

A peek into consumer desires for Community Supported Agriculture in Flanders (Belgium): can agroforestry be an asset to attract CSA participants?



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Introduction and background

Community Supported Agriculture (CSA) is a type of farming where citizens collaborate with farmers by either paying for the harvest in advance through a subscription, or by co-investing in the farm. Many CSA farms seem to work with agro-ecological and/or organic methods (Barbosa et al., 2022) and agroforestry. Is this agro-ecological working method a requirement for CSA participants? Which factors play a role in consumers' decision-making process to participate in CSA? To answer these questions (with a focus on the case study Flanders, Belgium), a discrete choice experiment (DCE) will be used. For the moment, there are already a number of studies that have investigated this matter qualitatively (in-depth interviews) (Birtalan et al., 2020; Diekmann & Theuvsen, 2019;) but the results of these studies have not yet been confirmed by quantitative studies that survey random consumers' preferences on a larger scale.

Objectives

- To study preferences of consumers for different attributes of CSA formulas in Flanders
- To identify the Willingness to Pay of consumers in Flanders for agroecological working methods

Table 1: DCE Attributes and levels.

Attribute	Levels
Working method	1) Conventional farming 2) Agroecological farming, without a label 3) Organic farming, with a label
Diversity in offer	1) Low diversity 2) Medium diversity 3) High diversity
Logistics	1) Selfharvesting 2) Selfharvesting or pick up a food box at the farm 3) Selfharvesting or homedelivery
Choice freedom in available food	1) Yes 2) No
Social activities	1) Yes 2) No
Agroforestry	1) Yes 2) No
Price (/year)	1) € 200 2) € 400 3) € 600 4) € 800 5) € 1000 6) € 1200

Methodology

- Study area:** Flanders, northern Belgium
- To reveal consumer preferences for CSA, a stated preferences DCE is used. To design the DCE, a literature review and an internet research to existing CSA farms, were conducted. Besides this, in-depth interviews were done with CSA farmers and members of these farms to unravel their motivations. As a last step, focus groups, one with CSA participants and two with random consumers, were organised in the winter of 2022-2023.
- In addition to the choice experiment itself, further questions from the Food-Related Lifestyle Instrument scale (FRLI) (Brunso et al., 2021) were added to the survey. This scale has three main components: food involvement (how important food choices and cooking are for a consumer), food innovation (trying new food products) and food responsibility (concern about environmental problems in food production).
- DCE: Bayesian D efficient design
- Online survey, send by specialised agency
- Data collection: Jan-feb 2024, n = 494

Attribute	Option A	Option B	
Working method	Organic agriculture, label 	Conventional agriculture 	I will not participate.
Diversity offer	Low diversity 	High diversity 	
Logistics	Self-harvest or pick-in up on farm 	Self-harvest 	
Choice freedom	No choice freedom 	Choice freedom 	
Social activities	No social activities 	Social activities 	
Agroforestry	Agroforestry 	No agroforestry 	
Price	€ 400/year 	€ 600/year 	

Figure 1: Example of a choice card.

Levels	Coeff.	St. err.	St. dev.	St. error
Opt-out	1,85	0,21	***	3,44 0,22 ***
Working method				
Conventional Farming	Base			
Agro-ecological farming (no label)	0,13	0,09		0,28 0,20
Organic farming (label)	0,06	0,11		- 0,87 0,17 ***
Diversity in offer				
Low	base			
Medium	0,32	0,05	***	-0,40 0,11 ***
High	0,63	0,09	***	0,46 0,20 *
Logistics				
Homedelivery	base			
Selfharvesting	-0,44	0,10	***	0,56 0,18 **
Selfharvesting or pick-up on farm	-0,10	0,11		0,78 0,17 ***
Choice freedom				
No	base			
Yes	0,53	0,08	***	0,69 0,13 ***
Social activities				
No	base			
Yes	0,02	0,07		0,25 0,13
Agroforestry				
No	base			
Yes	0,14	0,07		0,10 0,15
Price	-0,32	0,02	***	-0,26 0,02 ***

Figure 2: Research plan.

Preliminary results (ML model)

- Respondents have a positive preference for a higher diversity in food offered and for choice freedom in the food offered.
- They have a negative preference for selfharvesting in the farm. Consumers prefer the ease of homedelivery.
- There seems to be a little preference for agroforestry ($p=0.054$) but this is less clear than for other attributes. Further analysis is needed through latent class models to see if there is a particular group within the respondents that has a clearer preference for agroforestry.

References

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