

# "Biodiversity" – The Powerful Pseudocognate

Way back towards the end of the 1970's, the 'Conservation' community and various Non Government Organisations (NGOs) were discussing the merits of protecting nature, while ensuring that the communities, as a result would not be deprived of the so called 'benefits' of development. The way nature and nature products were exploited in the name of providing 'development benefits' came under the magnifying glass. It was noted that the exploitation of 'natural products' were often done by the developed country organizations. These organizations exploited 'nature products' by bringing them into the market. The market product was a refined 'attractive' product that required 'technological transformation'. For example 'drugs' were brought out through technological transformations as 'tablets', 'concentrates', 'lotions', etc. The use of these products were much more easier than the 'original substance', which involved collection from the wild, preparation through expert hands, etc.

The products have entered the economic mainstream and even become, as in Sri Lanka, major foreign exchange earning sources. In this process, it was also noted that the 'raw material' was often taken away from the country, transformed technologically, brought into the market and the profits are reaped by the 'Agency' of the developed country. This general aspect was seen to apply across almost all the 'nature products'. In the meantime, greater awareness of the environment was also building in the world community. Development in information transformation and ability to travel across nations were also becoming easier and 'cheaper'. Many people were traveling across borders as 'Tourists', and are seeking to enjoy the traits of the remaining naturalness in many of the developing nations. This mode of enjoyment, education, also brings pressures upon the resource base, through impacts of "over visitation" and 'development demands'. The conflict between 'tourism' and "nature conservation" was also an emerging subject during these years.

The NGOs and conservation community demanded "justice" and "fair play" in these developments. In 1981, the IUCN (The World Conservation Union) along with other NGOs brought to light the plight of 'biological diversity' conservation and its exploitation. Soon it was recognized that any justice to the recognized difference is beyond the scope of NGOs, and it needs international 'agreements' and trust. As a result of this realization, United Nations Environment Programme (UNEP) took over the mandate to negotiate an 'International Convention' on the subject.

Things moved through numerous directions and discussions were filled with open disagreements and grave concerns. Walter Rosen of the National Academy of Science, USA, coined the Word 'Biodiversity' from the two words "Biological Diversity" as a need for a conference in 1985. As it was a coined word, it is referred to as a 'pseudocognate'. The word caught the imagination of the world, and O.E. Wilson through his publication "The Diversity of Life" made it popular. Thus the use of the word became universal, but not 'legal'.

The meaning of 'biodiversity' evolved to reflect something much more than "biological diversity".

"Biodiversity is one of many terms, which whilst applied widely in biology, remain inconsistently or at times inadequately defined. However, the problem is perhaps amplified in this case, because the term has usage in other spheres (legal, media, political, etc.). It will be difficult, perhaps impossible, to put an end to the element of confusion which results. Nonetheless, whether viewed as an abstract biological concept, which can or cannot be operationalized, or as something scientifically less neutral, it has served to draw attention to and provide fresh perspectives on a number of scientific concepts".

(Kevin J. Gaston).

In this background, it will be appropriate here to attempt to understand the term 'biodiversity'. The best way is to seek a link between 'biological diversity' (the original words) and the present word 'biodiversity'. After many years of been involved

**Prof. S.W.Kotagama**

*Professor of Environment Science,  
Dept. of Zoology, University of  
Colombo.*

in the subject, I have come up with the following which helps us to recognize and understand the word Biodiversity.

"Biodiversity gives DEPTH and WIDTH to Biological Diversity".

How does Biodiversity give DEPTH to Biological Diversity?

The definition of biological diversity given in the Convention on Biological Diversity – Art 2, recognizes all living organisms, their processes, at the broad ecosystem level (Ecosystem diversity), species occupying these ecosystems as "species diversity", and finally the variability within species as brought about by "Genetic Diversity". Thus from the broad ecosystem – through species we go to the molecular genetic diversity. This DEPTH of the subjects opens immense areas of study and concerns.

Next 'Biodiversity gives WIDTH to Biological Diversity'. The study of biological diversity other than from the conventional biology, areas such as agricultural related research, the areas of trade, and economics, the indigenous knowledge and practices are all part of the WIDTH. There is in the real sense 'Nothing Outside' biodiversity. This wide all-inclusive nature is the more popular aspect of biodiversity. It is therefore not surprising that in 1993 – we had the word 'Bio piracy' coined to reflect the unethical, exploitation of the biological diversity. So is the term 'Bio-prospecting' and many other 'bio' – linked words.

The word biodiversity has become an all encompassing term with implications in every aspects of study and management. It has become a need for all persons concerned to understand this complexity.