Project "Meeting urban food needs"

A project "with" FAO and not "for" FAO

CALL FOR PAPERS (03/2014)

Complex-systems dynamics principles

applied to food systems

The Food and Agriculture Organization of the UN (FAO) is implementing the project "Meeting urban food needs (MUFN)" whose aim is to support policy decisions by local government authorities on improving the efficiency, dynamism, inclusiveness and resilience of food systems meeting urban food needs.

Nowadays, the dramatic increase of urban food demand requires effective, coordinated and sustainable interventions in both developing countries and those in transition. As we live in a world governed by complexity, diversity and uncertainty, the traditional methodologies do not provide the necessary tools to analyse the several aspects involved in food systems, to predict the multiple effects of actions, and to avoid unforeseen side-effects. Therefore, the behaviour of complex systems is often counterintuitive and difficult to manage because of our static and reductionist mental models.

As a food system can be considered as a whole, formed by several interdependent elements, manifesting behaviours that cannot be inferred from the behaviours of its components, the complex systems approach seems to be likely to be able to tackle the challenges offered by analysing complex food systems. Furthermore, in the recent years, scholars have developed methods, theoretical frameworks and tools in order to approach complexity. Among the others, agent-based modelling, social network analysis, nonlinear analysis and system dynamics can shed light on:

a) the understanding of the characteristics, structure, behaviour and performance of complex systems in both a static and dynamic perspective, i.e., in a 10-year time horizon;
b) the identification of appropriate areas of intervention (hubs);
c) the formulation of appropriate policies, strategies and intervention programmes.

For these reasons, **the focus of this call for papers is on approaches offering powerful methodologies for understanding, discussing and simulating complex systems over time, including - but not limited to – agent-based modelling, nonlinear analysis, network analysis and system dynamics**.

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FAO will select at least five authors among those whose paper will be published (maximum one author per paper) and will invite them to attend an expert meeting in FAO-Rome in 2015. Travel expenses will be paid by FAO while all other expenses will have to be paid by the participants.

OBJECTIVE

This call – launched by FAO in collaboration with the University of Turin - is aimed at selecting relevant papers discussing how complex-systems dynamics perspective can contribute to the understanding of the characteristics, structure, performance and behaviour of food systems meeting urban food needs and to the formulation of appropriate policies, strategies and investments plans.

We are looking for thematic contributions and analytical case studies showing:

- the relevance of complex-systems dynamics perspective in comparison with other disciplines or approaches in the analysis of complex food systems meeting urban food needs;
- how complex-systems dynamics concepts and criteria can be utilized in the analysis of complex food systems meeting urban food needs;
- how complex-systems dynamics concepts and criteria can be useful in formulating appropriate policies, strategies and investments plans;
- the application of complex-systems dynamics approach and concepts to the analysis of complex food systems meeting the food needs of selected urban areas in both developed and developing countries.

We also welcome additional suggestions, reflections and proposals contributing – based on a complex-systems dynamics perspective - to the analysis of complex food systems meeting urban food needs with the ultimate goal of improving their efficiency, dynamism, inclusiveness, sustainability and resilience.

HOW TO PROCEED

1) Submission of proposals is through the provision of an abstract of between 300-500 words by 31 October 2014. Proposals should be submitted by email to MUFN-Papers@fao.org. Authors will be notified by mid November 2014;
2) Full papers should be submitted by 15 January 2015 to MUFN-Papers@fao.org.
3) All papers will be reviewed by a board of selected experts and a notification of acceptance will be communicated by the end of February 2015. All final papers will also be subjected to an internal clearance process by FAO.

Selected papers are normally expected to contain between 3000 and 5000 words, and should be written in a non-technical, simple, clear and concise manner for ease of comprehension by target users. Final version of the papers should be submitted in English and will be published either in electronic format or as a special issue of an academic journal.

Final versions must be submitted to FAO carefully following FAOSTYLE (ftp://ftp.fao.org/docrep/fao/004/ac339e/ac339e00.pdf) and the publisher format:

For further details about the call for papers conditions see:
ftp://ext-ftp.fao.org/AG/Data/AGS/MUFN/MUFN_Callpapers_conditions.pdf