

Best-Worst Scale and Pearson's Correlation Based Investigation on Socioeconomic Status of Fishermen in Sugondha River of Bangladesh

^{1,2}Shaharior Hossen, ³Khadijatul Kubra, ^{3,4}Mir Mohammad Ali, ³Mehedi Azam, ⁵Mofasser Rahman, ^{1,2}Md. Rajib Sharker, ⁶Prosun Roy, ⁷Md. Yusuf Ali and ⁸Md. Belal Hossain

¹Department of Fisheries Science, Chonnam National University, Yeosu 59626, Korea

²Department of Fisheries Biology and Genetics,

Patuakhali Science and Technology University, Patuakhali 8602, Bangladesh

³Department of Aquaculture, Patuakhali Science and Technology University, Patuakhali 8602, Bangladesh

⁴Department of Aquaculture, Sher-e-Bangla Agricultural University, Dhaka 1207, Bangladesh

⁵Department of Agribusiness and Marketing,

Sher-e-Bangla Agricultural University, Dhaka 1207, Bangladesh

⁶Department of Aquaculture, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh

⁷Department of Marine Fisheries and Oceanography,

Patuakhali Science and Technology University, Patuakhali-8602, Bangladesh

⁸Department of Fisheries and Marine Science,

Noakhali Science and Technology University, Noakhali 3802, Bangladesh

Abstract: The investigation was conducted to evaluate the socioeconomic profile of the fishermen, using Best-Worst scale and Pearson's correlation of Sugondha River, Bangladesh during the period of July 2015 to June 2016 by interviewing 200 fishermen. In Sugondha River, 47% fishermen were engaged in fulltime fishing and 56% preferred group fishing. Maximum fishermen (49%) were middle aged and 56% were found illiterate. 58% fishermen were lived with joint family and 17% fishermen had 8-above family members. Average annual income of most of the fishermen ranged from was BDT 56,000-70,000 (32%), where 30% had less than BDT 41,000. 48% women of the fishermen family supported their family by Poultry rearing. Age of fishers and income was positively correlated ($r = 0.071$) where income showed positive relationship with saving ($r = 0.765$; $p < 0.01$), type ($r = 0.561$; $p < 0.01$), fishing ($r = 0.759$; $p < 0.01$), housing ($r = 0.351$; $p < 0.01$), sanitation ($r = 0.540$; $p < 0.01$) and health ($r = 0.535$; $p < 0.01$). Although the drinking water facility in area is good enough, 100% used tube-well water, the sanitation condition is not good, 80% fishers used traditional toilet and 15% had no sanitary facilities. Lack of credit facilities was identified as main constraint by Best-Worst scale. Factors of insecure livelihood were dramatically showed by problem tree. Poor socioeconomic conditions of fishermen were forced to overfishing round the year without considering government rules related to aquatic diversity.

Key words: Livelihood status • Fishermen • Sugondha River • Constraints • Correlations

INTRODUCTION

Fishing from rivers play an important role in supporting livelihood worldwide and also forms a vital source of diet [1-3]. Fish and fishing trade are a significant

sector of many nations of the world from the standpoint of income and employment generation [4-7]. The rivers are offering enormous scope and potentiality for augmenting fish production and socio-economic safety of the people living around [8]. Rivers provide 1.78 million people's

Corresponding Author: Md. Rajib Sharker, Department of Fisheries Science, Chonnam National University, Yeosu 59626, Korea & Department of Fisheries Biology and Genetics, Patuakhali Science and Technology University, Patuakhali 8602, Bangladesh.

