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# Sustainable management of organic municipal waste in the Municipality of Pérez Zeledón

Through technology cooperation the project will strengthen the centralized composting plant of organic waste in the municipality of Pérez Zeledón, which will serve as a model for replication in other municipalities and cities of the country and the region, not only in the technical and technological aspects, but also in terms of the engagement and empowerment of various actors applying a systemic approach to the proposed solutions.



Municipality of Pérez Zeledón, Costa Rica

**Project Period:**

2019 - 2021

**Name of Client:**

Platform REPIC - An interdepartmental platform of the Federal Offices SECO, SDC, FOEN and SFOE of Switzerland

**Services Provided:**

- Fund management and monitoring.
- Transfer of technologies and knowledge.
- Sustainable waste management, stakeholder engagement and systems approach.

**Name of Staff involved and functions performed:**

[Dr. Sandra Méndez Fajardo](#)

Functions performed: General coordination of the project. Actors engagement and systemic design of strategies for sustainable organic waste management

**Name of Partner Organisations:**

From Switzerland:

- Skat Consulting
- University of Applied Sciences of Zurich (ZHAW)
- Institute for Research in Organic Agriculture (FiBL)

From Costa Rica:

National coordinator.

- Municipality of Pérez Zeledón
- Ministry of Agriculture and Livestock of Costa Rica
- National Union of Local Governments (UNGL)
- University of Costa Rica, San José

## Description of the Project:

Through cooperation with experts from Switzerland, the participating Costa Rican institutions seek **advice for technical improvements in the composting process, as well as the improvement and diversification of the final product, in order that the economic viability will be assured in the long-term.** The fulfillment of these objectives require a technical evaluation of the processes, the assessment of the quality of the organic waste and the determination of compost products, based on the different local fertilizer needs, as well as the training of the personnel of the plant. Moreover, conceiving the project in a holistic and integral way, the transfer of technology and knowledge will include not only these technical requirements and the **design of environmental education strategies to improve the separation at the source and in the collection of the organic waste.**

The project will **support participatory processes that increase the empowerment of public, private and civil society stakeholders involved.** This coupled with the inclusion of the academy and relevant groups of the society such as ACEPESA, the NGO that will lead the project in Costa Rica, will guarantee sustainability within the territory of the project and a high potential for multiplying the experience in similar contexts of Costa Rica.

## Improvement of the value chain of organic waste and products

Technical procedures that are currently running in the plant have been identified as big opportunities for improvements. Based on the results of the baseline assessment during the first stage of the project and with the support of the Swiss experts, best practices to implement will be verified.

Due to the technology transfer and the implementation of suggestions of the Swiss experts, the efficiency of the composting processes will increase. To guarantee the sustainability, in addition to trainings during the project as such, a plant operation manual will result as a means to maintain and improve the level of operation after termination of the Repic project.

The quality of the products obtained will be evaluated through field experiments in which different mixtures of soil and organic fertilizer (from the improved composting process) will be tested with different crops. At the end of the project, there will be a guideline for the use of the different products.

## Strengthening of stakeholder empowerment

Achieving this goal means to increase the level of participation, coordination and cooperation between the most relevant actors. This goal will be reflected in two ways: On one hand, actors directly involved in the composting plant operated in Pérez Zeledón. On

the other hand, actors who are involved in the organic (or municipal) solid waste management in other municipalities of the country.

Methods applied in the activities to achieve this goal will be based on the systems approach and include participatory design tools. Through these actors involved in workshops, meetings and interviews will consider (and learn from) the concepts of the other actors, the debate about the processes of the life cycle of organics, the inclusion of different perspectives to approach problems and solutions, and the use of the cause-and-effect way of thinking.

Stakeholders to involve will cover the needs of the municipality of Pérez Zeledón, but also actors related to the future implementation process of the NAMA (National Appropriated Mitigation Actions), as well as the Decarbonization Plan, linked directly with organic waste management, and aiming strengthening cooperation beyond the Repic project.

<http://www.repic.ch/repic-en/projects/ongoing-projects/resource-efficiency/skat-costa-rica/>