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"Global food security and food safety:
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Cooperation and Participation for Improving Food Security in Corridor Seco Region, Guatemala: the Soberanos Project

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Abstract

Guatemala is recently facing a severe food crisis mainly due to extreme weather events, land degradation phenomena and water scarcity. Most of smallholder farmers have not access to stable and sufficient water resources and the situation is particularly severe in the south-eastern area of Corridor Seco, where low rainfall amount led to the loss of high percentages of the total agricultural production.

The SOBERANOS project, implemented by ManiTese, the Association Santiago de Jocotan and GESAAF Department of the University of Florence, has the ultimate goal of promoting food sovereignty in the Chortì region of Chiquimula. This is expected to be guaranteed through the achievement of three objectives: to provide each family with an alternative rainwater collection system for the irrigation of the family gardens; to make families rediscover and consume native foods supported by a sensitisation on the issues of food security and the importance of food diversification; to create a seed bank collecting native seeds and managed by a local committee.

GESAAF department of the University of Florence carried out two missions, in 2014 and in 2017, in the municipality of Jocotan, aimed at realising household water harvesting systems composed by a rooftop collection system connected with an underground tank. In fact, in the climatic conditions of the Corridor Seco area, the use of water harvesting, the collection of scarce rainfall over a large area for its concentration and use for productive purposes, can provide a more stable access to water resources and increase agricultural production. At the same time, Association Santiago de Jocotan realised practical activities and community mobilisations for introducing improved agricultural techniques and improving nutrition. First results showed promising results for what concerns the acquisition of consciousness of the benefits provided by a varied and balanced diet and the awareness of the role played by family horticulture, not only for self-sustenance, but also as a mean for land re-appropriation to cope with large-scale agro-business activities. Moreover, improved rooftop water harvesting structures have provided a reliable water source, and local farmers are now adopting this technology at a wider scale.

Keywords: Family horticulture, food security, nutrition, rooftop water harvesting, water Scarcity