

Valuation of recreational benefits of village tank systems

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Village tank systems are ecosystems that provide a number of goods and services that have an economic value to the local people living adjacent to the tanks and also to communities outside the tank ecosystem area. Quantifying those economic values of village tank systems will be helpful to set priorities and to allocate spending on conservation initiatives. This paper reveals the findings of an economic valuation, which was undertaken in 10 village tanks in Hambantota district of Sri Lanka during the *maha* season of 2005. The total sample size was 175 villagers who live adjacent to the tanks. Contingent valuation method was used to measure the annual net recreational benefits received by villagers who use these tanks. Open-ended willingness to pay (WTP) format was employed to estimate the recreational value. Results of Independent sample t test indicates that there is no significant difference between two strata; tanks in isolation and tanks in cascades, with regard to mean willingness to pay value (t value 0.352, significant p value 0.506). The mean willingness to pay

for the preservation of village tanks was estimated at Rs. 1020 per household per year. The recreational benefits of the village tanks of Hambantota district were estimated to have an annual value of Rs. 8,374,200. Results of regression analysis revealed that the respondent's income, age and education level had a positive relationship with WTP. Distance showed a negative relationship. The standardised coefficient of income (0.370) indicated that income has more influence on WTP than age (0.104) or years of schooling (0.088) or distance (0.212). The adjusted R square value was 0.308. As the F value (20.539) is significant (0.000) at 5% level, it can be concluded that the regression equation predicts the dependent variable at greater than chance level. The study concludes that the villagers are willing and economically able to support the conservation of tanks for recreational benefits they offer. Furthermore, if income status improves in the area, people will contribute more towards conservation of the tanks.

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