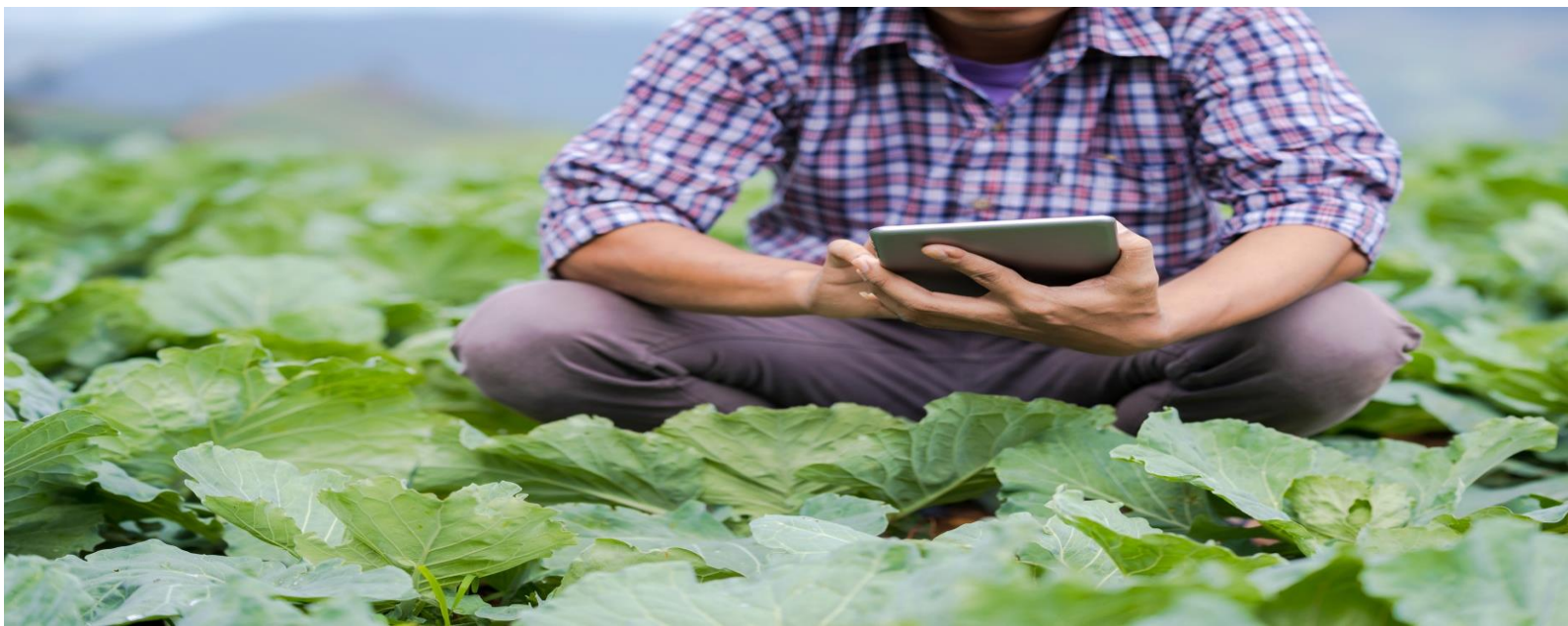
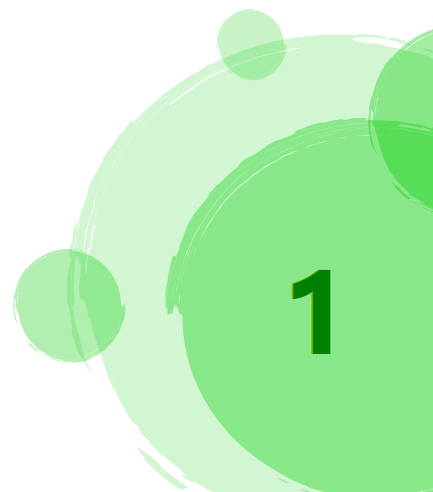


SMALLDERS

Empowering the Small Holders



NEWSLETTER





SUMMARY

Presentation of SMALLDERS Project	3
SMALLDERS 1 st General Assembly Meeting in ROME-Italy, September 2022	6
SMALLDERS Special Session at the International Multidisciplinary Modeling & Simulation Multiconference (I3M), September 2022	7
SMALLDERS Special Session at the 4th International Conference on Industry 4.0 and Smart Manufacturing (ISM), November 2022	10



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Presentation of SMALLDERS Project

Smart **M**odels for **A**gro-food Local va**L**ue chain based on **D**igital technologies for
Enabling covid-19 **R**esilience and **S**ustainability

PRIMA Program

PRIMA (Partnership for Research and Innovation in the Mediterranean Area) consists of European Union Member States, Horizon 2020 Associated Countries and Mediterranean Partner and aims to build research and innovation capacities and developing knowledge and common innovative solutions for integrated water provision and management in the Mediterranean area.

GLOBAL AIM

The overall objective of the project is to carry out basic research as well as industrial research and development activities with the aim of identifying a framework that encompass innovative strategies, methodologies, technologies and business models to increase the resilience of small-scale farms in the Mediterranean area, to effectively and efficiently face unexpected and disruptive events such as the COVID-19 pandemic.

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Specific Objectives

Our research activities will be carried out with the aim of:

1. Integrating the smallholders processes into an advanced operational scenario;
2. Designing a framework that encompass Web-App and Mobile App technologies, AI based Knowledge Navigators, new Business Models, Blockchain technology, Multi-Capitals Sustainability and Simulation;
3. Conceptualizing an architecture able to integrate the above-mentioned methodologies/technologies;
4. Developing an ICT platform prototype (the SMALLDERS platform); creating experimentations testbeds and case studies localized in different countries

SMALLDERS Expected Impacts

1. Ensure incomes to smallholders facing COVID-like crisis.
2. Decrease inefficiencies and barriers to market access.
3. Greater efficiency and sustainability in processes and the use of resources.
4. Increase in mitigation capability.
5. Increase profitability via either or both the reduction of production costs or/and the increase of quality.

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Partnership

The partnership involves five academic partners from four countries, covering a wide range of academic experts in various scientific fields:

- ✓ University of Calabria (UNICAL) - Modeling & Simulation Center-Laboratory of Enterprise Solutions, ITALY
- ✓ University of Parma (UNIPR) - Future Technology Lab, ITALY
- ✓ University of Extremadura (UEX), SPAIN
- ✓ IMT Mines Ales – Laboratoire des Sciences des Risques (LSR), France
- ✓ University of Tunis El Manar, Laboratory of energy applications and renewable energy efficiency (LAPER), TUNISIA

Testbeds

To show the potentials of the SMALLDERS platform and its versatility, the project partners foresee the creation and running of an experimental infrastructure based on four testbeds respectively located in Italy, France, Spain and Tunisia.

Entities of testbed 1:

Azienda Stuard, Italy



Ecornaturasì, Italy



Entity of testbed 2:

Asociación de Fruticultores de Extremadura (AFRUEX), Spain



Entity of testbed 3:

Le Mas des Agriculteurs, France



Entity of testbed 4:

Tunisian Ministry of Agriculture and Water Resources: Regional Office of Agricultural Development of Nabeul



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SMALLDERS 1st General Assembly Meeting in ROME September 2022

SMALLDERS Project held its 1st General Assembly (GA) meeting, on the 20 September 2022 in a hybrid mode (face-to-face and online participation) in ROME-Italy. The 1st- GA meeting involved principal investigators and researchers of all five Partners (University of Calabria, Italy; University of Parma, Italy; IMT Mines Ales, France; University of Extremadura, Spain; University of Tunis El Manar, Tunisia) coordinated by Prof. Francesco Longo.



The discussion concerned the work carried out by each Working Group, pointing out to the actions relating to communication and dissemination activities of the project. An extensive discussion focusing on several topics was carried out to ensure the smooth accomplishment of project tasks, deliverables, as well as future events.

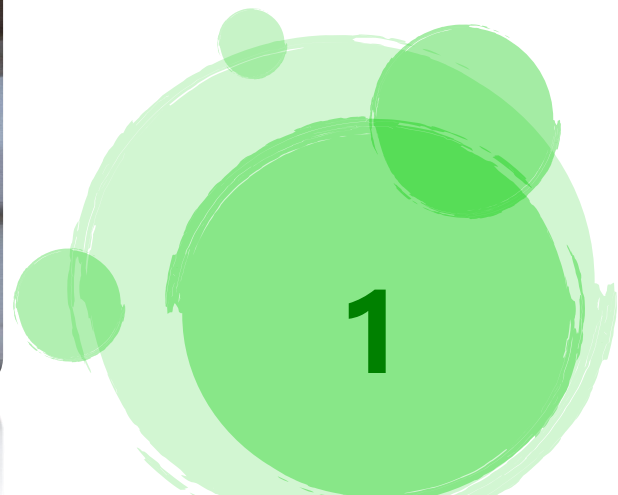
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SMALLDERS Special Session at the I3M Conference September 2022

A SMALLDERS special session has been scheduled at the International Multidisciplinary Modeling & Simulation Multiconference (I3M) conference in Rome, Italy on the 20 September 2022. A presentation of the SMALLDERS project was made by each partner member.





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SMALLDERS Project Overview

Presented by Prof. Francesco Longo, University of



The User Management Layer of SMALLDERS

Presented by Prof. Vittorio Solina, University of
Calabria, Italy



New Business Models for Smallholders

Presented by Prof. Sergio Rubio Lacoba, Extremadura
University, Spain





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The Certification and Sensors Layer of SMALLDERS

Presented by Prof. Giuseppe Vignali, University of
Parma, Italy



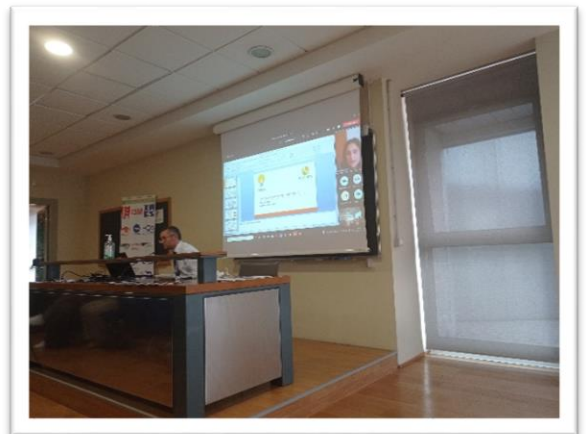
The Sustainability within SMALLDERS

Presented by Prof. Lilia Sidhom, University of
Tunis El Manar, Tunisia



The Digital Twin and Simulation Layer of SMALLDERS

Presented by Prof. Gregory Zacharewicz, IMT Mines
Alès, France



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SMALLDERS Special Session at the ISM Conference November 2022

The 4th International Conference on Industry 4.0 and Smart Manufacturing (ISM) has been held in 2-4 November 2022 in Linz, Austria. Many researchers and professionals involved in additive manufacturing, artificial intelligence, analytics and big data, Blockchain, digital twins and also economics-business models coming from all over the world have attended this conference.

In this special session, presentations from the partners of the SMALLDERS project are carried out in an open format in order to present the project results and interact with the audience with the aim to establish connections and possible cooperation opportunities.

During the session, the following paper was presented:

“An overview of approaches and methodologies for supporting smallholders: ICT tools, blockchain, business models, sustainability indicators, simulation models”

Francesco Longo, Giovanni Mirabelli, Vittorio Solina, Laura Belli, Chaima Ben Abdallah, Oussama Ben-Ammar, Eleonora Bottani, José Manuel García-Gallego, Manuella Germanos, Francisco Javier Miranda González, Sergio Rubio Lacoba, Lilia Sidhom, Giuseppe Vignali, Gregory Zacharewicz.

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