

# The URBAL participatory method: collectively documenting sustainable food innovation impact pathways

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#### ► To cite this version:

Olivier Lepiller, Tristan Fournier, Nicolas Bricas, Muriel Figuié, Élodie Valette, et al.. The URBAL participatory method: collectively documenting sustainable food innovation impact pathways. Olivier Lepiller; Tristan Fournier; Nicolas Bricas; Muriel Figuié. Studying food and eaters. a cocktail of perspectives and methods, Ed. Quae, pp.165-175, 2023, Update Sciences & Technologies, 978-2-7592-3663-3. 10.35690/978-2-7592-3664-0/c12. hal-04409067

### HAL Id: hal-04409067 https://hal.inrae.fr/hal-04409067

Submitted on 22 Jan 2024

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# STUDYING FOOD AND EATERS

# A cocktail of perspectives and methods

Olivier Lepiller, Tristan Fournier, Nicolas Bricas, Muriel Figuié, eds





#### Chapter 12

## The URBAL participatory method: collectively documenting sustainable food innovation impact pathways

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The URBAL method is aimed at understanding the impacts of activities implemented through social innovations that seek to enhance food system sustainability. In an effort to support the transition to more sustainable food systems, URBAL proposes a qualitative, monitoring and evaluation approach based on the impact pathway concept. It uses a participatory method to incorporate eaters' knowledge and experience with these impacts.

The dominant food systems and diets in affluent areas worldwide have numerous negative environmental, health, social, and political impacts, which in turn lead to sustainability issues in a context of high worldwide population growth (Esnouf et al., 2011). Questions raised by urban food systems—which concentrate consumption needs but not the food production capacity—are particularly critical. Large cities from around the world signed the 2015 Milan Urban Food Policy Pact (MUFPP) with the aim of addressing these questions. There is now a growing feeling that local solutions could be very effective for enhancing food system sustainability. Otherwise cities are bristling with initiatives and experiments. The question remains as to how they could be supported in their efforts to expand the scale and facilitate the transition toward a more sustainable system (Geels and Schot, 2007).

That question is pivotal to the URBAL<sup>55</sup> method, which looks at urban social innovations geared towards developing sustainable food systems. This targeted and applied research aims at providing a methodological guide for monitoring and evaluation by actors and stakeholders (innovators, donors, policymakers) involved in transitions towards sustainability. The method is meant to be participatory, qualitative, multidimensional, resource-efficient, and centered on activities. Since 2018, it has been tested in more than a dozen case studies (Valette et al., 2020; Blay-Palmer et al., 2023).

The objective does not include impact quantification, but rather the identification and representation—through cognitive mapping—of impact pathways, whether they are positive or negative, intended or unexpected. The latter are explained by exposing the causal chains that can lead activities to long-term changes. This requires distinguishing the direct effects (products or outputs), on a mid- (results or outcomes) and long-term (impacts) basis, while identifying the conditions underlying the passage between stages. These pathways can help identify the necessary or enabling conditions for success, as well as the potential obstacles or restraints.



Figure 12.1. Simplified representation of an impact pathway.

The idea of an impact pathway places URBAL in the family of approaches encompassed by the 'theory of change' (Mayne, 2011). In this work we have drawn inspiration from the ImpresS method developed at Cirad to document the impacts of development-oriented research programmes in which the research institute participates (Barret et al., 2018; Blundo Canto et al., 2020).

The participatory<sup>56</sup> dimension takes advantage of collective knowledge and intelligence. In practice, this takes the form of multi-actor workshops, with the idea being that the diversity of viewpoints and experience among the concerned actors, as well as their interaction, enables assessment of a broader range of impacts. The challenge is to successfully facilitate communication of these viewpoints and experience by actors who often have difficulty expressing them.

Food system sustainability encompasses a large spectrum of dimensions: environmental, economic, sociocultural, political and health. With this in mind, it is essential to have a clear up to date picture of the synergies and conflicts between these dimensions before examining the impacts of innovation activities. For example, while food supplied

<sup>55.</sup> The URBAL project (N° FC 2015/2440 - N° FDNC Ellgt 00063479) has been funded by the *Thought for Food Initiative* of the Agropolis Fondation (through the *Programme Investissements d'Avenir*, ANR-10-LABX-0001-01), the Fondazione Cariplo, and the Daniel and Nina Carasso Foundation.

<sup>56.</sup> Cousins and Earl (1982) suggested defining participatory evaluation as "applied social research that involves a partnership between trained evaluation personnel and practice-based decision makers, organization members with program responsibility or people with a vital interest in the program–in Alkin's terms, primary users" (p. 399-400). We include eaters (or consumers) among the latter, as they are the beneficiaries of the innovations studied through URBAL.

by local producers can be beneficial for the region's economy and farmers' socioprofessional position, it can have negative environmental impacts if the logistics are not streamlined. These types of observation and the evidence they provide can help inform decision-making on potential trade-offs and priority ranking.

The method needs to be cost-effective and flexible enough to adapt to different types of innovation. By definition, these innovations are new yet sometimes fragile and irregular arrangements. Hence, the actors overseeing these innovations must devote considerable energy to ensure their sustainability. They are largely focused on their objectives, often leaving little time, financial means and they don't necessarily have the skills to assess the impact of their activities. Even when practiced, monitoring and evaluation of those impacts are usually quantitative, which means choosing or developing indicators and a metric and collecting series of data. For example, the 17 Sustainable Development Goals adopted by the United Nations in 2015 have been qualified by more than 230 indicators. This type of approach is not practical for most innovations beyond those introduced by powerful institutions. URBAL offers an alternative, yet without excluding quantification strategies. Qualitative evaluation and help identify indicators that need to be prioritized on the basis of social relevance.

The URBAL methodological guide is available online for use under a Creative Commons license (Valette et al., 2023). It is free for use by innovators, policymakers, innovation-supporting donors, and researchers. The minimum conditions for proper utilization are specified, e.g. allowing for the possibility of workshops being attended by a diverse range of participants and certifying that negative impacts are not concealed in final reports. The URBAL method can be implemented to fulfil several objectives: to explain the functioning of an innovation and the decision to support it, promote it, or prepare a quantified evaluation of its impacts. This open sharing is not solely a policy choice, it is also a pragmatic way of facilitating innovation scaling (Lepiller and Valette, 2021).

In the following sections, we outline the method and look at its advantages and limitations, the legal and ethical implications, and its connection with a holistic approach to food. Finally, we illustrate two cases where the method was applied and then explain how it was tailored to the situational constraints to foster eater (or consumer) participation in the monitoring and evaluation.

#### >> The three steps of the URBAL method

The method is organized in three successive steps.

The first is devoted to characterization of the innovation on the basis of its innovative activities. This step is based on an analysis of available documentation, a review of the literature related to the type of innovation studied, and interviews with stakeholders (e.g. innovators and beneficiaries). At this step, a chronogram may be drawn up of the innovation trajectory, while mapping the actors and activities involved.

The second step involves organizing a participatory workshop that brings together the key actors and stakeholders of the innovation (innovators and people implicated in the innovative activities, the users and supporters, food system stakeholders connected to the innovation, such as suppliers and producers, actors from allied or similar innova-

tions, etc.). The participation limits are determined case by case according to the specific constraints but with the overall objective of pooling a diverse range of viewpoints on the innovation and experience with its activities. Experts on various sustainable food system dimensions are also invited to participate, while being instructed to avoid assuming a superior knowledge stance which that could be intimidating. These experts should instead be helpful observers, offering further details on impacts or suggesting impacts that might be less spontaneously discussed while encouraging everyone to contribute. Those in charge of organization should be experienced in facilitating workshops and the related logistics (invitations, preparing the venue and providing materials, while not forgetting to set aside time for convivial activities conducive to participation).<sup>57</sup>

The analysis of the information collected during the workshop is critical. When it comes out of the workshop information is generally in raw form at first, i.e. large sheets of paper with rough details on the workshop discussions. There may also be complementary sound recordings and notes. But at this stage the information is still far from being clean, detailed and easily interpreted graphical representations of the impact pathways. In this analysis and graphical formatting phase, the workshop leaders can decide to limit representations to information derived from the workshop discussions, i.e. by itemizing that information (e.g. by explaining the causal steps or the conditions of success), or else they can decide to enrich the identified impact pathways with additional information from the scientific literature. It is also possible to keep a record of who said what or identified what impacts. From this standpoint, there is no obsessive commitment to the method's participatory nature.

The third step is aimed at rendering and discussing the results produced in the previous step. This step can take various forms. It could be a participatory workshop that reunites the participants from the previous step, while new participants could also be accepted. Otherwise it could take the form of a shorter meeting that is less participatory but still allows time for discussion (particularly for expressing views on the relevance of the results and the impact pathway representations). The form chosen for this third step depends on the function that the organizer or presenter wants to prioritize: Is it above all meant to generate information for collective decision making on the functioning and governance of an innovation? To promote and enhance recognition on an innovation and solicit political or financial support? To develop or solidify a network of territorial initiatives? To prepare a quantified evaluation of impacts and identify their indicators?

#### Advantages and limitations of URBAL

#### Advantages

The method was designed in response to a relatively simple practical question: What are the impacts of food-related social innovations aimed at improving sustainability? This question is prompted by the need to foresee and monitor the impacts of these

<sup>57.</sup> There are many participatory methods, just as there are many applied contexts and questions to address. There are likewise many publications describing methods and many training programmes for their application, but there are not many summary publications. The King Baudouin Foundation, however, has published a free summary document, which may serve as a good entry point into the participatory approach (Slocum, 2003; Slocum et al., 2006). An inventory of participatory research in France was published in 2013 by the Fondation Science Cityoyennes (Storup et al., 2013). See also chapters 13 and 14 in this book.

activities. The URBAL may be used to perform monitoring and evaluation alongside the activity, to detect changes *ex post*, when they have already occurred and may be monitored, or *ex ante*, when they are under way or could potentially take place. It is important to distinguish changes that have occurred from those that could occur as the responses will differ in terms of action or decision, i.e. strengthening or changing direction, or otherwise it is essential to be proactive so as to avoid a potential impact.

Knowledge produced by URBAL is meant to be shared. This exchange of both positive and negative experience is useful, for example, with regard to more recent innovations which may have drawn inspiration from other already tested or fully confirmed innovations. The general philosophy, as reflected in the choice of the Creative Commons license, is in line with the philosophy of intellectual commons. Lemeilleur and Allaire (2018) and Romagny et al. (2023) noted that these intangible resources associated with knowledge and procedures share similar characteristics with common natural resources such as clandestine passenger issues, exclusion difficulties, or resource degradation risks depending on the type of use. These resources also have unique properties. In some ways they are not in rivalry as they are founded on knowledge whose use by one actor will not be to the detriment of that of others. The objective when governing the use of these resources is to facilitate their improvement and diffusion rather than their preservation. Their degradation is instead seen as being due to an inability to adapt to different contexts, thereby questioning their renewability capacity.

The objective of this knowledge sharing is to participate in the construction of a common culture around practical ways to enhance food system sustainability. This includes producing usable knowledge at various scales (Lepiller and Valette, 2021). Through shared experience, URBAL can facilitate replication and diffusion (scaling out). The knowledge that underpins the steering of innovations, or the political and financial support they receive, promotes their institutionalization (scaling up). The diffusion of this knowledge also helps reinforce the shared culture while promoting new ideas (scaling deep). The use of URBAL in several local innovation cases can also favor the creation of a territorial network of initiatives.

The method's participatory dimension enables innovators to distance themselves from their objectives and thereby avoid the trap of wishful thinking, which in turn could be conducive to formulating unexpected impacts that were neither forecast nor pursued —surprising negative or contradictory impacts, etc., would thus have a better chance of being exposed. The participatory aspect ensures that the monitoring and evaluation process will be socially relevant because the impacts identified will naturally be those that actually concern the participants themselves. For this reason, it is also essential that experts play an auxiliary role in the formulation of the impacts and their pathways, while offering useful information and introducing potential impacts that might not spontaneously emerge from the discussions.

#### Limitations

Standard limitations of participatory methods also apply to URBAL. It can be difficult to recruit participants who may be affected by the innovation but do not feel qualified to take part in discussions. The competence of certain actors may overrule their participation, so the forms of participation should be rethought. For example, how could young children or illiterate individuals participate in the workshops?

The institutional attachments of participants could hinder them from freely expressing themselves, for instance because of confidentiality restrictions or of pressure placed on them by their superiors to prevent their full participation. In such situations, the preparation, initial contact and explanation of the objectives well before the workshop appear crucial for reassuring potential actors who may hesitate to participate. The participatory mechanism should also be designed to control some actors' enthusiasm, e.g. an innovator excited by his/her project, who might tend to monopolize the workshop discussions. The role of invited experts and that of the workshop facilitator are particularly important for managing this type of problem.

Another shortcoming concerns the perception of the legitimacy of the results. The results are qualitative and not quantitatively measured. Quantified indicators are often considered to be more 'objective', and thereby more legitimate. Yet the value of URBAL results is measured more by the extent of their social relevance and their potential for explaining causality and impacts than by objective metrics. To address this legitimacy challenge, the URBAL project team strives to develop simple and efficient communication graphics that will help to readily grasp the range of impact pathways and their associated sustainability dimensions. Another argument in favour of the legitimacy of URBAL's qualitative results is that the latter may be connected to quantitative evaluation results—application of the method may hence be viewed as a preliminary and socially relevant step in the impact quantification process.

A final set of limitations is related to the intention to make URBAL a method that is economic in terms of resources, time, and money. Although different structural scales suitable for diverse potential applications are anticipated, the goal is to make the process practicable even for Master's students on a 4-month internship. The need for economy presupposes trade-offs. The time required for a participatory workshop can be difficult to organize around participants' scheduling, mobility, interest or freedom to speak constraints. The orchestration must be attentive to all these issues in order to be able to collect as much information as possible about the impact pathways. Innovative activities whose impacts will be discussed can be identified beforehand. There may be many activities depending on the innovation, but addressing more than a dozen of them during a 4h workshop would be difficult. Therefore, it is necessary to choose the activities that are most emblematic of the innovation, or the most interesting for a given sustainability dimension.

The choice whether or not to focus on certain dimensions constitutes a second trade-off which strains the multidimensional scope of the method. The very nature of innovations can warrant a more in-depth exploration of any specific dimension. For example, a solidarity grocery serving as a means to address social precarity issues might require a longer period of collective discussion on the economic, sociocultural, and political dimensions.

A third trade-off can be necessary regarding the extent of detail on the impact pathways highlighted during the workshop. When the goal is to reveal the widest range of activity impacts, it could be hard to obtain a detailed picture of their pathways. In this case, the information generated by the workshop reflects the impacts more than their pathways. However, the pathways can then be formulated and mapped in greater detail during a post-workshop phase, after which they can be presented for discussion and validation by the participants in the workshop of the third step. Otherwise, certain impact pathways could be prepared in advance of the second workshop where they will be discussed and validated, while only superficially addressing impacts judged as less crucial to the innovation.

#### >> Legal and ethical implications of URBAL

Like all scientific investigations that involve the gathering of information on personal data, such as opinions, there is an obligation to comply with all applicable laws in the area where the method is implemented. In Europe, the General Data Protection Regulation requires prior authorization for use of the investigation protocol and data processing plan. Depending on the level of precision sought, it may not be necessary to keep a record of who said what during the workshops, so there is no obligation to attribution any dialogue to specific actors (anonymous or not). Moreover, anonymization can sometimes be illusionary. The mention of a job position, e.g. director of food catering services in a city school system, might be enough to identify certain individuals without mentioning their name. It is important to inform participants and obtain their consent before the workshops.

Ethically, implementation of the URBAL method should encourage the vocal participation of the actors who have the most difficulty speaking. If these individuals are hindered by a workplace hierarchy, a lack of competence, or some personal issue that prevents them from participating, their contributions to the discussion could be recorded by other means so as to ensure that no one else will illegitimately speak on their behalf.

#### >> URBAL and the holistic approach to sustainable food systems

A holistic approach to sustainable food systems is pivotal to this method as it seeks to identify impact pathways in all of their different dimensions. Nevertheless, and as we have mentioned, choices can be made to ensure efficiency or to focus specifically on a given dimension or impact. In practice, the holistic approach applies to the organization of the workshops, the invitation of diverse actors with different interests and viewpoints regarding the innovation, as well as experts on various food system sustainability dimensions. Even if all of the various of sustainability dimensions cannot be represented by experts, the different disciplines involved should be represented, e.g. by inviting a nutritionist, an economist, and an expert on social issues.

Once results are obtained for a given innovation, the different impacts are labeled according to the sustainability dimensions, thereby highlighting dimensions with affinities. An impact could jointly have economic and sociocultural elements, e.g. contractualization with a local producer might allow him/her to increase him/her professional competence, ensure a steady income, while creating social links in the community. Attributing impacts to different dimensions can also highlight their mutual contradictions with respect to those dimensions. An environment-friendly measure might be less favorable for nutritional health, e.g. some plant-based products that are presented as alternatives to meat but are less nutritional. Highlighting these synergies and contradictions helps inform decision-making and restores the political dimension of innovations and their quest for sustainability. These decisions are then clearly driven by priority setting, trade-offs and, sometimes, failures. In this sense,

URBAL is working towards a vision—more pragmatic than idealistic—of sustainability that gives preference to itineraries of change that are chosen knowingly and with the help of collective intelligence.

#### >> Adaptations to foster eater participation in evaluations

The social innovations studied for the development of URBAL were chosen in order to showcase a variety of situations. The following is a partial list:

innovations based on new technologies (ordering sustainable quality food products online in Hanoi);

- innovations initiated by activist collectives (a solidarity grocery in Paris, a cooperative supermarket in Montpellier, a participatory guarantee system that certifies agroecological quality in Rabat);

- innovations initiated by sustainable food entrepreneurs (tortillas made with indigenous corn varieties grown by local farmers and processed by traditional methods in Mexico City, a site for the aquaponic production of fish and vegetable products sold locally in Berlin);

- innovations initiated by institutions (a program to improve school meals in Montpellier, a Baltimore-based community food initiative, a food district in Milan aimed at promoting local agricultural supplies, a food security strategy under the EU Common Agricultural Policy).

Here we focus on two applied cases to illustrate the way the eaters are associated with the monitoring and evaluation process and to highlight their contributions.

The first initiative was implemented in the Vietnamese capital Hanoi. It was not conceived as an innovation with a well-defined form, but rather as as a digital communication technology friendly innovation: the use of social media (Facebook or Zalo – a popular Vietnamese media) for ordering sustainable quality food products (Bruckert et al., 2023). The market for more sustainable products is relatively recent in the Vietnamese context, where supermarkets and industrialized food chains have developed rapidly since the 2000s. The development of online sales outlets for these products—separate from mainstream e-commerce in the large supermarket chains is even more recent. Actually, the sustainability concept is seldom applied and not easily translatable in Vietnam. The research team thus had to find a way to designate products that could be qualified as sustainable. They settled on referring to them as unprocessed food products (fruits, vegetables, seafood, honey) or products subject to minimal processing (pastries, spices, preserved foods) that are of better quality than their industrialized equivalents. This included products obtained via more traditional methods that limit the use of synthetic chemical inputs (labeled or not) or other additives. These are sometimes labelled with an indication of origin or a specific cultural identity and are often sold directly by the producers.

An important issue at the Hanoi participatory workshop held in December 2019 was to allow eaters to voice their opinions on impacts regarding the following activities: ordering online, paying online, posting comments, and asking the seller questions. But this participation was not self-evident in a country marked by a particularly authoritarian political culture, a vertical power structure, and great respect for hierarchical order. The invited eaters also needed to feel qualified to discuss with the experts (agronomy and environment, agricultural economy and geography), a food quality control official, and journalists. The Vietnamese research partners were tasked with recruiting several eaters (or consumers) and organizing contacts while respecting local customs, particularly by sending a printed invitation to potential participants who were also informed that a gift would be offered at the end of the workshop (food products such as oranges produced by a participating vendor.) They were also invited to a restaurant to dine together at the end of the workshop. During the workshop, one of the research partners used his talents as moderator. Using humour, he managed to convey the idea that the experience of each of the participants was valuable to the process, and that the experts had been invited to enrich the discussions, raise questions, and provide clarification, but not to distinguish between true and false ideas. The Vietnamese research partners had never previously organized a participatory workshop with such a horizontal structure and they were pleasantly surprised by the eaters' active participation in the discussions. In terms of outcome, the eaters' participation highlighted the importance of the issue of trust in online transactions. The eaters stressed several points on this issue:

– the importance of the opinion or experience of close friends in building trust before an initial transaction with a seller,

- the importance of communication from sellers in response to information requests,

- the importance of various types of media for communicating the origin and production method of food products, as well as identifying the producers (videos, images, etc.).

The second initiative highlighted a different way of looking at the eater participation issue. This innovation was a program to improve school meals in the city of Montpellier, France (Perignon et al., 2023). We were soon faced with this question: How can we collect the viewpoints of elementary school children who were the beneficiaries and the most directly affected? Moreover, the participation of children raised legal questions (parental authorization, ethical procedures, etc.) whose resolution was not too compatible with the project agenda. The choice was thus made to partially modify the participatory spirit by not directly including the children in the workshop and, instead, collecting their viewpoints, reporting them during the workshop, and adding them to those of the participants as part of the post-workshop analysis process. A qualitative survey was thereby conducted among the school children from several schools and at the Children's Municipal Council of Montpellier. This was accomplished through collective and individual interviews as well as participating observations during the school meals.

Without this survey which facilitated access the children's experience, certain impacts would have been less precisely (or not at all) identified. The children's awareness of environmental impacts was generally very high, as revealed by their judgements regarding the sorting of recyclable materials on sorting tables displaying the waste quantities, and also regarding the increase in organic food. One child's comments on the sorting tables revealed a case of inversed socialization that suggested a possible impact on household practices: "Now, when my family doesn't throw stuff in the right garbage bin, I show them how to recycle, and now they know." The children's cooperation with the service personnel in regard to the school cafeteria's recycling tables was identified by another child as a source of satisfaction, allowing the child to feel proud about actively helping and being praised for that action. Another child's reaction identified a

potentially negative aspect of the sorting tables. The fact that this child was shocked by the volume of waste generated suggested the need for support to accompany and help the children understand the meaning of the activity.

A more varied response was noted concerning one of the program's other initiatives: the monthly addition of an 'eco-citizen alternative' menu—which has since become available twice a week. The children noted its more 'ecolo' (i.e. greener) character due to the absence of meat, the possibility to "see what it is like to be a vegetarian," and the realization that it is not necessary to eat meat every day and that whole meals could be made without meat. An impact in terms of social inclusion was noted in the reaction of one child who thought the menu allowed "kids who don't eat meat to eat like us." In fact, on the days that these menus were served, all the children were presented with the same menu because the 'eco-citizen alternative' menu was compatible with the three normally proposed menus (standard, without pork, and without meat). However, fears about the nutritional quality (iron and protein) were also expressed, as well as an impact on the satiation, i.e. one child claimed to be unable to eat the alternative menu due to an aversion to vegetables.

Lastly, the children's remarks confirmed and helped explain the effects that had already been measured in terms of food waste quantities and the introduction of a device for rapidly cutting fruits (particularly apples) directly at the table. The rapidly cut quarters encouraged sharing and allowed the children to understand the importance of eating the entire fruit rather than leaving it half eaten on the table. The fun aspect of the cutting tool seemed to encourage fruit consumption: "It's nice because it makes a flower when it cuts; it's pretty and funny."

To conclude this chapter, we point out the importance of including—as much as possible—eaters in the monitoring and evaluation of innovations that promote more sustainable food systems. Mainstreaming them into the participatory process enriches the evaluation quality with their practical knowledge on the impacts of innovative activities they have experienced. On a political note, the inclusion of eater participation in the evaluation process becomes part of the politicization of food and promotes food democracy (Booth and Coveney, 2015), while favoring the emergence of common shared knowledge on food practices and issues.

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