

RURAL LIVING LAB IN SOCIAL FARMING SPECIFIC AIM: DEPLOYMENT OF IOT & BLOCKCHAIN TECHNOLOGIES IN THE FOOD TRACEABILITY SYSTEM

CENTRAL REGION



LIVERUR Pilot Region: **Central Region**
Square km: **2,7 km²**
Population: **23 034 inhabitants**
Political region: **Birkirkara, Malta**

DESCRIPTION

The Circular Rural Living Lab Malta pilot action aims to generate new methodologies and technologies to approach rural and peri-urban territories weakness and strengths in Malta by a “model of social farming” and follow the entire short food supply chain for the sustainable eco-production. The main natural ingredients of functional food (spices and medical herbs) will be produced in the land of Church Home for the Elderly in Dar tal-Kleru in Birkirkara, which combine an used water recycling with rain water harvesting and already installed (but need to renovate) irrigation system.

Spices & medical herb



The pilot case will use the experiences of local senior farmers in the selected land of Church Home for the Elderly in Dar tal-Kleru in Birkirkara, by producing spices & medical herbs as raw materials. The short food supply chain will be deployed from the seed and production until the post-harvest through the traceability system, supported by IoT, Data and Blockchain technologies.

 Environment & Climate	Malta suffers from a lack of natural water resources, having no natural rivers or lakes. The freshwater supply of the country is stored in groundwater aquifers or obtained through rainwater harvesting. The lack of natural resources generates another problem by the high population density, which leads to higher water demand.	✘
	Circular economy is in the focus of the country's policies, which includes the balanced water consumption, green jobs creation and the use of renewable energy.	😊
 Economic context	Small island with a high population density.	ⓘ
	Agriculture is important for diverse economic activity and employment and the agricultural industry provides genuine products for the local market.	😊
	Dominant BM: rural SME's.	ⓘ
	Lack of diversification in production, lack of technology intensive, innovative small business entities (micro- , family-and farm business, self-entrepreneurs, agricultural startups).	✘
 Societal Context & Social Infrastructure	Weak human resources in Science and Technologies.	✘
	Small island with a high population density.	ⓘ
	The Vision 2050 introduces the concept of a sustainable society by protecting natural resources and safeguarding health, which is essential to the development and prosperity of the society.	😊
	Lack of young entrepreneurs, lack of small entities.	✘
 Rural technical infrastructure	Malta's organic agriculture (food production/processing) is below average compared to other EU countries	✘
	High transportation costs.	✘
	Short food supply chain model as an opportunity to overcome high transportation costs.	😊
 Legal & institutional framework	In 2001, the Environment Protection Act established the National Commission for Sustainable Development, which was set up in 2002.	😊
	The Strategic Plan for the Environment and Development (SPED) was approved in 2015 as the official document that addresses spatial issues for the Maltese Islands in the coming years. It regulates the sustainable management of land and sea resources covering the whole territory and territorial waters of the Maltese Islands.	😊
	Social farming policy framework.	😊
	The objectives of the Vision 2050 following the goals of SDG are based on more efficient resource utilisation and the long-term management of, and investment in human, social and material resources, which is particularly relevant for Malta's profile.	😊
	National Agricultural Policy for the Maltese Islands 2018-2028. This vision contemplates the development of a policy with critical targets.	😊
 Food Security & Safety	There are few registered quality-labelled products in Malta, but the Maltese Islands have vast potential to tap the markets with quality labelled products. It is essential for the agricultural and food processing sectors to reconnect with Maltese consumers to meet the demand for fresh and quality assured products.	✘
	In February 2014, an agreement was signed between the Government and the Mediterranean Agronomic Institute of Bari to provide Technical Assistance for the Setting Up of a Quality Regime for Agricultural Products in Malta.	😊