Expert Knowledge Based Valuation Method of Ecosystem Services in China--

Valuation of global ecosystem services by R Costanza (1997) has attracted attention of the Chinese ecological researchers over the years. Many Chinese scientists have been using the methods to valuate the ecosystem services for forest, grassland and farmland ecosystems. However, it has been turned out that there are several shortcomings in direct adaptation of the method. For instance, some ecosystem services have been insufficiently valuated or even ignored via using Costanza's method. To fill this gap, we have, on the basis of Costanza's method, developed a new method or ‘unit value’ based method for assessment of ecosystem services. Expert interviews with structured questionnaire were contacted in 2002 and 2007 respectively, and altogether 700 Chinese ecologists were involved in the interviews for testing the method. It has been found that the values of ecosystem services from expert knowledge based unit value method and biomass based method are comparative. Therefore, expert knowledge based assessment of ecosystem services could be used as a method for assessing ecosystem services with known land use areas and a good result could be generated within a short period of time. However, for scientifically sound and concrete results, the spatial disparity of ecosystem services should be taken into account.

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