(120)

A Case Study on the Integration of Organic Farming Practices to Enhance the Livelihoods of Farmers and Fishermen through Wetland Conservation in the Bolgoda Lake Region

De Soysa, W.H.H.N.[1*], Abeyrathne, A.P.[2],

[1]EMACE Foundation, Sri Lanka
[2]Nerds Against the Odds (NATOS), Sri Lanka
**hnidushan@gmail.com*

Abstract

Since early 2023, a community-based initiative has been implemented in the Bolgoda Lake region, Sri Lanka, focusing on integrating organic farming practices to enhance the livelihoods of local farmers and fishermen while improving the environmental health of wetlands. Wetlands play a crucial role in sustaining biodiversity, regulating water quality, and supporting the socio-economic resilience of communities. This study evaluates how the adoption of organic farming practices has contributed to sustainable wetland conservation, environmental restoration, and economic growth. The project, conducted between March 2023 and August 2024, involved the training of farmers and fishermen in organic farming methods during the first six months, followed by 12 months of monitoring their progress. Monthly assessments were conducted to measure increases in income from organic product sales, changes in soil health, and the broader ecological impact of organic fertilizer-based farming practices. Historical pre-project data on income levels, soil conditions, and the availability of economically significant crops were also collected to establish a baseline for evaluation. Key findings reveal that organic farming has led to higher incomes for farmers and provided supplementary income opportunities for fishermen through diversified activities. By eliminating the use of chemical fertilizers, this initiative has secured water quality and fostered a flourishing ecosystem with organic vegetation. The wetlands are at a better state at present with improved soil health and a reduction in harmful agricultural runoff. The community has come together through this initiative, forming a collaborative group to ensure the long-term success of these practices. Development in the region spans social, economic, and environmental dimensions, demonstrating how community-driven conservation can synergize livelihood enhancement with ecological preservation. This study concludes that integrating organic farming practices with wetland conservation provides a replicable model for sustainable development, improving biodiversity and strengthening the socio-economic stability of wetland-dependent communities.

Keywords: *Biodiversity, Wetlands, Organic farming, Livelihoods, Conservation*