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Urban Coastal Ecosystem Services and Value of Cultural Landscape: An Assessment of View Value to the Indigenous Fishing Community

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Abstract

Benefits from an ecosystem to support sustainable human well-being-commonly referred to as 'ecosystem services'-are basically categorized into four major groups such as "Provisioning", "Regulating", "Cultural" and "Supporting". In environmental valuation studies, these have often been taken as a bundle of services and the individual value of certain attributes such as Cultural services, which accounts for non-material benefits people obtain from ecosystems, were largely overlooked. The purpose of this study was to assess the value of cultural landscape of an urban coastal ecosystem, which is made out of two categories (i.e. urban systems and coastal systems) specified under the 'ten system classification of millennium ecosystem assessment'. Negombo lagoon was selected as the study site, and the view of the site was justified to explain the cultural landscape of lagoon in concern. Admitting those inherent difficulties associated with defining the cultural landscape, this was slender down into few values, namely: aesthetic, social relations, sense of place, and cultural heritage values. The lagoon area is geographically segregated into areas known as "Thotupola" where the fisherman used to launch their fishing boats. Choice Method was applied to assess the community preferences for lagoon view to which the 'attributes' and 'levels' identified through the pilot survey were used. There were number of lagoon front properties as lagoon provides many other amenities. Therefore view was classified into three levels as "full view" (unobstructed lagoon view), "partial view" (some obstruction by buildings and trees) and "no view" (fully obstructed or no view can be seen). Face-to-face interviews supported by a structured questionnaire were carried out with 300 respondents representing 15 'Thotupola' areas to collect data. The level "no view" was omitted as the dummy variable; "full" and "partial" view were combined to value the cultural landscape. The outcome of analysis shows that the Marginal willingness-to-pay (MWTP) for cultural landscape is Rs. 309.50. Further, the lagoon view had significant impact on implicit price of overall ecosystem services in terms of both 'full' (Rs. 161.50) and 'partial' (Rs. 148.50) view. The overall implicit price for the ecosystem services is derived as Rs. 1062.75. Cultural landscape account solely 30 percent from whole ecosystem value that cannot readily provide a substitute to the indigenous people in community. Therefore in formulating conservation policies and exploiting land development activities the policy makers must account the fact and importance of cultural landscape of an ecosystem to the indigenous people in community.

Keywords: Choice Methods, Cultural landscape, Negombo lagoon, Urban ecosystem services, Value of view