Integrating social science and agricultural practice through serious gaming – perspectives on benefits and challenges

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Abstract: Nordic agriculture has to adapt to the effects of climate change, both in terms of reducing the risk of negative effects, but also to draw on the opportunities that climate change might imply for agricultural production. As the implementation of adaptation measures might lead to potential negative outcomes or have trade-offs with different environmental or socio-economic goals, this project addresses the concept of maladaptation in Nordic agriculture. In order to identify and assess examples of maladaptation for the agricultural sector, we developed a novel methodology, integrating visualization, participatory methods and serious gaming. While games and gaming may be considered as a new, and innovative communication strategy to inform and engage public and citizens with scientific research, this study offers an analysis of how a research based game on climate change maladaptation can support but also hinder players' sense-making processes.

Through the analysis of eight gaming workshops, this study identifies challenges and support for the player's sense-making. While it concludes that conceptual thinking of game content sometimes clashes with players' everyday experiences and practice, possibly resulting in loss of credibility, this study also concludes that gaming may function as an eye-opener to new ways of thinking. Overall, this paper suggests that the integration of (social) science and agricultural practices through serious gaming has great potential but at the same time poses challenges due to different knowledge systems and interpretive frameworks among researchers and practitioners.

Keywords: climate change, maladaptation, serious gaming, focus groups, public understanding