VI.A.4. Problems with Valuation of Biodiversity: A Case of Great Plains

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Economic estimates of environmental resources in general and biodiversity in particular has been a challenging issue for economists and ecologists alike. Valuation of variety and variability of all life forms ranging from molecular to biomass level in true bio-physical setting throws a large number of problems. The institution of efficient market, one finds either absolutely absent or partly present in the case of biodiversity. Moreover the phenomena of biodiversity itself is least understood and underdeveloped. The valuation of biodiversity in ecological economics tradition has been dominated by valuation at apices level signifying primarily the direct and indirect values but biodiversity encompasses not only number of species but its symbiotic relationship, organisational capabilities and resilience are equally important. It is this resilience which becomes crucial for various direct and indirect uses of biodiversity in terms of economic goods and services. Non-market valuation techniques for biodiversity based on psychometric analysis (Contingent Valuation Method (CVM)) albeit a robust tool, does not seem capturing the primary functions of biodiversity if it is a case of great plain ecosystem or river basin. The problem gets accentuated if the respondents under consideration is either ill informed or the surveyor itself has not grasped the issue properly - a distinct possibility, considering the complex nature and characteristics of their functions far away from conventional economists imagination.

In this context, the proposed paper is supposed to address some of these issues. The paper has been divided into four parts. Part I focuses on the unique features of biodiversity which are entirely different from normal goods and services for which h the consumer with the given income and assets make the choice and hence reveal his/her preferences facilitating the emergence of 'value' of that particular good in monetary term. Part II makes a survey of some of the recent attempts to put economic value for either some components or the whole biodiversity. It has been found that primarily the valuation has been done for direct and indirect use and non use values. Problems confronted in this projects have been discussed in detail. Part III discusses the features of large scale landscape. Here, great plain ecosystem, for example, has been considered. Their valuation process has been mapped out. It has been found that the contingent valuation method is not a suitable technique here. In valuation of great plain ecosystem the phenomena of warm glows, long value formation, dynamic inconsistency, ignorance about the object (ecosystem) are prevalent. Part IV of the paper tries to suggest some steps in valuation of ecosystem services which can enhance the information available to people and simultaneously provide an opportunity to reveal their preferences. It has also been suggested that a set of laboratory experimental actions should be developed allowing a person to value non-hypothetical set of services.