Team ID: UG22

Terra Strategies

Team member Name	Year	Major
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Topic Title: Food waste in the Colombian central region and the role of Corabastos **Audience:** Corabastos Board of Directors

Sustainable Development Goal

SDG Goal # 12: Ensure Sustainable Consumption and Production Patterns

Executive Summary

Corabastos, Colombia's largest market square and the second largest in the Americas, situated in Bogotá, operates within a highly dynamic environment. It grapples with the significant challenge of effectively reducing food waste in its daily operations. This entails identifying key areas for improvement and proposing innovative solutions to promote sustainability and efficiency throughout the supply chain, from farmers to commercialization. Trading approximately 12,000 tons of food daily, the supply chain surrounding Corabastos wastes around 30% of produce. This wastage not only impacts food availability and prices, but also exacerbates food insecurity and pollution. Farmers bear direct consequences, experiencing partial payment for damaged food, while distributors incur losses as damaged goods cannot be used or sold during processing. Despite ongoing efforts from Corabastos, inefficiencies persist, further compounded by harmful leachate from organic waste. This not only diminishes recycling potential but also escalates waste disposal costs.

As Terra Strategies, a consulting partner of Corabastos, we propose addressing this challenge from a multifaceted perspective. Our solution is divided into three fronts: prevention, regulation, and management. For prevention, we suggest implementing an agricultural support system with timing and projected pricing, using IoT (Internet of Things) technology to optimize production and prevent oversupply. This involves collecting and analyzing data to predict consumption patterns and suggesting crop schedules to help farmers to use their land optimally. On the regulation front, we recommend establishing incentives and penalties for proper waste separation in Corabastos to minimize the waste of usable products. This will encourage more sustainable waste management practices within Corabastos and its supply chain. Lastly, in waste management, we propose exploring various strategies such as utilizing waste for biomass production, both for human and animal consumption, as well as composting. This will help reduce waste and promote more efficient resource management within Corabastos. Implementing these measures will not only contribute to the economic sustainability of the operation but also improve its environmental footprint.