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Siargao Fresh Picks: Optimizing Sustainable Food Product Orders and Delivery System

Niedes D. Clerigo and Riah E. Encarnacion 0009-0002-4953-839Xand 0000-0003-3760-7458 Surigao del Norte State University, Surigao City, Philippines ndclerigo@ssct.edu.ph and rencarnacion@ssct.edu.ph

Abstract: Siargao Island, renowned for its ecological diversity and tourism, faces unique logistical challenges in food distribution, exacerbated by seasonal variations and limited infrastructure. This study aims to addresses the critical need for an efficient, sustainable food supply chain in a remote island context. It optimized ordering and delivery system tailored to the island's specific needs, focusing on sustainability, efficiency, and community engagement. By utilizing a mixed-methods approach, the research combines quantitative data analysis of current supply chain logistics with qualitative insights from local stakeholders, including farmers, vendors, and consumers. The results revealed that there is a high agreement among the respondents in terms of the transportation issues, integration of technology, and infrastructure and supply. By proposing a web-basedsystem will not only enhance the efficiency of food distribution but also supports local agricultural practices and strengthens the island's economy. Moreover, this research provides a replicable framework for other remote regions facing similar logistical challenges, contributing to the broader discourse on sustainable food systems and resilient community infrastructures.

Keywords: Sustainable food systems, Supply chain optimization, Eco-friendly logistics, Fresh food delivery, Siargao Island, Local producers, Food waste reduction, Sustainable tourism, Technology integration, Sustainable development

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