

# Interdependency of people and environment

Business



The figurative model represents the various levels of interaction found in a typical ecosystem, showing the different levels of interactions. The ecosystem is essentially a combination of various aspects of biotic and abiotic elements, which interact in what is essentially referred to as an ecosystem framework as seen in the figure. In addition, “ any unit that includes all of the organisms (i. e. the community) in a given area interacting with the physical environment so that a flow of energy leads to a clearly defined trophic structure, biotic diversity and material cycles (i. e. exchange of materials between living and non living parts within the system) is an ecological system or ecosystem” (Piergorsch and El-Shaarawi 612). In regard to the different levels of interaction there are different points of interaction and interdependency, which include local perspectives, national perspectives, and global level mechanisms. Humans derive a great deal of the ecosystem services which are essentially expressed in the prescribed benefits of nature for the surrounding communities.

The services essentially include material inputs provision, regulation aspects, cultural related aspects, and finally supporting elements of the ecosystem (Elvis 28). a) Local Perspectives There are various local perspectives leading to the accomplishment of the various environmental related objectives. Considering the various local perspectives through contextualisation of the Australian environment some of the major ecosystem services are derived from reef ecosystems, mangroves ecosystems, arid ecosystems, rainforest ecosystems, dry sclerophyll, and rivers ecosystem. “ The type of organisms in an ecosystem are determined by the local and regional climate, the

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topography (slope, elevation, and aspect that affect the local climate and the soil), the geology and soil, the organisms in the area, and the history of disturbance events” (Piergorsch and El-Shaarawi 613). In the Australian context the interactions seen in the interdependency among critical systems leads to the emancipation of the presently occurring status quo, which dictates the state of the environmental elements.

b) National Perspectives On the national scale there are various aspects involved in planning the distinct utilisation of the ecosystem through consideration of the manner in which components of the environment have been developed. “ The structure, function, interactions, and complexity of ecosystems all change over time. Change is a natural and fundamental characteristic of ecosystems, and is frequently essential if other attributes are to be sustained over the long term” (Piergorsch and El-Shaarawi 613). In the Australian national context, the environmental organisations in the country context take stock of critical national ecosystem elements, which contribute to an emancipation of the population livelihoods. For instance, these have been implemented with due consideration of the operational, regulatory and legislative aspects, market elements, and product formulation (Elvis 39).

c) Global Level Mechanisms Inquiry Issue – Aspects Affecting the Ecosystem

There are various issues, which are known to affect the status quo of the ecosystem as the different elements of ecosystem continue interacting amongst themselves. Among some of those issues include social factors, economic factors and environmental factors. In a bid to solve some of the resultant issues various aspects are usually put to application with a view of <https://assignbuster.com/interdependency-of-people-and-environment/>

minimising the resulting negative effects caused by the various interaction points. These efforts usually involve the following levels of input: stakeholder involvement in promoting the ecosystem arrangement, conflict identification and resolution mechanisms, getting various points from the different levels of interaction, and dillering techniques. Issues Affecting Status Quo a) Social Elements In the process of interacting with the ecosystem, various social factors due to the effect resulting from the accompanying human factors as people accrue ecosystem benefits. The continuity of ecosystem dependency depends upon the interacting factors resulting from the manner in which humans derive survival elements from the ecosystem.

“ The particular interactions and their intimacy and persistence vary from one ecosystem to another, and they change over time in any ecosystem type to another, and they change with time in any particular ecosystem.

Ecosystem disturbances changes existing relationships and creates new ones” (Piergorsch and El-Shaarawi 613). This fundamentally creates new social dispositions especially when taking due consideration of the interrelated elements arising from human elements. In the natural environment, there exists ways through which organisms perfect their respective niches in a bid to survive. In the course of their respective survival trends they develop beneficial social relations aimed at achieving critical economic goals in the long run (Elvis 34).

b) Economic Elements There are various economic virtues associated with the development of ecosystem variables in which humans derive their livelihood upon. There must exist a mechanism for balancing the input resulting from the ecosystem, throughput process resulting from human  
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factors and subsequent output elements that are elementally needed by the population. Critical economic factors therefore relate more to the element of human livelihood, which depends solely upon the ecosystem to support its various needs (Elvis 34). Economically speaking, ecosystem services that include provision of material elements, the regulation component, supporting characteristics, and other cultural benefits that humans tend to derive in the long run resulting in a complex mix. Some of the available techniques for valuing critical ecosystem elements include avoided costing technique, replacement costing technique, factor income technique, travel costing technique, hedonic pricing technique, and contingent valuation technique (Elvis 34). In addition, due to the critical economic factors there are various levels of assessment of in order to ensure sustainability of the resulting effects of the economic activities.

c) Environmental Factors There exist various environmental dispositions through which critical environmental factors contribute to the enhancement of the ecosystem formulation. The environmental factors usually determine the various ecosystems attributes that lead to the development of the different characteristics found in the environment. In this sense there are various ways in which environmental components need to be sustained through establishment of a critical feedback system or essentially a cyclic system through which environmental components are rejuvenated in order to ensure continuity of the human race. “ The structure of an ecosystem is not fixed, unchanging characteristic. Change in ecosystem structure does not constitute ecosystem damage or destruction, and many ecosystem change in structure over time may be essential for ecosystem health and for

the maintenance of a wide variety of ecosystem values and environmental services” (Piergorsch and El-Shaarawi 612). Further advancement into the environmental agenda brings out the element of open systems and closed systems taking due consideration of the recurring rates, pathways, and residence times of some of the critical elements of the ecosystem.

d) Various View Points In the development of the ecosystem agenda in view of the recent environmental determinants and objectives there are several emerging issues concerning the viability and sustainability of some of the ecosystem services overtime. For instance, the respective interactions have been observed to occur along certain critical lines of occurrences, some of which can be deduced through the application of a top-down approach and bottom-up approach (Elvis 33). The different pathways through which variables in the ecosystem are exposed to keep changing with time leading to the view that no single model can be proposed in regard to solving some of the emerging concerns. For instance, “ Energy transformations and biogeochemical cycling are the main processes that comprise the field of ecosystem ecology” (Whitman n. p). This represents other means through the theme of ecosystem enhancement can further be developed.