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Collaborative approaches to the identification of evaluation indicators using the URBAL framework

Beatrice Intoppa, Université de Montpellier, Cirad, UMR ART-Dev, Montpellier, France
Élodie Valette, Université de Montpellier, Cirad, UMR ART-Dev, Montpellier, France

KEY POINTS

- URBAL is a qualitative and participatory approach for assessing the sustainability of food innovations. It focuses on change processes, to support innovators and stakeholders in their decision making.

- The choice of evaluation indicators is a crucial step with an undeniably political dimension. Indicators reflect the interests of those who define them, interests which then guide future sustainability strategies.

- The experiment carried out as part of the City of Montpellier's school catering policy shows that URBAL helps to prepare and better target the choice of indicators to be used for a normative evaluation.

With the dominant food system exerting growing pressure on our planet, it is crucial to understand the transformative potential of urban food systems and to foster public and private actors' capacity to build sustainable solutions (Brand *et al.*, 2017). Although cities raise a host of sustainability issues, they are home to diverse initiatives led by municipalities, the private sector, and food consumers. These initiatives all strive to provide alternatives to the dominant food system and, more generally, to rethink the links between cities, farming, and food.

How to assess such initiatives' impact on sustainability, however, remains an open question. Evaluation is a key tool for informing and steering the contribution of these innovations to the ecological transition.

The necessarily subjective nature of evaluation

Although there is a growing body of research suggesting alternative assessment methods, quantification is still widely regarded as the most objective tool for assessing any human practice. Monitoring indicators are taken as standards of consistency and exhaustivity for steering public policy.

Quantification methods do however have limitations, which have been widely evidenced in research. These relate to the uneven quality or availability of data, the high costs of data collection and management, and the information loss associated with the aggregation process, as data standardization does not do justice to the complexity and heterogeneity of local contexts. These constraints considerably limit any prior deliberation on the relevance of particular indicators and data.

> **Collaborative evaluation helps to guide the formulation of sustainability indicators for food innovations.**

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Above all, quantitative evaluation is often associated with objectivity, despite subjectivity being involved at every stage of an evaluation, from setting its objectives, operational criteria and indicators to the very choice of information to collect. This particularly leads to ignoring the political—and not just technical—dimension of the choice of indicators, as their function is often informed solely by the interests of the actors who produce them. Thus, evaluation measures stand to gain from being developed within the framework of a collective process (Innes, 1990) involving multiple actors, taking into account the specific needs of end-users and the sustainability vision of the different local actors.

These are particularly important challenges for the assessment of the sustainability of food innovations. In 2015, the United Nations' 2030 Agenda for Sustainable Development published a set of 17 Sustainable Development Goals (SDGs) broken down into 232 indicators to measure progress towards sustainability, many of which directly or indirectly relate to food systems. On a regional level, the Milan Urban Food Policy Pact (MUFPP) brings together a network of 217 cities that have joined forces to fight climate change, promote healthy food policies, and create sustainable urban food systems. The MUFPP provides a monitoring framework to support the implementation of the SDGs at local level.

The SDGs and MUFPP only involve recommendations, but they constitute important normative frameworks for cities. However, these frameworks struggle to account for the specificities of each local context and the programmes that are developed there. In particular, the difficulty of using indicators to interpret the interactions between different sustainability objectives on a local scale, or the coherence between these objectives on different scales, reduces local authorities' capacity to engage in strategic action. In 2015, already, the International Panel of Experts on Sustainable Food Systems (IPES-Food) called for more reflexive, inclusive, and multi-dimensional assessment approaches.

Selecting indicators through a multi-stakeholder approach can therefore be particularly valuable in this context. The URBAL collaborative evaluation method, which focuses on change processes rather than results (see Methodology), helps to guide the choice of indicators by prioritizing certain key factors that foster or hinder the achievement of sustainability objectives, taking into account the stakeholders' context and sometimes diverging interests (Figure 1). This method also makes it possible to assess the action of the initiative or programme against local and global sustainability recommendations and normative frameworks.

## Guiding the indicator-based evaluation of the programme *Ma cantine autrement* with URBAL

In 2019, the URBAL framework was applied to the City of Montpellier's programme to improve school catering, *Ma cantine autrement* (MCA), launched in 2016 by the Food Policy Department (FPD).

The central kitchen, which is publicly managed, distributes an average of 15,500 meals per day to 85 school canteens and nurseries. MCA proposes a series of actions to "optimize school catering and combat food waste". These actions revolve around four pillars: food procurement policy, food production management, meal distribution, and raising children's awareness of sustainability issues. This programme aligns with Montpellier's commitment to sustainable food: the city, which has been involved in the agro-ecological and food policy (*politique agroécologique et alimentaire*, P2A) of Montpellier Méditerranée Métropole since 2014, is also a signatory of the MUFPP since 2015. Since 2018, MCA has also been subject to the EGalim law on institutional catering. As of 1st January 2022, this law requires all public catering establishments to serve 50% sustainable products in canteens, including 20% organic products. For school catering, it also introduces a ban on plastic food containers and the obligation to serve a weekly vegetarian menu.

Using the URBAL approach as part of a workshop, parents, farmers, the FPD, and municipal staff working in the central kitchen or in the schools involved collectively reflected on the sustainability outcomes produced by the various actions initiated. They looked at the operational methods applied, as well as the obstacles to and levers for change. This allowed for discussions on strategies to ensure the programme's success and the conditions for scaling it.

METHODOLOGY

URBAL is an approach for monitoring and evaluating the impacts of food innovations on different dimensions of sustainability. It provides a qualitative and participatory evaluation framework, mainly based on multi-stakeholder workshops during which the changes produced by an innovation over the short, medium and long term are identified. This method draws on the theory of change and impact pathway evaluation approaches. URBAL provides a reflexive perspective on 1) the changes surrounding sustainability—whether expected or unexpected, positive or negative, proven or potential—produced by the innovation, and 2) the levers or barriers to these changes. This approach was designed for public or private actors seeking to gear their actions towards achieving greater sustainability. It supports their strategic thinking, and also helps donors and public actors in their decision making.

Figure 1. How URBAL can support innovations through the development of impact assessments
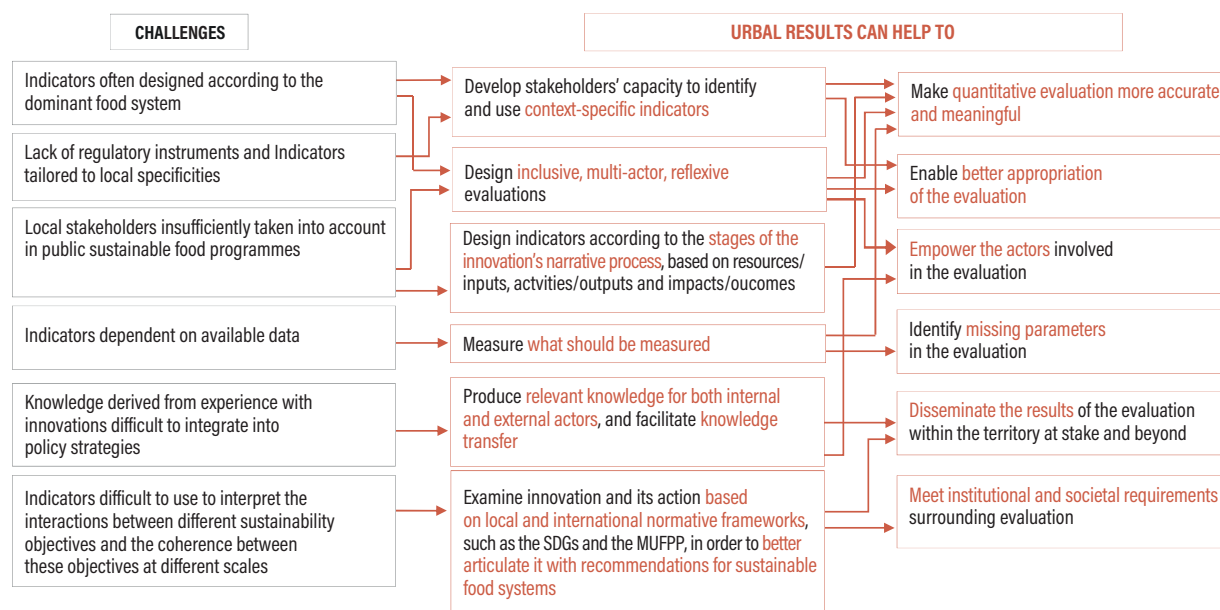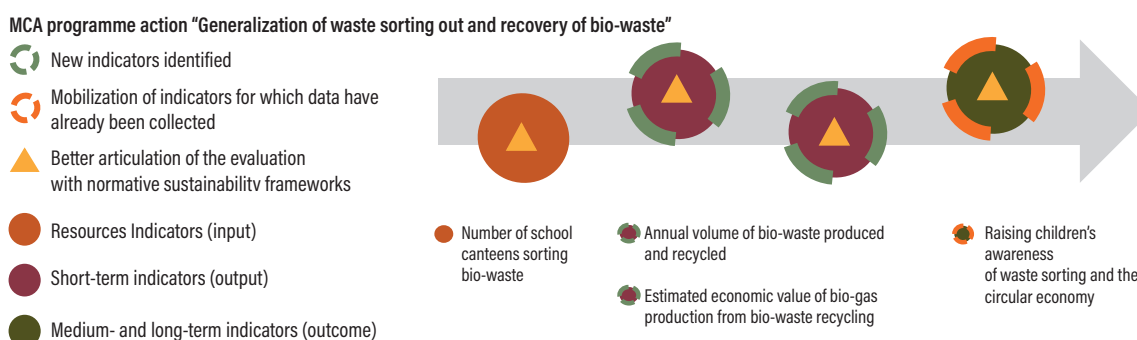

Source: Beatrice Intoppa

At the request of the FPD, the results of this in-depth analysis were used to guide a quantitative evaluation of the programme. The aim was both to review the existing set of indicators, so as to propose an evaluation framework better suited to the specific issues identified by URBAL, and to better align the programme with existing normative frameworks. An analytical framework was co-developed for each MCA action, identifying connections, similarities and differences between the URBAL results and normative frameworks at local level (P2A), national level (EGalim), and global level (SDGs, MUFPP). This analytical framework provided a basis for identifying suitable indicators for assessing the performance of these actions, focusing on the activities and resources used by the innovation at stake, and distinguishing between indicators relating to resources (inputs), indicators relating to activities (outputs), and impact indicators (outcomes), in line with the theory of change.

What is the benefit of articulating an indicator-based evaluation with an evaluation framework such as URBAL, which revolves around the analysis of change processes and relies on multi-actor knowledge? First, basing the choice of indicators on an understanding of the innovation process limits the risk of falling into the trap of standardization. Previously, MCA's evaluation system was based on a set of indicators reflecting the overall impact of the programme, without any distinct evaluation of the different actions included in the programme, or of the stages of the change process. Identifying these stages and characterizing the obstacles or levers along the impact pathway allows for selecting indicators that can account for the specific stages of this pathway. These stages can be material or contextual resources that made the action possible, actions that were implemented to generate the change, different levers or hurdles that impacted the change, or yet long-term effects on the system. For example, the action "More refined allotment" aims to break down the procurement process into a greater number of contracts, in order to encourage applications from a wider range of farmers and food processors, particularly small and especially local organizations. The impact pathway mapped collectively using URBAL showed that sourcing—the consultations carried out to identify potential suppliers—is a precondition that is conducive to the action's success. An *ad hoc* indicator was therefore added to the existing set of indicators.

The impact pathway analysis also shed light on indicators that should be created or mobilized—for which data were already available—in order to improve the evaluation of the programme. Insights from multi-stakeholder dialogue, in particular, made it possible to include indicators that reflected the interests of the diverse stakeholders involved, beyond the project leader alone. For example, during the URBAL participatory workshop, canteen workers indicated that the tools in the "cutting kit" —designed to make it easier for them to cut up fruit and reduce associated waste—could involve a risk of injury. Taking this insight into account might ensure better working conditions and avoid an increase in healthcare costs.

Moreover, the FPD had begun reflecting on how to articulate the programme's monitoring and

Figure 2. Example of evaluation support through indicators using the URBAL approach

MCA programme action "Generalization of waste sorting out and recovery of bio-waste"

New indicators identified

Mobilization of indicators for which data have already been collected

Better articulation of the evaluation with normative sustainability frameworks

Resources Indicators (input)

Short-term indicators (output)

Medium- and long-term indicators (outcome)

Number of school canteens sorting bio-waste

Annual volume of bio-waste produced and recycled

Estimated economic value of bio-gas production from bio-waste recycling

Raising children's awareness of waste sorting and the circular economy

Source: Beatrice Intoppa

evaluation system with various normative sustainability frameworks (P2A Charter, EGalim, MUFPP, SDGs). This was facilitated by the URBAL approach, which allowed for highlighting the programme's contribution to the different dimensions of sustainability (economic, social, environmental, health/nutrition, and governance).

For example, the activity "Bio-waste sorting and recovery" was evaluated using the indicator "Number of school canteens sorting compostable waste" and associated with SDG 11, "Sustainable cities". The URBAL results helped identify the impact of this activity on the creation of renewable energy sources using bio-waste, and on waste reduction through prevention, recycling and reuse. These results thus made it possible to better target the evaluation by highlighting a link with SDG 7, "Ensure access to affordable, reliable, sustainable and modern energy for all", and SDG 12, "Ensure sustainable consumption and production patterns".

Taking into account the different global evaluation frameworks, the need to adapt overly general indicators to the scale of MCA, and the additional information afforded by URBAL, led us to reorganise the existing set of indicators (Figure 2). ■

CONCLUSION

Defining an indicator-based evaluation strategy is a challenge for innovators seeking to measure their actions' contribution to the sustainability of food systems.
URBAL can help to think about indicator selection based on the specificities of contexts: by relying on collective intelligence to take into account the subjectivity of each stakeholder and by highlighting the processual dimension of change, this approach allows for identifying the relevant indicators likely to support strategic action, in line with the recommendations of sustainability frameworks established at different scales.
These indicators are not limited to outcome indicators: they can also be used to evaluate and closely monitor the evolution of the entire change process, from the resources used (input indicators) to the various milestones (output indicators) leading to the final impact. This iterative conception of evaluation allows it to better support actors in their current and future strategies.

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Authors

Beatrice Intoppa, geographer, University of Montpellier, Cirad, UMR ART-Dev, Montpellier, France

Élodie Valette, geographer, University of Montpellier, Cirad, UMR ART-Dev, Montpellier, France

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