

The German organic sector from the perspective of social-ecological research on agriculture and nutrition

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Abstract

Social-ecological research analyses agriculture and nutrition from the perspective of sustainable development. This interdisciplinary and transdisciplinary approach embeds the organic sector in a broad societal and ecological context, integrating normative aspects into its research methodology. New insights from six German research projects are presented.

Introduction: Social-ecological research on agriculture and nutrition

Far-reaching transformations can be observed in the field of “agriculture and nutrition”, but not every developmental path leads toward sustainable development. Undoubtedly, organic agriculture and food industries can contribute toward sustainable development in manifold ways (Halberg et al. 2006). However, not every organic enterprise is necessarily sustainable. The organic sector represents one important option, amongst others, for achieving a more sustainable agriculture and nutrition. This paper deals with questions concerning what role the still relatively small organic sector can and should play in the vast field of “agriculture and nutrition”.

This contribution draws on results from the Social-Ecological Research Programme of the German Ministry of Education and Research. Social-ecological research is a type of sustainability research which integrates knowledge derived from different disciplines and practical experiences in order to elaborate feasible solutions for sustainability problems. Six research projects using this approach of social-ecological research analysed the field of “agriculture and nutrition”, covering conventional and organic agriculture, food processing, marketing and consumption, and cooperated in a research network (tab. 1).

Tab. 1: Topics of the projects from the social-ecological research network

Projects	Agriculture	Processing	Marketing	Consumption	Policy
Food change			✓	✓	✓
OSSENA	✓ (regional)	✓	✓	✓	
Turnaround in consumption	✓ (organic)	✓	✓	✓	✓
Regional wealth	✓ (organic)	✓	✓		(✓)
AgChange	✓				✓
PartizipA	✓				✓

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The methodological approach of social-ecological research

The conceptual and methodological approach of the network projects² has the following three primary characteristics. 1) These research projects referred explicitly to the *normative concept* of sustainability, clarifying which of the rival definitions of sustainable agriculture and nutrition they held and what their position on these conflicts and debates was. 2) The researchers took an *integrative perspective* on sustainability problems combining agricultural and nutritional research with regard to the whole value-added chain and its linkages with nutrition. 3) *Participatory approaches* included practitioners, stakeholders etc. in order to link the analysis closely with real world problems as a basis for developing practical solutions.

In sum, the projects, discussing their results in the research network, did not focus on single, disconnected aspects of organic and conventional agriculture and nutrition, but rather analysed relevant sustainability problems in relation to the framework conditions as well as to their particular context. The integrative approach and an intense relation with practitioners complement one another, thus going beyond disciplinary research.

Some results from social-ecological research projects

Some exemplary results with regard to organic food production and consumption in Germany are presented here (for more information see Nöltning/Schäfer 2007 and the project websites). They can be assigned to the three main components of the field of "agriculture and nutrition": 1) enterprises from food production; 2) consumers and nutrition; and 3) policies and discourses as framework conditions.

From sustainable food to sustainable enterprises: The project "Regional wealth" analysed the contribution of enterprises from the organic food-chain towards quality of life and sustainable development in the Northeast German region of Berlin-Brandenburg. One method was a close stakeholder participation including trans-disciplinary workshops, joint decisions about indicators, and an advisory council of practitioners from the organic sector. Due to this participative approach, the results show that organic companies are not only engaged in environmental protection – even beyond the organic standards – and create jobs and income. Further, the research revealed "invisible" social effects such as a transfer of knowledge and experiences about sustainable agriculture and healthy nutrition to consumers, the participation in regional networks, and the stabilisation of social resources in rural areas (Schäfer 2007). The project "Turnaround in consumption" compared organic farms in two German regions and developed a typology of organic farmers according to region, motivation and economic specialisation. The results reveal that organic farmers are also involved in diverse activities (e.g. tourism, natural protection, marketing) that foster rural development. This typology helps identifying and addressing the "right" farmers for specific projects of rural development (Engel et al. 2006).

Both projects point out that entrepreneurial activities entail more than just employing a sustainable mode of production (e.g. environmentally friendly, fair) and creating

² See www.sozial-oekologische-forschung.org/en/154.php. The projects are: *Food change* (www.ernaehrungswende.de); *OSSENA – Nutritional quality as quality of life* (www.ossena-net.de); *From the turnaround in agrarian policy to a turnaround in consumption patterns?* (www.konsumwende.de); *Regional wealth reconsidered* (www.regionalerwohlstand.de); *PartizipA - Participative modelling, analysis of actors and ecosystems in agro-intensive regions* (www.partizipa.net); *AgChange – conflicts in the new agricultural policy* (www.agchange.de).

sustainable products (e.g. healthy). Additionally, the integrative and participative approaches stress the impact of the enterprises on society beyond the market as well as the importance of the social embeddedness of organic firms. In fact, the social contexts of organic firms and their positions within the market are corresponding factors, e.g. a sustainable profile can be an asset for marketing. In this regard, however, trends in the German food market, such as severe price competition, are a drawback for sustainable food production.

Taking the perspective of consumers seriously: The projects "Food change" and "OSSENA" show that consumers do not orient their nutritional practices solely toward achieving economic cost-benefit-maximisation or comprehensive information. As "competent" consumers, they rather manage their nutrition within the constraints of a complex everyday life and according to deeply rooted nutritional cultures and patterns, which makes changes in nutritional habits very difficult. Adopting a participatory and gender sensitive approach, the project "Food change" focused on the everyday perspectives of consumers other than the perspectives from e.g. marketing, nutrition or health experts. The findings show that consumers need simple solutions for sustainable nutrition that easily fit in their everyday life. Organic food is only one element of combined, easily accessible offers of sustainable nutrition; other elements are fair trade, regional food, less meat, competences in cooking and healthy eating, adequate options of out-of-home-eating etc. (Eberle et al. 2006). These findings are also reflected in the research project "Turnaround in consumption" that developed an integrated model of action that addresses the perceptions, knowledge, motivations and actions of consumers simultaneously, in order to motivate them toward eating more organic food. Such a campaign will only be successful, however, if it addresses the specific experiences of the target group and their everyday life context, instead of inundating them with information and "preaching" the right diet.

Discourses and policies: Necessary changes for sustainable agriculture and nutrition entail re-formulation of policy goals and redistribution of resources and chances. Such alterations arouse conflicts, and there is a fierce struggle going on in Germany over redesigning policy strategies and re-framing public discourses on agriculture and nutrition. Disputes about organic agriculture and genetically modified organisms are at the heart of such conflicts. The projects "PartizipA" and "AgChange" – using participatory methods, such as group model-building or participatory sustainability impact assessment – suggest that conflict does not necessarily obstruct finding solutions, but can rather be a starting point for constructive problem solving. By including debates on normative aspects and valuations in the analysis as well as involving stakeholders, the projects were able to use the diversity of perspectives as well as normative conflicts as a source of knowledge and motivation.

Discussion of the results and conclusions for organic research

The results and recommendations of the network projects point out that sustainability problems cannot be resolved by single measures such as organic food production and consumption. The researchers, often together with practitioners, formulated and experimented with manifold instruments and strategies. Even though practitioners were not always able to directly implement these recommendations, social-ecological research produces knowledge at the interface of society and science. This robust research perspective embeds organic food production and consumption in a broad societal context, examining them in light of sustainable development. Its strength lies in employing an interdisciplinary and transdisciplinary mode of analysis of food

production and nutrition which can also provide new insights for specialised organic research. It helps to link the organic sector with the vast field of "agriculture and nutrition" which is dominated by conventional production and faces manifold sustainability problems (health/obesity, environment, biodiversity, market concentration, nutritional culture etc.). Organic food production cannot resolve these problems alone because of its relatively small size and because it addresses only some of these problems. However, the results from social-ecological research suggest that the social context of organic enterprises and consumers, their motivation and valuations, heterogeneous actor networks, conflicts over policies etc. can have a potential for sustainable development even beyond organic agriculture. It points toward topics for further research, such as the following:

1. Having started as a social movement that tried to change society, the organic sector has been familiar with the debate on normative implications and value judgments since its origin. However, these discussions seem to have grown less important during the phase of differentiation and professionalisation over the last years. The organic sector, and those who research it, should again revisit and take up the debate with regard to sustainable development; it has to clarify its normative orientations within the whole value-added chain and the role of organic agriculture in society in general.
2. Sustainable nutrition entails more than organic food. Consumers need room for manoeuvre, competences in nutritional understanding, and management strategies concerning how to handle nutrition in everyday life and in the framework of existing nutritional cultures. Since sustainable nutrition means more than individual choice (at the market), consumers need professional assistance and empowerment. In this respect, it seems worthwhile to explore the potential of organic food consumption further.
3. Political conflicts and controversial discourses about (organic) agriculture and nutrition should inspire societal learning on sustainability. Research should identify the most effective procedures and strategies for societal learning and how they can be made fruitful for further development of the organic sector and increasing its contribution toward sustainable nutrition.

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