



Universidad Central “Marta Abreu” de Las Villas

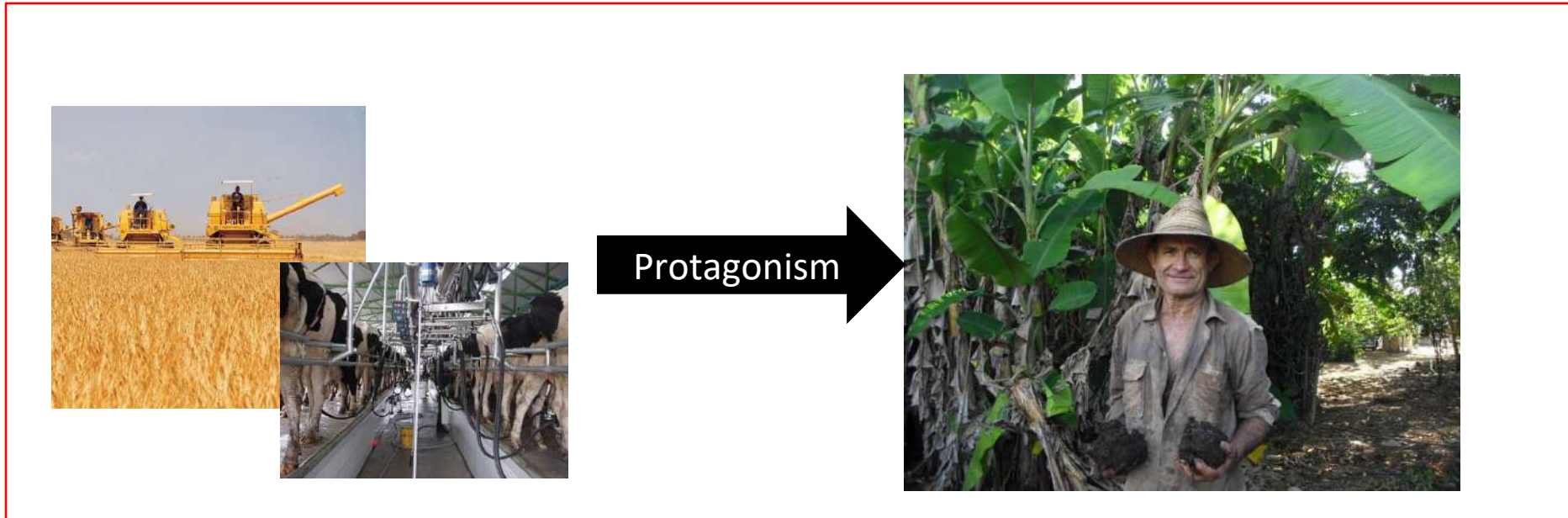
*Innovadora, plural, nuestra*

## Workshop UnderplaNet-Ecuador

Management of Local Agricultural Innovation for the development and promotion of local food systems

**Dr. Arahis Cruz Limonte**

# The agricultural development scenario has changed



**Agricultural and livestock environment**

**Insufficient access to inputs**

**Climate change**

**Degradation of agroecosystems**

**Socio-economic crises**





Building on the SDGs, optimizing the role of agriculture in ensuring food sovereignty and improving nutrition requires a holistic approach that goes beyond interventions aimed at increasing agricultural productivity or incomes.

It is more important than ever to recognize the multifunctionality of agriculture in seeking to double agricultural productivity and smallholder incomes, make food production systems sustainable, and maintain agricultural genetic diversity.



Acting in a coordinated manner towards sustainability in the production, processing and distribution of locally grown edible agricultural products could lead to food sovereignty and nutrition, reduce losses, improve soil quality, protect ecosystems and genetic diversity, and strengthen resilience to climate change.

## **Strategic Issues Priorities for food sovereignty**

**1**

**Decrease dependence on imports of foodstuffs and inputs**

**2**

**To guarantee quality and safety and reduce food losses and wastage**

**3**

**Consolidation of territorial food systems**

**4**

**Mobilize educational, cultural and communication systems to strengthen nutrition education**



# What are the implications of this scenario for agricultural science and innovation?

---

**This scenario imposes new demands on the innovation model**



- Improvements in various areas such as technology, organization, institutions, economics and agricultural development policies.
- Solutions appropriate to local conditions, based on human welfare and equity.
- Creative process of critical assimilation of proposals, construction, action and collective learning.



**Scientific  
Knowledge**



**The productive  
practice**

**Knowledge transfer**



**Local capabilities**



**Institutional change**

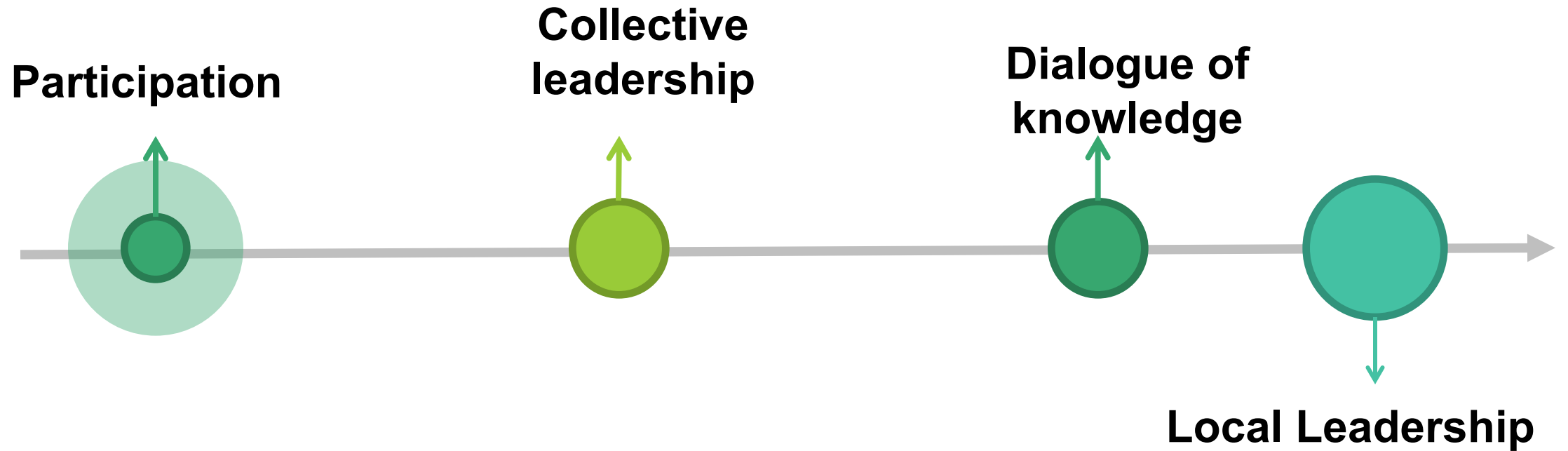


## **Local Agricultural Innovation System**

Organizes locally, the interrelationship between the actors involved in agricultural development processes.



# Principles of the Local Agricultural Innovation System





## Management of the Local Agricultural Innovation System

- Focus the limited resources available for research on the specific needs of farmers and stakeholders in production chains.
- Leverage the local knowledge of farmers and other stakeholders to stimulate diversification and increase sustainable production.
- Facilitate access and coordination between producers, government representatives and other actors in the chains, and the knowledge of their counterparts in the territory, universities and research centers, generating collaborative networks.
- Empower people involved in innovation processes at the local level, through training, a space for the exchange of experiences and horizontal decision-making.

# **Actions taken for the promotion of local food systems**



Platforms for interaction, exchange and learning in action were established and consolidated in the eighth municipalities with the participation of key municipal actors ANAP, CUM, CITMA, FMC, MINAG, Local Governments, CCS, CPA, UBPC, the GIAL, among other institutions.



**The work of the Local Agricultural Innovation Groups (GIALs) is strengthened through best practices for more diverse, agroecological agricultural production adapted to climate change, as well as for the processing and marketing of agricultural products.**



**Grain Production, Cifuentes**



**Agroecology, Manicaragua y Placetas**



**GIAL of Canned food**



**Goat Production, Camajuaní**



**Ornamental plants, Placetas, Santa Clara y Quemado**



**Medicinal Plants, Manicaragua**

# Biodiversity Fairs and Farmers School



# Seeds donation of high genetic quality crops



**Wheat**



**Sunflower**



**Corn**



**Crotalaria**



**Sesame**



**Chickpea**



***Setaria moha***



**Pea**



**Beans**



**Soybean**

# Formed a critical mass of leading producers in each Municipalities of Villa Clara for the production of grains and local seeds.



In the last two years, 12 local seed banks have been promoted, with a predominance of species little used in human and animal food in Cuba. Among them: cowpea, guinea sorghum, chickpea, breadfruit, soybean, sunflower, sesame, wheat, pea, mung bean, guinea sorghum.



- The incorporation of Local Agricultural Innovation in the basic curricula of university courses (Agricultural Extension) and postgraduate courses (training courses were designed, a Diploma in "Participatory Agricultural Innovation for Local Development" and a Postgraduate Specialization).



**Articulation between the investigative labor practice of students from Agronomy, Socio cultural, Social Communication, Sociology careers and the actions of the Local Agricultural Innovation System.**



**Development of coexistence (farmers-students) in rural communities as a space for learning, for the application of local agricultural innovation and collective action aimed at teaching-research.**



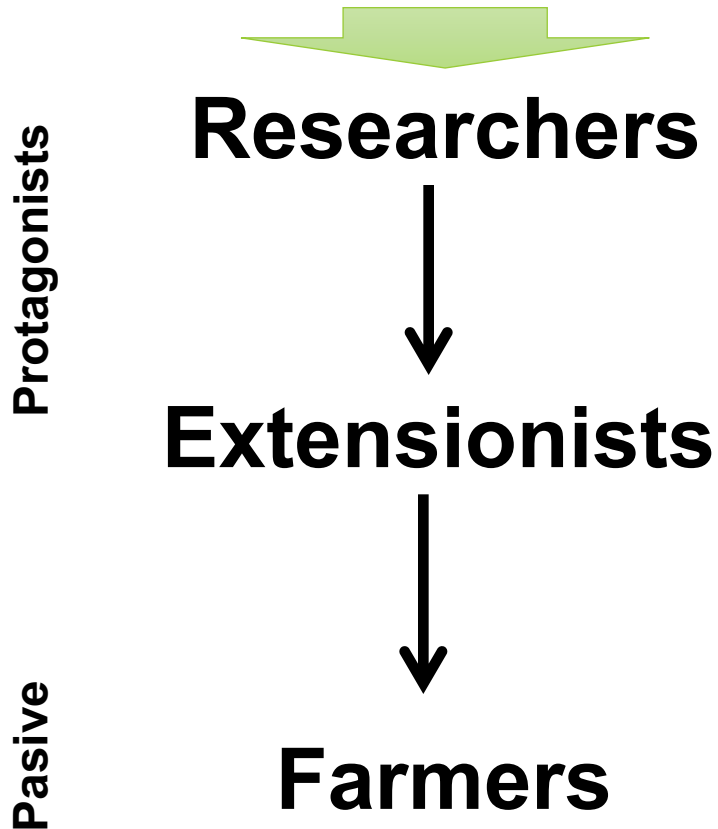
# Job opportunities generated within the local agricultural innovation system for women in the eight municipalities.

In four years, the generation of **453** jobs was favored, which contributed to employing 1,256 people, of them 1,000 part-time and 256 full-time, benefiting **250** women and more than **100** young people.

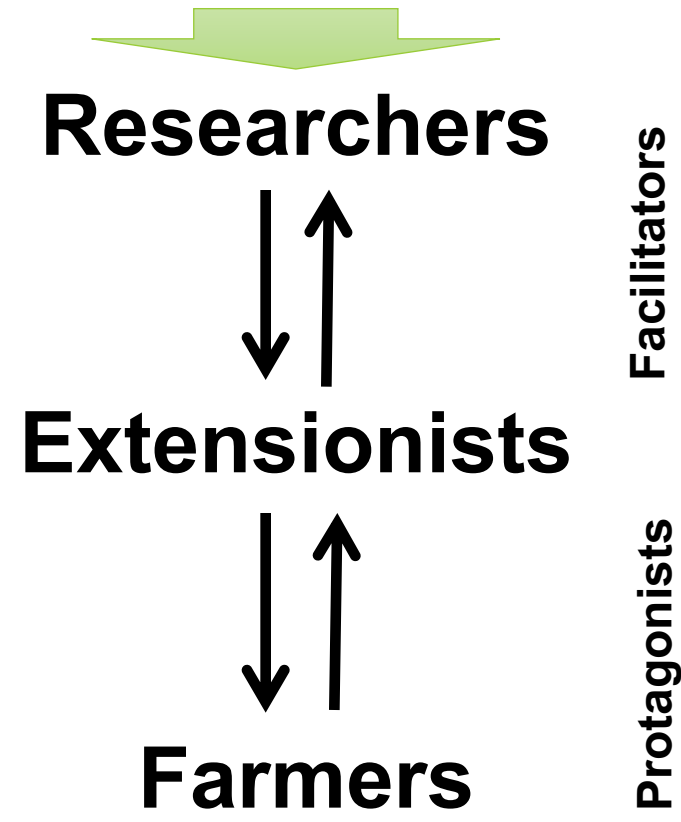


# Lessons learned from the process

## Conventional Extensionism



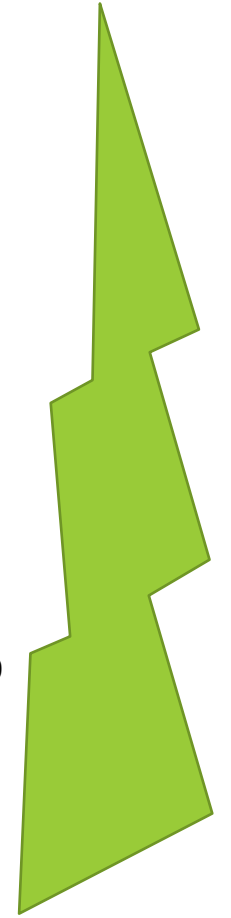
## Participatory Extensionism



≠



- Role changes
- Interactive nature



Permanent interaction between government and decision-makers to dynamize the productive chains of interest



## Team

Dr. Luis Antonio Barranco Olivera  
Dr. Raciél Lima Orozco  
Dr. Ubaldo Acelio Alvarez Hernández  
MSc. Víctor Daniel Gil Díaz  
Dr. Annia Martínez Massip  
Dr. Lienny García Pedraza  
Dr. Rodobaldo Ortiz Pérez  
Dr. Rosa Acosta Roca

Thanks you

