Full Research Article

Exploring scenario guided pathways for food assistance in Tuscany

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Abstract. A growing number of people in high income countries, also from the segments of population once considered secure, seek food assistance. Diverse food aid initiatives and practices are developed by a range of actors to tackle food poverty; alongside traditional difficulties, new challenges emerge from welfare expenditure cuts, the reorganization of EU Funds for the Most Deprived (FEAD) and from the spreading of surplus food recovery practices by private companies. Based on a preliminary analysis on food assistance practices in Tuscany (Italy), it emerged that operators involved in food assistance activities are reflecting upon future developments: how is food assistance re-thinking its role to deal with the challenges posed by the current context of change? This work adopts a participatory scenario approach to examine pathways that can be considered robust under uncertainties in the planning context of food assistance. We combine the strengths of back-casted planning, which develops desirable pathways for the future, and explorative scenarios that describe plausible future contexts. Results comprise the definition of shared priority themes and plans tested across a set of downscaled scenarios. The methodology provides a promising learning tool to engage with stakeholders and foster a creative future oriented thinking approach to food assistance system's vulnerability and resilience.

Keywords. Food security, food poverty, scenario analysis, strategic planning, high income countries

JEL codes. Q18, R58, I3

1. Introduction

In recent years severe crisis, unemployment, immigration and political instability are challenging food and nutrition security worldwide. Food and Nutrition Security (FNS) is comprised of availability, access, utilization and stability dimensions (FAO, 2001). Increas-

ingly in high income countries, vulnerable socio economic groups struggle with (food) poverty and health, not primarily as a matter of availability of food but of inadequate income and poverty (Riches and Silvasti, 2014). In this context of change, a growing number of people seek food assistance (Caraher and Cavicchi, 2014; Lambie-Mumford and Dowler, 2015). In Europe in 2014, 122 million people (24.4%) were at risk of poverty or social exclusion and among these 55 million (9.6%) were not able to afford at least one protein meal every two days (meat, fish, chicken, or vegetarian equivalent) (Eurostat, 2015). Italy ranks eighth (14.2%) after eastern European countries, with values above the average. The variations before and after the economic crisis (since 2007 to 2013, see Figure 1) show that the highest increase of food poverty was recorded in Italy: in just six years, people who did not afford a protein meal increased by 129.0%, followed by the UK, (+ 117.5%), and Greece (+ 112.3%).

Figure 1. Inability to afford a protein meal every two days in EU countries, comparison 2007-2013 (percentage variation).
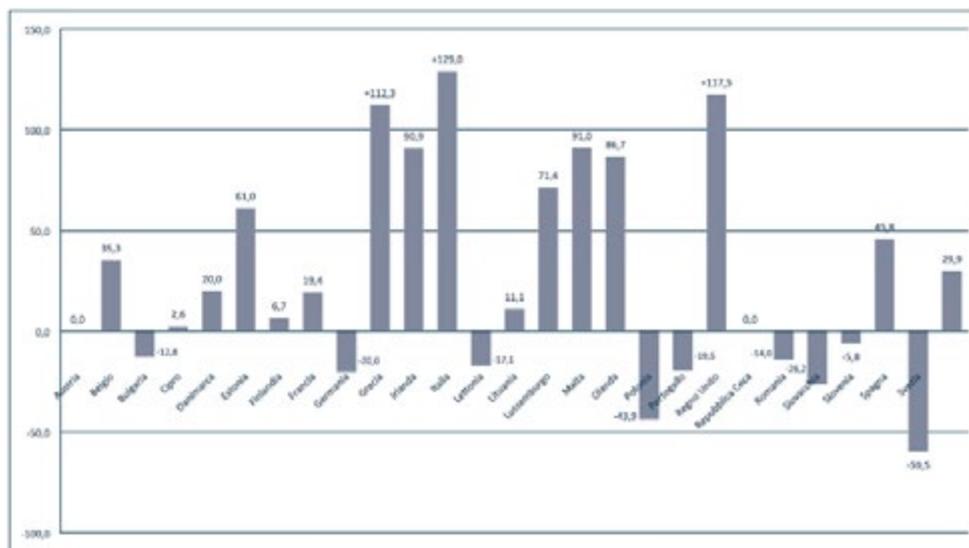
Source: Eurostat, 2015.

The increase of those requiring food aid is tied to an economic emergency and families in need can be pushed to save on food to meet "less flexible" expenditure items such as electricity, gas and rent (Tait, 2015; Dowler 2003). Before the crisis people were sharply divided between those who were food secure and those who were extremely insecure (i.e., chronic poverty). However, due to the complexity of vulnerability pathways, there has been a gradual intensification of poverty gradients and there is no longer such a clear division: individuals are distributed among poor, temporarily poor, vulnerable and non-poor, and the conditions can quickly worsen or improve (Maino *et al.,* 2016, our translation).

    A temporary relief and support to households living a phase of discomfort comes from a wide range of actors and structures engaged in food assistance activities in different coun-

tries. In Italy, according to the European Court of Auditors, seven charities were appointed by the State and operated at national level, 249 organizations operated at regional level and 14.973 charitable organizations operated locally for the distribution of 2 million and 300 thousand final beneficiaries (European Court of Auditors, 2009). The extensiveness and local specificity of food aid initiatives makes it extremely hard to achieve an exhaustive picture. More widely, several authors raise the concern on the lack of (official) data collection through systematic food insecurity and food charity monitoring (Silvasti and Karjalainen, 2014; Lambie-Mumford *et al.*, 2014; Perez de Armino, 2014; Pfeifer *et al.*, 2011), while unofficial data collection by charitable organizations, aimed at keeping track of activities and performances, is by definition partial, therefore incoherent and sometimes unreliable.

Food aid consists in a diversity of practices tailored to different recipients' needs including distribution of food parcels, soup kitchens, social restaurants and others. These services are directed to a specific profile of users and rely on a specific supply of food and financial resources. In fact, food assistance practices entail several actors and resource flows that are, formally and informally, interconnected into a delicate "system". Charitable food donations are often combined with the collection and redistribution of 'surplus' food – safe food that, for various reasons, is not sold through regular market channels (Garrone *et al.*, 2014). Food assistance also relies on public support, deriving from the European (i.e., currently, the European Funds for the Most Deprived, FEAD), national, regional and municipal administrative levels.

The continuous relationship between welfare and third sector actors highlights what Poppendieck (1998) called the "persistent dilemma" of such initiatives, namely the "deeply felt tension" between responding to immediate hunger with charitable food assistance, the preoccupations associated with the (lack of) supply and tackling the factors underlying the growing demand for these services (Tarasuk *et al.*, 2014). Several actors, that strive to respond to the emergency faced by the most vulnerable groups of the population, are at the same time under pressure to reframe food assistance in a "right to food" perspective (Dowler and O'Connor, 2012). Elmes *et al.* (2016) consider the critical role that food bank leaders play in "sense-making" around the ethical and justice dimensions of hunger and food-related illnesses in the United States, contributing to understanding how some food bank leaders in the United States have been adopting a variety of innovative, sustainable and just approaches to food banking, that try to address the root causes of growing levels of hunger in the United States.

Among Italian regions, Tuscany has for years been a fairly wealthy region, with per capita income above the national average. However, the crisis that began in late 2007 has threatened this advantage mainly because it brings out some structural weaknesses[1]. After several years of increase, in line with the general trend in Italy, poverty in Tuscany seems to be stabilized, as indicated by relative poverty index. In 2014, relative poor have been 5.1% of resident population, 1.6 percentage points less than the previous year. This makes Tuscany the fifth less relatively poor region in Italy (after Trentino, Lombardy, Emilia Romagna and Veneto regions). In absolute values, the percentage indicates that 191 thousand residents live below the relative poverty line.

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[1] In particular, the crisis in the manufacturing sector, the low investments in innovation (with the exclusion of the fashion industry and other technological fields), and the decrease in consumption deriving from the decrease in employment due to industrial restructuring (Tomei and Caterino, 2013).

The growth of poverty and social exclusion and the multiplication of possible sliding paths to poverty, as well as those social segments thought to be at low risk only until very recently, raise the need to revise and tailor appropriate and specific policies that are able to deal with this whole series of critical issues through specialized services.

Based on a preliminary analysis of the main practices adopted by food assistance operators in Tuscany (Italy), it emerges that food assistance is a highly hybridized system as it assembles components of the food system, civil society organizations, voluntary workers, public social services, consumers (Brunori *et al.*, 2016). The degree of government involvement, funding, regulatory controls, voluntary sector participation and reliance on surplus and donations from food chain actors is highly variable and context specific. The initiatives that arise in order to supply surplus food for redistribution are not always coordinated or, sometimes, even competing with each other. They rely upon the interaction between voluntary actors – acting within religious and non religious organizations – that have their own specific history, professional profile and cultural references, but nonetheless collaborate to pursue FNS in Tuscany, in different ways and different contexts. More consolidated practices, such as food parcels, complement with other emergent ones, such as "Emporia of solidarity" (i.e., "shops" where recipients directly "purchase" food through income-based electronic cards), where the charitable aim is coupled with the attempt to reduce stigmatization, increase empowerment and support nutritional choices[2]. Tomei and Caterino (2013) made a survey on the services and Tuscan structures that deal with combating the phenomenon of food poverty. 75 (out of approximately 150) structures indicate the existence of a more or less formal but consolidated relationship between public social services and non-profit organizations (religious and non religious), as well as procedures through which social services officers signal and ask individuals to seek help from charitable organizations. Among the 68 cases out of 75 surveyed, the organizations assert that they routinely handle cases of people reported by the social services of the local municipalities. This assumption of responsibility is not surprising with reference to the associations that conduct their activities in a structured way (i.e., within an 'institutionalized' framework), although it is striking that such a link is stated by associations that conduct their activities on an occasional basis.

The delicate balance between actors, resources and responsibilities makes the food assistance system vulnerable to increasing demands, changing need and decreasing resources. The elaboration of strategies towards future FNS represents a relevant goal to be accomplished. By confronting with leading actors of Caritas[3], the Food Bank[4], Tuscany

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[2] For example, in Emporia, prior to releasing the cards, recipients are encouraged to take part to organized classes in which support is provided in relation to nutritional choices, healthy life styles and family budget management.

[3] Caritas is the Pastoral body of the Italian Episcopal Conference to promote charity. Caritas' main features are: advocacy, widespread presence on the territory and direct contact with recipients; it relies mostly on voluntary resources, both human and material.

[4] Food aid in Italy entails first and second level entities. A second level entity in the chain, acting according to a warehouse model, is the Food Bank (Fondazione Banco Alimentare Onlus, FBAO). This is a non-profit organization that for over 25 years has been engaged in the daily recovery of surplus edible food aimed at food poverty, through a dense network of relationships that has allowed to save and redistribute food, otherwise destined for destruction. The regional Food Banks are 21 territorial organizations that refer to the Food Bank (FBAO) (see Santini and Cavicchi, 2014).

regional administration and others, it emerged that these actors are re-thinking their role to address changing needs: private companies are increasingly involved in food assistance operations and adjust their activities and strategies accordingly; public institutions re-think the boundaries between charitable assistance, welfare system and market-based food system.

This paper reports on the results of a participatory process, developed around two workshops, involving key players of the food assistance system in Tuscany. As a main interlocutor, we addressed Caritas, which is now reconsidering its role in contributing to food poverty mitigation by setting up a territorial "Alliance for Food", a desirable goal which has been thought of in abstract terms but has not be reflected in concrete yet. By adopting a combination of scenario approaches – namely, explorative scenarios describing plausible future contexts and normative pathways that explore the feasibility of transformative change in different scenarios – we ultimately aim at answering the following research questions: how are actors re-thinking their roles in relation to changing needs? Does the scenario-guided planning method enable participants in engaging in new themes, identifying shared priorities and conceptualizing new partnerships that have not been discussed before?

We tested the combined methodology with the main actors of the food assistance system in Tuscany (Italy) in order to address the challenges and pressures of the current context of change. The paper is organized as follows: the next section presents the methodology adopted, by placing it within relevant literature and explains how it was applied. Section 3 presents main results and section 4 provides a discussion and concludes.

2. Methods

2.1 Methodology background

The methods we used – explorative scenarios combined with visioning and back-casting – can together be identified as 'foresight'. A foresight exercise can be defined as "any process focused on building medium to long term futures aimed at influencing present day decisions and mobilizing actions" (Gavigan et al., 2001). Foresight methodology is increasingly used to orient policy making around food systems: Vervoort et al. (2015) show that scenario studies carried out at European level on the food system have increased five-fold between 2002 and 2014, and that an average of five food-related foresight studies are conducted or ongoing in the EU per year. Many foresight exercises are participatory, seeking to engage relevant stakeholders, more often conducted in a consultative fashion, and can be developed through qualitative, quantitative or mixed approaches (Mallampalli et al., 2016). Moreover, foresight can be done for different objectives, of which policy development/formulation is only one of the possibilities. Bourgeois (2012) identified three 3 categories of objectives: content (producing new knowledge), process (connecting people, changing ideas) and impact (policy development). Foresight is not a tool to predict the most probable future but the main purpose is to "explore" the future in order to guide, or inform, current decision-making processes (Fahey, L., 1998: 18).

We use scenarios and visioning/back-casting as tools to explore futures for food assistance (Vervoort et al, 2014). Scenario methodology, based in complex systems research, seeks to recognize and explore uncertainty and complexity in decision-makers' contexts

(Van Der Sluijs, 2005; Kok *et al.*, 2006). A range of approaches is available to develop different types of scenarios (Van Notten, 2003). Planners must be aware of their decision contexts and how these contexts can evolve, both as a results of external factors and internally through attempts at transformational change. The work presented in this paper combines the strengths of two approaches. Together with a diverse group of participants, we developed explorative scenarios that describe food systems contexts on the one hand, and normative "transition pathways" on the other hand, combining them to explore the feasibility of transformative change in the different scenario contexts. Making up one part of our approach, explorative scenarios are defined as "multiple plausible futures described in words, numbers and/or images" (Van Notten *et al.,* 2003). In multi-stakeholder contexts, exploratory scenarios can engage multiple legitimate perspectives involved in framing and addressing challenges such as food security and sustainability (Reilly and Willenbockel, 2010). However, while explorative scenarios offer diverse contexts for decision-making, they do not represent plans and, by themselves, they provide no direction for action. Because of this, outside of specific contexts like the military and the private sector, many scenario processes, especially those led by academics, have been limited in their potential for impact because scenarios are often created but not used to help consider different actions and strategies (Wilkinson and Eidinow, 2008). However, explorative scenarios can be used to test and inform the feasibility of plans. This is done by cross-examining a plan or policy across different scenarios, each posing their own challenges and opportunities. If a plan is considered to be feasible under a wide range of challenging futures, it can be considered robust.

In this project, we therefore combined explorative scenarios with the development of normative strategies through "back-casting". In a back-casting process, participants start with a vision of a desirable future, and then work backward in time from that vision to identify each step needed to lead to that vision (Kok *et al.,* 2011; Robinson *et al.,* 2011). This approach has the benefit of allowing for the creation of actionable, proactive futures.

By exploring the feasibility of normative transition pathways in the context of different explorative scenarios, we allow for a conscious focus on the changing interactions between actors' agency and their contexts (Vervoort *et al.,* 2014). Our approach also adds a cross-level dynamic, in that the explorative scenarios used are a local interpretation of pre-existing European-level scenarios (see Brzezina *et al.,* 2016) that provide wider socio-economic contexts; conversely, the back-casted transition pathways are combined with case studies across Europe to contribute to the conceptualization of transition pathways for the future of the European food system[5].

This combined approach of using explorative scenarios to test back-casted transition pathways is particularly suitable to the case of food assistance for several reasons. First of all, the food and nutrition security challenges that food assistance responds to are contingent upon changing and uncertain socio-economic contexts. Explorative scenarios offer distinct and diverse accounts, co-created by local participants, of how future contexts could develop and change the challenges and opportunities of food assistance. Secondly, because robust food and nutrition security strategies are needed in the face of this future uncertainty, the back-casting of strategies has the potential to provide food

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[5] This part of the research is still on-going and will be completed by end of 2017.

assistance actors with a format in which they can look beyond present limitations and start with their desired long-term objectives, which can then be tested against scenarios to make them more robust.

The methodology includes a preliminary phase, consisting of in-depth, semi-structured interviews to food assistance operators, on-site visits and primary data gathering, aimed at identifying current and historical context of practices, actors, resources and skills employed and vulnerable groups addressed. Then, a participatory scenario approach was developed within two workshops. The first step of the first workshop focused on creating a draft of local food assistance strategies through formulating a vision for this future and then back-casting planning steps towards the present. In the second step of the first workshop, the set of pre-existing European food system scenarios was down-scaled to the level of food assistance in Tuscany to provide explorative scenario contexts. Local scenarios were created by examining what the local situation would look like in the context of each European scenario, with attention to key variables that affect the goals of the focal project in the future. The second workshop focused on using the explorative scenario contexts for testing the desirable future visions and multiple pathways toward these visions created in the first workshop, to investigate and challenge the feasibility of these concrete plans for the future of the case, aiming to facilitate new ideas in the process.

2.2 Structure workshops

Based on the preliminary study, we selected 20 participants. Participants included representatives of Tuscany Regional Administration, members of the department on citizenship' rights and social cohesion (youth policy, family and sports, and the Regional Observatory for the promotion of social citizenship rights). We had the participation of the directors of 10 diocesan Caritas Tuscany, the coordinators of the Emporia in Prato and Pisa, the manager of the fund-raising of the Food Bank Tuscany, the Director of members section of UniCoop Florence (i.e., retailer), in addition to academic experts on the topic of food poverty, food and agricultural systems. Participants' affiliations are listed in Annex 2 and 3.

The first workshop was held on the 1st of February 2016, while the second on the 3rd of May, 2016, both in Florence at the headquarters of the Theological Faculty of Central Italy. The same participants were invited in the two workshops, although on the second one some guests dropped at the last moment, while new participants from the regional administration asked to take part. Various contextual reasons contributed to a lower number of participants but still, key senior participants were present, for a total of 12 participants overall. The workshops consisted of several building blocks, which are now briefly described. Figure 2 summarizes the workflow of the two workshops. The first three steps were developed in the first workshop and the last three steps in the second workshop.

2.2.1 Visioning

Participants were asked to answer the following question: "What are the elements of a desirable future to ensure access to healthy and nutritious food for everybody in Tuscany? And, specifically, "What it is the ideal future for food assistance in Tuscany?". 2030 was chosen as a suitable time horizon for the realization of change, with reference to Caritas

Figure 2. Building blocks of the two workshops
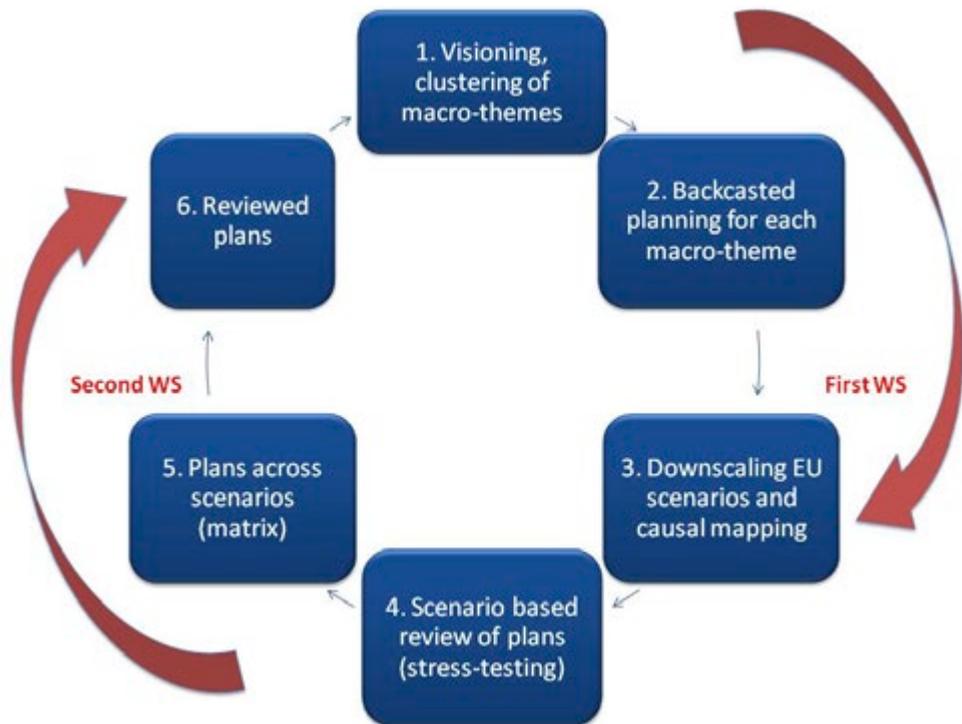
activities. This visioning exercise developed in two steps: 1) brainstorming and 2) clustering of the elements of the vision. Participants were invited to reflect in pairs (5 minutes speed-meets repeated three times) on the features of a desirable future for food assistance in Tuscany. The post-its were then grouped (collectively) into macro-areas, that constitute the vision. Once macro-themes were identified, each participant had 8 stickers to vote for the most important ones: participants voted based on their preference (no explicit rules were given). In order to steer the engagement of stakeholders in the elaboration of the themes within the vision, we asked them to visually represent the elements of each theme, by developing a "rich picture" exercise[6].

2.2.2 Back-casted planning

Back-casting is a systematic process for working backwards from a desirable future to identify the steps required that connect the future to the present (Kok *et al.,* 2011; Robinson *et al.,* 2011; Vervoort *et al.,* 2014). At each step we asked the question "if we want to attain [current step] what would we need to do/have in place for that to be possible?". This

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[6] The rich picture is a method from Soft Systems Methodology (SMM). Here, simple drawings and sketches are used to illuminate systemic relationships that are not so easily captured in narrative form.

question is asked over and over again until the present situation is reached. These steps can then be implemented from the present successively to achieve the desired future.

2.2.3 Downscaling European scenarios and causal mapping

The goal was to create a clear image of the local scenario at the end of the chosen time horizon (2030) starting from four given scenarios, previously developed by a range of European food system actors and researchers to represent plausible European scenario for the food system (see Brzezina *et al.*, 2015). The emphasis was on the introduction of scenarios and their adaptation to make them coherent to the specific context of the case. This meant that a new, local story was invented, where the European scenarios were used as an inspiration and to provide a wider European context. In practice, this step involved immersing the participants in the European scenarios and engaging in an open, imaginative conversation about what the scenario could mean for their decision context. Each group discussed individual views and developed a coherent image of the scenario end state, which is developed in further detail through the following activities. The participants in each scenario group discussed what the scenario meant for a list of key elements, to ensure that relevance of the scenario for the decision context of the initiative. The outcome was a narrative description of the scenario end state.

Participants within their scenario groups were asked to explore the chains of cause and effect amongst the discussed aspects. Causal mapping was also used to elaborate the scenarios (Coyle, 1996). Participants drew arrows between concepts and assigned a plus (+) or minus (-) to the arrow. A (+) indicates a positive effect of increase in one element on the level of the other, for example "an increase in the number of food recipients results in an increase in social inequality". A (-) indicates an inverse relationship, for example "an increase in the ageing of population results in a decrease in the number of volunteers". Consensus on adding concepts, drawing arrows and giving a sign to the arrows was reached by discussion within scenario groups. The graph-based nature and relative visual simplicity encourages the use of this approach by stakeholders with different backgrounds.

2.2.4 Scenario-based review of plans

In the second workshop, each scenario group reconvened and used the content of the previous workshop, based on the digitized local scenarios and accompanying materials, such as insights from the causal map and the drawings representing the main features of scenarios. A short round of conversation happened to make sure everyone, including any newcomers to the process, understood the scenario, and still considered it plausible. Missing elements were written down on post-its and collected. Then, after receiving all the back-casted plans from the first workshop, for every aspect of each plan, the group asked: "Is this action/strategy/etc. possible in this scenario, or not? If not, what could be recommended (concretely) to make the plan more feasible in this scenario?".

2.2.5 Plans across scenarios: the matrix

During a plenary discussion, each scenario group presented the comments and adaptations made to each plan in order to fit in each scenario. Scenario groups prepared their

comments on what they thought were the main strengths and weaknesses of the plan in their scenario and what their main recommendations would be to make the plan work better in their scenario. These comments were reported on a table organized per plan (horizontal) and per scenario (vertical), as an additional way of capturing the discussion.

2.2.6 Review of plans

The last step is dedicated to plans' groups, discussing how to integrate into the plans the comments received by each scenario group. The discussion aimed at identifying which of the scenario-based comments and recommendations occurred across all of the different scenarios and therefore highlighted key strengths, weaknesses and potential improvements to make the plans work better regardless of the scenario (i.e., essentially making them more robust). Moreover, scenario-specific recommendations were identified to determine whether it was worth considering as an option to make the plan more flexible in case a certain scenario occurs.

3. Results

3.1 Identification of the desired vision and elaboration of back-casted plans

An overall ideal vision on how stakeholders would imagine food assistance in 2030 in Tuscany has been outlined based on the participants' suggestions. The vision was articulated in macro-themes, which have been prioritized based on voting[7].

Above all, the protagonists of the food assistance system believe that governance is a priority to focus on. In fact, one of the main features of the current food assistance network is the fragmentation of the actors and activities on territory: this is a strength, in terms of flexibility and adaptability to the context, but also one of the main vulnerabilities, whereas rules and actors change also for reasons not linked to the system. The second theme in order of importance is education. A major concern of the food assistance actors is to flank practices, that deal with resolving contingent emergencies, with training and education on issues of food security and nutrition, aimed at all stakeholders in the system. Training and education processes should address, first of all, those covering a role of educators and trainers, both internal to the food assistance system (for example, the volunteers and the third sector) or beyond (for example, retail or agribusinesses). The third macro-theme is the definition of a "person-oriented approach", which is crosscutting. It refers to the ability of the food assistance system to identify, understand and respond more effectively to the needs in relation to the individual conditions, in a flexible and adaptable manner. This also refers to a system that involves the recipients, in a perspective that goes beyond the logic of assistance.

The participants split into three groups, one per macro-theme, and through back-casting (i.e., working backwards, from the desirable future to the present, identifying all the steps and actions needed, striving to overcome the limitations and constraints of the

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[7] The following themes were elaborated and ranked: rights (13 points); governance (23 points) and networks (16 points) – these two themes were joined; person-centred approach (17 points); education (25 points); monitoring (12) – this was considered as a cross cutting issue; food waste (11 points); food quality (11 points).

present) developed three plans (see Annex 4 for detail on each plan), summarized in the following paragraphs. The plans are presented based on the draft elaborated and further refined in the following steps of the process.

3.1.1 A plan for governance and network towards FNS

In order to address the concern on improving the governance of food assistance, the creation of a coordination table is one of the main instruments proposed, along with the participatory definition of rules and criteria for monitoring and evaluation of the food and nutrition security situation in Tuscany. This implies the clarification and definition of rules and multi-level responsibilities (at European, national and regional level). The plan for Governance and network consist of two main goals: i) development of an integrated and coordinated network for FNS and ii) development of a FNS policy according to a prevention approach. The integrated network for FNS starts from the creation of a promoters' group, as a first step of the process. The promoters' group should be active on a regional level, in charge of the direction of actions, responsible for brokering and raising awareness among regional and local actors. It should also identify local institutional actors to be involved in the coordination of FNS in Tuscany, addressing among others social health districts. The promoters' group engages with municipalities and third sector actors in network building activities. Based on the network built and the knowledge exchanged, an *ad-hoc* Regional Committee on FNS is established. A fundamental task to be accomplished by the Committee is the activation of monitoring activities of food insecurity on the territory (i.e., a regional observatory on FNS). Within the promoters' group stands the third sector network, which is made in charge of involving actors of the supply chain (producers and retailers). Inside this network, the third sector organizations develop a self reflection on inner functioning, in order to find common aims and synergic solutions (e.g. on food drives, volunteer pooling, University training/ stage, vouchers, etc.) and develop fundraising actions. The Committee works to develop incentives for small and medium enterprises (SMEs) and retailers in order to encourage corporate social responsibility and donations (e.g. tax relief measures) and, at the same time, steers public authorities to develop tendering processes that award projects of food recovery in public canteens. Universities and retailers should also be involved in this process. In addition, the Committee lobbies at the European level to ensure continuity in FEAD support funding.

ii) The second main goal is to develop a Regional Plan for FNS in Tuscany. The development of a FNS policy and action plan, adopting a prevention approach relates primarily to the creation of a dedicated Board for the coordination of actions towards FNS within the Tuscany Regional Departments. The networking process (described in the first step) should be antecedent to this task (i.e., the initial phase of dialogue should be started with local actors, involving Tuscany Region Departments, local health districts and the Committee).

It was clarified that the establishment of the Committee represents an instrumental objective, functional to achieving the second main objective and not an end *per se*. The governance model must include higher levels beyond the Municipality. Governance should take into account homogeneous territorial levels, also beyond institutional borders,

in order to understand and interpret local specificities[8]. This approach could also allow to redefine roles between public and private actors. Further suggestions were made by stakeholders in relation to "governance and network": for example setting very short term goals, such as organizing a meeting/seminar with the main actors of the food assistance system, or building a mailing list, or an online platform for sharing experiences (e.g., videos) among food assistance actors.

3.1.2 A plan for education towards FNS

Beyond contingent practices and emergency responses to food need, equal attention should be given to developing education paths to achieve FNS. Education relates to stimulating openness towards societal problems, voluntary action and gift, together with a food culture. Education processes should be planned to address, first of all, those who have a role as educators and trainers, both internal to the food assistance system (e.g., volunteers and third sector) and the food system in general (e.g., retailers or food processors).

The plan elaborated for education for FNS in Tuscany develops around three main goals, which are interconnected and reinforcing one another: i) increasing awareness on available resources and production processes; ii) educating to cultural change towards healthier lifestyles; iii) achieving coordination and sharing of information on relevant themes.

i) *Awareness on available resources*. A key issue concerns the definition of a role for private food system actors (i.e., retailers and food producers) who recognize their social responsibility and represent an asset and a strength to aim for quality and healthy food. To this aim, it is necessary to work on increasing awareness on the cost savings linked to surplus recovery and the reduction of waste and the possibilities for reinvestment. The private food system actors should be involved in awareness raising activities (and the extent will depend on the scenario), for example by adjusting new promotion strategies to discourage consumers from buying excess food with respect to their needs. The monitoring activity and the quantification of indicators on food surplus, waste and (hopefully) increased efficiency plays a key role, also to facilitate communication on the overall convenience at all levels (economic, social, environmental).

Another point on resources was made with regard to the development of relations between local producers and retailers, adapting their supplying strategies to promote local chains (see Galli *et al.* 2016 on the meaning of local food chains), or through "civic food projects" that link restaurants and producers in a local network based on the use of local products.

Instrumental to the mentioned objectives is enhancing project skills and planning as a specific competence of food assistance actors, that can open new avenues to food recovery. This concerns training to project design and planning, exploiting public-private synergies and activating food assistance actors. This objective also links to education/training for cultural change: third sector should work through projects to encourage donations: develop targeted gift in place of surplus recovery.

ii) *Educating to healthier life styles and cultural change*. A key issue concerns the "education of educators", that means those who have an educational responsibility must be

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[8] The governance approach adopted by the Civil Protection in Italy mentioned as a best practice, in which the third sector has an explicit and recognized role.

trained on the specificities of food and nutritional aspect: for example, school teachers and programs should include awareness raising on food, health and environment, by discussing the right to food into civic education programs. Education processes must address institutional, food system and food assistance actors. The third sector – specialized on food themes – could provide a support to those who deliver education (e.g., alternating schooling and working), together with higher education and university system. A specific focus was dedicated to religious communities, priests and religion teachers who are responsible for educating parishioners, mostly young citizens. A wider form of communication can address the wider public by organizing debates in public meetings, encourage the use of social media, promote spaces for aggregation and collective activities (e.g., food classes).

iii) *Sharing information on food and nutrition themes.* A cross-cutting objective to the mentioned above is the sharing of information among relevant actors. Stakeholders have proposed the setting of a board for education on FNS at regional level, able to coordinate actions and pursue coherent communication. This eventually may lead to the elaboration of a charter on shared principles among all stakeholders of the education system (social actors, media, ...). For example what is the meaning of right to food? What does it imply? For different people it may mean different things and a shared meaning should be reflected upon.

3.1.3 A "person centred approach" towards FNS

Stakeholder agree that the food assistance system should become able to involve recipients, in a perspective that goes beyond the assistance logic. The food assistance system should be able to identify, understand and respond to specific needs (also in relation to wider conditions), according to a person centred approach. The approach has been declined by the actors in five sub-objectives: i) *Tailoring assistance practices to receivers needs* (e.g. as identifying ways to tailor help to individual, as it happens in Emporia of Solidarity). Food should represent an instrument towards more social inclusion. This objective considers going beyond a more traditional food aid approach and setting up a direction for the recognition of the right to food: recipients should be reactivated through dedicated programs, based on reciprocity (i.e., recipients return in relation to the aid received). An underlying question to be tackled is: who is this "central" person" and what does she/he needs. Examples of concrete ways in which to turn this approach into practice are placing food aid within the individual social support path. This will require the involvement of Mayors, health services and other institutional actors, in order to cover multiple territorial levels, although Caritas and NGOs can be the leading actors.

ii) *Identifying multiple and integrated responses to food poverty*. This can be achieved through a more efficient and creative recovery of surplus, the Siticibo project[9] is one example.

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[9] Siticibo, started in Milan in 2003 with the Good Samaritan Law (enacted in Italy as Law n. 155, 16th of July 2003) aims at the recovery and redistribution of surplus food from canteens and catering services (hotels, corporate, hospitals and schools canteens, etc.) as well as big retailers (Rovati and Pesenti, 2015). Food recovered through this channel consists primarily of fresh and ready to eat meals from catering services, while bread, fruits and desserts are often recovered from school canteens. Since highly perishable foods are handled, in order to ensure food safety, modes of collection are described in very strict and scrupulous procedures, agreed with donors, and volunteers are properly trained on HACCP. Essential material requirements to carry out this practice are facilities for heat removal (for the donors) and refrigerated vans, key components of the fleet vehicles.

iii) *Effectively identifying food needs* (e.g., involving categories of "key witnesses" such as paediatricians, teachers, priests, etc.). Integrated responses implies an effective identification of needs and public authorities support, by Tuscany Region, would be desirable. In order to identify people's needs, the involvement of "witnesses of poverty" was suggested: paediatrician, family doctors, school teachers, priests, health and social services' operators and pharmacies are the first figures to be trained on how to recognize food poverty situations and intervene. To be able to monitor needs, the setting up of an "observatory on FNS" would represent a fundamental step. The activation of social professions (such as the "frontier operator") should be explored and valued. Mapping opportunities as well as problems of interventions should be supported by the use of IT networks, that can contribute to streamline food recovery activities (e.g., involving retailers, producers, collective catering) and consolidate alternative responses to food poverty (e.g., social farming).

vi) *Promoting networking opportunities among citizens within neighbourhoods* (e.g., leveraging on suitable spaces available in the various districts). A person centred approach should address the community in which the individual lives. Strengthening a sense of community is both an instrument and a desirable goal *per se*. Municipalities represent a key partner of civil society and third sector organizations in contributing to safe and active neighborhoods. Green areas and urban spaces, suitable equipment, cleaning and safety of public spaces are local administration responsibilities. The municipality, together with CSOs and active citizens, should identify and recover available spaces; establish community centres aiming at developing initiatives around food related themes (e.g., urban gardens) and involve schools in these activities and initiatives; organize local fairs, street food occasions to include migrant communities, and neighborhood dinners.

vi) *Enhancing nutritional value and quality of food.* This objective refers to the food currently distributed through food aid. Incentivizing the recovery of food surplus and the reduction of food waste, as well as the simplification of rules on products' expiration dates and the alignment of national legislation all over the territory are key themes that should be regulated by law. This process should be led by agriculture and health ministries, and lobbying activities by NGOs should have a supportive role to raise awareness on the difficulties met by food assistance operators on a daily basis.

3.2 Downscaling of European scenarios to the local context

The other outcome consists in the development of four future scenarios for food assistance in Tuscany in 2030. These have been elaborated by participants by downscaling four European scenarios, previously elaborated at the European level (see Brzezina *et al.* 2015 for detail). The downscaling process consisted in addressing the question: "What does each (EU) scenario mean for food assistance in Tuscany?". Although the four scenarios were developed around a wide set of relevant variables (i.e., economic up or downturn, immigration flows, urban rural relations, public health, availability of food surplus, availability of volunteer workers, degree of government involvement), two key variables across the four scenarios can be identified as being most relevant to food assistance and can be used to simultaneously compare them (see Annex 1 for detailed information on the content of each scenario). The first is way of intervention by Government, which may

entail the adoption of an emergency approach (i.e., the State responds from time to time to social emergencies, when they arise) or a strategic approach (i.e., the State anticipates social emergencies by adopting a proactive approach). The second variable relates to the openness of society towards societal problems, such as immigration (i.e., civil society demonstrates an open or a closed attitude). Figure 3 shows the locally adapted scenarios.

"Tuscany in 3D" (top-right). The right to food enters fully into the political debate: food assistance is conceived as a strategic task that allows to tackle bigger problems and needs. Public authorities develop a strategic approach to achieve closer collaboration between all players in the food system. Citizens are willing to contribute with voluntary work. The role of civil society associations is viewed by government as a resource for survival and functioning of the welfare system.

"It could be better" (bottom-right). The pressure on the national health care system – due to rising incommunicable diseases derived from years of poor diet – brings a reduction to public expenditure on social services. A reactive public management approach and poor coordination between services prevail. Social actors must find a way to cope with the increased (food) poverty.

"Solidarity in half" (top-left). Italian government adopts a high budget but targeted welfare strategy, by supporting eligible citizens with minimum incomes, exacerbating the

Figure 3. Local downscaled scenarios based on i) way of intervention by the government and ii) attitude of society towards societal problems.
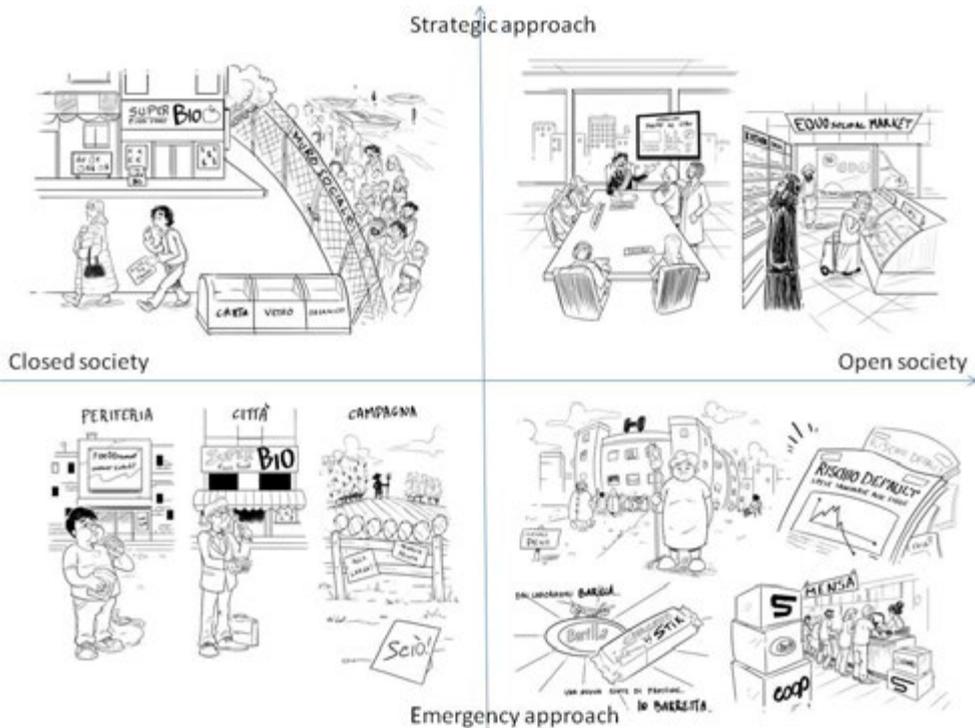
differences with the most vulnerable groups. Market and redistributive policies ensure FNS to all eligible citizens. Civil society is very closed and uninterested to social problems.

"Do I want to go to live in the countryside?" (bottom-left). The government decides budget cuts on social measures, considering these not as a priority. Food assistance support is limited to transferring European resources to social parties. The food assistance actors must intercept surplus of small producers and retailers, which are most resilient in the regional context, but this has become more complicated. Society is very closed, therefore human resources, i.e. volunteers, are also scarce.

3.3 Scenario based review of plans

The ultimate aim of this work was to obtain a final version of the plans enriched by the additions, revisions and comments made during the sessions of the second workshop. This was done during the scenario-based review of plans and a last plenary session, during which key recommendations and priorities were indicated by the stakeholders on each plan previously discussed. The table in Annex 5 provides detail on the main strengths and weaknesses of each plan across the scenarios and suggestions for improvement of the plans.

We can distinguish two levels of elaboration of the plans: revisions and additions to the plans which are valid across all scenarios and revisions and comments which are scenario specific, therefore suitable in case of contingent events happening in different scenarios.

In Tables 1, 2 and 3, contingent suggestions specific to each of the four scenarios are reported. Some general remarks: in the governance and network plan, as well as in the other plans, the initiative by Tuscany Region is strongly called for. However, the leading role of the Tuscany Region is not plausible under all the scenarios: this introduces the possibility for other actors/networks to gain a leading role in this process. Another general remark applies to all the scenarios: in order to achieve these sub-objectives, creating opportunity of exchange between actors will be necessary. Tuscany Region leadership would be desirable and, in order to mitigate a scenario of increasing lack of public support, sharp short-term and bottom-up actions by civil society and third sector should be put in place and should gradually involve other institutional and private actors.

4. Discussion and concluding remarks

The present work has dealt with the elaboration of a strategy for food and nutrition security in Tuscany. This has been done by addressing the main stakeholders of the food assistance system, with a primary involvement of Caritas but also other key actors, such as the Food Bank, the regional administration and retailers representatives. The process we have followed is more valuable to stakeholders if it is clear that it is tailored to their aims and improves strategic planning to achieve shared goals in an uncertain future. Therefore, the preliminary interviews and meetings were necessary in order to understand what the needs of the organizations were. Our work was aimed at supporting the food assistance network in Tuscany, with Caritas as leading actor, to address and develop the "Alliance for food", a vision which was suggested by stakeholders, although only conceptualized on an abstract level. During the preliminary research and the two workshops organized, the

Table 1. Contingency plan for "governance and network".

	Strategic role of the government	The government retreats
Civil society is open	· Favorable conditions and relationships: the objectives could be merged into one in order to save time and resources; · Promotion of social responsibility for Public Administration; · Creation of opportunities for cross coordination; · Promotion of the committee by the Region.	· Take the opportunity to recover food from public canteens: due to the health issue in this scenario, hospital food will be abundant; · As a remedy to some level of conflict, effort to dialogue and pressure by Caritas to have more public education/training; · Strong reliance on EU funds.
Civil society is closed	· Initiative must come from civil society organizations instead of institutional actors; · An initial emergency phase guided by CSO is followed by a regime phase, where institutions take the lead. · FNS should be included into a social integration policy.	· The problem is building a network in a less dense environment: the most relevant intermediate entities should be identified. · Consider bank foundations for fundraising campaigns.

Table 2. Contingency plan for "education".

	Strategic role of the government	The government retreats
Civil society is open	· Most comments have been included into the main plan	· Turning to local resources may be a problem if large processors and retailers dominate. In this case municipalities should play a role in promoting local products and territory. · If the state does not spend resources for prevention and education, it is important to identify who are the alternative actors in charge (churches or other actors with a mission on education)
Civil society is closed	· Awareness raising campaigns by the third sector to sensitize private actors (retailers and producers) to a "gift" culture. · Trainers in charge of education must recognize the need to promote social inclusion while maintaining identity: those who have been integrated into society are a resource	· There is need for a cultural change in volunteers: to dedicate to self production and organize gardens, and educating people. · Moving beyond the collection of food from others. · Leveraging on fund raising and targeted projects are another option in this scenario (e.g. breakfast for kids).

"Alliance for food" was declined into key themes and fine-tuned into draft strategies, that were not discussed collectively before. A challenging work is still ahead, but this starting point has set the base for further collaborations and developments.

This paper started by asking if scenario-guided planning can be a suitable tool to support relevant stakeholders willing to engage in a process of change, and what the combination of methods (i.e., explorative and normative) enables in terms of elaboration of new themes and blind spots and identification of shared priorities in the process of change.

Table 3. Contingency plan for "Person centred approach".

	Strategic role of the government	The government retreats
Civil society is open	· Act in order to anticipate objectives which are achieved in this scenario; · Enjoying institutional support, parallel action on the Plan for FNS; · Set dietary guidelines for food provision.	· Diversification of responses: food recovery along social farming strategies, in order to compensate the lack of social policies; · Witnesses of food poverty: doctors, pediatricians, etc. could be overwhelmed by the emergency on diseases and health. Therefore operators of civil society must be trained.
Civil society is closed	· Lay the ground for advocacy work by encouraging social research and sharing studies on social justice at all levels; · awareness-raising campaigns targeting civil society, as well as institutions at local and national level; · move towards education and social inclusion and allocate resources for these tasks.	· In a context of scarce resources , could Tuscany Region act as a broker, at least supporting the network? Concentrate strengths on network development; · Role of Social Health Districts (SdS) could be the most appropriate level for the coordination of actors. However, a strong leadership is deemed necessary to counteract a closed society. This is also valid for witnesses of food poverty; · Lobbying for FEAD resources; · Encourage self-production; · Work on specific projects, such as Breakfast for children.

Our first reflection is that the tool provided to stakeholders the opportunity to address uncertainty of future context in a systematic way. During back-casting, participants tried to work backwards from the desirable future to the present, identifying all the steps and actions needed, overcoming the limitations and constraints of the present. This turned out to be a challenging task, because of the difficulties not only in imagining long term ideal goals, but also connecting these long-term goals to concrete actions, that should take place in the medium and short-term. Many of these operators spend most of their time facing immediate, daily necessities, which hamper their capacity to have a broader look on structural problems and potential opportunities and make long term plans. In practice this turns, for example, into different kinds of services provided and the lack of a basic, homogeneous level of assistance, as indicated by previous literature (Tomei and Caterino, 2013). Therefore, gathering all these people together in order to engage constructively in a joint discussion on planning FNS in Tuscany could be considered as a first step towards the Alliance for food that had not been considered much as a concrete objective, at least not by all the people involved.

In relation to future oriented thinking, a key point concerns the boundary between actors' sphere of influence and the given scenario context. It is important to realise that this boundary between actors' sphere of influence and their larger contexts is not fixed or fully exogenous. For instance, changes in policy may normally be considered as part of the decision context for local food initiatives which they will simply have to adapt to. Downscaling the scenario in the local context requires dealing with the delicate balance

between exogenous events in relation to strategic actions: to what extent can stakeholders impact on the scenario and change it? The distinction depends on the public roles of the actors, but also on their perceptions of their own (potential) roles. Therefore, this process intended to allow for a conscious focus on actors' agency potential: implicit in the method is questioning the supposed limitations on agency that participants have in the scenarios[10].

Another crucial aspect in our study was the heterogeneous composition of the group of stakeholders invited to the workshop. Caritas represented the main partner, in this case, but it also involved a broader network of stakeholders who have their own critical perspectives and aims. Such a "hybrid user environment" – a middle point on a spectrum between a "one client" case and a fully dispersed case – is a specific feature of our case study: it poses a challenge in terms of "appropriation" of the results (i.e., the application of the plan for the achievement of focused impacts becomes inevitably harder) and requires to find a balance between the particular objectives of the main partner and other stakeholders. At the same time, it allows stakeholders to meet with leading partners such as Caritas in an inclusive planning process, in a shared space where relevant collaborations and potential synergies can be explored. Beyond being appreciated by participants, this hybrid composition allowed them to take a step back while looking at their own plans and to adopt an external vision on the strategies. The discussions took place among a broader range of stakeholders, that would not be involved in a single organizational planning process if conducted only by an actor such as Caritas alone. This is particularly relevant for food assistance in Tuscany, as this reveals to be a system *de facto* but not in explicit terms, in which actors otherwise meet and exchange to tackle daily needs but lack a strategic approach to food assistance (at least on a regional level)[11]. Furthermore, the hybridity of the approach is also a useful frame for Caritas itself, as it is a highly fragmented organization, where each diocese (there are 17 in Tuscany) is quite independent from all the others.

Another point relates to the downscaling of scenarios on the European food system, that were built by considering a range of eight variables with different states (see Brzezina *et al.*, 2016). The adaptation to the local context in relation to the characteristics of food assistance shifted the focus on case study specific variables: the coordinates around government approach and openness of civil society, in the first place, but also other key issues, such as availability of food surplus, volunteers, vulnerable groups and food assistance overall demand.

Two final remarks: first, the process was initially designed to be developed in four days. We had to shrink into two days for organizational reasons, in order to fit into stakeholders agendas. This inevitably impacted on the degree of elaboration and completeness of downscaled scenarios and planning. Second, it is early to make a final

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[10] Moreover within the Transmango research process the participation of local cases, and upscaling to the EU level in the final parts of the project, means that their ideas and recommendations could have some impacts at the EU level (which means that EU policy now falls within their sphere of influence to some degree).

[11] Co-designing of plans across scenarios has not only supported the elaboration and testing of planned actions, but has favoured exchanges between different organizations on ongoing mechanisms, strategies and actions (especially during working groups and lunch time side talks. For example, in relation to nutrition security, it was raised that shortage of fresh fruits and vegetables can be a problem for some food assistance practices (e.g, such as Emporia). It emerged instead that there is a large availability of fresh fruits and vegetables in other regions (e.g., in Emilia Romagna due to the impacts of the Russian embargo, or in southern parts of Tuscany). It was clarified that it is mainly a matter of logistics and connections between the different actors of the food system.

statement on the actual feasibility of the plans drafted, let alone their implementation: this needs to be verified through careful monitoring in the next year time, to allow researchers to check on actual implementation, although the first short-term steps have already been set by including the results on the plans in next Caritas annual report for Tuscany Region.

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The TRANSMANGO Project aims to investigate and empower innovative sustainable food practices across Europe. By interacting with decision makers at different levels, the overall aim of the project is to explore how innovative practices could lead to local and European transition pathways towards sustainable Food and Nutrition Security (FNS). In TRANSMANGO, a number of diverse local cases have been selected as relevant practices that can contribute to sustainable FNS. In order to support these initiatives in thinking about and taking action toward these transitions we focus on developing transition pathways and scenarios at the level of specific practices. Following the local case study workshops, the transition pathways developed within each of the country case studies will be scaled up to European level in the context of European scenarios.

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Annex 1. Summary of Local scenarios for Food Assistance in Tuscany in 2030.

Solidarity in half

Italian government adopts a restrictive welfare strategy, by supporting "eligible" citizens with minimum incomes, exacerbating the differences with the most vulnerable groups. Civil society is very closed and uninterested to social problems. The narrative of the scenario comprises the following key points:

- The political environment is becoming more and more closed and racism and xenophobia are widespread. With the slowdown of the crisis and the economic upturn, the resident population improves living conditions and expects better food and environmental quality.
- Public authorities adopt a strategy of restricting welfare to Italian citizens (eg. introduction of minimum income), exacerbating the differences with the most vulnerable groups.
- The food system is oriented towards quality production and there is a tighter supply chain coordination. Larger companies develop social responsibility projects mainly in the environmental field.
- There is growing public attention to the environment, both at European and national levels, restrictive public measures are adopted for environmental protection and sustainable agriculture. The agricultural system is geared towards the recovery of land for agricultural purposes. The overall production is falling in terms of quantity and increases in value. The food prices are very high; due to greater efficiency in the food system, surpluses and waste along the chain are minimized.
- Civil society is very closed and uninterested to social problems.

Do I want to go to live in the countryside?

The government decides budget cuts on social measures, considering these not as a priority. Food assistance support is limited to transferring European resources to social parties. The food assistance actors must intercept surplus of small producers and retailers, which are most resilient in the regional context, but this has become more complicated. Society is very closed, therefore human resources, ie volunteers are also scarce. The narrative of the scenario comprises the following key points:

- The economy is stagnating. The cost of living in the cities becomes unaffordable for most citizens, who move to rural areas but especially in the peri-urban areas, where poverty and vulnerable groups are concentrated. The greater poverty also leads to a divergence between the dietary habits of the poor, which worsen, and those of the rich, that enhance and sustain the demand for high quality products.
- The food scandals undermine consumer confidence in the largest agro-food industry and retailing. The small and medium enterprises reveals to be the most flexible, resilient to the crisis and able to better respond to an increasing attention to the relationship between diet and health and between power supply and local identity. Tuscany leverages its local industry tradition and supports small and medium enterprises. The local product is represented as the alternative to a healthy and sustainable globalization of food "taste".
- Large retailers are trying to adapt to the new situation in an articulated manner: a part of them meets the demand for local products and high quality, and another pushes on lowering prices and standardization.
- Public opinion is very sensitive to health, safety and the environment, but not very sensitive to societal problems. The government, faced with cuts in spending on social measures, doesn't consider food assistance as a priority. They merely manage European resources.
- Intercepting surplus of small producers and retailers has become more complicated for food assistance actors. Moreover there is a lack of volunteers.

Tuscany in 3D: gifts, rights, duties

The "right to food" enters fully into the political debate: food assistance is conceived as a strategic task that allows to tackle bigger problems and needs. Public authorities develop a strategic approach to achieve closer collaboration between all players in the food system. Citizens are willing to contribute with voluntary work. The role of civil society associations is viewed by government as a resource for survival and functioning of the welfare system. The narrative of the scenario comprises the following key points:

- The crisis escalates. Inequality and social conflict are increasing. migratory waves exert strong pressure on food assistance systems. Public health is deteriorating because of inadequate eating habits.

- The food system is concentrated in a few large companies. They reduce the surplus because they become more efficient and therefore greater attention is put to avoid waste. To justify itself, businesses engage in social responsibility projects. Growing public pressure on big companies to help the solutions.
- The welfare state is in crisis. People are seeking new answers and customized to emerging needs. The right to food enters fully into the political debate: food assistance is conceived as a strategic task that allows you to tackle larger problems and needs. Public authorities develop a strategic approach that aims to achieve closer collaboration between all players in the food system.
- An increasing number of citizens are willing to contribute with voluntary work. The role of civil society associations and is viewed by government as a resource for survival and functioning of the welfare system.

It could be better

The pressure on the national health care system – due to rising incommunicable diseases derived from years of poor diet – brings a reduction to public expenditure on social services. A reactive public management approach and poor coordination between services prevail. Social actors must find a way to cope with the increased (food) poverty. The narrative of the scenario comprises the following key points:

- The crisis persists: the middle class impoverishes, the need of assistance, including food, increases. Social conflict has become worse in part because of the stronger migration flows. The deterioration of lifestyles generates a deterioration of food styles and this has impacts on health.
- The food system is concentrated in the hands of a few large industries who invest in technological development and product innovation (eg. new proteins and quasi-meat). They reduce the surplus because there is more efficiency and therefore greater attention to waste. To justify itself, businesses engage in social responsibility projects.
- Welfare spending is further compressed, also challenged by the pressure on the national health care system because of diseases related to years of poor diet.
- Public resources to manage food poverty are increasingly scarce. At the State and Regional government levels a management approach continues to prevail, together with the emergency containment and poor coordination between policies, instruments and practices. Social actors are having to cope with the increased demand for social services, and in particular food assistance.

Annex 2. Participants WORKSHOP 1.

It could be better	Solidarity in Half	Do I want to go to live in the countryside?	Tuscany in 3D
University of Macerata, expert	University of Pisa, expert	University of Florence, expert	University of Pisa, expert
Health District Pisa	Coop retailer Florence	Food Bank	Caritas Tuscany
Caritas Lucca	Regional Observatory on Poverty	Caritas Pisa	Caritas Pistoia
Emporia coordinator from Prato	Caritas Siena	Caritas Arezzo	Tuscany Region
Caritas Firenze	Tuscany Region	Tuscany Region	Caritas Siena

Annex 3. Participants WORKSHOP 2.

It could be better	Solidarity in Half	Do I want to go to live in the countryside?	Tuscany in 3D
Tuscany Region	University of Pisa, expert	University of Florence, expert	University of Pisa, expert
Caritas Lucca	Regional Observatory on Poverty	Food Bank	Caritas Tuscany
Caritas Firenze	Tuscany Region	Caritas Pisa	Caritas Pistoia

Annex 4. Backcasted plans.

1. Governance and networks	
Sub objective	Actions (2016→2030)
1. Integration and coordination of food assistance activities(2030)	1.1: Creation of a "promoters group" active on a regional level, in charge of the direction of actions, responsible for brokering among regional and local actors. This "promoters group" works towards raising awareness of regional stakeholders. 1.2 a: It identifies local institutional actors to be involved in the coordination of FNS in Tuscany 1.2 b: Promoters group address social health districts, which must coordinate and interact. 1.3: The promoters group engages with municipalities and "third sector" actors in network building activities. 1.4.a: Based on the network built and the knowledge exchanged, the creation of an ad-hoc Regional Committee on FNS is established. 1.4.b: The third sector network is made in charge within the promoters group to involve actors of the supply chain (producers and retailers) and stimulate a debate on food and nutrition security. 1.5.a: The committee activates a monitoring of food insecurity on the territory, and supports project development. 1.5.b: The third sector develops a self reflection on its inner functioning. They try to find common aims and synergic solutions (example on food drives, volunteer pooling, University training/stage, voucher…) and develop fundraising actions. 1.6 a: The committee elaborates incentives for SMEs and retailers to encourage CSR and donations, tax relief measures. Universities and retailers can also be involved. 1.6 b: The committee puts pressure on public authorities to develop tendering process that award points based on the recovery of food in public canteens (needs regulation, Green Public Procurement that is also social). 1.7: The committee lobbies at the European level to ensure FEAD continuity planning.
2. Developing a Food and Nutrition Security action plan (a prevention approach)	2.1: Creation of a regional board for the coordination of actions towards food security (same committee as above). Actor: Tuscany Region department 2.2: Confronting with local actors (see first column). Actors involved: Tuscany region dept + regional committee + local health district. Providing support to innovative projects existing on the territory, by Tuscany Region, RDP resources, Municipalities, in interaction with Bank Foundations, Universities 2.3: Developing a regional Plan for FNS in Tuscany. Actor: Tuscany Region Department dedicated to Social Policies

2. Education	
Sub objective	Actions (2016→2030)
1 Increase awareness on resources available and production processes	1.1.a Retailers favor food surplus recovery 1.2.a Emphasize the cost reduction and the possible reinvestment 1.3.a Change promotion strategies by retailers (do not encourage buying beyond effective needs) 1.4.a Indicators on food waste and increase efficiency in resource use. 1.5.a Make explicit and communicate overall convenience (not only economic advantage) at all levels 1.1.b GDO increases sale of local products 1.2.b GDO supply with local producers: alliance with GDO 1.3.b Promotion of territory and local productions 1.1.c Enhance project skills and planning as a specific competence 1.2.c Educating the human resources to project design and programming to improve project planning capacity 1.3.c The food assistance actors promote collaboration in order to exploit public-private synergies 1.4.c The food assistance actors activate fundraising strategies
2 Cultural change, lifestyles	2.1.a Work on training priests and religion teachers 2.2.a Educate parishioners. Educational training agencies packages 2.1.b Training teachers 2.2.b Laboratories and trainings in schools 2.1.c Create and animate debates in public meetings, encourage the use of social media, promote spaces for aggregation and collective activities (example, food classes)
3 Coordination	3.1 Sharing of information among relevant actors 3.2.a Board on Education 3.2.b Board on Food and Nutrition security 3.3.a Charter of shared principles among all stakeholders of the education system (social actors, media ...) 3.3.b Civic food project: join together restaurants and producers in a local network, focusing on local productions

3. Person's centered approach	
Sub objective	Actions (2016→2030)
1 Finding multiple and integrated responses to the food poverty	1.1 Create opportunities for exchange between actors. The Region should be the leading facilitator 1.2 Map opportunities. The Region facilitating the process 1.3 Use of IT technology to create networks for food recovery. GDO, collective catering and producers of food. 1.4 Evaluate the available amount of food. Ex. Recovery and redistribution of surplus food. 1.5 Involvement of local producers networks
2 Effective identification of needs	2.1 Create opportunities for exchange between actors. The Region should be the leading facilitator 2.2 Identify the "witnesses" of food poverty: pediatrician, school teachers, priests, health and social services and pharmacies 2.3 Creation of an observatory on food and nutrition in security needs, coordinated by social services (regional level) 2.4 Training of "witnesses" on how to recognize food poverty needs 2.5 Monitoring needs of people

3 Safe and active neighborhoods	3.1 Create opportunities for exchange between actors. This should be led by neighborhoods 3.2 Involvement of schools to develop food culture and social relations. The municipality is in charge. 3.3 Identify and recover available neighborhood spaces for interaction. The neighborhood and municipality should interact on this action 3.4.a Create community centers aiming at developing initiatives around food related themes. Interaction between municipality and neighborhood. 3.4.b Municipalities allow neighborhoods to use available green spaces (municipal regulations). predisposition of equipment , cleaning , checking safety conditions (ex. children playground). The neighborhood creates food production spaces, (such as urban gardens). 3.5 Organize local fairs, street food occasions to include migrant communities, neighborhood dinners. Organized with the help of Caritas and third sector actors.
4 Recipients as protagonists	4.1 Create opportunities for exchange between actors. The Region should be the leading facilitator 4.2 Set up a direction for the recognition of the right to food. Mayors, Health services … (cover multiple territorial levels) 4.3 Place the food aid within the individual social support path 4.4 Decrease and gradual substitution of food parcels with Emporia (i.e. social markets) establishment. Caritas and NGOs should be leading actors.
5 Food quality	5.1 Create opportunities for exchange between actors. The Region should be the leading facilitator 5.2 Approve the law to promote food recovery and reduce waste 5.3 Simplify legislation and on product expiration dates 5.4 Alignment of national legislation on the territories These actions should be led by agriculture and health ministries. Lobbying by NGOs.

Annex 5. Plans across scenarios: strengths and weaknesses.

	Governance and network		
Tuscany 3D	It could be better	Solidarity in half	Do I want to go to live in the countryside?
· In this scenario the targets fixed for 2030 are achieved, however, to get there you need to start immediately and fill the gaps identified and the delays . · The priority to achieve this scenario is on establishing a governance system: a pact between all the actors that are part of the food assistance system is the first aim, (a pact for integrated policies on FNS) .	· In this scenario we can think of two possibilities. The first is "stronger": in the absence of a proactive state, society becomes self organized , occupies the land, does not recognize the institutions, even opposes the institutions. This raises a problem of representativeness of these actors . · The second hypothesis - softer - is that civil society reorganizes itself trying to mediate between the demands of all, to try to recover a dialogue with the institutions. In this case it is necessary, between now and 2030, to find suitable "spaces" where there are representatives actors that undertake a dialogue around shared objectives . · In this scenario there is no possibility of expenditure: pressing the public actor on not retreating from its coordinating role is the priority. · Given the scarcity of resources , European funds that are available must be used well.	· This scenario is characterized by a technocratic government: a central institution which decides for all individuals who have citizenship (e.g., food security of the citizens is achieved, for example via the introduction of a minimum wage). · Marginalized people represent a risk and a vulnerability: understanding the potential hazard linked to marginalized people could break through the symbolic (and material?) walls of society and let the institutions demonstrate a progressive openness towards extended rights. · While the original version of the plan had assigned the leading role to public (local) actors, in this scenario there should be a role reversal. Third sector should act as a trigger for the creation of a network of actors, in order to draw the attention of public institutions on the ongoing emergency and to involve them to collaborate and co-design further broader goals. · There is need for pervasive and efficient communication flows and information. Civil society aims for the right to food as an entry point to rediscuss and widen social rights and citizenship.	· Our scenario is characterized by a willingness of the public actor to delegate · There is no conflict between social private and public. · Here a preventive approach should be developed to anticipate negative trends . Efforts should be put in creating a network where the public coordinates and experiments with innovative projects involving private resources . This can also help to solve the lack of ability of the food assistance actors to attract resources . These categories of stakeholders should be included within the committees (e.g., potential lenders as banking foundations) .

Education			
· The substantial goals are three: acting on the change of lifestyles, awareness of resources , and the right to food. · Two instrumental goals, which are the coordination and education of educators. Educating to better lifestyles starting from school education and private entities, such as the mass distribution. · Resources : university courses are not very keen and private entities are the main resource managers. The right to food is related to the political dimension. Media and social media , but also committees at district and national levels , and GAS can raise awareness on these issues. · Social media and political campaigns act as "multipliers networks" around the theme of the right to food .	· In relation to resources there are two key actors: on one side the industry manufacturers and "responsible and aware" companies, which are nonetheless fragmented; on the other large retailers. · The protagonist is the third sector, who should push for minimum acceptable levels in terms of characteristics of quality and wholesomeness of new productions. Moreover it should support small producers and other new ways of intercepting foods. · In relations to changing lifestyles: how can we finance education projects related to school if the public does not have a strategy and retrieves? Again, the role of civil society and organizations! many actions and responsibilities are a burden for civil society as active participants. · In terms of coordinating communication. It should be re-defined at which level this would happen: wider and homogeneous territories , as in the districts should be identified (other than administrative districts).	· Education plays a key role in helping information flows and coordination ("centrality of the person", who is this person?). · In this scenario it is necessary to work on the identification of needs . · We are in a scenario with little or zero waste to be recovered, therefore education plays a key role to raise awareness, both towards the community and towards the retailers. · Targeted gift to needs should be boosted. · Develop care pathways: Caritas encourages education pathways that allow to include without losing own identity .	· Education plays a prevention role against closing up of society. · Education includes training of operators and institutions. In this scenario training and support to self production should be targeted. · Need of rethinking the supply of what now comes for free (surplus food).

Person's centered approach		
· This scenario provides a rather positive situation. It is necessary to anticipate some objectives and distinguish substance from method and procedure. · We have assigned a different priority to sub-objectives. Recipients as protagonists becomes the number 1 priority, where one of the first actions identified is to go towards replacing parcels with emporia where possible. The second objective is "multiple responses to poverty", the third is "quality of food" and the fourth is "safe neighborhoods". · A crosscutting objective is the "identification of the needs of the territory" which must be dealt with much in advance in comparison to the others. This is because, in order to adopt a strategy it is necessary to know and map opportunities and problems in the first place. · The consolidation of the networks and relationship with retailers are a necessary consequence of the identification of needs. Safety and nutrition are two fundamental pillars. · In "safe and active neighborhoods", the role of parishes to steer the awareness around needs of society is emphasized.	· In this scenario the region and the institutions are in the backstage, while the actors of self-organized civil society are in the foreground. · This gives a (different) priority to the objectives: in the first place, acting to create safe and active neighborhoods. by steering community actions, such as urban vegetable gardens. · Monitoring needs on the territory and also deal with education activities. Again, with the retreat of public actors many of the actions come through the civil society, that is being reorganized. All responsibilities from institutional public entities are now faced by civil society, as well as diversification of activities. The lobby activity towards policy makers also becomes a priority.	· Dealing with the centrality of the person is complex, within this scenario, because of the "invisibles". Who is the "central person"? The invisibles are a mass of people in need. · We have distinguished two steps: managing the emergency and running the regime. During the emergency we see a role for the third sector, that lobbies institutions with the aim of bringing the attention on food right to institutional levels. Caritas moves resources on the assistance of the invisibles (the "existential peripheries"). · In the regime it is expected that there will be the reframing of citizenship. Caritas therefore, is a promoter of social inclusion dedicating resources and infrastructure and promotes active citizenship of new included people. · Monitoring of the needs is relevant both in the emergency and regime. The "border operator" is a key figure to grasp the needs of the territory and acts as an intermediary between the two "worlds" (i.e., visible and invisible).

· The critical aspect in this scenario is linked to the absence of the state and a voluntary sector with few resources.

· In the background the public actor does not intervene in the scenario. Lobbying and specific training which addresses policy makers is necessary: the public actor cannot fail to act as a facilitator of the network.

· Key role of social services but with a different logic, not transferring resources but helping to develop skills, abilities, etc.

· Receivers as protagonists: self-production pathways, forms of circular economy and trade.

· Recovery of surplus: retailers also change their approach, by rethinking in innovative ways the available surplus food system recovery. For example they experiment specific projects linked to groups with special needs (e.g., children).