

# Knowledge Networking in Food Systems

- Codrin Dinu Vasiliu
- Ioan-Sebastian Brumă
- Lucian Tanasă

Romanian Academy, Iași Branch,  
"Gh. Zane" Institute for Economic and Social  
Research

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Zane" Institute for Economic and Social  
Research, Romanian Academy, Iași Branch, and  
Institute of Agrarian Economics, Bucharest

One of the major objectives aiming at the socio-economic development of the European Union is based on the concept of knowledge-based development. In this regard, the European Commission lays a special stress on the knowledge management components, in matters of community financing. A special attention is paid to actions involving scientific research, rational data structuring, scientific innovation, participatory innovation, knowledge transfer, and also to the knowledge communities built up by the actors and agents of the socio-economic systems that are trademark of the European communities. Accordingly, the main challenges of the projects funded by the European Commission are as follows: getting access to the practical knowledge within the socio-economic systems, identifying issues in a system starting from the experience of the stakeholders and turning these stakeholders into actors and agents of knowledge within a system. In this communication we would like to introduce a model of good practices in terms of collaboration and co-interest of the stakeholders in the agrifood systems from the North-East Development Region of Romania. The methodology engaged here is based on a systemic approach, namely a model of quadruple helix collaboration and knowledge management focused on a mutual endeavour of identifying specific issues and possible solutions.

**Keywords:** Food systems, North-East Development Region, European Union, Romania, knowledge management, european projects, stakeholders, systems thinking

## The operational meaning of the concept and phrase of “food system”

### FOOD SYSTEM STANDS FOR:

The whole of entities, functions, structures, values, representations, and interactions that constitute activities of production, distribution, purchase, consumption, and food post-consumption.

### ONE KEY SPECIFICATION:

Socio-economic systems are not merely food systems, they are also societal systems considered from a food perspective.

Food system does not exist as a system in itself as we cannot speak of a reality having this dual nature, namely an entity as a world system type, whose constitutive meaning resides in food. Ontologically speaking, we cannot speak of a food world in an exclusive and exhaustive way.

However, “the food system” phrase does not lack meaning. Except its meaning is not an ontological one, or, differently put, it does not refer to a reality that is purely a food reality. The meaning of the food system goes further and refers to something far more important: it is about considering the societal systems from a multi-level perspective: entities, functions, structures, values, representations, and interactions that constitute activities of production, distribution, purchase, consumption and food post-consumption. Starting from these premises, the food system as a phrase is the food dimension of the system considered in its structural and systemic whole. Thus, we can say that food system represents the food significance of the societal systems.

A societal system is considered in its whole complexity, which is equally social, cultural, political, economic, historical, financial, humanist, global, local and so on. The societal system is a systemic reality where all the anthropic dimensions can be found, regardless of their positions (vertically, horizontally or diagonally-placed).

## Food System as Dimension of the Societal System

### SOCIETAL SYSTEM

Regardless how many epistemological adjustments we end up adding, in their overall shape, the social and economic theory are not enough to have a modern understanding of the rural and urban systems.

This is why we need to constantly have in mind that a system, in its view and ontology, is after all a societal system. In other words, a system concentrates, without classifying and ordering in a particular way, all dimensions which determine life as-in within society.



- When we refer to socio-economic systems, we intend to correlate the entire reality of the system, a reality which we conceptualize as a composite in the social and economic theories. All the elements of this composite are either social, economic or socio-economic. Beyond this way of understanding, from a systemic perspective, we should not neglect the fact that the system ontology is a societal one. A societal system is a system where all possible dimensions of social existence are being considered, regardless of the importance or relations of some at global level, at a given time. For instance, a in representation reduced to the general socio-economic structure of the system it is hard to bring into discussion the relation between culture and civilization in a system, even though we could believe that civilization is merely economic, while culture is social only.
- The methodology employed has been built on the principles of systems thinking. The chosen methods were structured around the Iceberg model which involves a pyramid (from top to bottom) of the main elements of a system, namely events, structures, and mentalities.

## Knowledge Communities. Systemic Roles of Stakeholders



### THE MAIN ROLES IN THE SYSTEM

In terms of system dynamics, innovation, and resilience, the main roles are provided by two types of behaviour:

- Actors are inclined to maintain the system stasis and thus contribute to the system resilience
- Agents are inclined to push changes within the system and thus contribute to the system dynamics and innovation.

The knowledge communities are quite interesting as they get the two roles together in a quadruple helix system: civil society, entrepreneurship, public administration, and academia.

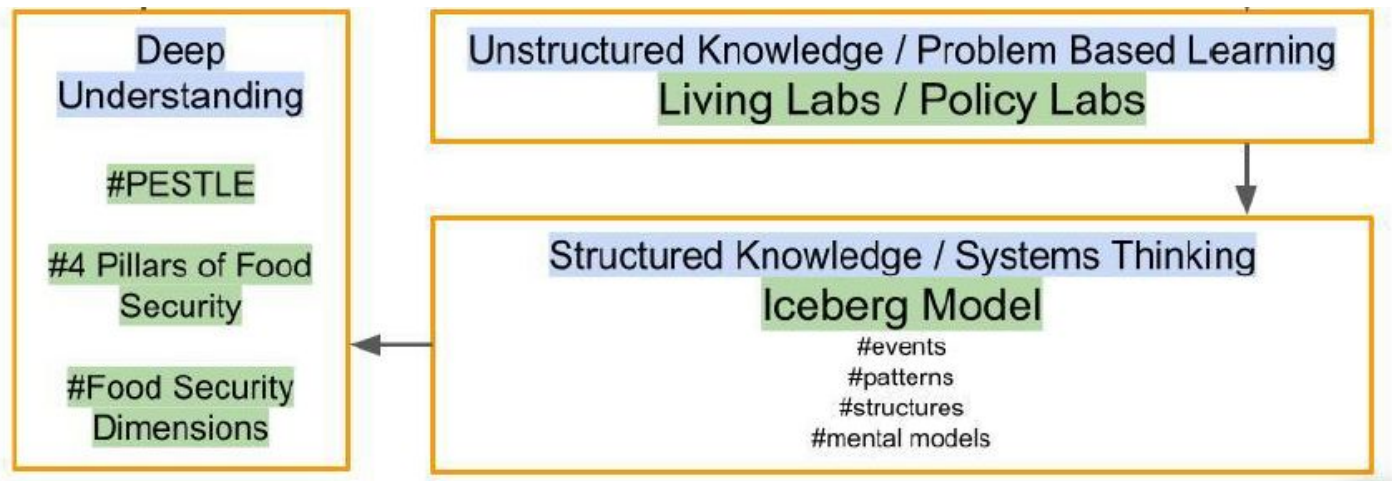
- Each actor or agent, as a stakeholder, represents a position, a role, a value, and a fact of knowledge in the system they are part of. These are their epistemic dimensions in the system, and within these coordinates he/ she can be defined and engaged in co-participatory knowledge acts.
- At the same time, the differences and modifications of roles, values, and positions are the key dimensions that can generate acts of knowledge. This multi-actor approach is the most appropriate to collaborate with the stakeholders to engage all participants of the system in getting to know the system.
- In this context, in the knowledge communities within Cities2030 project, 8 partners in the same project, under the coordination of the Finnish team, have decided to test the systemic methods of knowledge gathering and management.
- The methodology was built on the principles of systems thinking. The methods were chosen and structured according to the Iceberg model which implies a pyramid (from top to bottom) of the main elements of the system, namely events, patterns, structures, and mentalities.

## Epistemological Chains in the Systemic Thinking

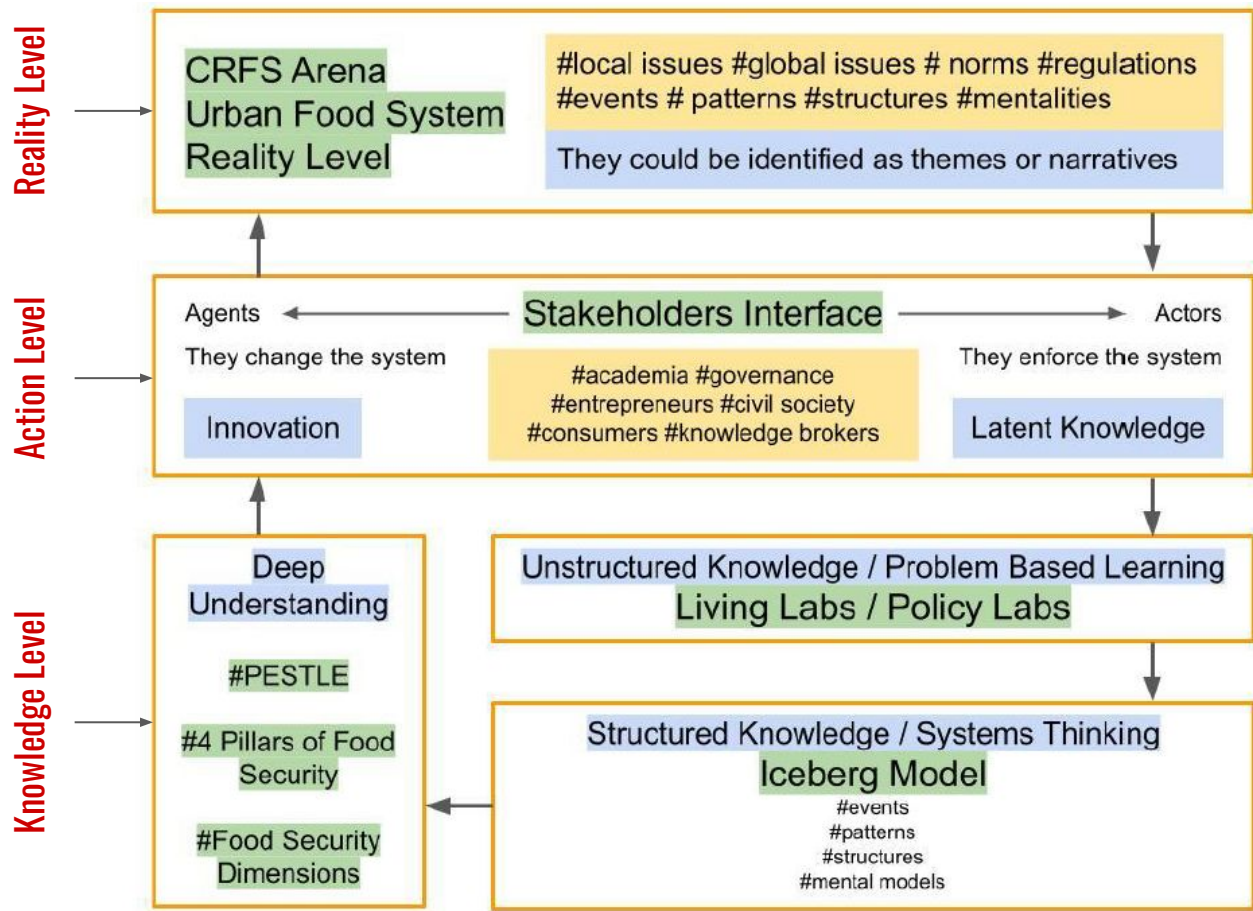
### EXPLICIT KNOWLEDGE AND TACIT KNOWLEDGE

The explicit knowledge is already generated by the thoughts, emotions, values of those who express it.

How can we acquire implicit knowledge, also known as tacit knowledge (see Michael Polanyi).



- In the actions of co-creation and co-innovation run in the knowledge communities built in Cities2030 project, to encourage stakeholders express knowledge acts in direct relation with tacit knowledge, we have adopted two courses of actions, Firstly, we organized as many direct meetings as possible, attended by actors and agents from various domains in the quadruple helix system. Secondly, we used qualitative methods for data interpretation and structuring.
- We chose the participatory and narrative methods for gathering, expressing, criticizing, structuring, and formulating the discourses got from the tacit knowledge of the stakeholders in the system.



Source:

## D3.3 Systems Thinking Methodology; 2021

Tuula Löytty  
 Codrin Dinu Vasiliu  
 Ioan Sebastian Brumă  
 Lucian Tanasă  
 Mark Koetse  
 Justine Vanhalst  
 Kyriakos E. Georgiou  
 Edna Yamasaki  
 Demet Osmancebioglu  
 Bruno da Silva  
 Sebastian Doboş  
 Kalle Karlsson

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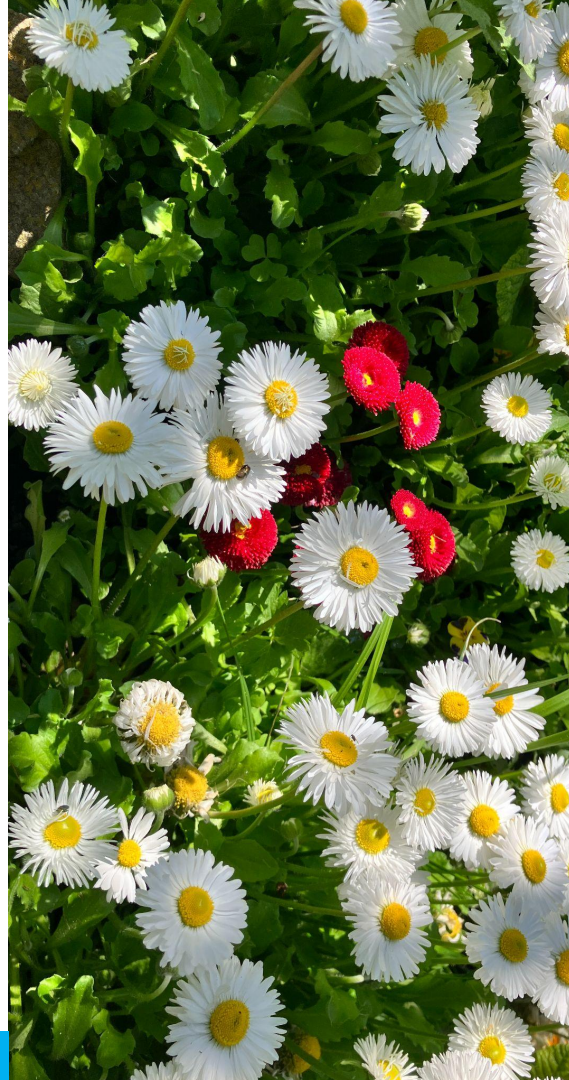
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