Organic 3.0 in Sweden – gathering perspectives through stakeholder dialogue

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### Implications

By capturing ideas through stakeholder dialogues of different ways to improve the production and environmental performance of organic agriculture we can contribute to engagement for developing a more sustainable organic agriculture in Sweden.

### Background and objectives

Organic production has shown to be successful in a number of ways; environmental and health benefits by avoiding synthetic pesticides, lower nitrogen losses per hectare and higher energy efficiency compared to conventional agriculture (Tuomisto et al. 2012, Reganold & Wachter 2016, Seufert & Ramankutty 2017). Organic management also promotes biodiversity (Tuck et al. 2014) and results in higher organic matter contents in soils (Gattinger et al. 2012). It generally improves animal welfare by e.g. providing preconditions for animal natural behaviour. Some studies also conclude that the economic viability is better on organic farms (Reganold & Wachter 2016). However, at the same time organic agriculture have sustainability shortcomings; often lower yields and productivity compared to conventional production, especially in a European context (including in Sweden), shortages of nutrients in arable cropping systems, and sometimes high leaching losses per amount produce (Tuomisto et al. 2012, Seufert & Ramankutty 2017). In order for organic agriculture to contribute to more sustainable farming and food systems as a whole it needs to improve and grow. Sustainable solutions and agricultural methods also need to be spread outside the organic sector (Arbenz et al. 2017).

EPOK initiated stakeholder dialogues in Sweden with the aim to gather ideas and ways to develop the Swedish organic farming sector in a sustainable way. One main objective was to identify research needs to support this development. An international discussion about the concept Organic 3.0 on the next steps to be taken for organic agriculture was formulated in a discussion paper by IFOAM (IFOAM 2016), a paper by Arbenz et al. (2017) and at an International Society of Organic Agricultural Research (ISOFAR) symposium “ Organic 3.0 is Innovation with Research” in Republic of Korea in late 2015 (Rahmann et al. 2016). These discussions form the background of the EPOK initiative.

### Results and Discussion

The results still need to be processed, e.g. different ideas sorted into themes and profoundly described, but here we give examples of issues being discussed in the dialogues. As stated above, organic agriculture has achieved recognition for being an environmental friendly farming system in a number of ways, but still there is a long way to go to build sustainable organic farming systems. A common theme in the dialogues was the appropriateness and the insufficient flexibility of the organic regulation, the European Council Regulation (EC 2007), which also forms the basis of the Swedish KRAV[[1]](#footnote-1) standards. According to the organic regulation the possibilities for nutrient recirculation between urban and rural areas are strongly restricted as any sewage product are forbidden to use. For a long-term sustainable nutrient management in organic farming changes are needed, both in the regulation and by conducting research and development work to find new solutions for safe and resource efficient recycling of these products. Greater availability of nutrients in organic production would give opportunities for growth and may also increase yields and productivity. Another theme concerned strengthening efforts in research on animal and crop breeding adjusted for organic systems, to achieve both productivity and animal welfare improvements, which were judged important for building more resilient organic agricultural systems in the future. A major challenge for agriculture as a whole is the dependence upon fossil fuels and the importance of organic agriculture contributing to solutions was stressed in some of the dialogue groups. One big part of the discussions was how different stakeholders looked at the role of organic agriculture as driver for sustainable agriculture. Should organic farming develop to be the mainstream agricultural practise? Or should organic agriculture also in the future be a niche production having the role of being a forerunner and an innovation system for agriculture as a whole? Another theme in the discussions was about building stronger bridges and confidence between producers and consumers and promote shorter food systems chains. Producer-consumer associations could be an alternative to certification of the production according to regulations.

### How work was carried out?

Seven dialogues with the following stakeholders were conducted: 1) Organic Sweden (Swedish umbrella organization for stakeholders in the organic sector), 2) Swedish Society for Nature Conservation, 3) The board of KRAV, 4) KRAV staff, 5) The board of Swedish Organic Farmers’ Association, 6) Swedish authorities (Swedish Board of Agriculture, Swedish Environmental Protection Agency, National Food Agency, Sweden, Swedish Chemicals Agency), 7) Researchers at SLU.

The dialogues were not structured in detail as we aimed for an informal discussion where all opinions and ideas could be freely expressed. However, we used an EPOK brochure about Organic 3.0 as background material (EPOK 2016 (a summary of the IFOAM discussion paper mentioned above, supplemented with adjustments for the Swedish context)). The dialogues have been finalized and we will now sort out the main ideas on future possible pathways for organic agriculture development in Sweden. In the end of year 2017 EPOK will arrange a stakeholder forum where the results of the study will be discussed and important future actions and research needs summarized.

**References**

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1. KRAV is a Swedish incorporated association, with 27 members from the whole food chain, that develop the KRAV organic standards [↑](#footnote-ref-1)