

A prototype tool for participatory multicriteria assessment to develop organic food chains

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Key words: sustainability assessment, stakeholder involvement, participatory tool

Abstract

Research and experience suggest that stakeholder involvement is crucial to the successful development and implementation of methods of sustainability assessment – but it is far from clear how to do this. In this paper we investigate how stakeholders may be involved in making and using overall assessments of organic food systems, and propose a prototype tool that can help do this. Based on consultations and workshops with organic stakeholders, we conclude that: 1) assessments should be driven by user needs, 2) assessments must be used in food chains, and 3) assessments should focus on tangible initiatives. A prototype of a participatory tool for multicriteria assessment and communication in organic food chains has been developed and described in form of an animation film, a diagrammatic representation and an explanatory report.

Introduction

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. Experiences from a wide range of approaches suggest that in order to successfully develop and implement methods of sustainability assessment, it is necessary to involve stakeholders (e.g. Videira et al. 2010). The last decades have thus seen the development of a range of participatory assessment techniques and practices aimed at promoting sustainability. However, in many cases the results have been disappointing, and disillusionment has grown amongst practitioners and stakeholders who have felt let down when the many benefits that have been claimed for participation, are not realized (e.g. Reed 2008). It is therefore far from clear how to involve stakeholders in making and using overall assessments of organic food systems. In the present paper we investigate this problem and propose a prototype tool that can help do this.

This paper is the result of work carried out in the research and development project MultiTrust.³ 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

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³ The MultiTrust project is part of the Organic RDD programme, which is coordinated by International Centre for Research in Organic Food Systems (ICROFS) and funded by the Danish Ministry of Food. We thank all the other partners in the MultiTrust project for their contributions.

reach these goals the project has developed a prototype of a tool for multicriteria assessment and communication that can effectively support an integrated and trustworthy development of organic food chains.

Methods

Generally, the MultiTrust project methodology is interdisciplinary and participatory. It applies a perspectivist methodology that works deliberately and openly with the different scientific and stakeholder perspectives in organic food systems and multicriteria assessment methods, and what aspects of organics these different perspectives are able to observe (cf. Alrøe and Noe 2011). Specifically, the investigation here builds, firstly, on theoretical analyses of multicriteria assessment methods from different scientific perspectives represented in the project: philosophy and ethics, economics, psychology, management theory, communication theory, and media theory. Secondly, it builds on consultations and workshops with organic stakeholders. And thirdly, it builds on tool development and design processes in cooperation with stakeholders and professionals in animation and systems design. While the focus here is thus on assessments of organic food systems, we also draw on experiences from sustainability assessments more generally.

Results

There are a range of potential barriers for successful stakeholder involvement in sustainability assessment and adoption of sustainability measures in food systems. Food systems are complex; they comprise many different systems, chains, networks, actors and practices. Transitions towards better and more sustainable food systems must therefore be based on coordinated decisions and synchronized changes of practices. Moreover, stakeholders' lifeworlds and relations are complex and varied, and different stakeholders have different understandings of sustainability, and of organic agriculture, and different ideas about what constitutes better food systems. On the scientific side, there is no one 'holistic' scientific perspective of organic agriculture from which developments can be observed and compared to visions and goals. Sustainability assessments rely on a multitude of different scientific perspectives, which are based on their own built-in, but mostly hidden, values. Furthermore, assessments are inherently value-based, they are always judgments of better and worse in some sense. A key to successful implementation of sustainability assessments is therefore to make values and perspectives explicit in a participatory process (Gasparatos 2010).

Based on this realisation, the MultiTrust project carried out a multi-stakeholder workshop focused on the question of how to communicate values as a basis for using overall assessments in the development of organic food systems. The workshop included representatives from production, processing, retail and consumers, who discussed the question first in homogeneous groups and then in mixed groups. The main conclusions from the workshop were that: 1) assessments should be driven by user needs, 2) assessments must be used in chains, and 3) assessments should focus on tangible initiatives.

These fairly simple conclusions have quite far-reaching consequences for the development of participatory assessment tools:

1. In order for assessments to be user driven, there has to be an option for discussing the criteria that the assessment is based on (criteria are values used for assessing).

But often criteria are determined by expert ideas about what is important. And generally the existing sustainability assessment tools are quite inept in handling values. This is a problem if organic food systems are assessed using general sustainability tools, which are based on criteria that are not necessarily in accordance with organic values as formulated in the organic principles. But it is also a problem for a dedicated organic assessment tool, because there are many differences in values both within and between the links in the food chain.

2. Most tools have been focused on single entities like farms, businesses, sectors or countries, or single products, and not on the interaction between entities in product chains or food networks. But transitions towards better and more sustainable food systems happens through synchronized changes in practices across food chains and networks. Complex assessments don't communicate well, they are only manageable by experts. And when they are transformed into something that is easy to communicate, such as "footprints", sustainability indexes, etc., this involves processes of indexation that effectively hide the assessment values and prevents any interaction with stakeholder values (Gasparatos et al. 2009).

3. The focus on tangible initiatives (or 'good examples'), such as a farm biogas plant or a retail packaging reduction plan, points in another direction than the typical assessment tool, which is focused on entities or products. Tangible initiatives are easier to communicate across different actors and stakeholders, since they provide concrete and palpable objects that are amenable to common understanding. Tangible initiatives also make the concept of multicriteria assessment more concrete than when the assessment is done on an enterprise that may have many initiatives which point in different directions.

Based on the theoretical work and stakeholder workshops, the MultiTrust project has developed a prototype for a participatory tool for multicriteria assessment and communication that aims to effectively support the development of organic food chains (Figure 1). The tool is described in form of an animation film, a diagrammatic representation and an explanatory report.

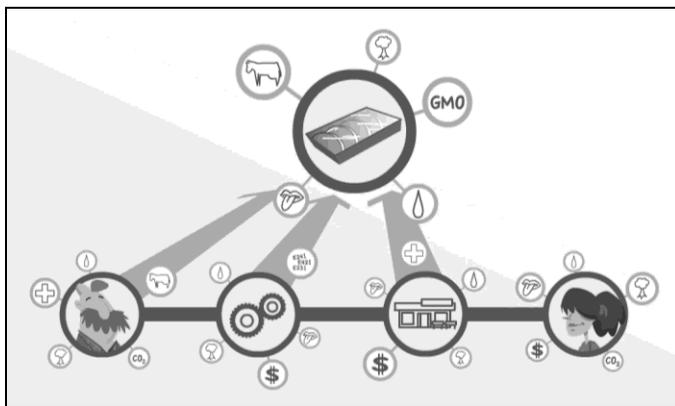


Figure 1. Snapshot from an animation film presenting the proposed participatory chain assessment tool, showing the criteria employed by different links in the chain for a specific product. © Tumblehead and MultiTrust

The tool is planned to be an online tool driven by users. It is directed at organic actors that want more transparency and deeper understanding and who wish to influence the development of organic agriculture, including producers, processors, retailers and consumers. Consumers, for instance, can use the tool for choosing products based on multiple criteria. They enter a product code and are provided with an overview of the complete production chain with links to the producers, processors and retailers that have (or may have, e.g. when there are more than one producer) been involved in the production. The given product shows a 'summing up' of the criteria that have been imprinted in the product through the production process, and there is detailed information on the criteria employed in the different links in the chain. Processors and retailers can use the tool to choose relevant suppliers. Producers, processors and retailers can get an overview of what criteria the next links in the chain weigh highly in their practices and use this in their strategic choices on development and sale.

The information is provided by the users. Each actor makes a user profile in the system which indicates what criteria they pursue in their actions. The selection and the stated importance of the criteria indicate the efforts made or planned, and not attitudes. For instance, a consumer selects the criteria she bases her consumer choices on, and a producer selects the criteria they use for making strategic decisions on their farm. Their efforts can be documented in the user profile in form of descriptions of tangible initiatives, observations (measures, pictures, videos) and assessments. Users can also comment on the profiles of other users, ask questions or make suggestions.

Discussion

The proposed prototype is an example of a tool that enables stakeholders to make and use overall multicriteria assessments in their daily practices; a tool that comprises the whole food chain and thereby makes it possible for stakeholders to work together in changing their patterns of production and consumption. The tool allows stakeholders to communicate what they desire and strive for in a way that works both ways in the chain. Consumers can learn from each other and establish connections with producers; retailers can gain insights in consumer needs; processors can make strategic decisions based on what the other actors in the chain want, etc. This proposal presents a new way of doing participatory multicriteria assessments, which provides deeper understanding and wider influence on the development of organic food systems.

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