

Session Partnerships: April 13th 09.00 hrs

4s2a: Food system transitions in deltas under pressure

Understanding Dutch farmers' decision making in the transition towards circular agriculture

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According to the Dutch Ministry of Agriculture, a transition towards a circular food system—in which the agricultural food chain will be changed from a linear production chain into a more circular food system with a minimum of unnecessary losses could be an answer to challenges in relation to national and international climate goals and water quality. In a study consisting of literature research, 13 semi-structured qualitative in-depth interviews with farmers who more or less contributed to circular agriculture, and a survey among 133 arable farmers, 80 dairy farmers, 79 pig farmers, 59 farmers with mixed arable and livestock farms, 43 farmers with multifunctional farms, 19 farmers engaged in initiatives that contribute to CA and 16 farmers from other sectors, we tried to find out which behavioural drivers and external conditions influence the decisions of Dutch farmers in the transition towards circular agriculture.

The interviews revealed that farmers engaged in circular initiatives were intrinsically motivated, were directed towards the society and were prepared to share their knowledge about circular agriculture; some of them even called themselves evangelical. Farmers who took more measures that contribute to circular agriculture also are triggered more by social and environmental values. Obstacles that the interviewed farmers mentioned were the resistance from their environment and the fact that special (circular) initiatives do not fit into existing legislation which – according to the interviewed farmers – is designed for conventional farming.

Survey results revealed that having a positive attitude towards circular agriculture, feeling addressed by it, intrinsic and extrinsic motivation and injunctive social norms (what others expect) are significant predictors of the intention to take (more) measures that contribute to circular agriculture. Positive behavioural beliefs, low scores for perceived risk and uncertainty and high scores for intrinsic motivation and feeling addressed by circular agriculture are significant predictors of attitude.

These insights can be helpful for targeted interventions. Examples are persuasive communication to influence motivations, beliefs and attitude, framing directed towards triggering pro-environmental and social values to increase intrinsic motivation, and providing information to decrease farmers' perception of risk and uncertainty, provided that the way information is offered, is adapted to individual situations. Social pressure

may not be helpful in this stage of the transition as still a lot of resistance from conventional farmers seems to exist against circular agriculture.

Keywords: circular agriculture, behavioural factors, external conditions, farmers' decision making