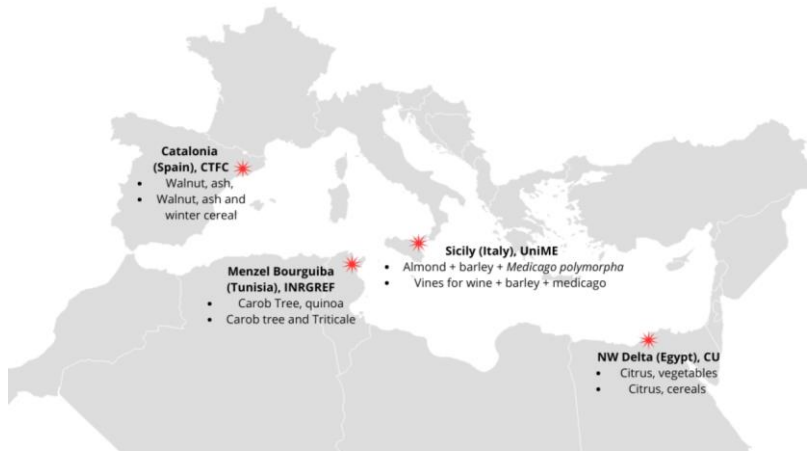


# Aligning Demand and Supply of Agroforestry Green Commodities for Scaling Up Agroforestry

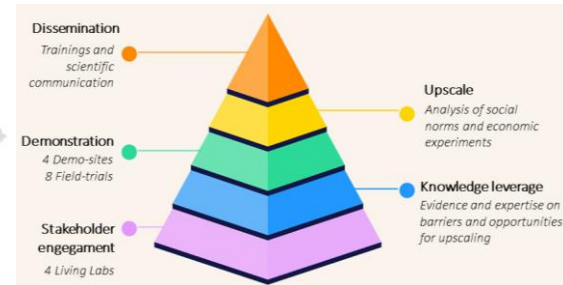
Research project: “SCaling Agroforestry by living LABs for Resilient Mediterranean agro-Ecosystems - SCALARE”

## Context of the research

- Agroforestry systems provide multifunctional benefits but often lack farmer appeal due to socio-economic barriers.
- When non-marketable ecosystem services (ES) are considered, their relative profitability increases (Kay et al. 2019)
- Exploring linkages to green commodities markets (e.g., PES, eco-products and standards) key for viable business models.



## SCALARE (2025-2028) - Project concept



Example: Grapes intercropped with forage legumes and grasses (Sicily, Italy)

Photo credits: Dr. Danilo Scordia, University of Messina

Experiments would elicit farmers product premia (e.g. product price increment) required to adopt such practices and consumers willingness to pay for products and services from these farming systems.

## Economic experiments

### Knowledge gap

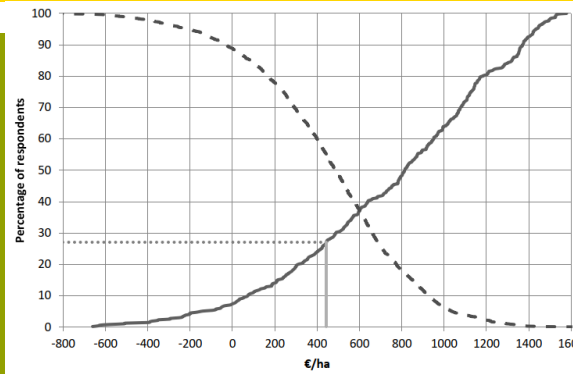
- Economic and behavioural factors influence the adoption of agroforestry.
- Little empirical evidence on farmers WTA agroforestry (e.g., Stetter & Sauer 2022; Opdenbosch & Hansson, 2023)
- Little empirical evidence on consumers WTP for environmental effects of agroforestry systems (e.g. Otter & Langenberg 2019; Cole et al. 2024)

### Methods

- Identification of practices delivering additional ES at DS (e.g. water or carbon services)
- DCE with farmers to elicit WTA agroforestry practices
- DCE with consumers to elicit WTP for related agroforestry products / ES

## Expected results

- Preferences estimates for different attributes.
- Supply and demand curves for agroforestry products
- Differences in demand of products among Germany, Northern and Southern Mediterranean Countries
- Market equilibrium analysis.



Example: Distributions of farmers individual WTA levels (black line) and consumers individual WTP levels (dashed line) for ecosystem services production. Citizens' mean aggregated WTP (grey line)

Source: Tienhaara et al. (2019)

Experiments will be used to derive supply and demand estimates for products (e.g., wine) produced according to selected agroforestry practices, as outlined in Latacz-Lohmann and Schreiner (2019).

## References

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## Contact



Dr. Carolin Canessa

TUM Chair of Agricultural Production and Resource Economics  
carolin.canessa@tum.de