

Summary of the Discussion on the 1st Draft of the Global Vision and Strategy for Organic Farming Research

Held on the 12th October 2014 TIPI Workshop "Practitioners' Research Agenda" Yeditepe University, Istanbul, Turkey

Urs Niggli

Revised version of May 5, 2015



The visualization of the discussion at the TIPI workshop in Istanbul.

Table of contents

1.	Abo	ut the workshop in Istanbul	2
2.		ımary of results	
		The state of organic farming and its research community	
	2.2	Niche production, alternative pathway (plan B), or up-scalable sustainability strategy	
	2.3	Internal and external drivers for organic farming development	3
	2.4	Who profits from research?	4
	2.5	Advocacy for organic agriculture research	4
	2.6	System redesign: contra organic 'silver-bullet' solutions	4
	2.7	Global Sustainable Food Security	5
3.	Refe	erences	5

1. About the workshop in Istanbul

On October 12, 2014, TIPI, the Technology Innovation Platform of the International Federation of Organic Agriculture Movements (IFOAM), held a workshop titled "Practitioners' Research Agenda" in advance of the IFOAM Organic World Congress at Yeditepe University in Istanbul.

At this workshop, the first draft of TIPI's Global Vision and Strategy for Organic Farming Research (Niggli et al. 2014) was discussed. The discussion was attended by 120 scientists, farmers, farm advisers, and other stakeholders. A report from this workshop with all presentations is available on Organic-Research.net (Möller 2014).

In this document, the most important aspects of the discussion are summarised. These aspects will be included in the final version of the vision.

2. **Summary of results**

2.1 The state of organic farming and its research community

Organic agriculture varies considerably from continent to continent, within continents, and even within countries. Although it is a tiny niche, because of political opposition and protests against ruthless food and agrochemical monopolies in many countries, organic agriculture is an important part of state agricultural policies, and, in some regions, it accounts for between 40 and 65 percent of farming subsidies and has priority promotion in huge supermarkets in some countries. The actors of organic farming are diverse, and so are the research communities, strategies, and priorities in the field. Although a difficult challenge, it is nonetheless exciting to discuss a common research agenda. The motivation lies in the principles of organic agriculture as worded by IFOAM.

2.2 Niche production, alternative pathway (plan B), or up-scalable sustainability strategy

One discussant brought up "from religion to SWOT analysis". In fact, this is a crucial question. Whether a farming strategy or method is for a niche of consumers or for all consumers influences strongly both the standards and the research agenda. Therefore, the organic research community is very diversely interested: Some researchers find it important to make the spiritual vitality of food visible, others support farm families in participatory breeding programs of local genetic resources, and still others work on the development of broad-acre precision-farming-assisted contour arable systems.

As a conclusion, many people called for a comprehensive innovation culture for organic farming as the most important framework for research. All the innovations needed for organic farming can be grouped into social innovations, ecological innovations (some name it ecological modernization), and technical/technological innovations. Unidirectional or reductionist innovation models as pursued by industrial agriculture are risky and do not support resilient ecological or economic production systems ("innovation can be destructive"). The scientific community will play an important role when the comprehensive and more open innovation culture for Organic 3.0 has to become defined. Technology assessment was mentioned in the discussion as being important. And indeed, the challenge of the future will be to select the best knowledge and most innovative products which increase the economic, social, ecological resilience of farms.

2.3 Internal and external drivers for organic farming development

How can organic agriculture grow? Is it the better information of consumers about the exceptional advantages of organic foods? Is it about finding more sophisticated communication methods in order to enlighten or allure consumers? Is it about having more quantifiable information about the value of the public goods or the avoidance costs of organic agriculture? Is it about developing best mechanisms and schemes which internalise negative externalities (true cost accounting)? These are all external drivers which might help to mainstream organic agriculture. They can be researched by projects but whether consumers or the society react upon more information with more support for organic agriculture is an open question.

By contrast, improving the farming or the processing method, using existing traditional and modern knowledge better, further explore the functioning of organic farming with agroecological, agronomic or technical research are internal drivers for mainstreaming the organic idea. They, of course, also depend on external factors, like funding availability. The latter can be influenced in a positive way by co-operations with likeminded scientists, which can be very fruitful as a growing part of science addresses agroecological systems, the socioeconomic context of farming, environmental concerns, and preventive crop and livestock health concepts. All these questions again highlight how important the role of science and scientists is, not least as bridge-builder between scientists.

2.4 Who profits from research?

This question was inherent in several aspects discussed during the workshop – most fervently when it came to the research needs of smallholder farmers. Many traditional techniques are therefore very attractive as they are affordable and applicable by family and smallholder farms. It is therefore one of the noblest jobs of scientists to help farmers to preserve, even recover, and for sure to value the knowledge they have fostered for centuries. While industrial farming capitalizes from modern research, organic science has to take care of those techniques and technologies which can be used by agricultural and food SMEs. An important aspect which was forgotten in the 1st draft of the vision as a strength of organic agriculture was the health of farmers. Smallholder farmers and farm workers have especially suffered from the 'chemicalization' of agriculture. The research priorities of TIPI should have a clear focus on what helps smallholder farmers and processors to become more profitable and what improves working and living conditions.

The question of who profits from research can only be answered in the regional context of farming and food production and distribution. Several people criticised that the focus of the first draft of the vision is still too euro-centric, which is absolutely true. As a first step, the research needs of the global regions for organic agriculture should become documented more profoundly and accurately. The outcome of the exercise should be presented at Science Day at BIOFACH 2015.

2.5 Advocacy for organic agriculture research

The question as to whether TIPI was to become involved in advocacy work was important. Some mentioned that the lobby work for more research funding was their most important interest in TIPI. Indeed, this is the difference between the International Society of Organic Agriculture Research (ISOFAR) – a society of individual scientists – and the TIPI network within the IFOAM structures. TIPI should have the dual purpose of advising the IFOAM board and the general assembly on sound science on the one hand and to liaison with IFOAM's regional and global leverage on the other hand to influence the research spending for organic agriculture. The example of TP Organics, where the cooperation between the scientists and the European Union Group of IFOAM (IFOAM EU) has influenced the EU research budgets, was enlightening for the delegates. A further developed Action Plan, with clear priorities, was, therefore, seen as very important and should be discussed during the Science Day 2015.

When it comes to national or regional priority setting, in terms of research themes and funding size, TIPI should facilitate the exchange of experience. Therefore, success and failure studies should be told and analysed on the website of TIPI, as well as at their conferences. This will not only help to understand overarching mechanisms better, but also to foster cooperations. Cooperation between the weaker institutions and the individuals in different countries have often made them stronger.

2.6 System redesign: contra organic 'silver-bullet' solutions

The 1stDraft of the TIPI vision (Niggli et al. 2014) developed a differentiated and undogmatic approach to these questions, which was supported by some and opposed by others. And, indeed, if one looks at the four principles of the organic farming of IFOAM,

only system-redesign should be the focus of the organic research. However, looking at the standards level instead, there were many badly-squared solutions that were allowed and practiced in organic farming, which emphasised that both approaches were highlyqualified and needed. Livestock medication, as well as plant disease strategies for horticultural crops (which create at least 60 percent of the value of organic food chains) are the backbone for obtaining adequate yields, and both use conventional chemicals. These "old" chemicals include copper, sulphur, phosphonate, sodium hypochlorite (NaClO), mineral oil, metaldehyde, pyrethroids, iron phosphate, potassium permanganate (KMnO4), di-ammonium phosphate, or lime sulphur are the backbone of yields. Scientists have a responsibility to look at these challenges in a more realistic way. Exploring the knowledge of how farmers have dealt with these issues over centuries and incorporating new solutions with cutting-edge science will help to raise the performance and credibility of organic agriculture and lead to the development of more resilient farming and production systems.

2.7 **Global Sustainable Food Security**

IFOAM took an important step forward when the general assembly carried a motion by the board to look into the sustainability of organic farming standards. Since then, the Sustainable Organic Agriculture Action Network (SOAAN) has worked on a holistic concept of sustainability and has published the SOAAN guidelines (SOAAN 2013) with indicators and metrics for sustainability assessment. The next steps will be for more organic research groups to become involved in the science and practice of sustainability assessment. Otherwise, the LCA approach from the industry will dominate the discussions about the sustainability of farms, food processors, and entire food chains, and the LCA is never in favour of the organic approach. The most relevant approach for sustainable food production will depend on the context of the farm, including its direct environment and the land, and as such, a pure output-related assessment is wrong in many cases. Global sustainable food security is a challenge for organic researchers and calls for cooperations between both scientists and farmers and between scientists from different socioeconomic and geographical environments.

3. References

Niggli, Urs; Baker, Brian; Rahmann, Gerold; Cuoco, Eduardo; Möller, Carolin; Ssebunya, Brian; Hossain, Shaikh Tanveer; Wivstad, Maria; Chang, Jennifer; Soto, Gabriela; Gould, David; Lampkin, Nic; Chander, Mahesh; Mapusua, Karen; Wynen, Els; Qiao, Yuhui; Ardakani, M. Reza; Hartmann, Marco; Oyama, Toshio; Schmid, Otto and Willer, Helga (2014): A Global Vision and Strategy for Organic Farming Research. First Draft. Working paper, Technology Innovation Platform of IFOAM, c/o Research Institute of Organic Agriculture (FiBL), Frick Switzerland. http://orgprints.org/27636/

Möller, Carolin (2014): Report about the Workshop "Practitioners' Research Agenda". The Organic Research website, Research Institute of Organic Agriculture FiBL, Frick, Switzerland. Available at http://www.organicresearch.net/home/news-organicresearch.html?tx_ttnews[tt_news]=1419&cHash=d324bc02ab51415ed75fb2a8ac9e8821

SOAAN (2013): Best Practice Guideline for Agriculture and Value Chains developed by the Sustainable Organic Agriculture Action Network (SOAAN). Developed by SOAAN, approved by the global organic movement by IFOAM Organics International by its General Assembly. December 2013. Public version 1.0 - December 2013. Sustainable Organic Agriculture Action Network (SOAAN)/International Federation of Organic Agriculture Movements, Bonn. Available at

http://www.ifoam.bio/sites/default/files/best_practice_guideline_v1.0_ratified.pdf