



## **The role of complexity of the modern foodverse**

**Mikelis Grivins**

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First of all, thank you for giving me this opportunity to share the thoughts I have after being involved in Transmango project for the last four years.

Many of Transmango deliverables underline that modern food systems are global and complex. It means that linear representations cannot explain the fool web of actors, values, facts, relations and processes that shape the foodverse (food universe - a neology designating extended food system). It rather resembles a messy cloud of interlinked influences. To me – this isn't a weakness but the strength of these systems. Complexity has allowed us to fight many of old and new problems we directly and un-directly associate with food. The possibility to use food to tackle the challenges we face in so many fronts simultaneously is not rooted in globalness or localness of food supply chains, nor in the degree to what trade is regulated, nor in the presence of alternatives. It is the **complexity** of foodverse that allows us to use food to approach all these challenges at the same time.

Ironically, complexity is also the main source of vulnerability of the contemporary food systems. This does not mean that we are living in a world where the global population is more food insecure than it was 100 years ago. No, it is not the case! FAO reports show that before the 2016 World hunger has been steadily declining for over a decade. Furthermore – in most parts of the World we have at least some possibilities to choose our diets. With that being said, ensuring food and nutritional security to all remains a challenge even in EU. The problem is that the expansion of food systems and ever more pronounced contextual uncertainty **reveals ever new food system aspects that can be easily corrupted or produces undesirable side-effects**. To put it simply – nowadays, there are **more things that can go wrong**. Transmango has done an essential job in mapping these wrongs and the diversity of food system vulnerabilities.

Furthermore, future scenarios developed in Transmango have shown us that food system vulnerabilities **will not go away on their own**. This means that we need to be proactive both in studying this complexity and in introducing answers to vulnerabilities. So far, the search for the possible solutions to food system vulnerabilities has been mainly **sympathising impersonalised and global solutions** – such as simply replicable discoveries of exact sciences, logistical and management solutions or trade regulations. This has helped to strengthen the food systems. However, in many cases now we see that the answers introduced are leading us to a dead end – and often – have become problems on their own.



As a social scientist, I think that many of the food system challenges we face are **primarily representing vulnerabilities of culture, values and people that are manifesting themselves through institutional solutions that enable the threats**. Therefore, the answers we are looking for need to take into account **human – solutions need to have ownership**, to be more context sensitive, and open to adaptations. And I am not trying to convince you that small is undoubtedly beautiful. There is evidence of both promising and disturbing cases both at local and global levels. However, Transmango has illustrated that at the local level there is a diverse spectre of food-related activities - not necessary alternative or unique, but with high potential to tackle local food challenges and offer genuinely complex perspective.

I would be naïve saying that these **small cases** will resolve all the problems global food systems face. However, these examples have shown high ability to adapt, to act, and to react. And each case Transmango researchers have studied, have shown high potential to tackle local challenges. Critics can claim that I am proposing to look at the periphery of food battles, while the most prominent changes should be made in the centre of the system – looking at global, huge, supranational actors. Most likely they are right. However, small and local things can be foundations of important changes. If you don't believe me – look at how geckos have inspired NASA to produce new space robots, beetle shells have served as an inspiration for new ways to collect drinking water in water-scarce environments while research on ant heaps have helped to improve urban planning.