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SEPARATE COLLECTION OF ORGANIC WASTE AND CARDBOARD: ASSESSING THE IMPACT OF A DEVELOPMENT COOPERATION PROJECT IN TULKAREM, WEST BANK

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Abstract

This research aimed to analyze the impact of the introduction of a separate collection system for organic waste and cardboard in the Governorate of Tulkarem, West Bank (Occupied Palestinian Territories). The amount of waste diverted from the final disposal at the landfill of Zahret Al-Finjan was quantified and the quality of separate materials was evaluated. An economic and environmental analysis was performed to quantify the impact of separate collection in terms of greenhouse gas emissions and the costs for the local waste management authority. Different methods for data collection were used, such as meetings, field visits and database analysis, allowing the construction of a scientific-based and coherent descriptive framework for the local solid waste management system. The results of the study demonstrate that the separate collection of organic waste and cardboard is a sustainable solution under the environmental point of view, while criticality has been identified in terms of economic sustainability. The proposed method has led to a proper assessment, allowing the identification of the material collection as the most expensive stage and creating the basis for further intervention on the waste management system.

Key words: composting, lower-middle-income countries, material recovery, municipal solid waste

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