



Citizen science in farmer clusters as a mechanism to reconnect rural communities

Gerid Hager, International Institute for Applied Systems Analysis (IIASA)

Daniela Ablinger, Virginia Bagnoni, Gillian Banks, Clare Scott, Alice Caselli, Kristina Janečková, Riina Kaasik, Youri Martin, Aliyeh Salehi, Martine Schoone, Jan Trávníček, Gonzalo Varas Romero, François Warlop, Marie-Luise Wohlmuth

30th European Society for Rural Sociology Congress, 7–11 July 2025, Rīga, Latvia



FRAMEwork has received funding from the European Union's H2020 research and innovation programme under grant agreement No. 862731.





Working with farmers to build biodiversity sensitive farming and realise agrobiodiversity management across ecosystems.

Farmer Clusters: Group of farmers supported by a facilitator working together to improve biodiversity and the ecological health of their connected farmlands.

11 clusters in 9 countries, diverse farming systems

Citizen science activities to enhance local capacity for biodiversity understanding and to enable community-level activation.



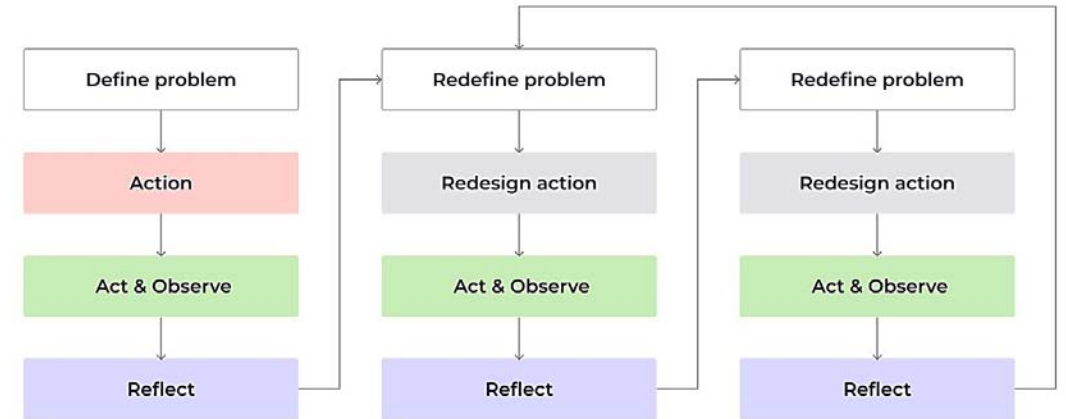
Concept-based action research

Community and community development

(Theodori 2006, based on interactional theory by Kaufman 1959; Wilkinson 1991): Community as a **coordinated structure of human relationships** based on a **place-oriented process of interrelated actions**; Community development is **purposive, positive action and interaction** between **actors** attempting to establish and/or strengthen the community.

Value creation stories (Wenger-Trayner et al., 2011):

Communities develop a **common purpose** and achieve value-added outcomes via **shared activities** mediated by **storylines and developing narratives**.



With farmers and rural public

100+ activities and events between **2021 to 2025**.

2,500+ people reached and engaged

- Raise awareness of biodiversity among rural communities more widely; support building of local connections and strengthen community in support of biodiversity-friendly farming.
- Encouraging farmers to observe and document biodiversity; tap into tacit and place-based knowledge.

Activities

- ✓ Grassland and meadow monitoring
- ✓ Monitoring of key species (bats, birds, bumblebees, moths)
- ✓ Wildlife camera trapping (mammals, birds)
- ✓ Oliver fruit fly monitoring
- ✓ Ground dwellers and soil biodiversity
- ✓ City Nature Challenge 2022-2025 (LU, IT, CZ, AT)
- ✓ BioBlitzes with school groups
- ✓ Other observation events (bats, kestrels, wild bees, rare arable plants, harvest mice, veteran tree survey etc.)





Local actor network



- Other likeminded farmers
- Everyone within the extended and cross-generational family context in and around operating farms
- People within the close social circle of farms

**Farmers,
farming
families and
friends**

**The wider
public,
community
groups**

- School/student groups
- Families, couples, groups of friends
 - Local associations and clubs, e.g., Scouts
 - Community initiatives

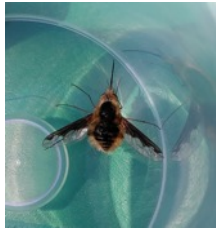
- Farming associations
- Agri-env. organisations
- Citizen science networks
- Nature conservation orgs
- National institutions, e.g., Natural History Museums
- Government and regional bodies

**Stakeholders,
advisory
organisations**

**Local
businesses**

- Farm cooperatives
- Sustainability start-ups
- Farm shops
- Local food businesses (e.g., producers and local sellers, food coops)







**CNC
BioBlitz
Italy**
2023-2025
417 to 1468
observations





**Biodiversity Path and BioBlitz
Czech Republic
2023-2025**
From 140 to 1537 biodiversity observations

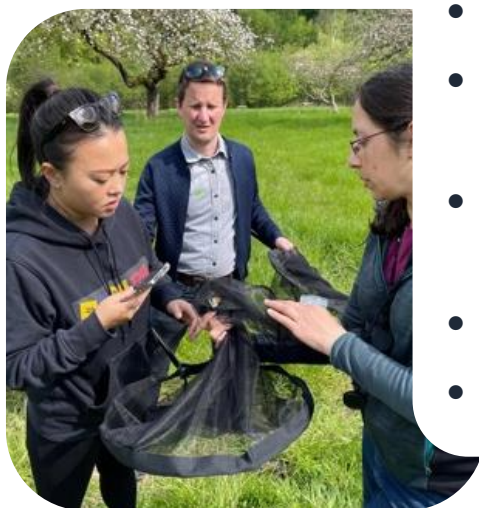




Local interactions



- Designing, organising, implementing and reflecting together.
- Providing information, guiding and creating shared space for activities.
- Sharing expertise and local stories, asking questions, inquiring jointly and curiously, exploring mutual interests.
- Spotting, chasing, catching and releasing wildlife.
- Taking photos, sharing/discussing observations on-site, building a database of wildlife together, identifying others' observations
- Learning from, surprising and inspiring one another, bouncing ideas, making plans.
- Having food, enjoying music and laughing together.
- Buying/selling locally produced foods and beverage.



Conclusions and outlook

- Some FCs have adopted citizen science practices as local activities for their communities longer term.
- New/unusual way to re-connect people, connect people and more-than-human nature, connect people and place.
- New types of regular festivities with a purpose, reason to come and act together.
- Need for local adoption, leadership and ownership.
- Durability and limitations of community strengthening.
- Future direction: explore more specific evidence of longer-lasting community building effects.



Thank you!

hager@iiasa.ac.at



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