Loss of Biodiversity and Conservation Strategies in Sri Lanka

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Abstract

Throughout the world, loss of biodiversity is a common issue. Biological evolution is an unavoidable natural process of the environment temporally and specially. Some of technological and scientific achievements have been changing the nature of living beings in the ecosystems directly or indirectly. According to the population growth quantitatively and qualitatively, it is essential to fulfill their needs using the technological advances and the natural ecosystems. In this process, the carrying capacity of the ecosystems is damaged harshly.

Population pressures have played a major role in the loss of biological resources. Human activities have accelerated the normal pace of species extinction, that is the pace that could be expected without the influence of humanity, by some 1,000 to 10,000 times, depending on the specific species.

In a study of 50 countries in Asia and Africa from 1980 to 1990, the United Nations Population Fund (UNFPA) found that the loss of natural habitat was greatest in areas of high population density and least in low-density areas.

Biodiversity hotspots are areas that contain a superabundance of plant and animal species but are threatened by human activities. Of the world's 25 terrestrial hotspots, 9 are in tropical rainforests, 5 include both wet and dry tropical forests, and another 5 consist of temperate Mediterranean-type ecosystems. In addition, three include tropical rainforest, dry forest, and arid systems; another is a mosaic of dry forest and savannah; while another is temperate forest and steppe; and the last is an arid region. An estimated 75% of all terrestrial animal species considered endangered or threatened live within these 25 hotspots. Sri Lanka and the South-Western coastal belt of India is also a biodiversity hotspot which is the 21st hotspot of the world.

Sri Lanka has high biodiversity distributed in a range of ecosystems from rain forests to savannas. The diverse climate, soil types and altitude have contributed to the high variation in natural vegetation in Sri Lanka. While Sri Lanka may be known for its biodiversity, this biological wealth is highly threatened.

Key words: Biological Hotspots