

Extended Abstract

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Paper/Poster Title	The composition of personal micro-AKIS and its influence on strategic decisions by farmers in Flemish horticulture
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Abstract prepared for presentation at the 96th Annual Conference of the Agricultural Economics Society, K U Leuven, Belgium

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Abstract	200 words max
<p>The influence of the agricultural knowledge and innovation system (AKIS) on the strategic decisions by farmers is an understudied component of the innovation process. The objective of this paper is to clarify the role of AKIS actors in strategic decisions in Flemish horticulture. To this end, we use a mix of qualitative methods, combining survey data from 28 Belgian horticultural farmers complemented with expert interviews. Survey participants were requested to identify their personal micro-AKIS actors, used for both operational and strategic decisions, and described the importance of each actor for three recent strategic decisions. Our data suggest that the micro-AKIS for operational decisions consists of a diverse mix of family members and private, public and embedded advisory services. Our observations lead to three key findings. First, standardized strategic decisions require little input from AKIS. Second, the members in the farmers' micro-AKIS only changed when starting or exiting farming. Third, even though subsectors of horticulture are categorized by a similar general AKIS, farmers in these subsectors constructed their micro-AKIS in different ways. We conclude that AKIS actors influence farmer decision making, but that this influence differs between farmers, decisions and horticultural sub-sectors.</p>	
Keywords	AKIS, Belgium, horticulture, advisory services, innovation, supportive environment, lock-in
JEL Code	Agricultural Extension Services Q16 see: www.aeaweb.org/jel/guide/jel.php?class=Q)
Introduction	100 – 250 words
<p>The influence of the agricultural knowledge and innovation system (AKIS)—the pluralistic system of public, private and embedded advisory services—on the strategic decisions by farmers is an understudied component of the innovation process. This influence can be divided in three steps. Initially, personal micro-AKIS members are selected from the pool of available general AKIS members. Secondly, these micro-AKIS members can influence, either positively or negatively, strategic decision making. Lastly, we hypothesize that impactful decisions might lead to a change in the composition of this personal micro-AKIS as now obsolete members are removed or new members are added. The objective of this paper is to clarify the role of AKIS actors in all three steps of strategic decisions in Flemish horticulture, a sector that can be divided in three subsectors: greenhouse farming, topfruit farming and field vegetable farming. These three subsectors share the same general AKIS, but have some practical differences that might lead to differing interactions with their personal micro-AKIS members. We will study the interaction over different farmers, different subsectors and different decisions.</p>	

Methodology	100 – 250 words
<p>To this end, we use a mix of qualitative methods, combining survey data from 28 Flemish horticultural farmers complemented with expert interviews. Survey participants were requested to identify their personal supportive environment actors, used for both operational and strategic decisions, and described the importance of each actor for three recent strategic decisions. Importantly, we did not chose the decisions beforehand. Respondents were free to choose any decision that they found important and strategic. Additionally, respondents indicated the degree in which this decision induced a change in farm strategy and whether or not this decision was the reason they interacted with the AKIS member for the first time. Expert interviews were used beforehand to develop the suggested list of micro-AKIS members and afterwards to verify the stylized facts.</p>	
Results	100 – 250 words
<p>Our data suggest that the supportive environment for operational decisions consists of a diverse mix of 8 groups: social members, private advisory services, embedded advisory services, cooperatives, accountancy firms, banks, research stations and farmers unions. However, clear differences were observed between greenhouse farmers and the two other subsectors. Greenhouse farmers show a degree of homogeneity in their composition of the micro-AKIS that was not observed by previous research. They had on average twice as many micro-AKIS members and those came from almost all groups. Other horticulture farmers were much more diverse, an observation more in line with previous research on micro-AKIS composition.</p> <p>When farmers make strategic decisions, the reported influence from micro-AKIS members outside of the social group (family and friends) was rather low, 57% of decisions was made without an important contribution. Those decisions that did where made with important contributions mostly from banks, accountancy firms and private advisory services, less so from cooperatives and research stations. No contributions were made by embedded advisory services and farmers unions. This is in line with expectations as banks and accountancy firms have more general expertise that is applicable to more types of decisions or innovations. We could not confirm our hypothesis that important strategic decisions lead to a change in the composition of a farmer’s micro-AKIS. Although there were some farmers who made changes, these farmers were in the beginning of their farming career or at the end. These changes are expected because the micro-AKIS is either new or in decline.</p>	
Discussion and Conclusion	100 – 250 words
<p>We conclude that AKIS actors influence farmer decision making, but that this influence differs between farmers, decisions and horticultural sub-sectors. In general we observed a diversity in both the importance of AKIS members and the composition of personal micro-AKISs. We found the importance of professional AKIS members to be rather low and propose that many of the decisions considered strategic are standardized where no important AKIS contribution is required. Our results are likely sector specific as horticulture is characterized by a pluralistic private and public advisory system that has several active organizations and companies in each of the 8 categories. We also found that farmers make strategic decisions that are more standardized and less impactful than what researchers might</p>	

define as strategic. Future research should be attentive to this fact when studying strategic decisions.