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A COMPREHENSIVE, INTEGRATED AND DEMOCRATIC APPROACH FOR DIVERSIFIED FOOD SYSTEMS

AT FIRST GLANCE

The development of diversified food systems requires research approaches that address and integrate all the aspects involved in a comprehensive way and allow a democratic and collaborative involvement of the diverse actors.

New approaches for diversified food systems

Increasing diversity in food systems is a crucial element to improve ecological and societal resilience. **Diversified food systems** means increasing diversity in the field - with more crops and more diversity within crops - and in the entire food supply chain - with a larger number and different types of actors actively involved. When doing that, it also means to face a variety of aspects, including ecological, agronomical, organisational, economic, institutional, social, cultural, ethical, legal and political. To be able to develop diversified food systems, research approaches are needed that address and integrate all these aspects in a comprehensive way, mobilise all the available knowledge resources and interact with all the diverse actors involved.

Embedding crop diversity and networking for local high quality food systems

The meaning of a comprehensive, integrated approach

A **comprehensive, integrated approach** has many facets. The word *comprehensive* refers to including all relevant knowledge fields, depending on the research question. These knowledge fields can concern plant features, soil management, breeding, food quality technology, marketing, economics, communication, legislation, politics and ethics. *Integrated* refers to the integration of these different knowledge fields and methods. Hence, an **interdisciplinary approach** is important. Various research methods of the biological and social sciences can be used. Integrating these different knowledge fields and methods throughout is important to face the interdependence of the various aspects involved, thereby optimising the result of the research process. However, depending on the research question, more or less knowledge fields and methods may be integrated. When the research question deals with a specific, technical aspect of the farming system (improving cross-pollination of a crop, for example), a few knowledge fields are needed. A different situation occurs in case of a question that touches on various elements of the local system (such as, for example, introducing a new farm product on the market, which requires optimising a complex interplay between farming and marketing practices to improve production, processing and marketing).

The meaning of a democratic and collaborative involvement

To develop diversified food systems, based on mobilisation of all available resources and meeting the needs of local and regional actors, the research has to be **multi-actor** and **collaborative**, meaning researchers and multiple local actors work together as partners



in context-specific processes. Together, they formulate the research question based on the specific needs, conduct the research by adopting the most appropriate methodology, discuss results and formulate further steps, often in an iterative way. This shows another fundamental feature of democratic and inclusive research, **transdisciplinarity**, which allows valorising the different types of knowledge thereby contributing to the comprehensive, integrated approach.

Crucial elements in this process are building of trust, creating an inclusive atmosphere to allow open communication, and developing a common language to improve mutual understanding. This process takes time and needs to be carefully developed; over time a shared culture may evolve. Similar to **action research**, that is a research deeply embedded in the activities and processes carried out, researchers, as other actors involved in the process, may also play **the role of facilitator** to improve the interaction and collaboration between the various practitioners. One of the local actors may also take the role of facilitator. This can further support the internal process, leading to what increasingly assumes the features of a collaborative multi-actor **research**. Over time, **this multi-actor, collaborative research** may need internal re-arrangement. This can be due to the development of new research questions, increase in group size, unexpected results, changing external factors and other aspects that can emerge during the process. In case these dynamics can be managed through the iterative process of reformulation of the research demands there is no problem. However, they may also have negative effects on the process, determining loss of effectiveness. This makes **monitoring and reflexivity** important. A continuous critical evaluation of the research process is needed: of its internal dynamics and of its intermediate and final achievements, in relation to the methodological choices and to the ultimate goals of the research activity. In combination with a comprehensive, integrated and democratic approach, reflexivity can help to manage the multi-actor research fruitfully and coherently in relation to its guiding principles. Based on the commitment to contribute to generating change in food systems, reflexivity can play a **transformative role**.

The way forward

To summarise, the development of diversified food systems requires interdisciplinarity and transdisciplinarity, in a collaborative multi-actor research. Depending on the food system context, the actors involved and the questions asked, this may occur in different ways, but always coherently with this comprehensive, integrated and democratic approach. As such, it is able to create synergies among all the involved actors and associated resources, thereby reinforcing the common effort to support the transition to more resilient, sustainable, equal and healthy food systems.

Suggested readings

Estelle Serpolay, Edwin Nuijten, Adanella Rossi, Véronique Chable, 2018. Toolkit to foster multi-actor research on agrobiodiversity. Diversifood Project. www.diversifood.eu/publications-old/booklets-and-reports/; DIVERSIFOOD IF#16. A Paradigm Shift. <http://www.diversifood.eu/publications-old/innovation-factsheets/>; Booklet #0. 9 Key Concepts for food diversity. Diversifood Project. www.diversifood.eu/publications-old/booklets-and-reports/; Rey F., Chable V. (Eds.) 2018. Innovative approaches to embed diversity in food systems: DIVERSIFOOD outcomes from field to plate. Booklet #6. DIVERSIFOOD Project. www.diversifood.eu/publications-old/booklets-and-reports

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