Increasing Resilience of Smallholders with Multi-Platforms Linking Localized Resource Sharing





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PRIMA S2 2021 RESILINK



- Partnership for Research and Innovation in the Mediterranean Area
- R&I approaches to improve usage of resources
- Call: Section 2 Multitopic 2021
- Thematic Area 3-Agrofood chain

https://prima-med.org/



Topic 2.3.1 Increasing the resilience of small-scale farms to challenges and COVID-like crisical ising cased technologorange smart agri-food supply chain and cases management is a smart agri-food supply chain and cases management.

















Prof. Congduc Pham



Towards more frequent crisis?







A transdisciplinary project











































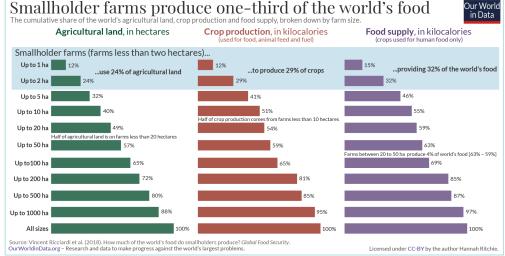
TO INCREASE THE RESILIENCE OF FARMERS TO GLOBAL CHALLENGES



Smallholders - up to 2ha



- Most (84%) of the world's 570 million farms are smallholdings
- Provide about 32% of world food supply, on about 24% of agriculture land
- <5ha would increase world food supply to 46% on 32% of land



https://ourworldindata.org/smallholder-food-production

Smallholder farmers: first to be impacted by climate change, resource scarcity & unexpected crises. They are very economically fragile!

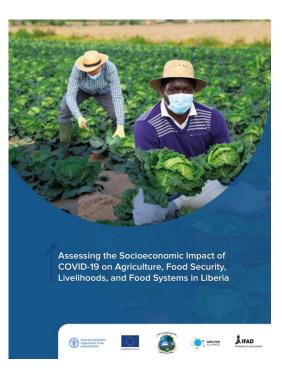




Increase resilience?

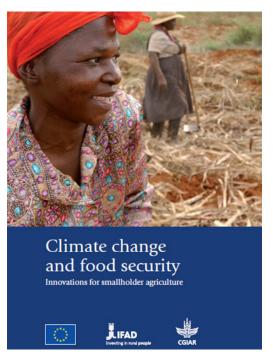


- Digital smart technologies can bring new tools & services that could improve the resilience of the entire food supply chain
- However, " what services" and " how to implement them" are still to be discussed and investigated!













RESILINK's motivations



- Increasing the resilience of farmers is a multidimensional challenge
- RESICULINK will increase farmer's resilience by providing continuity of access to both resources and markets in crisis situations
- Promotes & discover local resources that are less impacted by restrictions on movements
- Generalizing local resource sharing approach will enable smallholders to maintain their activity thus securing their revenues

IS IT ANOTHER e-COMMERCE or ONLINE SHOPPING PLATFORM?



Targeting farmers, but...



- Not only an exchange platform for farmers...
- All actors of the agri-food value chain need to be engaged!
 - Government Agencies, Agriculture Advisors
 - Agriculture Cooperatives
 - Local Administrations
 - Regulators
 - ...



BECAUSE IN CRISIS SITUATION, FAST DISSEMINATION & ACCESS TO INFORMATION IS CRITICAL!





RESILINK's approach



RESICULINK will increase farmer's resilience by providing continuity of access to both resources and markets in crisis situations

Promotes & links local resources that are less impacted by restrictions on movements

Generalizing local resource sharing approach will enable smallholders to maintain their activity thus securing their revenues

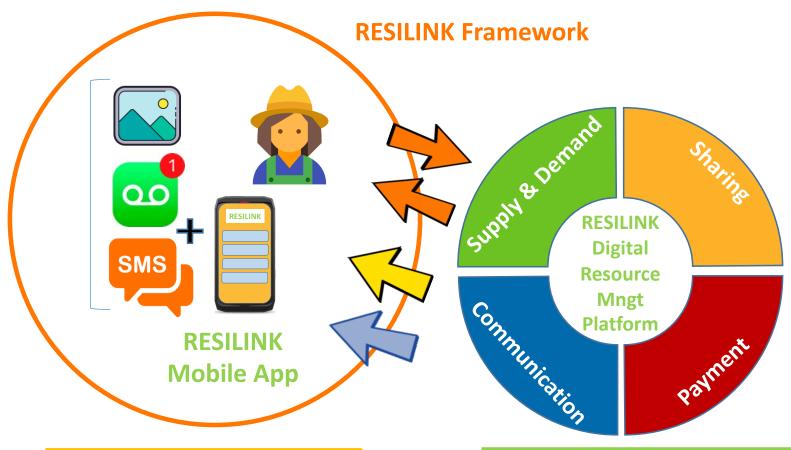
• A distributed digital platform will enable real-time exchange of information on territorial resources and supplies & demands; connecting farmers to new supply, sharing opportunities and distribution channels





RESILINK's digital platform





Improve the agri-food value chain by optimizing usage of local resources, generalizing local resource sharing approach and facilitating territorial markets

2

Develop distributed digital resource management platform for real-time exchange of information on territorial resources and supplies & demands; connecting smallholders to new supply, sharing opportunities and distribution channels



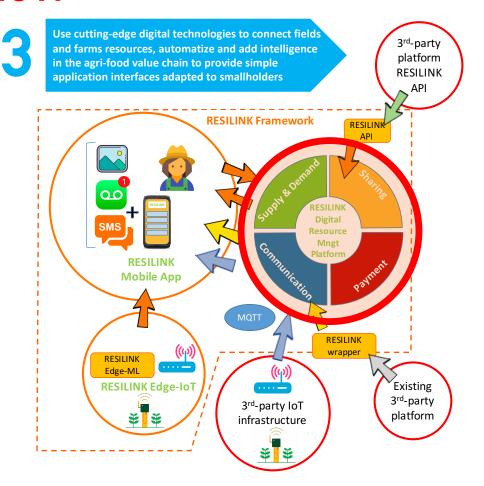


RESILINK's digital platform



IT IS ALSO A RESEARCH PROJECT!

- Will provide an open architecture and API to seamlessly integrate third-party platforms into comprehensive dashboards/portfolios
- Incrementally add disruptive technologies such as Internet-of-Thing (IoT), Edge Computing, Linked-Data and AI-based Decision Support System (DSS) for information sharing automation in agriculture/farming processes

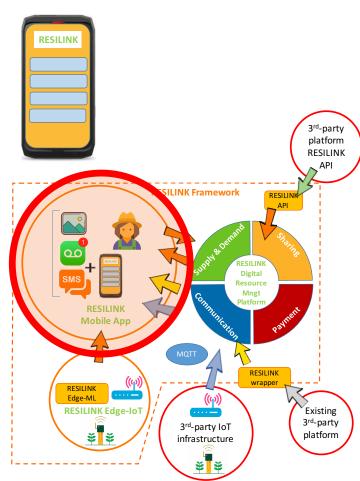




RESILINK's mobile application



- The mobile application will be the main interface to simply, quickly and intuitively interact with the RESILINK digital resource management platform
- The user interface will be adapted to the smallholder communities and simple interaction methods can also be supported such as SMS, voice attachment, pictures, etc.
- Will provide subscription service to real-time information channels from agri-food actors
- Reception of notifications for correlated local resources can be enabled, in addition to resources matching explicit requests







It is a multi-actors R&I project



What target?

What services?

What functionalities?

Synergy?

Acceptability?

Openness?

Sustainability?



Piloting & Evaluation





Project basic info



- 7 partners: Algeria (1), Egypt (2), France (2), Morocco (2)
- 1 associated partner: Germany (1)
- 48 months
- Start date: June 1st, 2022
- End date: May 31st, 2026







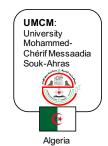






















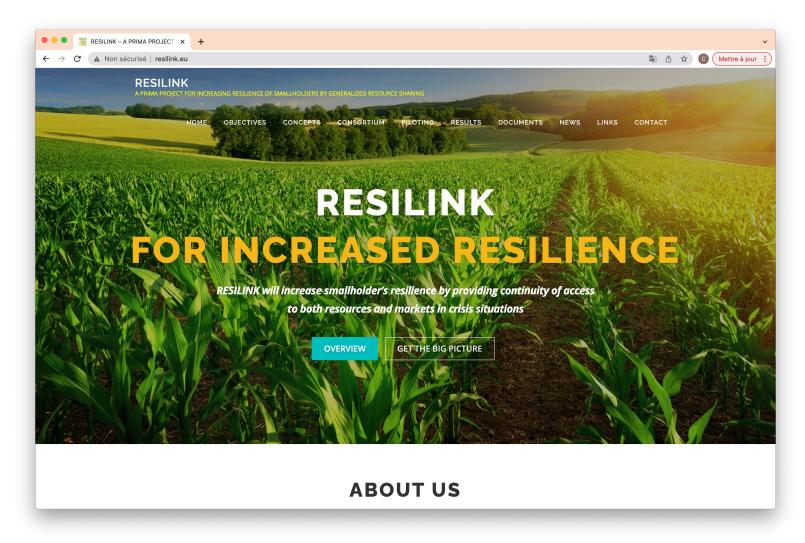






PRIMA Web site: https://resilink.eu







Increasing Resilience of Smallholders with Multi-Platforms Linking **Localized Resource Sharing**



ACICT: Arab Company for Information and Communication Technology



Egypt

ARC: Agricultural Research

Egypt







UMCM: University Mohammed-Chérif Messaadia Souk-Ahras

Algeria



USMS:

University

UPPA: University of Pau & Adour Country France

WAZIUP eV: WAZIUP association (WAZIUD) partner Germany