



# Farmer Research Network around the farmer federation FUMA Gaskiya in Niger

## Addressing production constraints in the Sahel

The Farmer Federation FUMA Gaskiya cooperates with a wide network of partners, including five CCRP-funded projects, to address constraints in pearl millet-based production systems in the Maradi region of Niger. Options and activities included in this Farmer Research Network (FRN) around FUMA Gaskiya cover the whole value chain from seed production to value addition (Fig. 1).

## Data collection...

Yield, yield components and farmer preference, using Open Data Kit (ODK) or classical field books.

## Recent highlights include...

- Use of "OGA" (sanitized urine) as fertilizer enhances pearl millet yield (Fig. 2) and is gaining popularity.
- Partial weeding can help to save women's time and to reduce sand storm damage on seedlings.
- 3 unions produce and sell a biological control agent against the pearl millet head miner.
- Total of 1480 tons of seed produced between 2010-2015 (of pearl millet, sorghum, cowpea and groundnut).

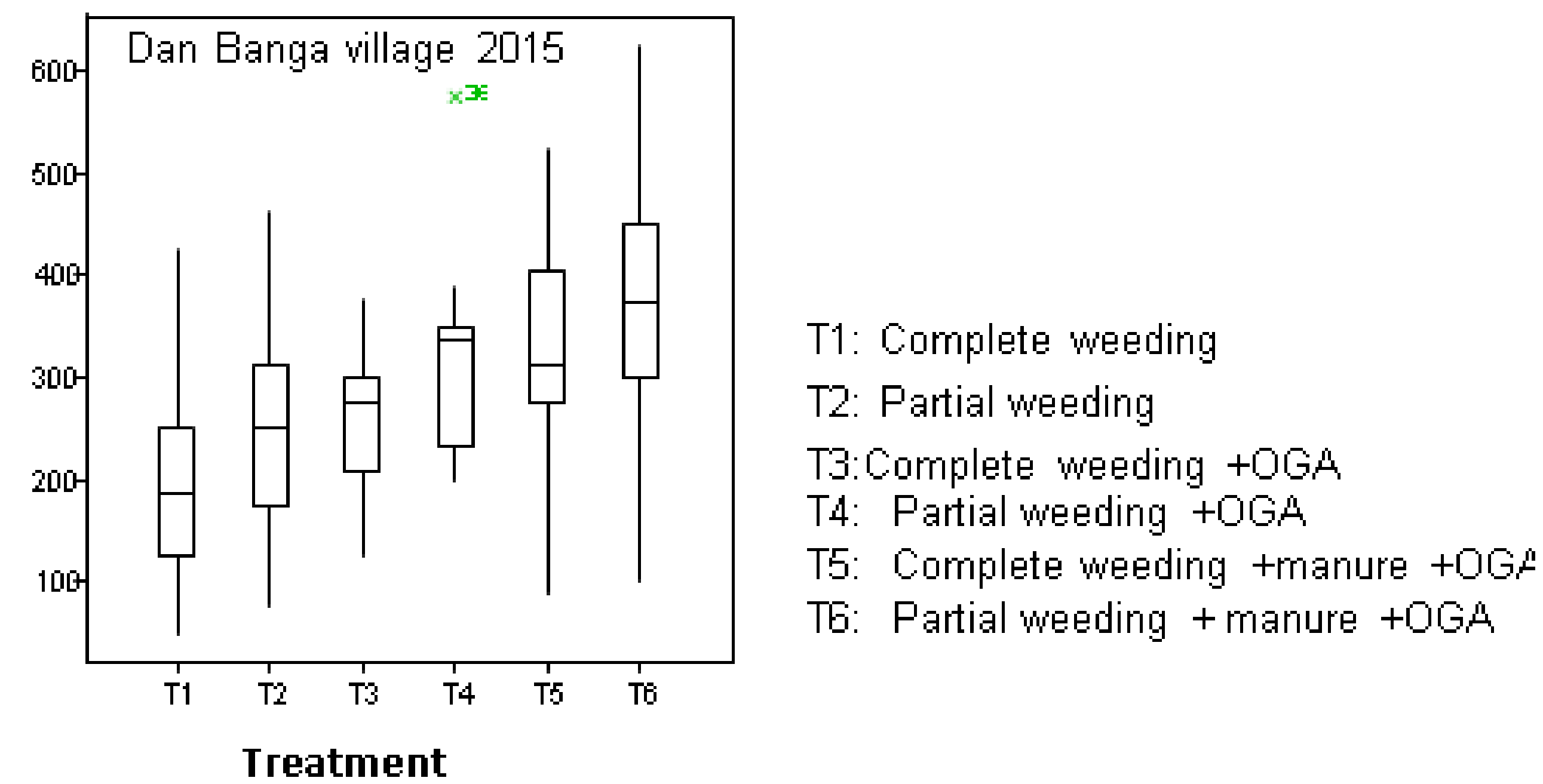
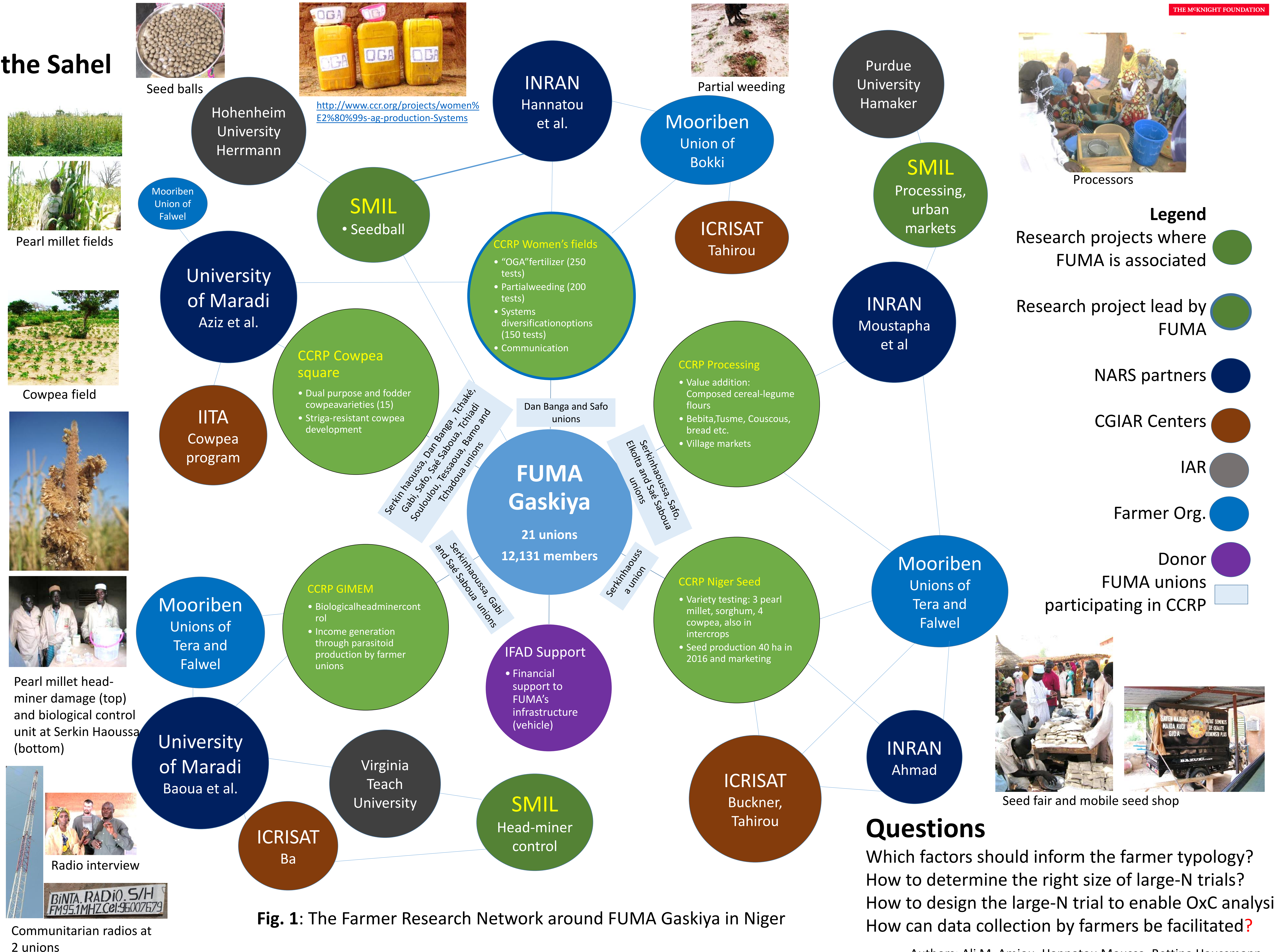


Fig. 2: Boxplots of pearl millet yield (kgs/ha) with partial weeding and OGA - example of Dan Banga

## Ongoing activities

- Development of a farmer typology that can help to explain heterogeneity of on-farm results and to better match options to diverse farmers' contexts.
- Development of a user-friendly data base that serves both farmers and researchers.
- Communication of results using various channels.



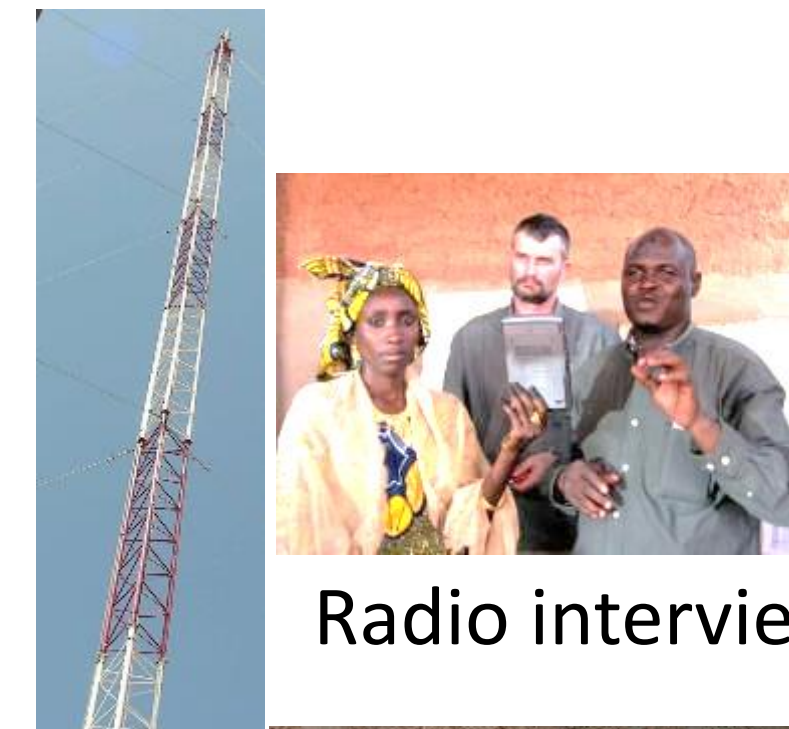
Pearl millet fields



Cowpea field



Pearl millet head-miner damage (top) and biological control unit at Serkin Haoussa (bottom)



Communitarian radios at 2 unions



Processors



Seed fair and mobile seed shop

- Legend**
- Research projects where FUMA is associated (Green circle)
  - Research project lead by FUMA (Light green circle)
  - NARS partners (Dark blue circle)
  - CGIAR Centers (Brown circle)
  - IAR (Grey circle)
  - Farmer Org. (Blue circle)
  - Donor (Purple circle)
  - FUMA unions participating in CCRP (Light blue circle)

Fig. 1: The Farmer Research Network around FUMA Gaskiya in Niger

## Questions

- Which factors should inform the farmer typology?
- How to determine the right size of large-N trials?
- How to design the large-N trial to enable OxC analysis?
- How can data collection by farmers be facilitated?