

# **CONFERENCE ON TRANSFORMING AGRI-**



# FOOD SUPPLY CHAIN FOR A **SUSTAINABLE FUTURE**





Alexandria, Egypt (AASTMT)





# Assessing the challenges of adopting digital platforms for localized resource sharing in agriculture in Morocco

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# Context

•Importance of Small Farms: Small-scale farms play a crucial role in food security and local economies but face ongoing challenges.



- **Digital Transformation in Agriculture**: With technological advancements, digital platforms are becoming powerful tools to boost productivity, strengthen collaboration and increase resilience of smallholder farmers.
- •Potential Impact of Resource-Sharing Platforms: Digital platforms enable farmers to share resources like machinery, seeds, and knowledge, fostering a more resilient and collaborative agricultural sector

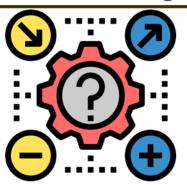






# Context

### New technologies



Social and economic impacts



**Accessibility** 

**Perceptions** 



**Constraints** 









# RESICULINK as an opportunity

- Develop a digital platform that enables real-time exchange of information on territorial resources, supply, and demands.
- Likely to be progressively improved.
- →Transform how farmers, respond, collaborate and adapt



Adapt the platform to the needs of the Agricultural sector











# RESICULINK as an opportunity

Identify the shared resources between agricultural stakeholders in normal and crisis situations



Identify the needs of agricultural stakeholders to be shared



Identify socio-economic Socioeconomic Determinants of **Digital Platform Adoption** 









# Methodological approach



ldentification of agricultural stakeholders' needs for the RESILINK platform



Four questionnaires have been established and validated



Stratified simple random sampling



**Data collection** 



**Data analysis** 



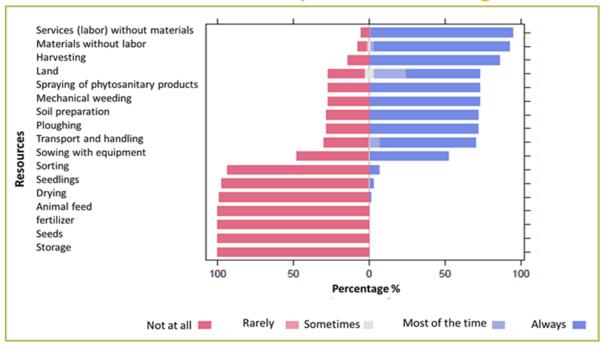






# Willingness to share farm resources

### **Resources Currently Shared Among**



### **Currently:**

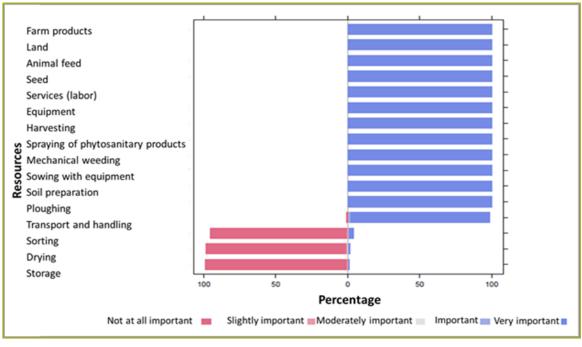
Farmers share certain resources like plowing, weeding, and harvesting but are still reluctant to share resources like storage space, seeds or fertilizers.







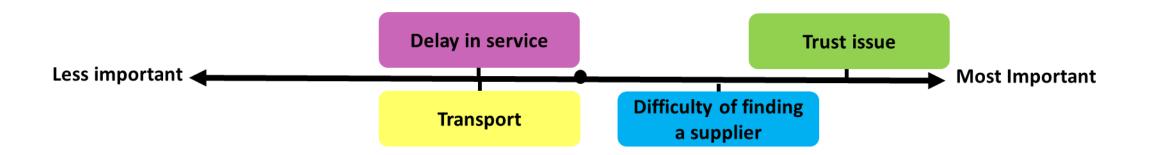
### **Resources Farmers Wish to Share**



### In the future:

However, 100% expressed interest in expanding their resource sharing in the future.

# Factors affecting agricultural resources sharing



- •Trust: Trust is a central factor that facilitates agricultural resource sharing by strengthening social ties and collaboration among farmers.
- Resource Availability: Difficulty finding suppliers drives farmers to rely more on sharing within their local network.
- **Logistics**: Service delays and a lack of suitable transportation complicate resource sharing, impacting the effectiveness of sharing mechanisms



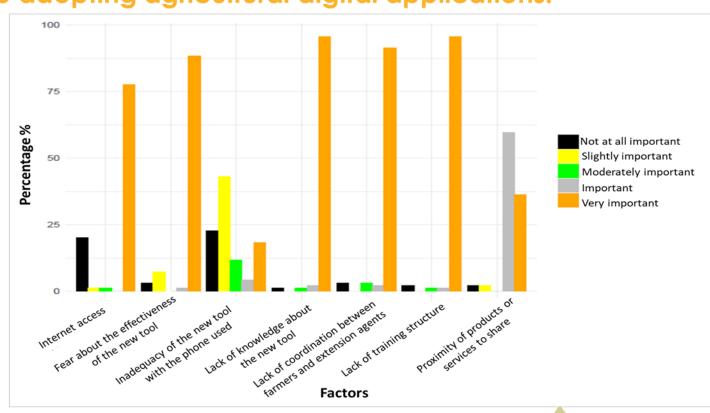




# Key Barriers to Adopting Digital Applications

Farmer interviews reveal key obstacles to adopting agricultural digital applications:

- √ 95.7% cite lack of knowledge and training as a major hurdle.
- ✓ Coordination issues with agricultural advisors.
- √ Distrust of digital tools
- √ Limited internet access









# Attitudes and Perceptions Towards Digital Applications in Agriculture in Morocco

Farmers who have no

**Digitalization in Agriculture** 

understanding of digitization in agriculture (54,8%)

Farmers who have an understanding of digitization in agriculture (45,2%)

**Views on Digital Applications** 

**Positive opinion** (43.2%)

No opinion (33,1%)

**Negative opinion** (23,7%)

Use of digital applications

Farmers who don't use (71,2%)

Farmers who use mobile (28,8%)

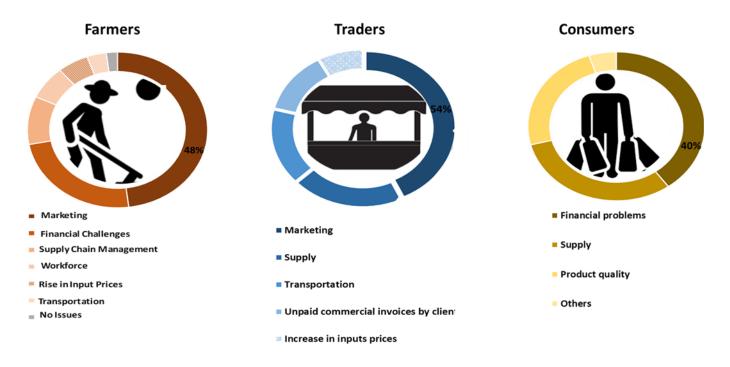
- ✓ Limited Knowledge and **Mixed Perceptions**
- Low Adoption with High **Potential**







# Attitudes of agricultural actors in crisis situations



### In Times of Crisis:

•Farmers: Difficulties in marketing and accessing supplies.

•Traders: Need for better market regulation and logistics.

•Consumers: call for Improvements in e-commerce and product quality control.



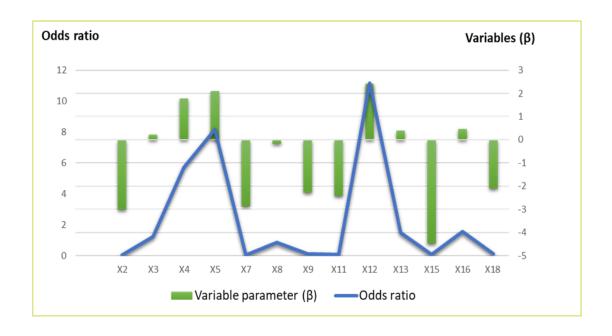




# Factors Motivating the Use of Digital Applications

### Socio-Economic Acceptability of Digital Platforms Among Farmers: A Modeling Approach

 The logistic regression analysis shows that socio-economic variables, such as age, farm size, education level, and membership in organizations, play a key role in farmers' adoption of digital platforms.









# Conclusions

- Small-scale farmers have specific resource needs that must be considered during the development of the platform.
- Farmers' opinions on the use of digital technology in agriculture also prove to be a significant factor.
- Training, access and trust-building, are crucial for enhancing small-scale farmers' resource management skills and fostering the adoption of new agricultural tools.









