

Impact of Sensor Networks on Aquatic Biodiversity in Wetland: An Innovative Approach

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Abstract Aquatic biodiversity is in the central field of environmental conservation issues in a wetland. Yet it determinately faced aquatic conservation authorities the loss of biodiversity as a very important global issue for several years due to misuse wireless sensor technology. The study attempts to re-look at the sensor networks that affect the aquatic biodiversity within and around the Tanguar Haor- wetland study at Sunamganj district in Bangladesh. Key aquatic conservation tools provided at the Tanguar Haor and its challenges with gaps in policies for wetland management practices are highlighted. The study shows the aquatic biodiversity-related rules and regulations amended were apex in Bangladesh from 2010 to 2018. The study represents the impact of processed sensor networks on aquatic biodiversity in a wetland to be compared to larger, medium, and smaller animals in a bright, dark and optimum environment, facilitating the design and misuse of wireless sensor networks within GPS locations. Approximately 64% of the respondents agreed on the development of aquatic biodiversity for managing the wetland at Sunamganj with secure peripheral sensor networks. The research also found that the Tanguar Haor is at risk due to misuse of wireless sensor networks compared to other wetlands in the Sylhet Division. Scientific knowledge is indispensable in wetland resource management but it poorly identified such knowledge while various performances are still below par. The research is unique and represents the innovative idea to improve the existing wetland policy linking with the appropriateness for the Ramsar Wetland Conservation Strategy.

Keywords Biodiversity, Sensor Network, Wetland, Tanguar haor, Ramsar

1. Introduction

Aquatic Biodiversity is in the core field of environmental issues in wetland management [1,2,3,21]. Wetlands deal with habitat for thousands of aquatic and terrestrial species community living in the soil surface through controlling floods [22]. Moreover, wetlands also engage additional sediment, nutrients, and other pollutants before they attach in

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