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Identification of Key Components for a new Urban Food Strategy – Results of a Delphi Study in Cologne, Germany

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ABSTRACT

Urban food systems consist of many stakeholders with different perspectives, different interests and different governance tools. This study aimed at developing potential future scenarios for the food system of Cologne by analysing the system with a Delphi approach.

In our research-design, the suitability of the Delphi-method was evaluated not only as a tool for future modelling and scenario design, but also as a communication tool among the group of participants on a multi-stakeholder-platform. As a case study, the Food Policy Council of Cologne, Germany was used. Cologne can be seen as a forerunner among German cities in the development of a new urban food policy. Some of the successful steps to re-envisioning food as an urban system include joining the Milan Urban Food Policy Pact, the decision of the City Council to become an edible city and the establishment of a Food Policy Council. For the study it was important to capture participants' visions of a common goal regarding the governance of the urban food system and also to identify mental 'silos'. It was obvious that the municipality of Cologne together with the Food Policy Council made great efforts towards participatory processes to build a vision for a sustainable and regional food supply. However, many stakeholder-groups in the process still work exclusively among themselves and do not actively practice the confrontation with the viewpoints of other relevant groups. This supports the maintenance of 'silos' and leaves little room for face-to-face discussions. Therefore, the primary aim of this study is to explore key components of food provisioning in the future for Cologne while confronting all stakeholders (municipal administration and politicians, farmers and food activists) with the perspectives of all group members. We used a multi-stakeholder Delphi approach with 19 panellists to find out essential components of the municipal regional food provisioning system in Cologne. Unique in this Delphi study is the bringing together of municipal administration, regional urban farmers and food activists. The research is still on-going, but preliminary results show that more communication among all relevant actors, especially horizontally among different city departments, in the urban food system is needed.

Keywords: urban food supply; municipality; farmers; civil society; urban food strategy; forecast; qualitative empirical research, Delphi-method

Introduction

Many cities worldwide have started dealing with the transformation of their current urban food system. With the forecasted increase of urban population by 66% in 2050, cities will be a major driver for the demand of sufficient, healthy and environmentally friendly food. Urban food systems consume considerable amounts of resources, e.g. global food production uses 30% of energy and 40-70% of water (McLaughlin and Kinzelbach

2015, Ercin and Hoekstra 2012) and contribute to greenhouse gas emissions coming from production, processing, transportation and consumption of food (FAO 2016). Additionally, food systems are components of a society's critical infrastructure (Gizewski 2012) and their functionality or capacity to function depends on various sectors (production, transport, trade, etc.) and their connectedness. If these sectors are vulnerable or not resilient, then the food system is also vulnerable. Resilience (Bartel and Isendahl 2013) in this context requires diversity, e.g. seed systems, decentralization of food production (different places in cities and their fringes) and environmentally embedded processes such as sustainable management of natural resources with consideration of food system needs. A resilient urban system is innovative and contributes to the creation of "good work", poverty reduction and community building as well as to the creation of markets and social networks. In a resilient urban food system, a wide range of actors from all sectors (business, public administration, politics, civil society as well as citizen-driven associations) is present and actively involved (inclusive). The development of such a resilient urban food system is increasingly becoming the task of governmental organizations (Morgan, 2009, Cohen, 2011, Ilieva, 2016). In response to recent global challenges, municipalities around the globe have started developing and implementing policies to improve contemporary food systems (Pothukuchi and Kaufman 1999, Blay-Palmer 2009, Morgan 2015, Wiskerke and Viljoen 2012). This process does not rest only on the shoulders of municipalities; the inclusion of public institutions' perspectives as well as actors from the entire supply chain are gaining in importance in this new food geography (Renting and Wiskerke, 2010). Among German cities, Cologne can be seen as a forerunner in the development of a new urban food policy. Indications for this include the city joining the Milan Urban Food Policy Pact in 2015, the establishment of a Food Policy Council in 2016 as well as the decision of the city council to transform Cologne into an edible city in 2017. The municipality of Cologne together with the Food Policy Council have made great efforts, using participatory processes, to build a vision for a sustainable and regional food supply. A variety of multi-stakeholder activities related to the future urban food systems have taken place in Cologne over the last two years. Many different projects such as the edible city, regional direct marketing, sustainable communal catering of schools and kindergartens as well as regional gastronomy and artisanal food production were embarked upon. Nevertheless, little attempt has been made to gain a bundled multi-stakeholder picture of the design of a sustainable future food system.

This paper seeks to answer the question "What are the priorities and key components of a sustainable food system in Cologne from different actors' perspectives?"

Materials and Methods

In order to capture opinions of all relevant stakeholders (municipal administration and politicians, farmers and civil society) the Delphi-method was used with a panel of 19 experts from the four stakeholder groups (Fig. 1). After the identification of experts through participants' lists from Food Policy Council events and committee¹ lists, a written questionnaire with 26 statements from four sustainability fields based on the FAO Sustainability Assessment of Food and Agriculture (SAFA) (FAO 2014) was developed and sent to the selected experts. The suitability of the SAFA guidelines to assess urban food system governance has already been proven (Moreau 2012, Landert and Schader 2016) and covers many food-related sustainability topics, going beyond classical sustainability dimensions (Landert et al. 2017). In total, 51 experts were contacted via classic postal delivery method; 19 out of the 51 experts returned filled out questionnaires, which is considered quite successful. The data was analysed by descriptive statistics for the determination of similar views/estimates and the quantification of degrees of similarity.

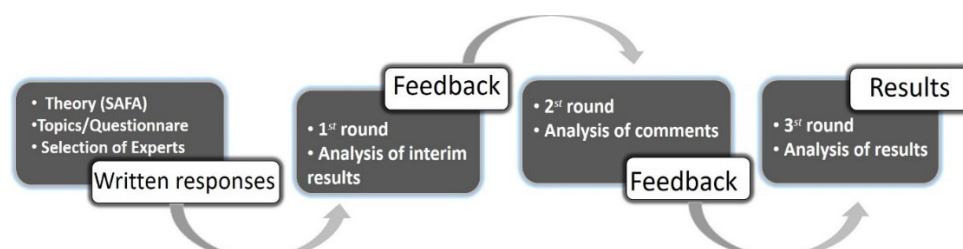


Fig.1 Description of applied Delphi-technique

¹ Currently there are four committees: 1) Edible City / Urban Agriculture; 2) Regional direct marketing; 3) Food literacy / communal catering of kindergartens and schools; 4) Gastronomy and artisanal food production

All results were presented in a stakeholder workshop and questionnaires modified according to comments from the participants. The 2nd questionnaire was distributed in a 2nd round and results evaluated in a 2nd workshop. The final results of the study will be presented at the bi-annual meeting of the Cologne Food Policy Council.

Results

All results presented here are a summary of 1st round answers. The analysis of the sample (Delphi questionnaire) shows an equal gender representation (50% female and 50% male); ages range between 36-66 years (with 58% of respondents being >50 years old). Representatives of municipal administration were the largest actors group (40%), followed by regional farmers (25%) and civil society (20%). Quite a small response came from the local policy makers (15%). Fifty-one (51) experts were invited to participate in the Delphi-Study, with 20 (39%) completing the first round.

The Delphi participants reacted significantly strongly to four questions, predominantly from economic and ecological fields. These fields were ranked as the major influences on the food provisioning system of Cologne in the next decades, covering the topics of: further loss of biodiversity, change in urbanisation of lifestyles, growing importance of short food supply ways and competition for land between urban development and agriculture. Especially the biodiversity issue and the urbanization of the lifestyles got high scores (Fig. 2). Political steering tools of sustainability, especially regulations regarding work on family farms, strictness of sanitary regulations and the City of Cologne joining the Milan Urban Food Policy Pact were ranked as less influential for future urban food system. The number of questions answered with “Don’t know” was also quite high in this section.

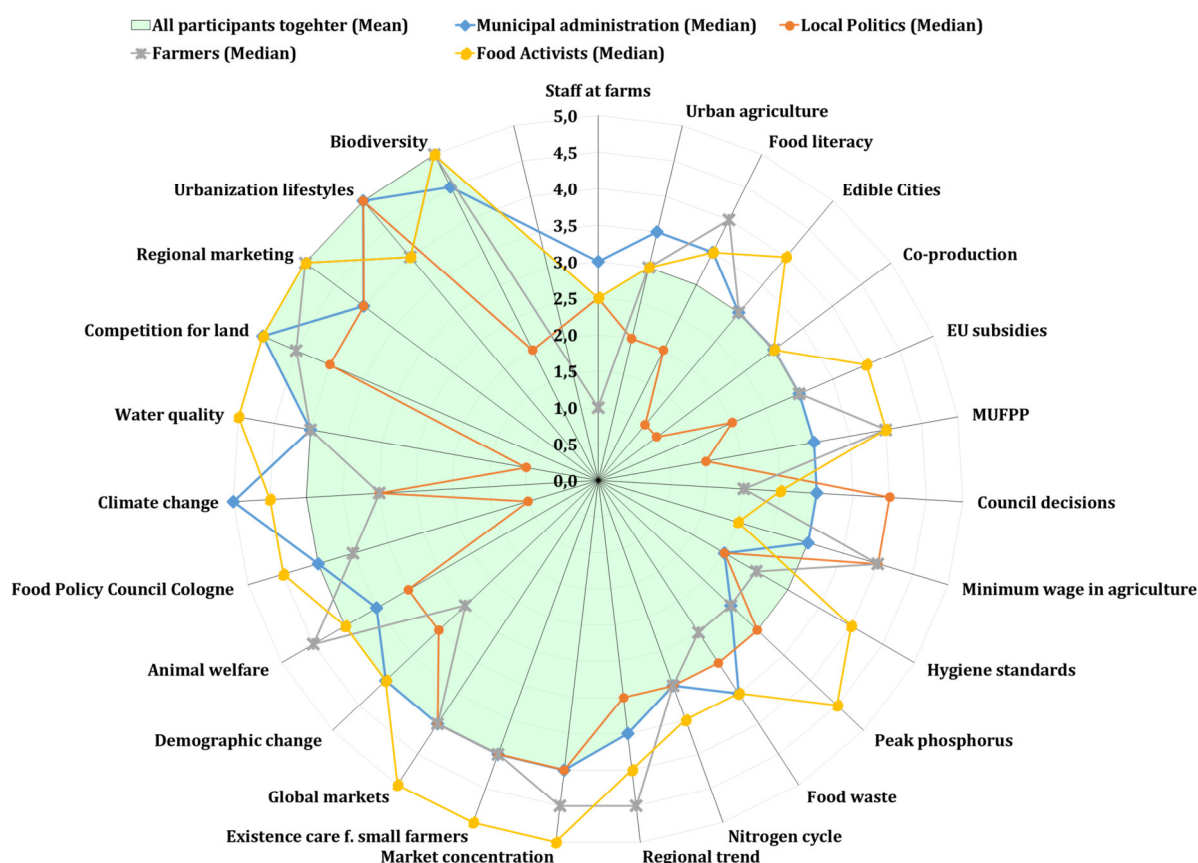


Fig. 2 Mean scores of Delphi-study responses

Conclusions

The results from the 1st round of the Delphi Study revealed a high suitability of the Delphi method in stimulating and illustrating different actors' opinions as a basis for exchange. Compared to other applied

approaches in this multi-stakeholder platform, the Delphi method showed a substantial success, as a relatively large number of municipal actors were reached.

The analysis of the 1st round of the Delphi Study indicated that traditional governance tools (rules and laws) are perceived to be less effective for the management of Urban Food Systems. New strategy tools need to be developed.

Limitations

Although the study delivered interesting research results, some limitations were identified. The first limitation identified concerned the methodology; we had planned on applying the Delphi technique and presenting results at workshops between rounds. However, the willingness of actors to attend the workshops was quite low. This indicated to us that the Delphi technique with workshops may not be the most suitable format for the activation of actors of urban food systems.

Secondly, since the aim of the study was to detect key components of sustainable urban food systems of Cologne, a relatively low number of experts was involved. Therefore, the small sample and some missing responses did not allow us to make more accurate assumptions and formulate recommendations for an urban food strategy.

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