



A methodology to go from stakeholder's expectations to research questions: implementation on organic food processing

Marc Tchamitchian, Servane Penvern, Céline Cresson, Laetitia Fourrié, Bruno Taupier-Letage, Rodolphe Clement, Joel Abecassis

► To cite this version:

Marc Tchamitchian, Servane Penvern, Céline Cresson, Laetitia Fourrié, Bruno Taupier-Letage, et al.. A methodology to go from stakeholder's expectations to research questions: implementation on organic food processing. 19. Organic World Congress, Nov 2017, New Delhi, India. hal-01837484

HAL Id: hal-01837484

<https://hal.science/hal-01837484>

Submitted on 2 Jun 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Innovative Research for Organic 3.0

(Proceedings of the Scientific Track)

Volume-II



Organic World Congress 2017
November 9-11, 2017
Delhi, India

Innovative Research for Organic 3.0

(Proceedings of the Scientific Track)

Volume - II

Organic World Congress 2017

November 9-11, 2017

Delhi, India

Editors:

Gerold Rahmann, Christian Andres, A.K. Yadav, Krishan Chandra,
Reza Ardakani, Victorlowe, Gabriela Soto, Helga Willer



International Society of Organic Agriculture Research

A methodology to go from stakeholder’s expectations to research questions: implementation on organic food processing

Marc Tchamitchian¹, Servane Penvern¹, Céline Cresson², Laetitia Fourrie², Bruno Taupier-Létage²,
Rodolphe Vidal², Joël Abécassis³

Key words: Town-hall meeting, participative method, research agenda

Abstract

To develop research projects on organic food processing, the French Research Institute of Organic Farming and the French National Institute for Agricultural Research co-organised a participatory meeting to define shared research questions and involve stakeholders (researchers, private companies, representatives of funding agencies and consumers). Based on the Town Hall Meeting method, it enabled attendees to express and discuss their points of view on proposals they made together. This led to twenty-two research questions about bio-compatibility, conservation, sustainability, adaptation to the food system and flexibility, socio-economic or health. It also led to mid-term strategic agenda. Some of these questions are currently used to build multidisciplinary projects in the framework of a French organic processing network.

Introduction

Organic food processing has a great responsibility: handing to consumers food that still conveys the principles of organics. It raises many questions, on raw materials, on processing, but also on the end-product and the way it is presented and packed. How to deal with raw materials heterogeneity? Which processes can be used, with which ingredients? And many other questions. The European platform TP Organics (Moeskops and Cuoco 2014), Kahl et al. (2013) and others highlight the need for more research in this area, to go further than just define concept framework, but do not venture into a prioritization of these questions: the priority is related to the local economies and situations, to stakeholders’ and private companies’ strategies. It is also related to the nature of the questions: some are mainly technical (process design, adaptation of recipes), some relates to regulations, while others cover many domains ranging from ethics to analytics (e. g. what defines an organic processed product, how to assess its properties). Priority setting must also conjugate research temporality and stakeholders’ engagement.

In France, the research dedicated to organic food processing is scarce, despite the recent initiative to coordinate the different R&D actors in this domain, the RMT TransfoBio (a technological network dedicated to organic food processing, associating development organisations and processing company representatives). The diagnostic of this RMT on this scarcity is that it is probably not due to a lack in funding, but rather to the difficulty for research to find specific questions in organic food processing. It is therefore most interesting to design consensus-based methods allowing stakeholders to express their concerns and questions that research could solve and consortium creation to stimulate project design. We describe the implementation of such a method to design a research agenda dedicated to organic food processing.

Material and methods

¹ ECODEVELOPPEMENT, INRA, 84000, Avignon, France. marc.tchamitchian@inra.fr, servane.penvern@inra.fr

² ITAB, 75013, Paris, France. celine.cresson@itab.asso.fr, laetitia.fourrie@itab.asso.fr,
bruno.taupier-letage@itab.asso.fr, rodolphe.vidal@itab.asso.fr

³ UMR IATE, INRA, 34000, Montpellier, France. joel.abecassis@inra.fr

To achieve the goals of eliciting a diversity of research questions fulfilling the expectations of the stakeholders and reaching a consensus on these questions, the method must take into account the following constraints. It must involve a large panel of stakeholders. It must allow free expression and avoids domination. It must yield a limited number of final formulations, built from all the diversity of proposals while preserving its richness. It must allow to validate the final formulations and finally it must show public and private funding bodies that these questions are of true interest and legitimate. These constraints clearly point towards participatory methods, which implies a strong and rigorous organisation.

Actors and roles

Three types of actors are involved in the process: an organizing committee, stakeholders and funding agency representatives. The role of the organizing committee is manifold. It is responsible for the design of the participative event, for the facilitation during the interactions between stakeholders, but also for the use of the results of the event to foster research actions addressing the questions raised during the process. The committee must have facilitation skills but does not need to be deeply aware of the addressed domain, because this is delegated to the panel of stakeholders that are gathered. The stakeholders, either directly involved in the economic sector, or simply concerned because it uses its production for example, must be in a large enough number and balanced in terms of role that they play. Finally, funding body representatives are called to raise their awareness of bottlenecks and immediate questions that will require attention from research.

Organisational steps

The general organization of the participatory event leading to the identification of a series of research questions and a hierarchy of these questions follows three progressive steps. The first step is the elicitation of consensus-based questions addressed to research. The second step aims at obtaining from the participants two different information, a ranking of the questions according to their knowledge and needs and a list of participants interested in being involved in building a research action. The final step gathers representatives of public or private funding bodies who are asked to react to the hierarchized list of research questions and how it could enter their own agenda.

Step 1 elicitation of research questions. Among the several participatory methods presented in Elliott et al. (2005), the 21st century town meeting (also known as Town Hall Meeting) satisfies most of the above-mentioned constraints. Its drawback is that it requires a heavy organization and is somewhat complex to implement. The general idea is to work on questions in a funnel like process, however allowing for returns. Ideas are expressed by small groups (tables in Figure 1) in response to a question and are gathered. They are then grouped by similarities by a panel of experts, which allows for a reformulation taking into account the different shades. These reformulations are displayed and the participants can react, either by reinforcing or proposing new formulations. On complex questions, this process must be iterated, guiding the participants from the simpler to the more complex.

In our case, the first question asked to the participant was “According to you, what is a quality organic food?” The goal is twofold, acquainting the participants with the method, and setting the basis of the progression towards the final goal. The second question was “Therefore, what does it imply for organic food processing?” The last question finally deals explicitly with the research agenda: “What questions on processing for the production of a quality organic food do you address to research?”

Step 2 ranking. The twenty resulting research questions have been displayed on boards, allowing the participants to review them. Each participants was given five stickers, which they had to put on the research questions they thought were most urgent. According to the stakeholder category (researchers, economic operators, producer or consumer, advisors and development agent), the

stickers were from different colors. Each could choose to put several stickers on one same question to express a high level of priority. At the same time, they could add their name on the questions they were interested in to contribute to future work on this topic. These two actions could be independent.

Step 3 raising awareness of funding bodies. The organizing committee also invited representatives of funding agencies (Ministry of agriculture, research agencies) to attend this participatory meeting, and invited them to a final round table, with a double goal. First, the invitation to express their position in a round table was thought to be a good incentive to ensure their participation, second, participation also should increase their level of implication in the process, and their level of readiness to adopt (part of) the resulting research agenda.

Results

The main results of the implementation of this participatory method to organic food processing is a list of 20 research questions (2 of them have been reformulated and split afterward by the organising committee for precision sake leading to a 22 question list). The main questions, according to stickers vote, are listed in Table 1. The second result is the ranking of these questions (step 2) by participant category. For example, the most important question according to researchers, consumers and producers is the impact of production systems on food quality, while the processing companies favoured the questions on packaging and new processes. The question on the definition of an organic food ranked 4th, because it raised a relative interest of all the participant categories. It has been the most widely shared question, conversely to questions 1 to 3 who ranked better because of a massive vote of fewer categories.

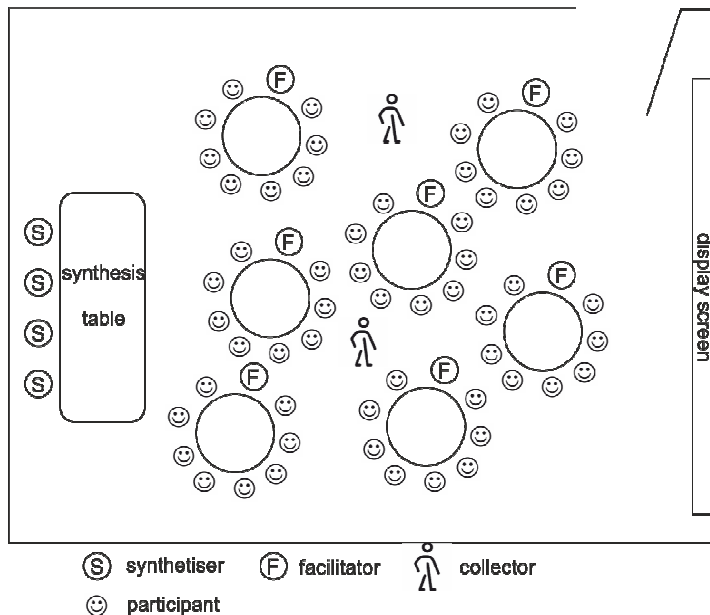


Figure 1. Room organization during the 21st century meeting phase (step 1)

Discussion

On the method

Today, research agendas are more and more commonly established and published, and used by funding bodies to decide on their priorities (e.g. Moeskops and Cuoco 2014). The construction

process can be based on surveys (Lamichhane et al. 2016) or on experts meetings (Kahl et al. 2012); which allows for different types of interactions during the process. Surveys generally allow for directed information transfers, and the consulted panel has little possibilities to interact with the proposed results (research agenda in this case). Experts meetings offer two-ways exchanges when time allows for the organization of several workshops. The process that we have adopted here falls within the scope of the second types of methods, the consulted panel having the possibilities to interact during the construction of the research agenda. However, the Town Hall Meeting method is designed to allow these exchanges to take place at once, during the building of the research agenda. Indeed, the consulted panel is immediately aware of the questions the results from their inputs.

The second step that has been implemented in the presented case aimed at prioritizing the resulting agenda. In survey-based methods, this is generally achieved by a statistical analysis of the collected answers. In our case the consulted panel directly built the prioritization by voting.

Table 1: Top 5 research questions resulting from the participatory meeting

1	Impact of production systems, of cropping/herding techniques and processing on organic food quality
2	Developing a global quality indicator, taking into account formulation, processing, nutrition, taste, origin, environment, and demonstrating its credibility
3	Develop new processes to preserve or enhance the quality and limit risks (contaminants, allergens)
4	Defining, characterizing and measuring the vitality, naturalness and authenticity of OF products
5	Finding alternatives to additives, optimizing formulations with organic ingredients

Hence the proposed design described in this paper combines the advantages of the survey-based and of the expert meetings methods. However, the quality of the results we obtained is dependent on the representativeness of the consulted panel. A large panel is therefore needed. By contrast to surveys, the proposed methods allows to control the composition of the panel.

On the results

Interesting questions were expressed through this methodology, and the participants generally indicated a high degree of satisfaction, both because they could see their concerns translated into questions addressed to research and because they are now better acquainted with each other. However, a little part of the material, gathered from the ideas expressed, could not find their way into the final question list. It was the case of ideas that have been expressed only once, were rather different from the others, and had been evaluated as probably of small general interest. On the contrary, orphan ideas that seemed to be promising have been selected at the synthesis step, and displayed.

As indicated above, some questions raised a shared interest, but most of the high ranking questions had varied appreciation from the different participant categories. The highest ranking questions for research only yields 3rd among processing companies, and 6th among advisors and development agents. These discrepancies confirm the diagnostic on the scarcity of research on this topic in France: the questions of highest interest for the economic agents are not those favored by research, and conversely.

A major output of this method is that some questions were identified with convergent priority, although they did not rank highest. Since the meeting (December 2015), the organizing committee, jointly with the organic network (RMT), supports the building of collaborative research projects around these questions. They are interesting because they allow gathering different actors of the

R&D system together. It is expected that starting collaboration around shared questions will build a common culture and will ease to create convergent interests on the less shared questions of higher priority.

The main difficulties that were encountered in keeping the wake after the participatory meeting itself, are the adjustment between funding calls, that are not yet in phase with the produced research agenda, and the nature of the questions raised. As it can be seen in Table 1, many of these questions are multidisciplinary, and cross boundaries that were rather closed up to now, a result of the diversity of the participants, and of the funnel process that led to the expression of these questions. This adds another dimension to the efforts that have to be made not to let such a meeting without concrete output addressing the needs and concerns of the participants and of the society they represent.

Suggestions to tackle with the future challenges of organic food process

Our work can mainly contribute to position organic systems as part of the multiple solutions needed to solve the tremendous challenges faced by our planet, especially in food processing and packaging for a sustainable consumption. All stakeholders were empowered so they become real partners in the system. The upcoming work will help to identify innovations potential and show how organic sector actors are working towards best practices through continuous improvement. Some of the research questions will lead to a diversity of appropriate methods for ensuring transparent integrity and give an overview of best available food technologies for sustainability.

References

- Elliott J, Heesterbeek S, Lukensmeyer CJ, Slocum N (2005). Participatory Methods Toolkit: A practitioners manual. King Baudouin Foundation Flemish Institute for Science and Technology Assessment, Flemish Institute for Science and Technology Assessment.
- Kahl J, Baars T, Bügel S, Busscher N, Huber M, Kusche D, Rembialkowska E, Schmid O, Seidel, K, Taupier-Letage B, Velimirov A, Zalecka, A (2012). Organic food quality: a framework for concept, definition and evaluation from the European perspective. *J. Sci. Food Agric.* doi:10.1002/jsfa.5640
- Lamichhane, JR et al. (2017). Identifying obstacles and ranking common biological control research priorities for Europe to manage most economically important pests in arable, vegetable and perennial crops. *Pest Manag. Sci.* doi.org/10.1002/ps.4423.
- Moeskops B, Cuoco E (eds.) (2014). Strategic research and innovation agenda for organic food and farming. TP Organics, Brussels.