How can we know if organics becomes better? A perspectivist view on multicriteria assessment

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Abstract

Methods to do overall sustainability assessment are very different, they produce different assessments, and none of them can claim to have the 'right' answer. This paper aims to show some of the deeper challenges of making and communicating overall assessments of organic food systems, by investigating the role of scientific and stakeholder perspectives. Some results are that (1) sustainability is a paradoxical perspective, which relies on a multitude of specialised scientific perspectives; (2) assessments are based on built-in, but mostly hidden and sometimes incompatible values; and (3) the key to successful overall assessments is to make perspectives and values explicit in order to enable assessment of assessments in a participatory process. We conclude that there is a need to develop new participatory methods to handle perspectives and values in the preparation and communication of assessments of organic food systems.

Introduction

Consumers buy organic goods, and citizens and politician support organics, to some degree, because they believe it is a better alternative with regard to global challenges and societal goals for environment, health and welfare. Much credibility and trust rests on whether organic agriculture can continue to improve in relation to its stated principles.[3] But there is also a need to show citizens, politicians and consumers that the organic alternative actually makes a positive difference. Organic systems are monitored and certified with regard to the organic standards, and not with regard to the principles, and the standards are directed at practices rather than (expected or possible) effects and impacts. This is an appropriate choice, since practices are much easier to evaluate than effects. But it leaves us with the questions of whether organic is a better alternative, overall, and whether the on-going developments make organic food systems better, overall. How can we know this?

In order to develop better and more sustainable organic food systems, there is a need to make overall assessments of their effects and to bring those assessments into practice. In the last decades, many methods to do overall sustainability assessment have been developed, including 'integrated', 'holistic' or multicriteria tools (Alrøe et al. 2014). But the methods are very different, they produce different assessments, and none of them can claim to have the 'right' answer.

One common problem with making overall assessments is indexation. An index 'machine' transforms indicator measurements into performance-based scores by way of 'scoring functions' that determine the value (in terms of desirable or not) over the expected range of the indicator (e.g. Andrews et al. 2002). Indexes are in other words very effective machines to remove information, which turn a range of value-based assessments into a number (typically) between 0 and 100. Overall indexes, like sustainability indexes, sum up assessments from very different research perspectives, which may be based on very different values, and effectively hides those perspectives and those values. (Even multicriteria methods are based on building separate indexes within a limited number of thematic areas.) Such indexation is problematic when the assessments are to be used in relation to specific values such as the organic principles, which may not be in accordance with the built-in and hidden values.

Another common problem is how to assess food system sustainability in such a way that stakeholders can use it in changing their practices (Alrøe et al. 2014). One approach is to categorize different assessment tools and provide guidance on how to choose the most appropriate tool for each situation. The choice of method is based on built-in methodological differences and trade-offs between different objectives. For instance there may be a trade-off between the scope in terms of area, level and comprehensiveness, and the precision and validity of the results (Schader et al. 2014); between complex expert-based full assessments and participatory rapid assessments (Marchand et al. 2014); and between measures of sustainability

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[3] See http://www.ifoam.org/en/organic-landmarks/principles-organic-agriculture.

performance and the management and development of agricultural enterprises (Trieste et al. 2014). These differences and trade-offs means that one-size-fits-all solutions are rarely feasible.

However, the problem is deeper than choosing the right tool for the job; it concerns the question of how we are at all able to do sustainability assessments, and what role assessment plays in relation to reflexivity and communication (Freyer and Bingen 2014, Alrøe et al. 2014). This paper aims to show some of the deeper challenges of making and communicating overall assessments of organic food systems.

Methods

This paper is the result of work carried out in the research and development project MultiTrust.[4] The twofold goal of the MultiTrust project is (1) to make the organic producers better able to develop organics in accordance with the organic principles and in synergy with societal objectives, thereby consolidating the long term growth of organic food systems, and (2) to make it easier for consumers, citizens and politicians to observe and evaluate the different contributions that organic food systems offer. To reach these goals the project develops methods for multicriteria assessment and communication that can effectively support an integrated and trustworthy development of organic agriculture. The project methodology is interdisciplinary and participatory. It applies a perspectivist methodology that investigates the role of different scientific and stakeholder perspectives in organic food systems and multicriteria assessment methods (cf. Alrøe and Noe 2011).

Results

The MultiTrust project has identified three pivotal challenges in developing overall assessments of organic food systems (Figure 1). The first challenge is how to balance different types of knowledge, and to avoid that what is most well-known, precise or easiest to measure gets the most weight. The second challenge is how to expose values such as the built-in values in assessment tools (cf. Gasparatos 2010), and relate them to the ethical principles of organic agriculture, societal goals, and other interests. The third challenge is how to reduce the complexity of overall assessments to enable communication in such a way that the assessments can effectively contribute to the development of better organic food systems.

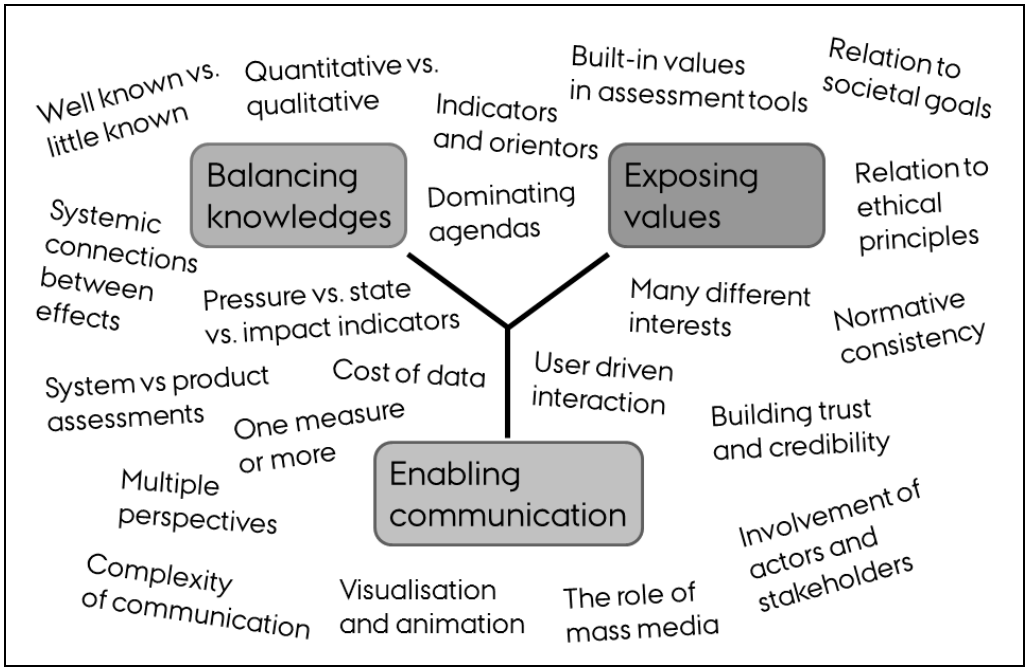

Figure 1. Three key challenges in the development of overall assessments of organic food systems, with some more specific aspects of the problematic.

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To meet these challenges, we claim, it is necessary to explicitly and exhaustively address the question of what perspectives the assessments are made from. This is a complex problem in several dimensions. Firstly, sustainability is a paradoxical perspective in the sense that it wishes to comprise the whole, but must rely on a multitude of specialised scientific perspectives. Therefore, there is no one fixed idea of sustainability; new concerns arise continuously in society and new perspectives emerge in science, which must be included, and the assessment can never be exhausted. The same may be said of organics. Specifically, organic agriculture does not have its own 'holistic' perspective, from which to observe the development of organic food systems compared to the vision and goals laid down in the principles of organic agriculture; it always depends on other perspectives.

Secondly, the learning and knowledge that enters into an assessment is constricted by its discursive, practical and cognitive context. Scientific perspectives are based on built-in but mostly hidden values, which are embedded in the knowledges they produce (Thorsøe et al. 2014). Moreover, these values may be incompatible, and the scientific perspectives may be incommensurable or complementary (in Niels Bohr's sense). Each perspective can observe some aspects, but will be blind to others. For instance, we find two different values, care and naturalness, in animal welfare in organic agriculture, which are complementary in the sense that we cannot honour both values at the same time.

Thirdly, there are multiple kinds of stakeholders in food systems with very different values and goals, and these values do not necessarily match the values embedded in the scientific perspectives and assessments. Even when the same value terms are used, such as 'sustainability', 'nature quality' or 'animal welfare', they are often used in very different meanings by different stakeholders and scientists. This problem is aggravated by the fact that the existing sustainability assessment tools are generally inept in handling values.

Discussion

The answer to the question of how we can know if organic becomes better, calls for more than just making indexes or choosing the right assessment tool for the job. Science in itself cannot say whether organic agriculture is a better alternative, or whether any specific development of organic food system is toward the better, overall. There is no assessment without values, and the determination of what values to base overall assessments of organic food systems on, is not only up to science; it is something that has to be determined in cooperation between science, organic actors and other stakeholders. And this is where the attention to perspectives becomes essential. There is not one science but a range of relevant scientific perspectives which are needed to make overall assessments. The built-in values in perspectives and assessments may be incompatible with each other and with stakeholder values. A key to successful implementation of sustainability assessments is therefore to make values and perspectives explicit to allow for assessments of assessments in a participatory process. Values should not be hidden in indexes, but exposed so that stakeholders can assess as well the values behind the assessment. And methods should be developed that are able to handle perspectives and values in the preparation and communication of overall assessments of organic food systems.

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