

Integrating Agroecology and One Health: A Path to Sustainable Food Systems and Improved Health

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*Presented at the third congress of Ecole Nationale de Médecine
Vétérinaire: The veterinarian in the light of changes – Sidi Thabet,
Tunisia; 12 & 13 October 2023*



Problematics...

- **How to integrate these two concepts?**
- **How can this integration be applied?**

How to integrate these two concepts?



INITIATIVE ON
Agroecology

Integrated and
unified approach

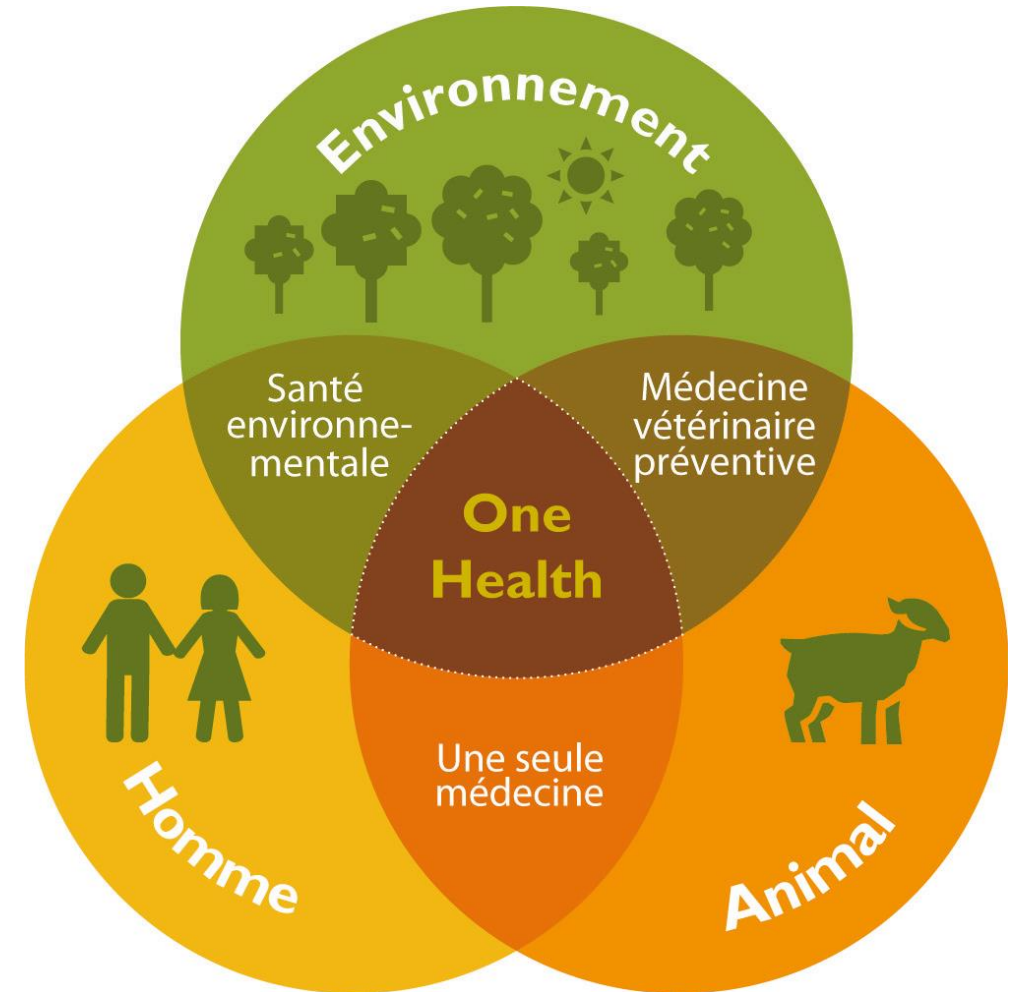


"One

Health"



Optimising the health of humans,
animals and the environment



Source : Agropolis International/François Coffrant,
dossier n° 25, décembre 2019

Crops and Livestock



"Agro Ecology"



The study of interactions between
living organisms and the environment

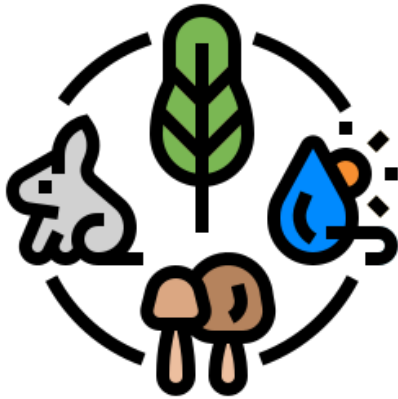
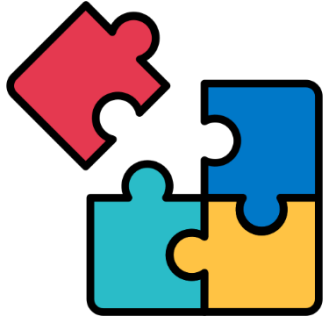
- Sustainable and holistic approach
- Designing agricultural and food systems
- Incorporating ecological principles
- Social and economic considerations





ILLUSTRATIONS: DOROTTYA POÓR

What do we have in common?

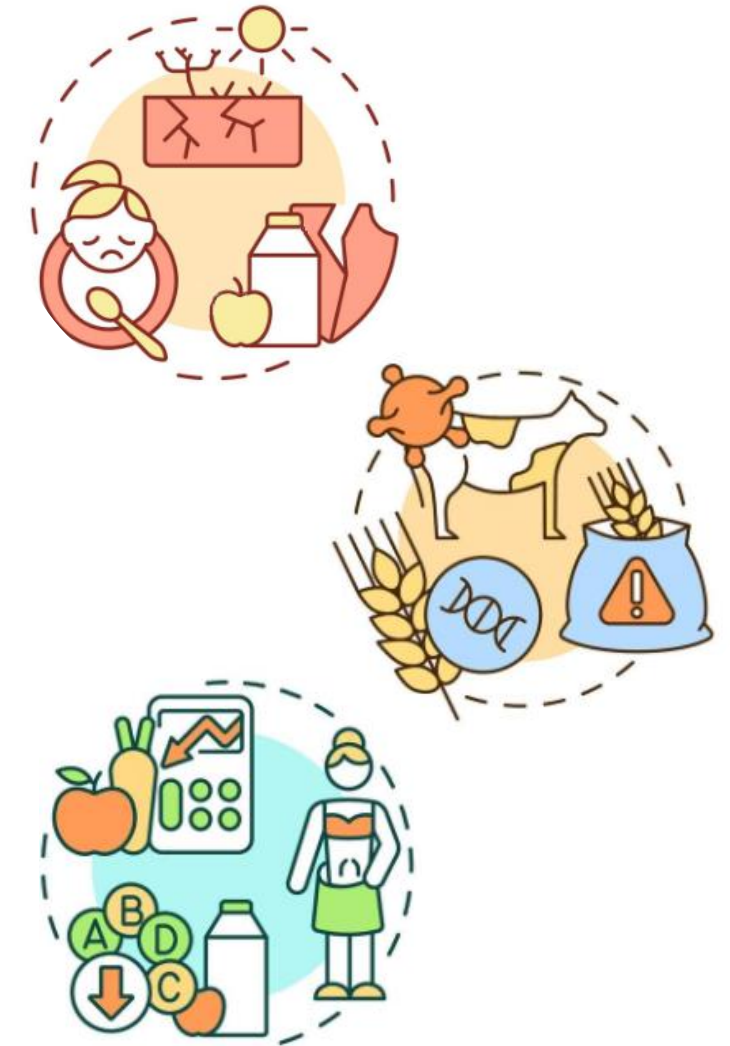


- **Common holistic approach:** ecosystem health is closely linked to **social and economic factors**
- In particular, **agroecology** aims to:
 - Preserving the health of soils, crops and natural habitats → **Environmental health**
 - Preventing animal diseases and reducing inputs → **Animal and human health**
 - The **resilience of ecosystems** to **climate change** through the adoption of **agroecological practices**

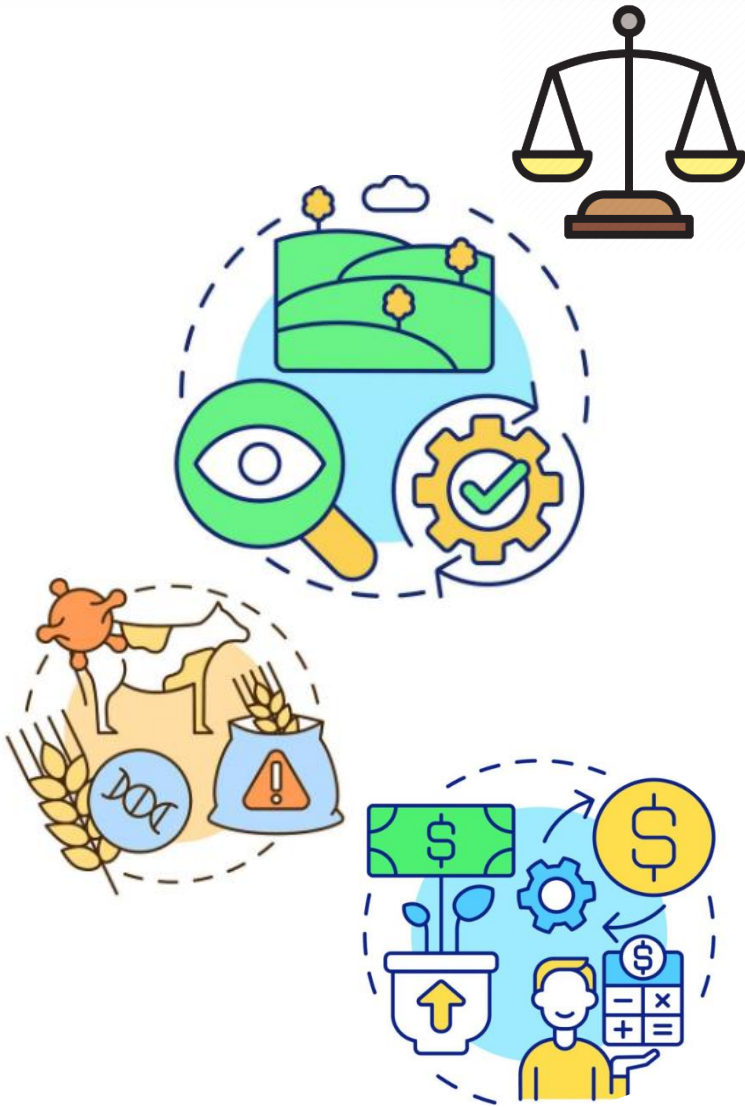
How important is this integration?



- Consider the **challenges** threatening **food systems** and health...
 - **Environmental health:** Greenhouse gas emissions (agriculture +++), soil erosion, water pollution, ... Climate change!
 - **Animal health:** contagious and zoonotic animal diseases, drug resistance (antibiotics, antiparasitics, etc.), ...
 - **Human health:** Malnutrition, food-borne diseases and zoonoses, ...



And how to face these challenges? ...



- Influencing **agricultural and health policies** → More consistent **regulation** and **good management of food systems**
- **Adopting** good **sustainable farming practices** → Reducing the environmental impact of farming, optimising the use of local resources, improving disease resistance, ...
- **Economic viability** → ↑ Farm income and ↓ Public health costs.

A real-life example...

Integrated Herd-Health Package

National and regional stakeholders



ICARDA

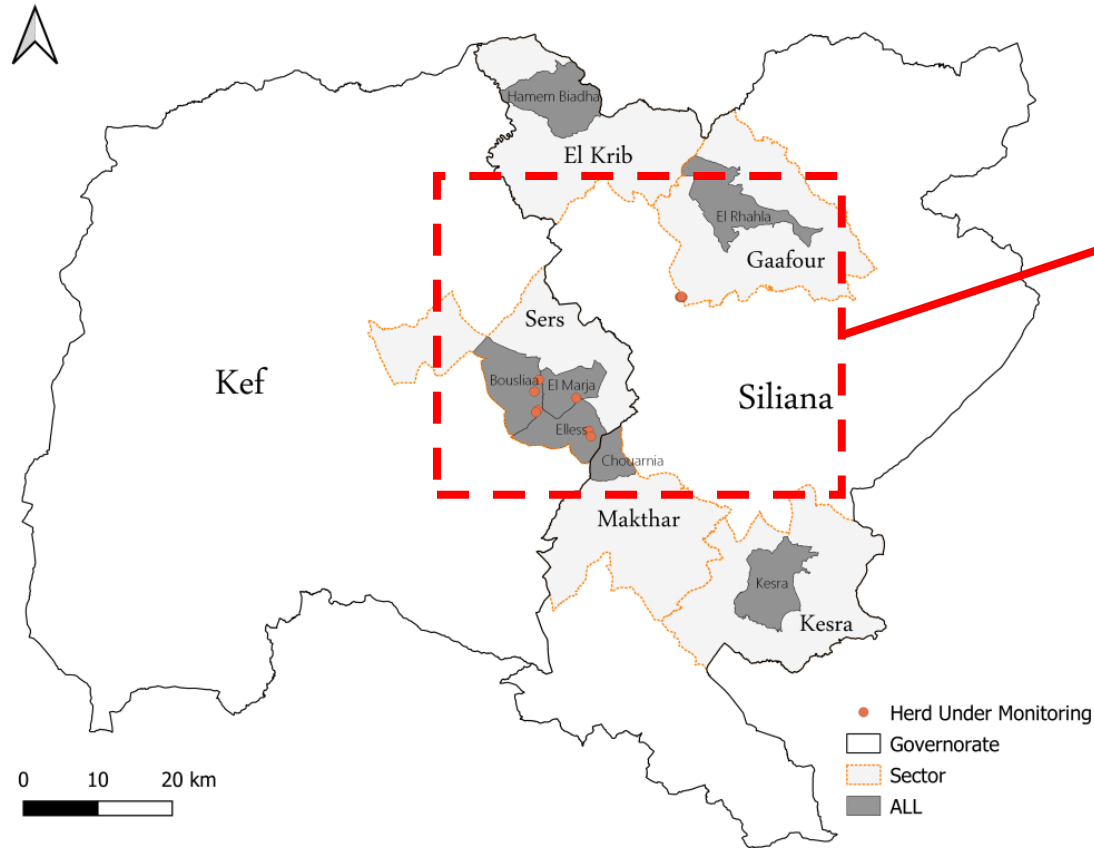


Farmers' Cooperatives



Female farmers at GDA Sers, Tunisia - ICARDA Communication Team, September 18, 2022

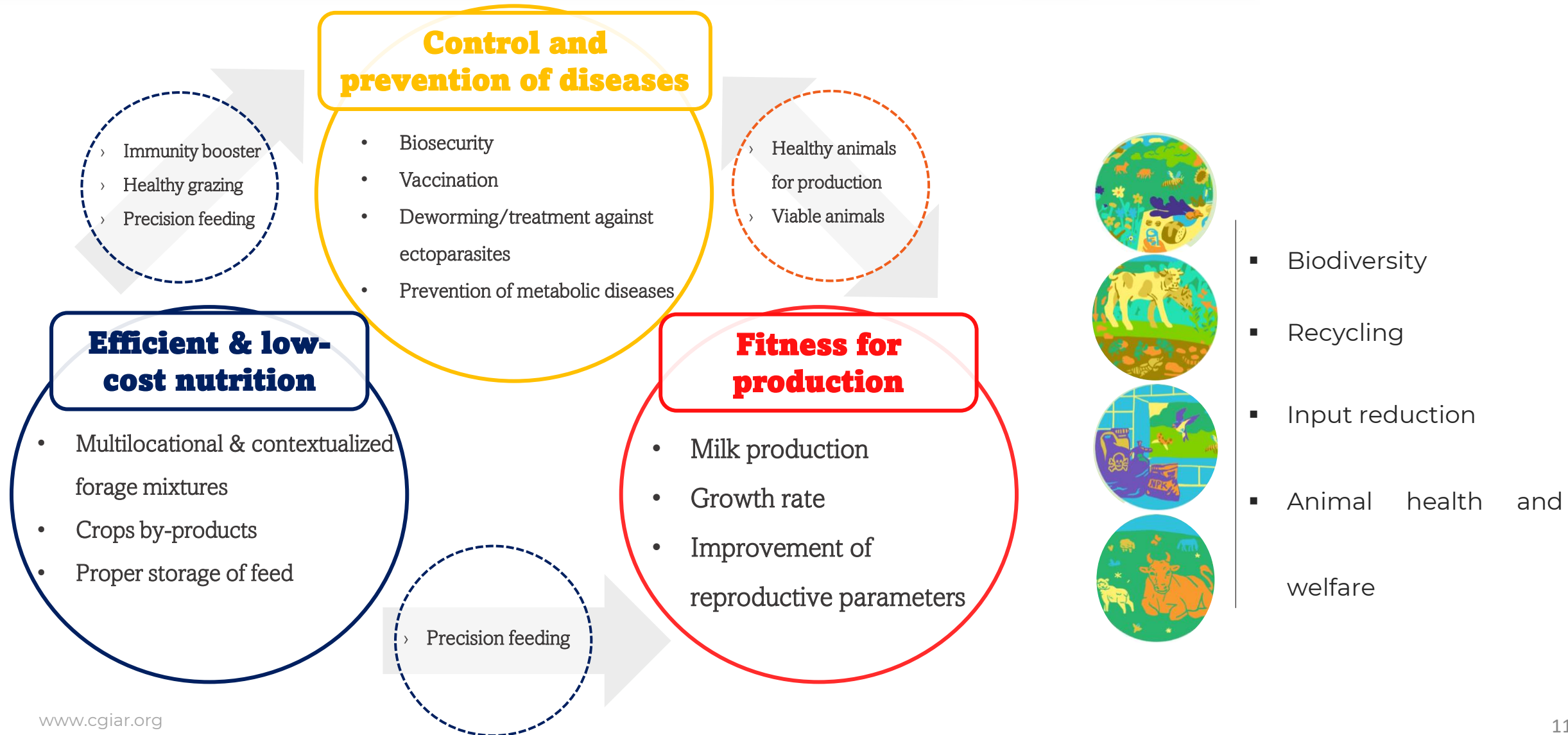
Where in Tunisia?



Total flocks: 12

Total sheep: 500 units

Concept of the **integrated** package...

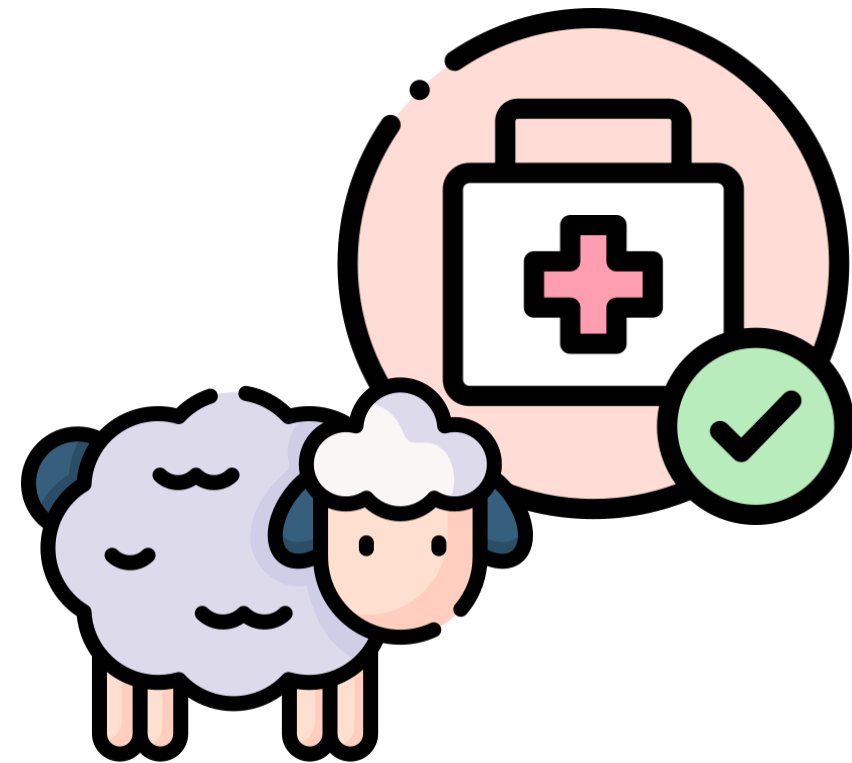


Package implementation..



- Identification of herds
- Data entry on the "Dtree" platform
- Training farmers and vets in agro-ecological practices
- Monitoring herd health and performance (reproduction, growth)

Expected Health outputs...



- **Improving veterinary practices:**

- Promoting animal health surveillance
- Recommending health practices that respect the environment

- **Improving public health:**

- Reducing the risk of contagious and/or zoonotic diseases
- Reducing drug resistance (antibiotics, antiparasitics, etc.)
- Provision of healthier food

- **Reduction in health costs:**

- Healthy diet
- Healthy environment

Conclusion...

- **Agroecology** & **One Health** integration
- Potential to improve veterinary practices, public health and ecosystem resilience
- Optimising environmental, animal and human health
- Guarantees the sustainability of food systems

THANK YOU!



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Agroecology