
Why urban poor exposed to climate change in coastal Bangladesh are more concerned about ecosystem disservices than services?

Md Mustafa Saroar*^{†1} and Nuzhat Fatema²

¹Professor, Urban Regional Planning Department – Khulna University of Engineering Technology (KUET) Khulna City, Bangladesh

²Lecturer, Development Studies Discipline – Khulna University, Khulna 9208, Bangladesh

Abstract

The role of urban ecosystem services in the wellbeing of poor are extensively discussed, yet little is known about the vulnerability of urban poor to ecosystem disservices particularly in the context of climate change. Therefore, this research is aimed: a) first, to identify urban ecosystem services and disservices which the urban poor take into account to ensure their wellbeing; b) second, to examine whether urban poor really care more about protecting them from ecosystem disservices than taking advantage of services; and c) finally, to identify the factors that determine urban poor's differential concern for ecosystem services/disservices. The study was conducted taking coastal Khulna- a metropolis exposed to climatic disasters, as a case. Family heads of a total 235 households from low-income settlement- Rupsha slum were randomly interviewed through administering a semi structured questionnaire. Research instrument mainly explores their responses about both blue and green ecosystem services and disservices. The principal component analysis (PCA), and logistic regression techniques were employed to analyze data. The result shows that ecosystem disservices which the urban poor care most are waterlogging, storm water overflows, surface run off and smell from decomposed wastewater. Probit model shows that respondent's concern over ecosystem disservices are significantly determined by age, gender, occupation, season of a year, tenure of housing, length of stay, etc. The findings would help designing appropriate interventions to protect urban poor from the vulnerability of ecosystem disservices. Therefore, findings would give synergies to ongoing efforts of building resilient urban community in the context of changing climate.

Keywords: Climate change, Ecosystem services, Ecosystem disservices, Urban Poor, Bangladesh

*Speaker

[†]Corresponding author: saroar.mustafa@yahoo.com