

# BUILDING LIVING LABS FOR SUSTAINABLE FOOD SYSTEMS IN ECUADOR

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## INTRODUCTION



The IRD's Community of Knowledge "Sustainable Food Systems" is a forum for dialogue and exchange bringing together researchers and local partners



WasiLab is an interdisciplinary and transdisciplinary research institute based in Quito, Ecuador, addressing complex socio-environmental challenges in Ecuador.



Creation of Living Labs to unite diverse stakeholders in co-creating locally adapted sustainable solutions. These labs empower communities through participatory research that fosters knowledge co-production and practical action, while promoting dialogue and collaboration between science, society, and policymakers.

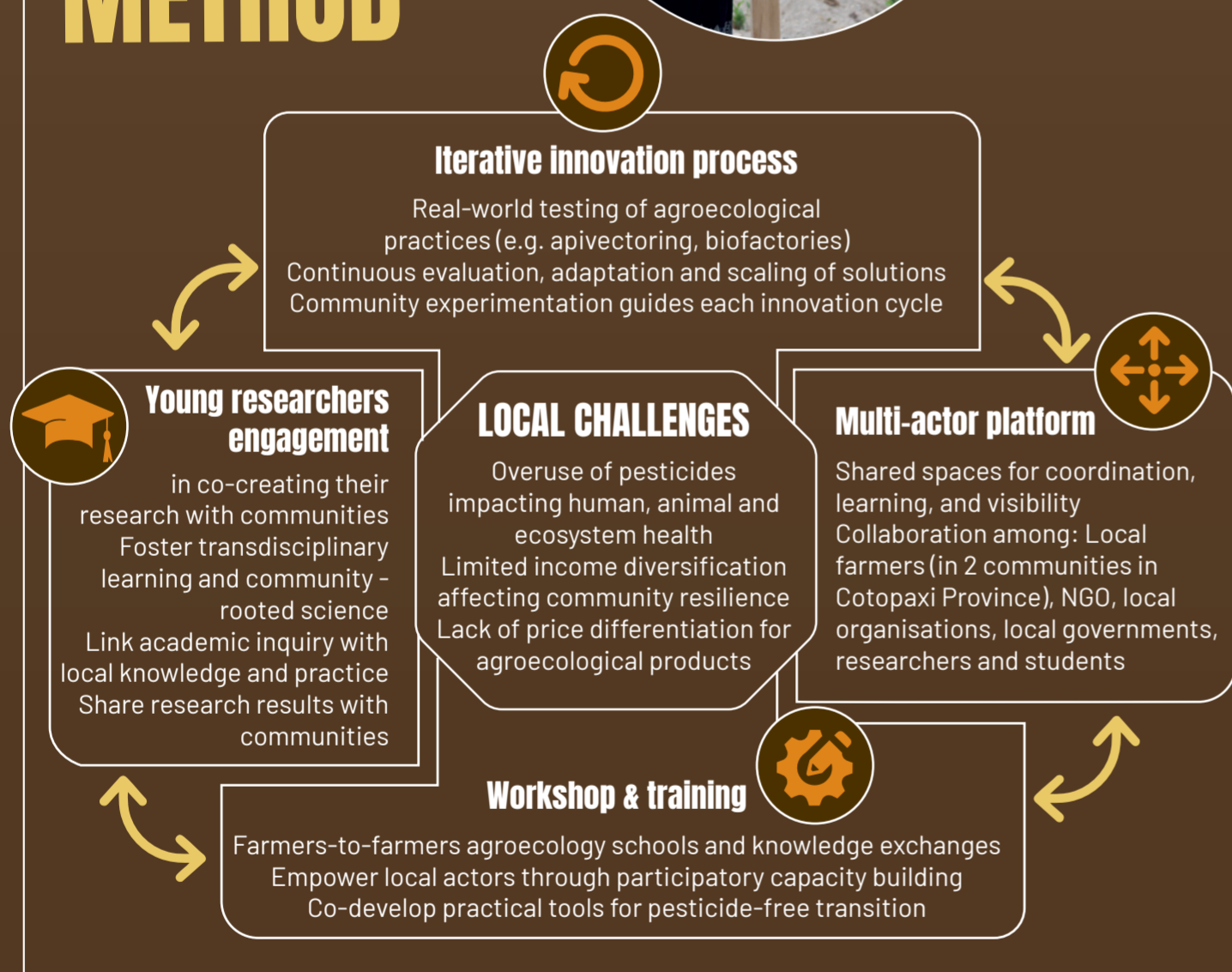


## OBJECTIVES



The OASIS project, emblematic of this initiative, supports Andean communities to create pesticide-free territories for resilient, agroecological food systems. The key objectives are: 1) To support transitions to pesticide-free agroecosystems in field clusters; 2) to strengthen community agency and research integration, 3) To co-create local sustainability roadmaps via Living Labs

## METHOD



## KEY ACHIEVEMENTS

- **Community participation:** Over 120 local actors engaged across two communities in Cotopaxi Province – Guayama Grande (rural) and Aláquez (peri-urban) – through workshops, interviews, co-design sessions, and ongoing participatory monitoring
- **Multi-actor collaboration:** interdisciplinary researchers, local organisations (AMUPA, Colectivo de Defensa de los Polinizadores), NGO, and the local Decentralized Autonomous Government
- **Integration of ancestral knowledge:** Local expertise embedded through chakrakamaks and traditional agroecological practices
- **Infrastructure & innovation:** A community-run biofactory established in Aláquez to produce organic bio-inputs, community agroecology schools created in Aláquez and Guayama Grande to support peer learning and farmer-led experimentation
- **Land-scale transition:** 16 families in Guayama and 25 in Aláquez are engaged in pesticide-free production and agroecological trials
- **Scientific contributions:** More than 8 research outputs produced, covering GIS-based pesticide mapping, apivectoring innovations, agroecological school assessments, policy briefs and boundary object theory
- **Participatory science:** biodiversity monitoring via iNaturalist

## PERSPECTIVES:

### For the OASIS Project:

- Expansion in Ecuador (with a third community) and in Peru (with two new communities)
- Certify biofactories and develop value chains for certified products

### For WasiLab: 2 new agroecological Living Labs already under development using the same methodology

- Sustainable and Fertile Cotopaxi in Cotopaxi Province (Andes) – regenerative farming to restore soils and boost food security and community resilience
- Amazonian Mycelium in Napo Province (Amazon) – turning farm waste into sustainable food with fungi, blending ancestral knowledge and biotechnology

## CONCLUSION:

The WasiLab initiative and the OASIS Project highlight the transformative potential of community-research collaboration in driving agroecological transitions and enhancing the resilience of the territories. By combining local knowledge, participatory approaches, and scientific innovation, these initiatives have fostered concrete changes that address both environmental degradation and socio-economic challenges.

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