

FISHERY COMMUNITY'S WILLINGNESS TO PAY FOR TANK CLEANER: A CASE STUDY OF HURULUWEWA TANK IN ANURADHAPURA DISTRICT

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The invasion by invasive species is considered a global threat to native biological diversity and ecosystems. Tank cleaner (*Pterygoplichthus* spp.) is one of the invasive fish species introduced to Sri Lanka as an aquarium fish in 1994. Now it has become a threat to inland fishery sector in the country. According to previous records, Huruluwewa Tank is one of the major inland water bodies that faces this threat. But its impact on fishing and aquatic biota are not yet fully realized. Hence, this study estimated the direct financial damage, fishermen's willingness to pay (WTP) for tank cleaner problem and factors affecting the willingness to pay by applying contingent valuation method. A questionnaire survey was conducted to collect data by interviewing 80 fishermen, randomly selected from fisherman registry of Huruluwewa fishery society. According to the results, average direct financial damage was Rs. 371,963 per year per fisherman. It comprised the cost of damage to fishing gears and vessels, income loss due to reduction of food fish catch and cost of additional physical effort. The cost of extra physical effort recorded the highest at Rs. 166,921 per year, followed by loss of income (Rs. 165,772) and cost of damage to fishing gear and vessels (Rs. 39,270). The majority of the respondents (70%) were WTP with more than Rs. 1000 per annum and they were (fishery community) willing to contribute Rs. 176,312 or more per annum to support if there is any policy intervention. Thus, only direct financial damage had significantly influenced on WTP ($p < 0.05$). The results imply that invasion of tank cleaner had generated negative consequences to fishermen's livelihood and need of immediate policy intervention to overcome the problem.

Keywords: Direct financial damage, Huruluwewa tank, Tank cleaner, Willingness to pay