

# CO-DESIGN AND CO-EXPERIMENTATION FOR AGROECOLOGICAL TRANSITION: LEARNING FROM SMALLHOLDER SHEEP FARMERS

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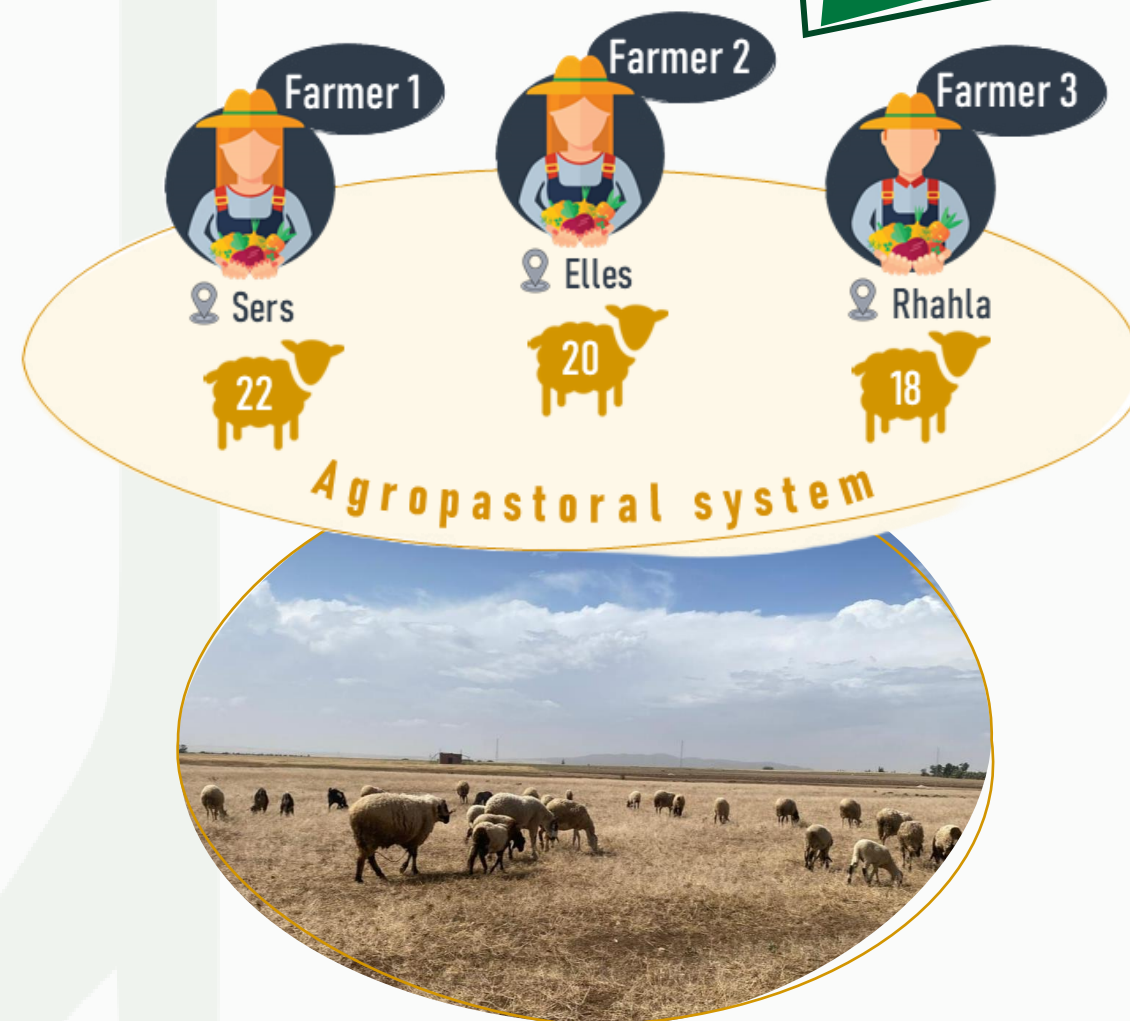
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## THE THINKING

- Agroecology emerges as a promising approach to sustainably transform livestock systems, addressing the negative impacts of conventional agriculture and valuing traditional farmer knowledge.
- It promotes co-creation of knowledge by combining farmer expertise with scientific research through participatory approaches.
- The process involves **co-design**, which includes farmers and stakeholders from the initial stages, and **co-experimentation**, which allows for adapting practices to local contexts.

## WHERE WAS THE CO-DESIGN?



## GRAZING OF GREEN FORAGES TO IMPROVE FERTILITY: "GREEN FERTILITY" IN SHEEP

The trial emerged from the Agroecology Initiative Co-design workshop in Tunisia (June 2023), where farmers recommended evaluating the effects of VOT (Vetch-Oat-Triticale) forage mixture on flocks' fertility when compared to their conventional practices.

VOT - an innovation they already adopted - could be a substrate to prepare their flocks for the mating season and to improve fertility as an **Economic** (less external feed), **Clean** (no hormones) and **Green** (using own-grown forages) alternative.

## FARMERS' CONTRIBUTION

1

### Allocation to grazing groups

Farmers and researchers co-selected and co-allocated ewes to balanced study groups based on age, lambing history, and body condition score.

2

### Ram selection

Rams were initially chosen by farmers for **desirable physical traits**, then validated by ICARDA and OEP technical staff through **breeding soundness examination** assessing general health condition and mating ability

3

### Day-to-day management

Farmers and their family members fully lead the **vaccination, deworming**, and the **30-day differential grazing**, monitoring ewe heat signs and assessing grazing plot conditions.

4

### Follow up data collection

ICARDA team to conduct ultrasound pregnancy diagnoses 30-45 days post-experiment, while farmers will record birth events.

