

Increasing Resilience



of Smallholders with Multi-Platforms Linking
Localized Resource Sharing

Agricultural Research Center Egypt

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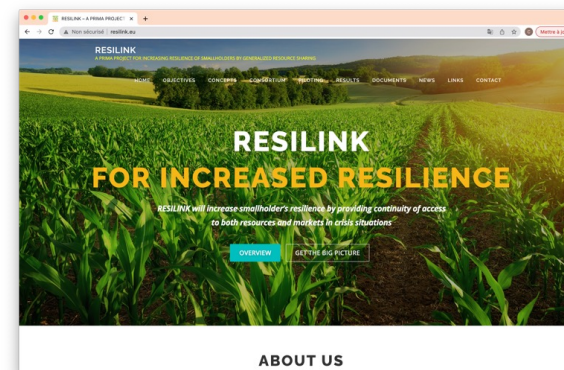


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PRIMA S2 2021 RESILINK

- Partnership for Research and Innovation in the Mediterranean Area
- Call: Section 2 Multitopic 2021**
- Thematic Area 3-Agrofood chain
- Topic 2.3.1 Increasing the resilience of small-scale farms to global challenges and COVID-like crisis by using adapted technologies, smart agri-food supply chain and crisis management tools
- Most (84%) of the world's 570 million farms are smallholdings
- Provide ~ 32% of world food supply, on ~ 24% of agriculture land



<https://resilink.eu>



RESILINK's motivations

- ⦿ Smallholder farmers: **first to be impacted by climate change, resource scarcity & unexpected crises**. They are very economically fragile!
- ⦿ Increasing the resilience of farmers is a multidimensional challenge
- ⦿ **RESILINK** 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**

Promotional video

- See the RESILINK's promotional video from the RESILINK web site
- https://youtu.be/FuCl2v_5Xt4

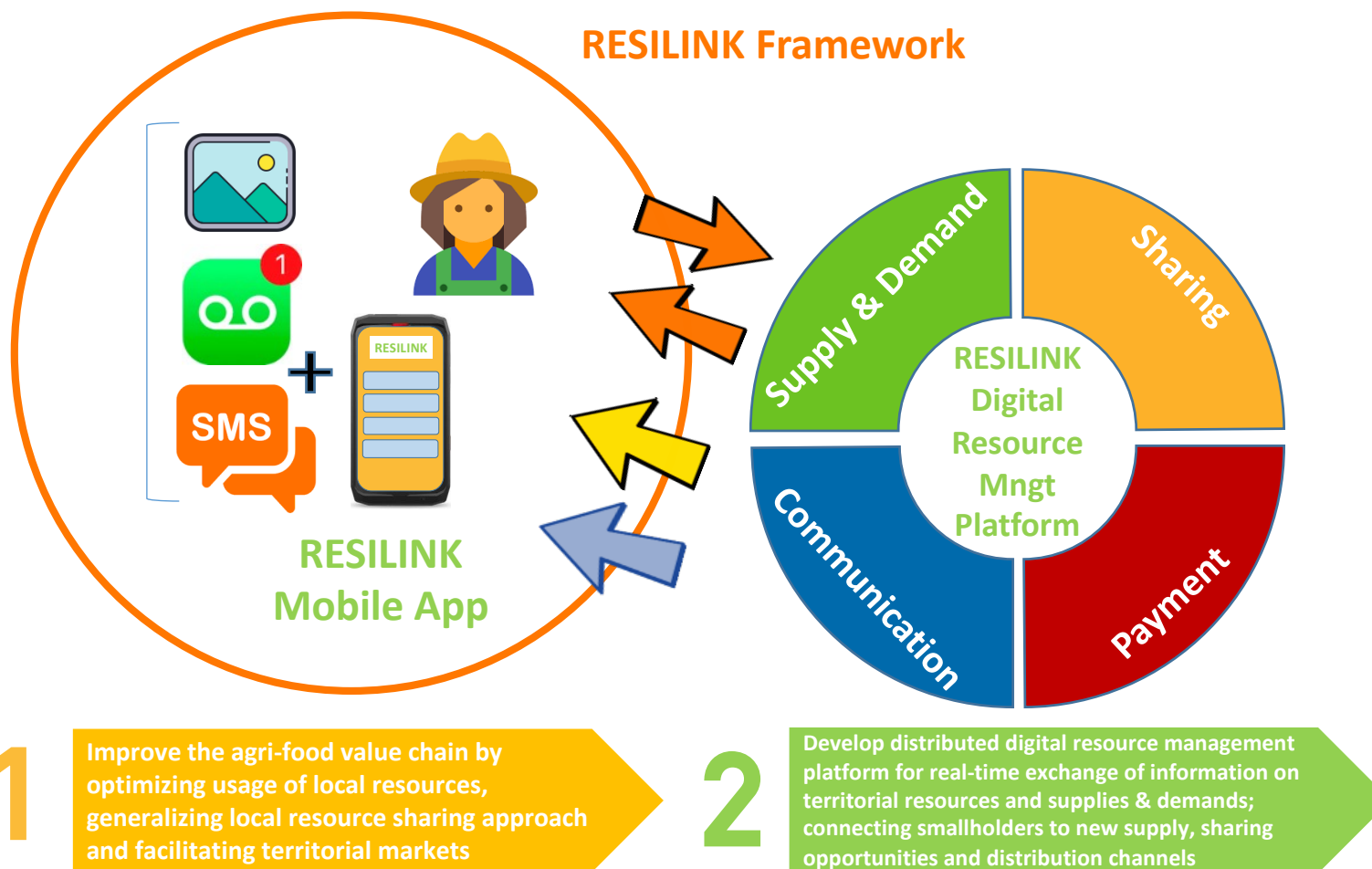


RESILINK's approach

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

- ⦿ 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



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



- ⦿ 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 is conducting surveys to better understand the needs, the level of technology acceptability, the desired functionalities, ...

Egypt Case Study

Beni Suef Governorate, is one of the leading governorates in medicinal and aromatic plant cultivation and the governorate targeted by PRIMA's project to increase smallholder resilience through multiple platforms linking local resource sharing in upper Egypt. So, we chose Tawa village, Biba, Beni Suef Governorate, to be our case study. It includes 128 farmers, representing about 10% of the total number of holders in the village



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Main Activities on Egyptian Case study

1. Review existing distribution channels and determine to what extent they can be improved taking into account structural limitations of smallholders.
2. Identify innovative distribution channels, taking into account smallholder communities, how they live and trade.
3. Identify innovative distribution channels specific to a local & territorial agri-food chain.
4. Take into account sustainable development issues when addressing distribution channels.
5. Investigate the challenges & risks of resource sharing approach when considering a large variety of smallholder communities.
6. Investigate on the resource sharing approach when applied to the smallholders' local agri-food chain

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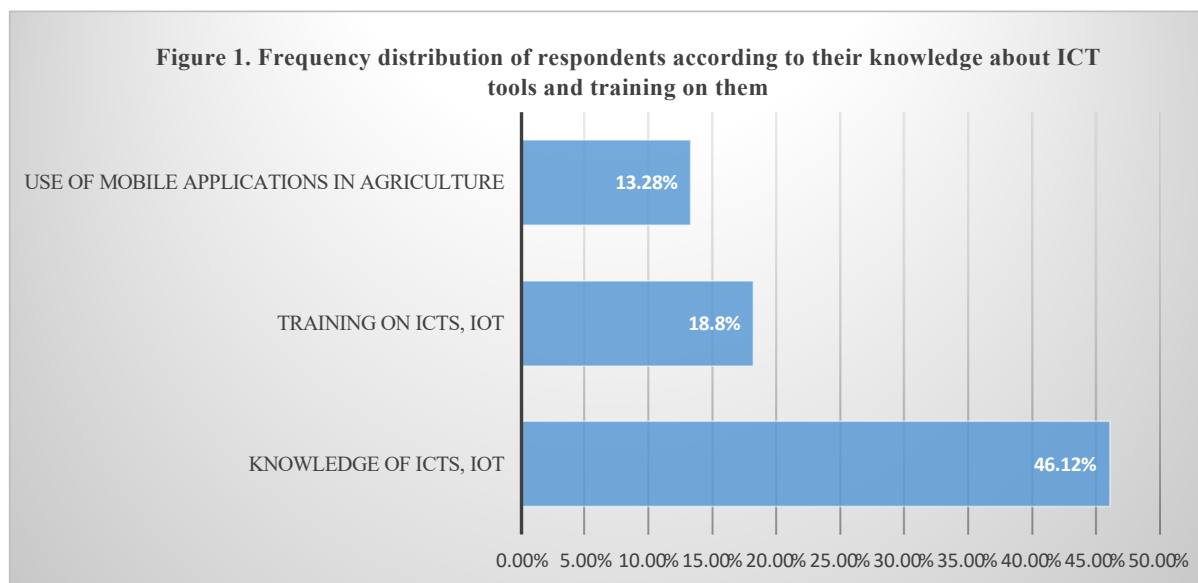
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Previous Stage Results (M1-M18)

1. Respondent's Knowledge about information and communication technology and their sources of information



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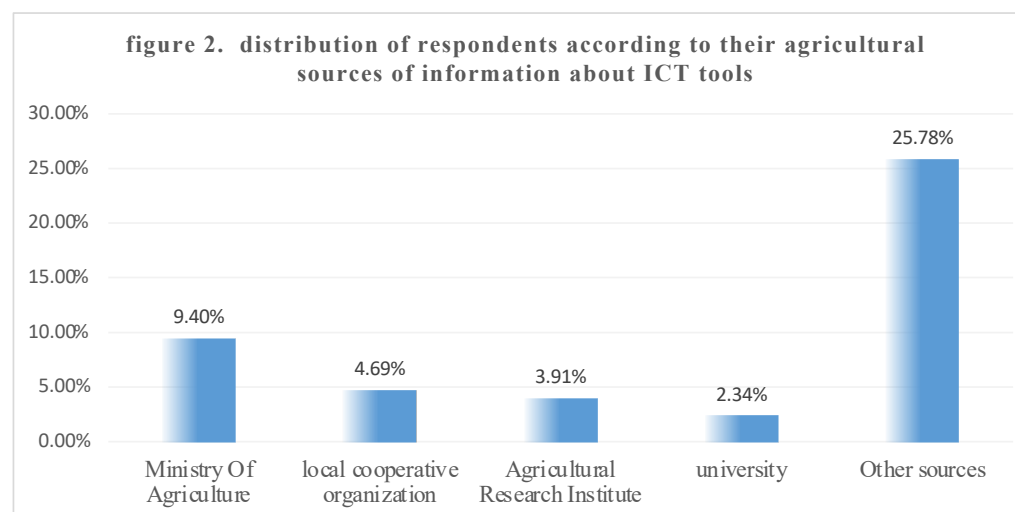


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2. Distribution of respondents according to their agricultural sources of information about ICT tools



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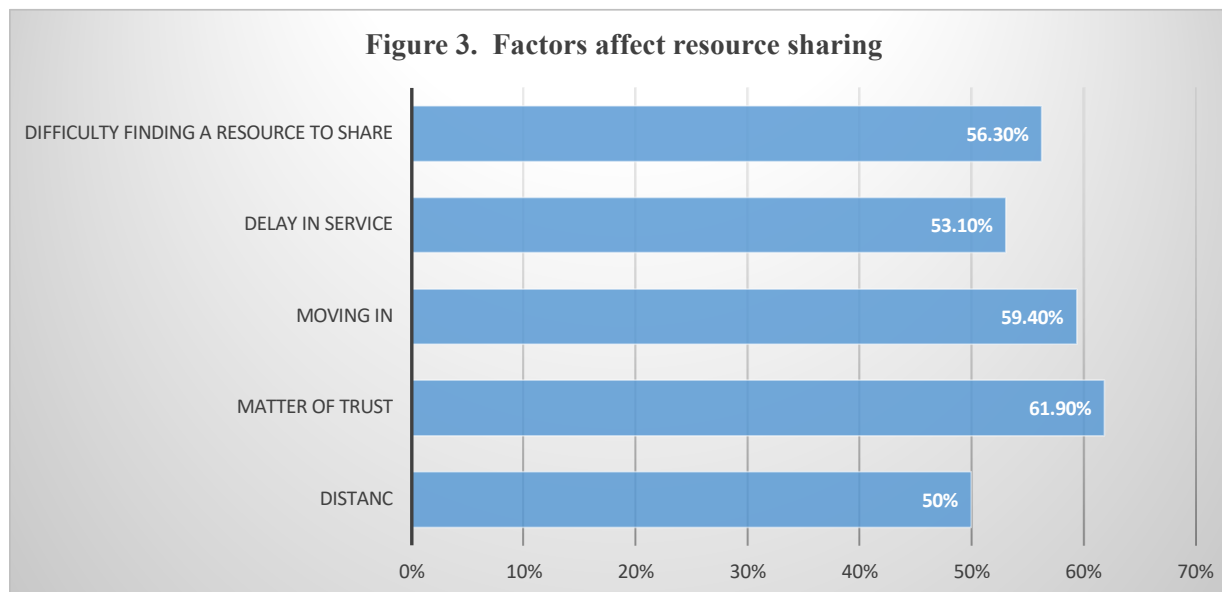


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3 . Factors affect the resource sharing



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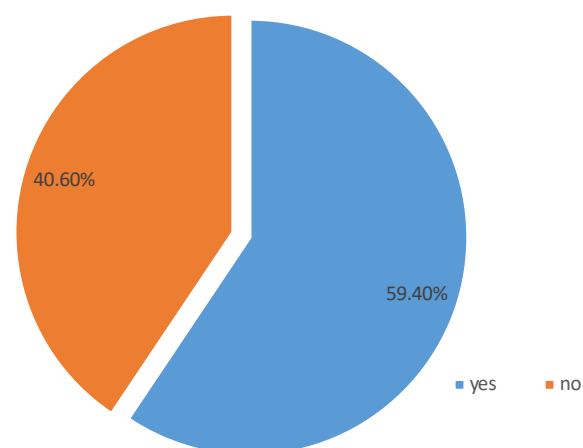
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4. Readiness to adopt platforms linking local resource-sharing in the future

Figure (4) Readiness to replace the traditional method of participation with a digital platform (phone application) to share resources and services



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5. Barriers to adopting digital applications in agriculture

Table 1. Obstacles of respondents concerning adopting digital application (N = 128).

Barriers to digital application adoption	%	Rank
Lack of knowledge of the new tool	81.25	1
Lack of training in using digital tools	62.50	4
The new tool is not compatible with the used phone	59.37	6
Poor internet service	56.30	7
Lack of coordination between farmers and extension workers	65.60	3
Low confidence in the effectiveness of the new tool	75.00	2
It takes longer to achieve the expected result	61.80	5
Non-discrimination in prices at the platform and market level	46.9	8

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Deliverables of ARC depending on the previous results

1-The Framework for a generalized resource sharing for increased resilience of smallholder considering a local & territorial agri-food chain (R, PU, M12) (Ed. ARC)

2-Framework definition of generalized resource sharing for increased resilience of smallholders (M04-M18)

3- Final report on Framework for a generalized resource sharing for increased resilience of smallholder considering a local & territorial agri-food chain (R, PU, M18) (Ed. ARC)

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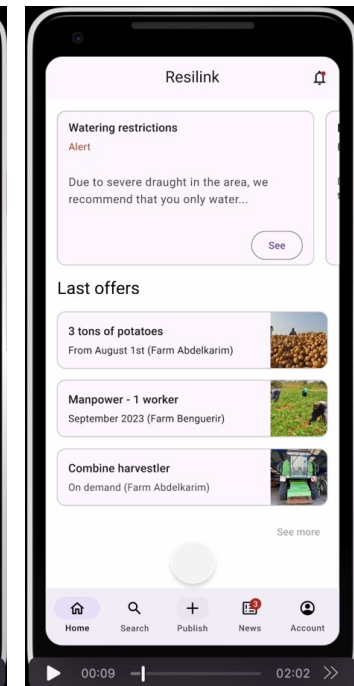
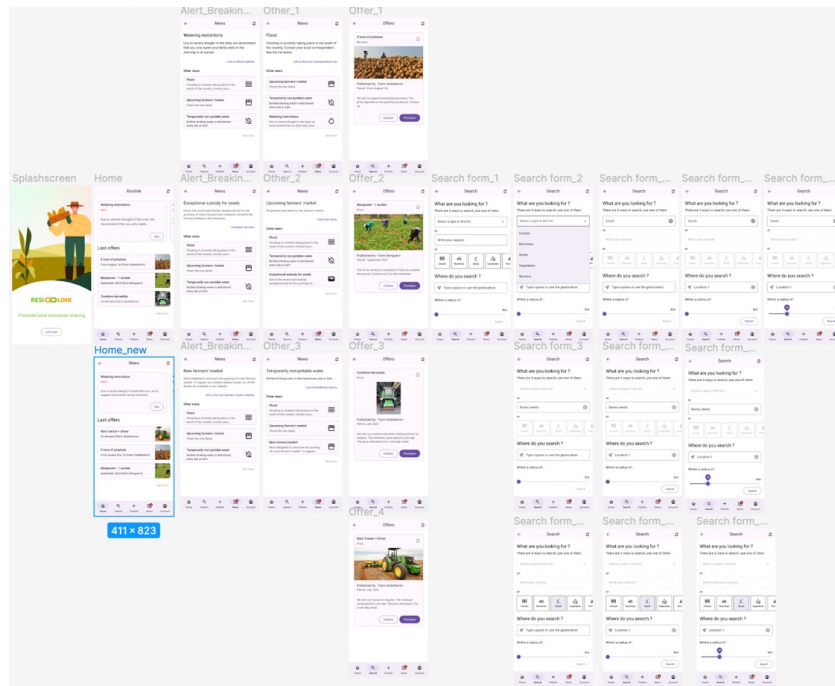
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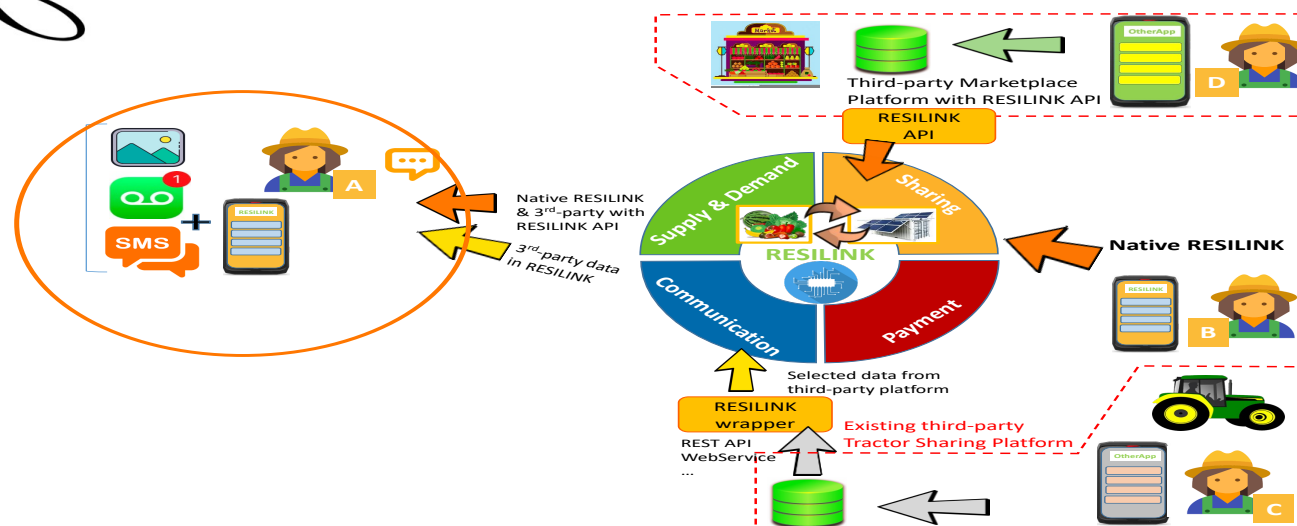
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Mobile app mockup

- Interviews results will be realized with a Figma mockup that can be interactively demonstrated on a smartphone to get feedback on the application functionalities, user experience and user interface



Thank You



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