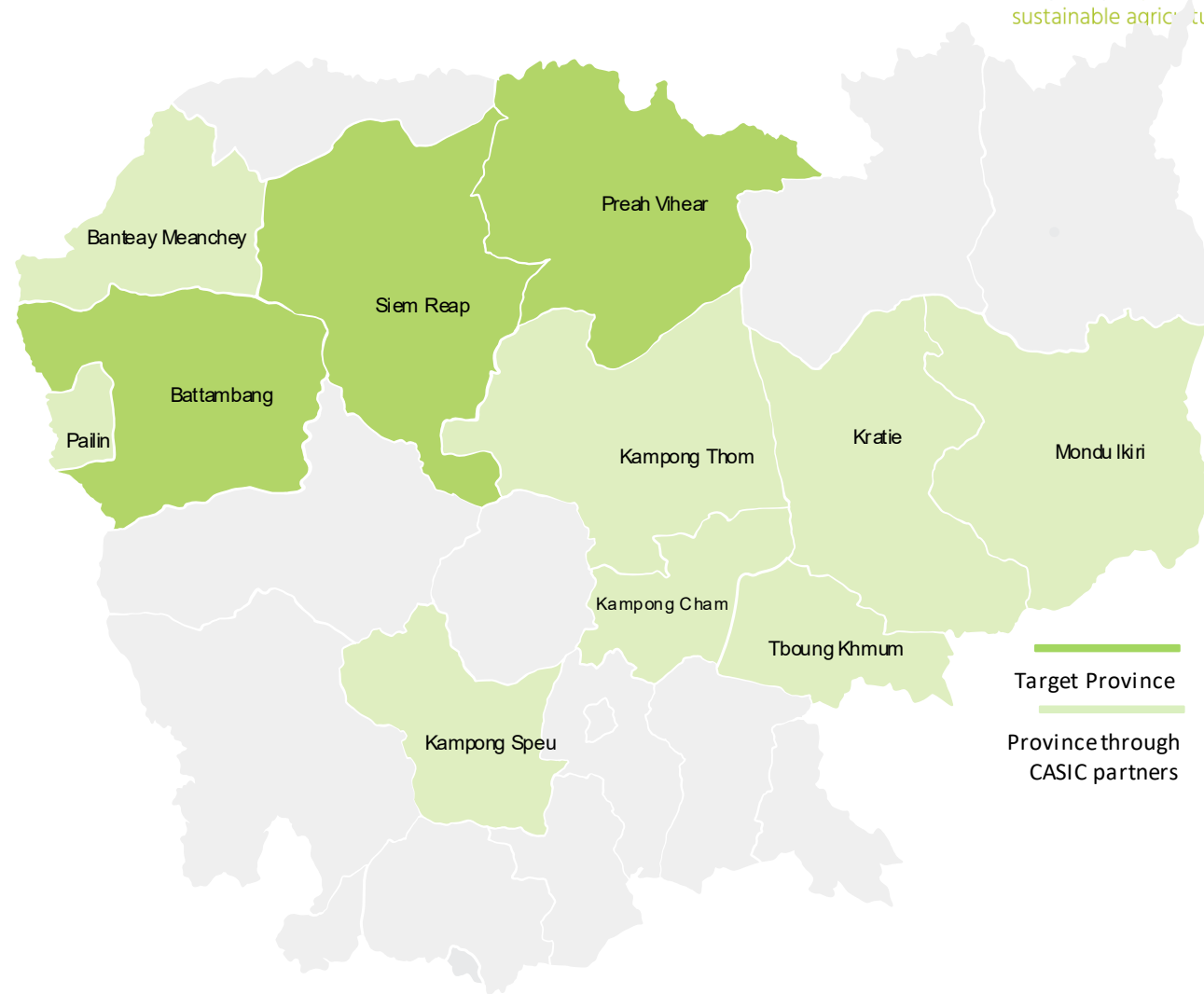


ISA Lab: Bridging Research to Market in Sustainable Agriculture

Phase II (2025 – 2028)

INNOVATION FOR SUSTAINABLE AGRICULTURE (ISA)

Promotes appropriate technologies, strengthened extension services, and public-private collaboration to improve soil health, increase farm productivity and income, and scale conservation agriculture and sustainable intensification in Cambodia.



INTERVENTION AREA

Public Sector



Private Sector



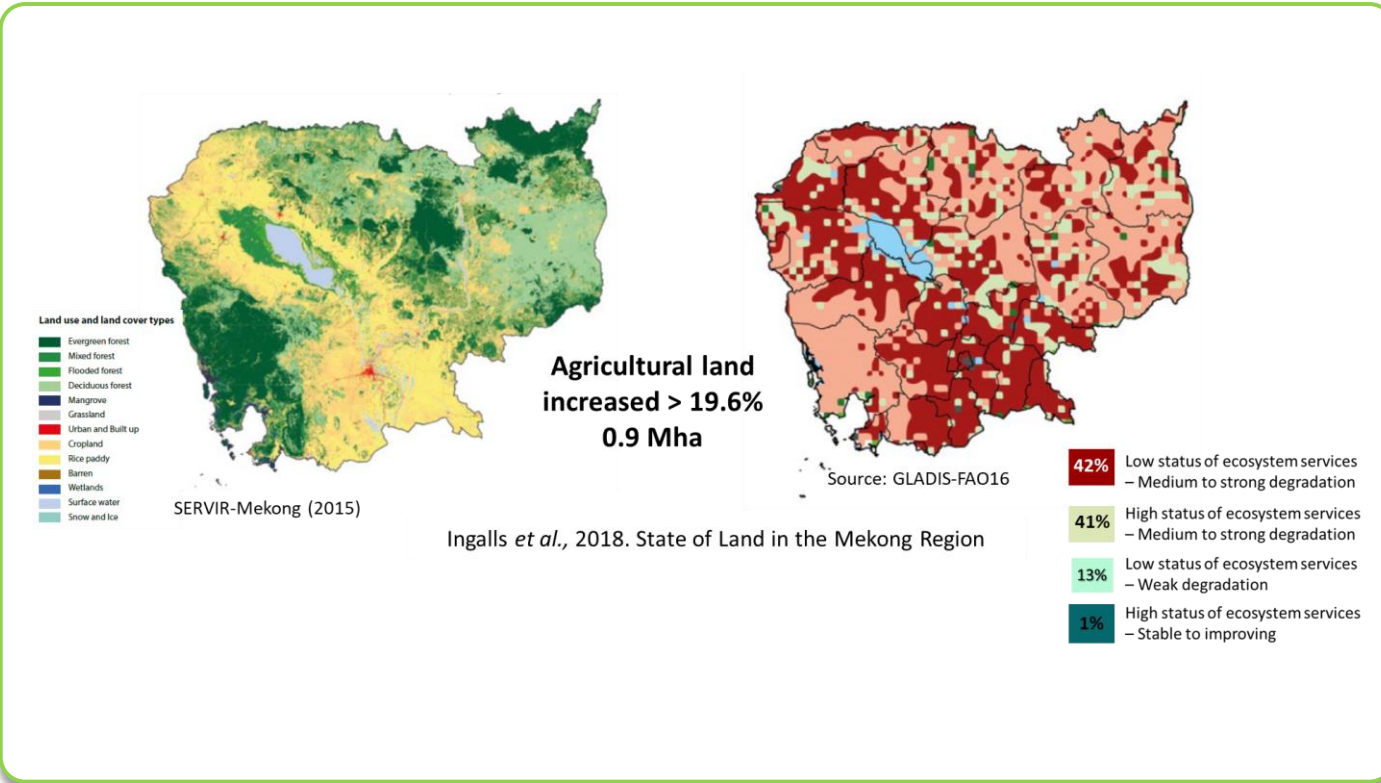
Project / Cooperative Partners



ISA Lab Pitch Deck



CHALLENGES IN AGRICULTURE



There is a need for the Cambodian agriculture sector to reinvent itself by shifting from increased production through land expansion and excessive use of inputs towards Agroecology.

- 1 Smallholder farmers are particularly vulnerable to climate change given their high dependence on rainfall and minimal crop diversification.
- 2 Cambodian agricultural lands are under threat of degradation and soil fertility depletion due to deforestation.
- 3 42% of land in Cambodia is under strong degradation.
- 4 The annual cost of land degradation in Cambodia is estimated at **USD 677 million**.



NEED FOR TRANSITION

Agroecology in Cambodia: Impacts and Co-Benefits



Agroecology Practices

- Permanent soil cover (Cover crops)
- Diversification
- Reduced to no-tillage
- Appropriate-scale machinery (no-till planter, land leveling...)
- Chemical inputs management
- Alternate Wetting and Drying (AWD)

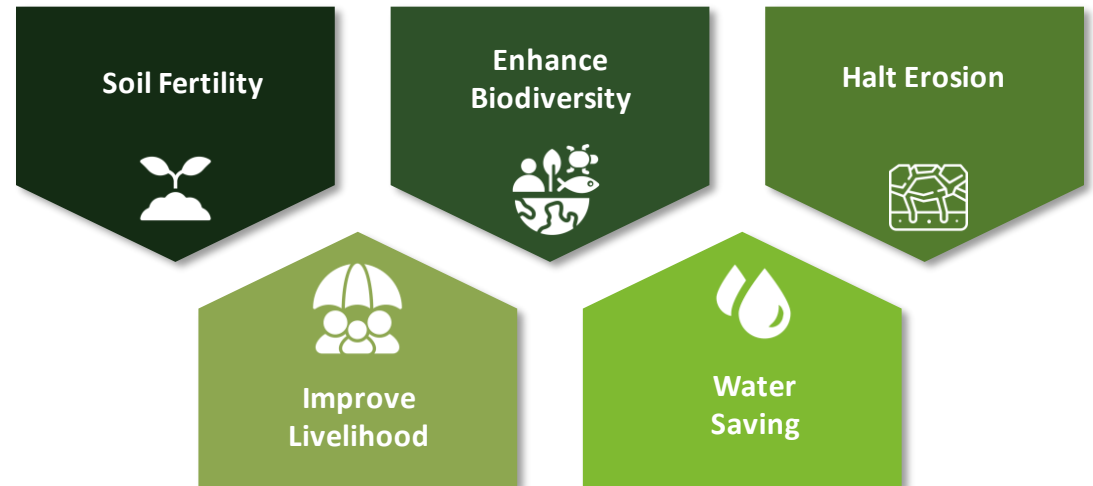


innovation for
sustainable agriculture

IMPACTS Climate Change Mitigation



CO-BENEFITS Climate Change Adaptation



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Innovation for Sustainable Agriculture

TIMELINE

Toward Sustainable Agriculture



CASIC, MetKasekor, SRP, InGuider



Support in developing human-centered design (HCD) based curriculum, an extension model to open markets for private sector, envision of a coordination mechanism, and supported research-to-commercialization, technology passporting, and collaboration with technology importers and local workshops.

CASIC, MetKasekor, SRP and InGuider embedded in public institutions.
SevaKasekor, KropouchKasekor and Dei Meas ideated and, in the process, to embed them.



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Innovation for Sustainable Agriculture

TIMELINE

Toward Sustainable Agriculture



Pre-commercialization
Phase
To De-risk the transition journey

➤ 2023

➤ 2025 - 2028
Commercialization and
Scale Up Phase

Deeper Collaboration with private sector and
commodity buyer

Cover crop, no-till and others to change practices. Capitalize on carbon credit,
eco-credit or other incentive mechanisms

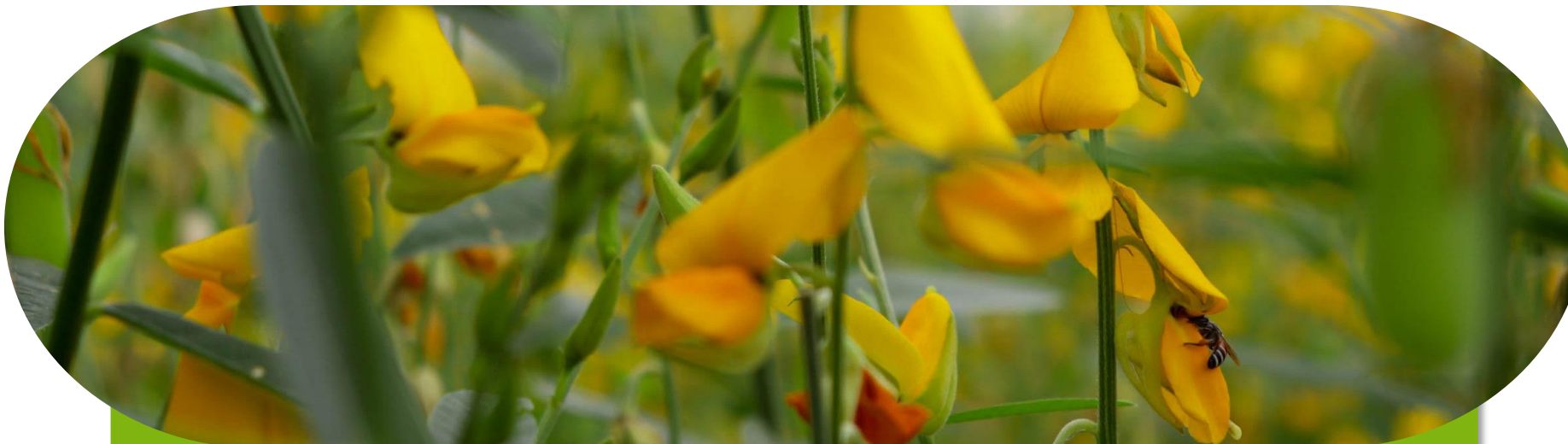


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RESEARCH GAPS AND SYSTEM CHALLENGES



1 Only 7% of agricultural research is driven by the private sector.

2 Research and business actors operate in silos.

3 Most innovations remain at pilot stage and fail to scale.

4 Critical challenges like land degradation cost Cambodia **USD 677** million annually.



The Gap We Address



Research



Pilot



No adoption



No business integration



No scale-up

The Valley of Death in the Agriculture Innovation

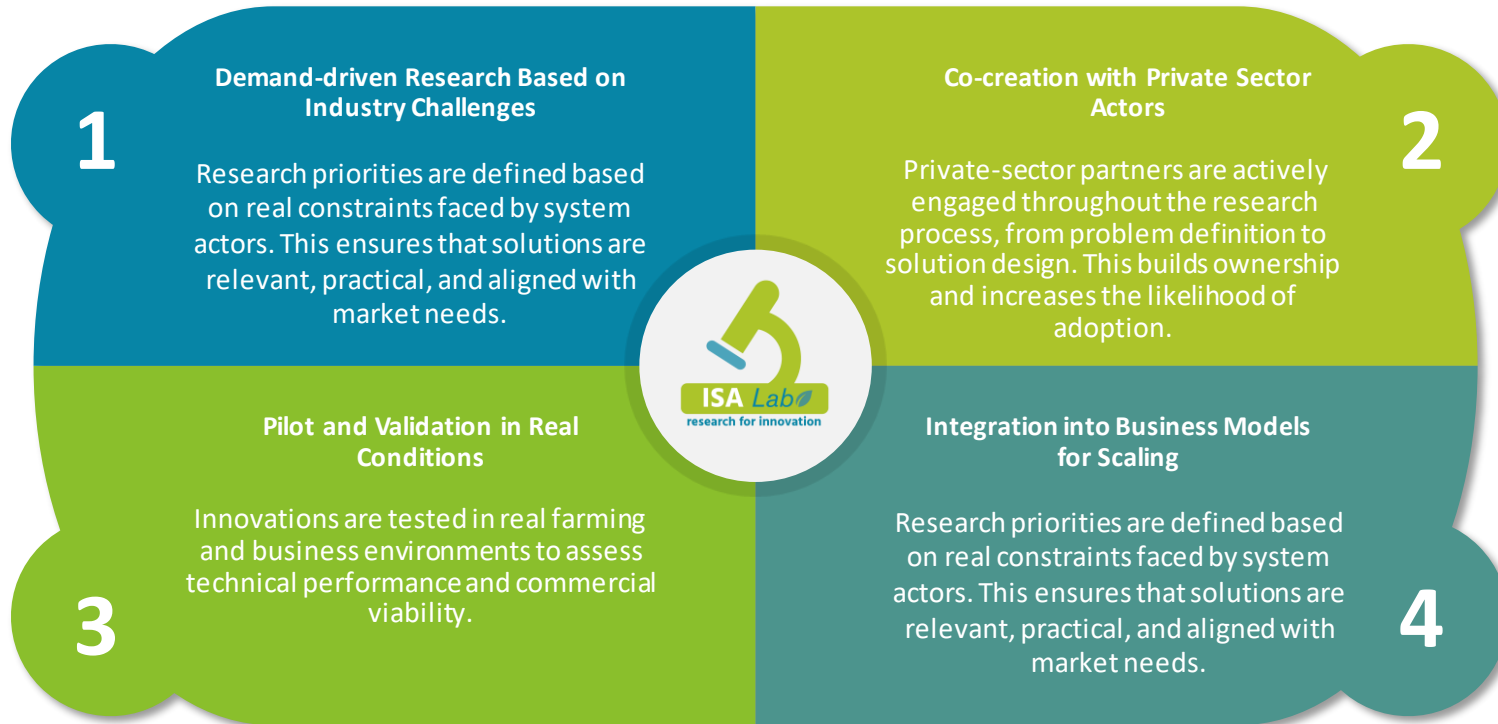


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THE SOLUTION ISA LAB



ISA Lab is a research-for-development intervention under the ISA project that serves as an applied research and innovation platform to strengthen private-sector engagement in sustainable agriculture research.

It addresses the “Valley of Death” between research and implementation by defining research questions based on the practical challenges faced by system actors and piloting solutions with a clear pathway for integration into their business models.

ISA Lab promotes co-investment, supports the commercialisation of context-specific innovations, disseminates research findings to attract broader private-sector involvement, and strengthens collaboration with local and international universities and research institutions.



HIGHLIGHT 2021-2025 ACHIEVEMENT



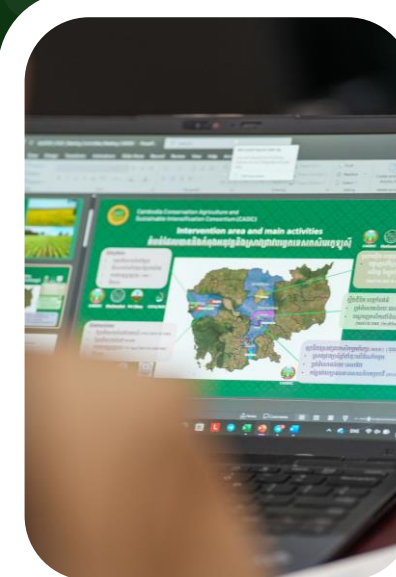
10
Total Number of
Student Engaged



4
Total Number of
Institution Engaged



2
Total Number of Private
Sector Engaged



7
Number of Research Topic
conducted**



EXAMPLE: FROM RESEARCH TO COMMERCIAL SOLUTION

Challenge

High cost and limited access to imported machinery.

Solution

Local adaptation, testing, and private sector engagement.

Result

- First generation of prototype developed.
- Second generation of prototype planned after user-testing feedback.
- Reduced costs for farmers (access to spare-parts and aftersales service).
- Scalable business opportunity.

Fabrication of No-Till Planter



HOW ISA LAB OPERATES



Private Sector

Defines problems/research challenge, co-invests, scales solutions.

ISA Lab

Facilitates, de-risks, and accelerates commercialisation.

Research Institutions

Provide technical support and research students.

Farmers

Test and adopt solutions.

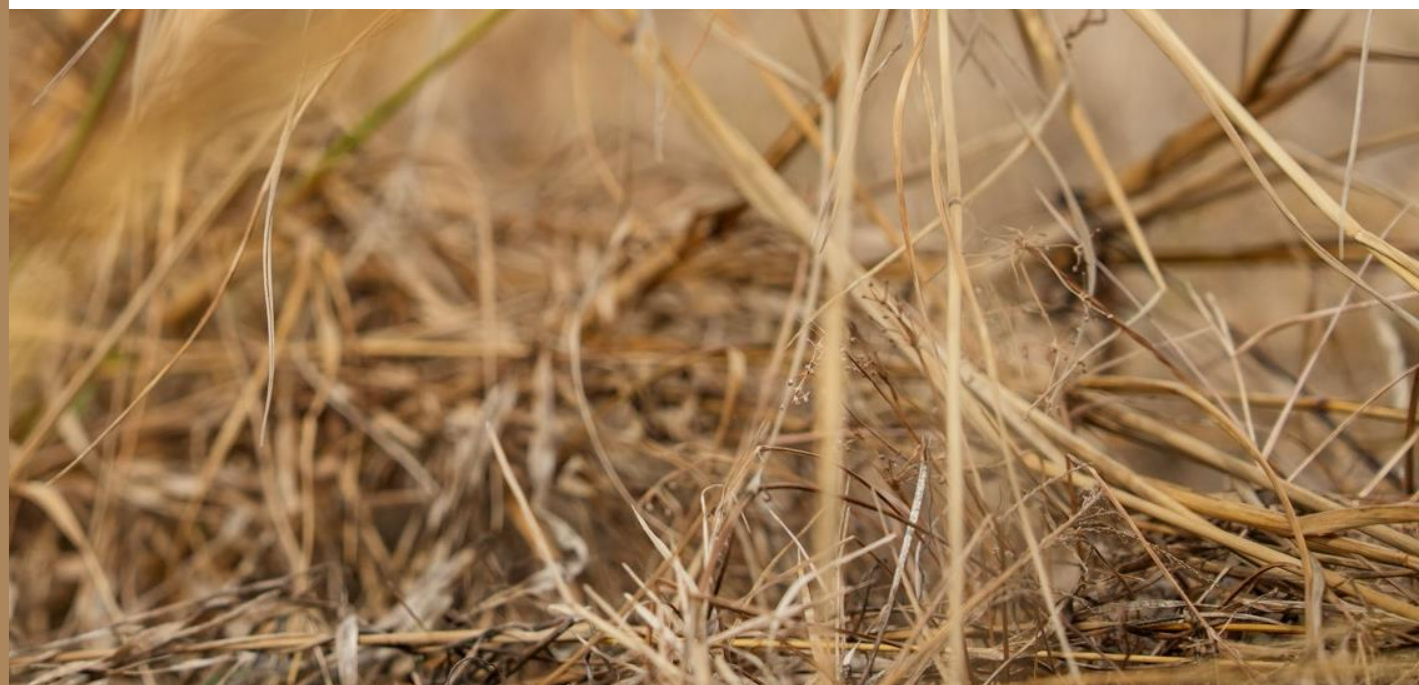


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WHAT'S NEXT?

- Expand pipeline of market-driven research.
- Increase private sector participation and co-investment.
- Scale validated innovations across provinces.
- Strengthen collaboration with national and international research institutions.



PARTNERSHIP AND INVESTMENT OPPORTUNITY

Join Us in Scaling Agricultural Innovation

We are seeking:

- Strategic partners from the private sector.
- Research and academic collaborators.
- Investment to scale pilot innovations.



WHAT ARE WE OFFERING?

1. Access to Market-Driven Research

- Research aligned with real business challenges
- Practical, field-tested solutions (not theoretical outputs)

2. De-Risked Innovation Pipeline

- Pilot and validation before large-scale investment
- Reduced uncertainty for new technologies and models

3. Co-Investment Opportunities

- Shared risk between ISA Lab and private sector
- Leverage donor funding to unlock innovation

4. Pathway to Commercialisation

- Support to integrate solutions into business models
- Focus on scalability and market adoption



KEEP IN TOUCH!

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