristics of sustainable development in order to conceptualize the structure of achieving sustainable development goals. Through the taxonomy mentioned in fig.I it elaborates what is to be sustained and what is to be developed. The holistic approach of the taxonomy covers all the aspects revolving the human life, to mention we need to sustain the nature, life support systems and the community; on the other hand, we stand for development of people, economy and society. The factors under these aspects are interdependent in nature and very much intrinsically involved into each other as for instance a society makes a community, a community has humans who, due to a sense of development tend to grew and demarcates boundaries and build up institutions and in order to attain a healthy lifestyle with equity it has created economy and life supporting systems and to achieve any goal the base is nature and also the human culture will define whether nature is going to survive in harmony or not.
Keywords*: Sustainability, Sustainable Development, Ecology, Brundtland Commission of 1987, the Earth Summit at Rio in 1992, Sustainable development goals.

I. INTRODUCTION

Sustainable development is a buzz word today. In view of the increased awareness of environmental problems, the accent on sustainable development has grown in recent times, particularly in respect of activities which degrade the environment and affect communities adversely.

Sustainability is about meeting basic human needs and wants. People value their health and that of their children, economic security and happiness. These are primary elements in our quality of life. Most definitions stress that sustainability requires making decisions that recognize the connections between actions and effects in the environment, economy and society. Sustainability is very much about what kind of a legacy we want to leave for our coming generation.

II. RESEARCH ELABORATION

Sustainability can be defined as the practice of maintaining processes of productivity indefinitely natural or human made by replacing resources used with resources of equal or greater value without degrading or endangering natural biotic systems According to M. Hasna, sustainability is a function of social, economic, technological and ecological themes.[1] Sustainable development ties together concern for the carrying capacity of natural systems with the social, political, and economic challenges faced by humanity. As early as the 1970s, the concept of "sustainability" was employed to describe an economy "in equilibrium with basic ecological support systems.[2]

Sustainable development is a roadmap, the action plan, for achieving sustainability in any activity that uses resources and where immediate and intergenerational replication is demanded. As such, sustainable development is the organizing principle for sustaining finite resources necessary to provide for the needs of future generations of life on the planet. It is a process that envisions a desirable future state for human societies in which living conditions and resource-use continue to meet human needs without undermining the "integrity, stability, and beauty" of natural biotic systems.[3]

There are many definitions of ‘sustainable development’, but what is most frequently quoted is that formulated by the Brundtland Commission in 1987[4]. According to this definition, “sustainable development” is that pattern of development which “meets the needs of the present without compromising the ability of the future generations to meet their own needs.” In addition to emphasizing the intergenerational (and intra-generational) equity, this broad definition also covered two other key concepts. The first is the concept of “needs”, especially the needs of the world’s poor which are seen to have overriding priority. The second concept is the

idea of "limits" on the ability of the environment to meet the present and future needs. The Brundtland Commission also saw sustainable development as a process of change rather than a fixed state of harmony.

Subsequent global conferences on the themes of development and environment, in particular the 1992 United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro, Brazil through its outcome (Agenda 21 and the associated Earth Charter)[5] and the 1995 World Summit on Social development[6] through its declaration and programme of action elaborated the principles of sustainable development. Agenda 21 in particular emphasized that broad public participation in decision-making was a fundamental prerequisite for achieving sustainable development which involves integration of environmental and social concerns into all development processes.

The 2002 World Summit on Sustainable Development held in Johannesburg, South Africa further elaborated the definition through its inclusion of "economic development, social development and environmental protection — at the local, regional and global levels" as the "interdependent and mutually reinforcing pillars of sustainable development".[7] The 2005 World Summit (14-16 September 2005)[8] confirmed the formulation while reaffirming its commitment to achieve the goal of sustainable development as enshrined in various declarations including Agenda 21, the Rio principles and the 2000 Millennium Declaration goals which in one sense contributed to definitional elaboration by laying down short-term (by 2015) development targets in areas such as eradication of extreme poverty, hunger and malnutrition, primary education and environmental sustainability.

Since the Brundtland report (World Commission on Environment and Development, 1987) first defined 'sustainable development', many other definitions have been formulated by various proponents taking advantage of the 'creative ambiguity' of the original formulation.[9] These are based on multiple motivations, interests and goals. Also, much work has gone into the development of quantitative indicators of sustainable development which in turn have contributed to definitional profligacy.

All these definitions have some combination of development and environment as well as equity; however, there are differences on the emphasis placed on what is to be developed, what is to be sustained and how to link environment with development. Due to the interdisciplinary nature of the concept of sustainable development, it becomes necessary to define the linkages and at the same time compartmentalize the areas of development accordingly in order to meet the requirements in any given society.

"In practice", to quote Parris and Kates[10], "groups and institutions tend to acknowledge the many multiple and conflicting objectives to be both sustained and developed but then adopt implicit objective functions that take the forms such as: sustain only, develop mostly, develop only but sustain somewhat, sustain or develop — for favoured objectives."

Similarly, the time period of concern, ambiguously described in the Brundtland definition as "now and in the future" has differed widely, from one generation (when almost everything is sustainable) to forever (when nothing may be sustainable). Parris and Kates[11], have used taxonomy to describe the goals in these formulations (see, figure.I):

Figure.I Taxonomy of Sustainable Development Goals

What is to be sustained?	What is to be developed?
Nature □ Earth □ Biodiversity □ Ecosystems	People □ Child survival □ Life expectancy □ Education □ Equity □ Equal opportunity
Life Support □ Ecosystem Services □ Resources □ Environment	Economy □ Wealth □ Productive Sectors □ Consumption
Community □ Culture □ Groups □ Places	Society □ Institutions □ Social Capital □ States □ Regions

Source: Parris, T.M. and R.W. Kates, Characterizing and Measuring Sustainable Development, Annual Review of Environment and Resources, Volume 28, Annual Reviews Publications, California, 200

The above mentioned taxonomy clearly displays the goals of sustainable development i.e. what is to be sustained and what is to be developed. The holistic approach of this taxonomy covers all the aspects revolving the human life, to mention we need to sustain the nature, life support systems and the community; on the other hand, we stand for development of people, economy and society. The factors under these aspects are interdependent in nature and very much intrinsically involved into each other as for instance a society makes a community, a community has humans who, due to a sense of development tend to grew and demarcates boundaries and build up institutions and in order to attain a healthy lifestyle with equity it has created economy and life supporting systems and to achieve any goal the base is nature and also the human culture will define whether nature is going to survive in harmony or not.

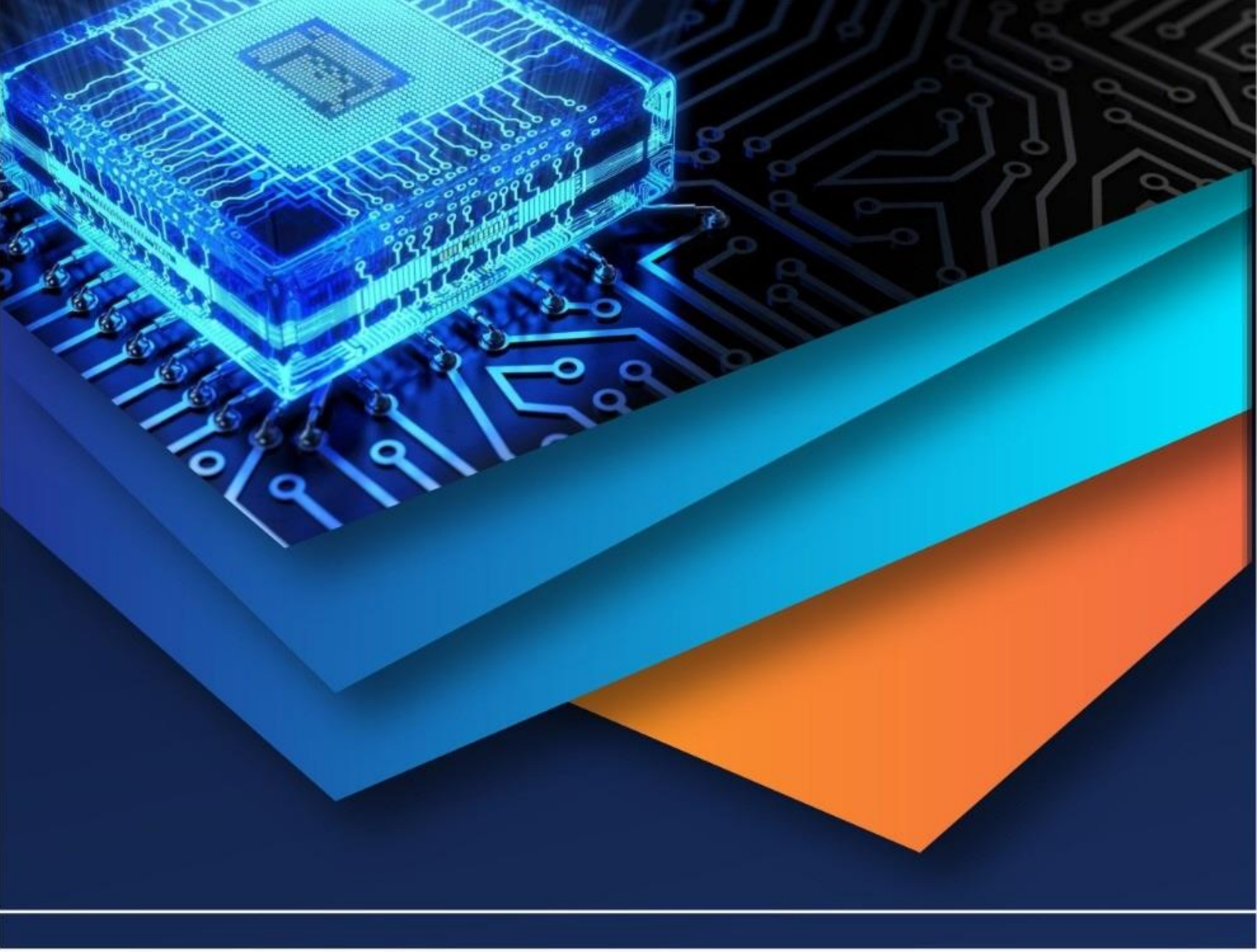
Thus we must thoroughly understand and study these different aspects of a life. Different domains have been identified for research and analysis of sustainable development. Broadly defined, these include ecology, economics, politics and culture — as used by the United Nations and a number of other international organizations.[12]

III. CONCLUSIONS

Defining the concept leads to understand the fundamental characteristics of the same. The research basis for sustainable development requires implementation of methods and knowledge from different scientific disciplines incorporated into a multidisciplinary account. The uniform understanding about the concepts we use in the research process of a given ecological target category, like mountains, is of crucial importance for the successful integration of knowledge and achievement of scientific results.

REFERENCES

[1] Hasna, A. M., Dimensions of Sustainability, Journal of Engineering for Sustainable Development: Energy, Environment, and Health, College Publishing, Canada, 2007.
[2] Stivers, R., The Sustainable Society: Ethics and Economic Growth, Westminster Press, Philadelphia, 1976.
[3] Leopold, Aldo, A Sand County Almanac, Oxford University Press, New York, 1949.
[4] Brundtland, B., Our Common Future: Report for the World Commission on Environment and Development, Oxford University Press, Oxford, 1987.
[5] United Nations Environment Programme, Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 1992, retrieved from http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163
[6] World Summit on Social Development, 2005, retrieved from http://www.un.org/esa/socdev/wssd/text-version/
[7] United Nations, Johannesburg Declaration on Sustainable Development, Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 2002, retrieved from http://www.un.org/jsummit/html/documents/summit_docs/131302_wssd_report_reissued.pdf
[8] World Summit, 2005, retrieved from http://www.un.org/en/events/pastevents/worldsummit_2005.shtml
[9] Brundtland, B., Our Common Future: Report for the World Commission on Environment and Development, Oxford University Press, Oxford, 1987.
[10] Parris, T.M. and R.W. Kates, Characterizing and Measuring Sustainable Development, Annual Review of Environment and Resources, Annual Reviews Publications, California, 2003.
[11] Parris, T.M. and R.W. Kates, Characterizing and Measuring Sustainable Development, Annual Review of Environment and Resources, Annual Reviews Publications, California, 2003.
[12] Scerri, Andy and James, Paul , Accounting for Sustainability: Combining Qualitative and Quantitative Research in Developing 'Indicators' of Sustainability, International Journal of Social Research Methodology, Taylor and Francis, U.K., 2010.



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