

Risk and risk management from an EU-household perspective: evidence and implications

<u>Erwin Wauters</u>¹, Tsion Taye Assefa², Miranda P. M. Meuwissen², Erno W. Kuiper², Alfons Oude Lansink², Frankwin van Winsen¹, Geoffroy Enjolras³, Magali Aubert⁴, Yann de Mey⁵, Markus Lips⁶, Mark Vancauteren⁵, Steven van Passel⁵, Robert Finger⁷, Johannes Sauer⁸, Ludwig Lauwers⁹

¹Institute for Agricultural and Fisheries Research, Belgium; ²Wageningen University, The Netherlands; ³CERAG, Université Grenoble, France; ⁴INRA, France; ⁵Hasselt University, Belgium; ⁶Agroscope, Switzerland; ⁷University of Bonn, Germany; ⁸TU Muenchen, Germany; ⁹ILVO, Belgium; erwin.wauters@ilvo.vlaanderen.be

The management of risk is an important part of farming, both for individual farmers and for governments that include this as one of their agricultural policy objectives. Indeed, farming is increasingly subject to uncertainties, arising from variable weather conditions, volatile markets, limitations on the use of animal medicines and plant protection chemicals and changes in government objectives and instruments. Relevant research, both from a management-economic and micro-economic perspective and the design of efficient policies in this area, require an analysis of risk and risk management from a holistic perspective. Rather than focusing on a specific source of risk, a specific risk management strategy, or a specific policy instrument, such a holistic approach analyzes risk and risk management as a system with significant interactions. These interactions occur between the sources of risk, between risk management and other farmers' objectives and activities, between policy measures and between policy objectives. Ultimately, risk management strategies start with decisions on the farm and the household that allocate time and resources to different activities. Further, the impact of policy measures in this area is dependent on farmers', farm households' and the broader industry's responses to these policy measures. Hence, besides a direct impact in the area of risk and risk management, risk management policy measures can have important side effects, and the desirability of policy measures should be judged by both the intended and unintended effects.

The objective of this session is to present and discuss the results of research that was carried out in various European countries, taking such a holistic approach to the analysis of risk and risk management. The results of these studies will be presented and discussed with the goal to derive implications for risk management research and for the design of policy measures. One common feature of these studies is the farm household perspective, whereby a farming system is seen as consisting of several subsystems – the technical, human, economic, goals and norms and management subsystems – operating in a series of suprasystems such as the macro-economic, the policy and the social suprasystem. Hence, during this session, we will take a step back by looking at farm households and trying to answer questions such as how do they perceive risk, which risks do they perceive, how do they manage risks, which interactions occur between risk management and other farm household management activities. Each individual study relates its main conclusion to the dominant research and policy approaches to find compliance and/or discrepancies.

A first series of studies deals with the farmers' willingness and capacity to manage risks and with farmers' conceptions of risk and risk management. These studies present important implications on how farmers conceptualize risk and on interactions between the sources of risk. Further, this series of studies analyzes potential and actual risk management decisions implemented by farm households in various European countries. A second series of studies deals with interactions between farm household risk management decisions. They show that risk management at the farm level is very much dependent on decisions and activities at the household level. This implies that analyses at the farm level will lead to unanticipated responses by farm households.