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Innovative multi-actor participatory literature review

A participatory bibliographical review is an innovative process of reviewing literature through the application of a multi-actor approach. The novel project described here involved European professionals and researchers with different theoretical and technical backgrounds in the stages of reviewing and analyzing scientific literature that is of specific interest to CERERE.

A model of participatory, multi-actor research

The participatory method is an innovative research model that calls for the involvement of university researchers and professionals, following European Union guidelines relative to multi-actor approaches. In this case, CERERE's partners with complementary areas of expertise (scientific, practical and otherwise) collaborated in all phases of the process of literature review, from the initial stages until the conclusions. The aim of the literature review was to assess the state of the art of recent research on various topics in order to shed light on practical and scientifically relevant questions. Indeed, the objective of the CERERE project generally is to sustain and promote innovative approaches that have emerged in Europe from a great variety of practices employed to introduce and manage agricultural biodiversity in cereal production. To this end, our partners selected studies and research projects which they deemed most relevant to facilitating the transition to more sustainable cereal production systems and food supply chains, ones based on biodiversity. Because of the broad scope of the project, three different areas were selected, and the literature review was accordingly divided into three themes: "Alternative and sustainable food systems" [1], "Health and nutrition" [2] and "Agronomy and food processing".

Methodology

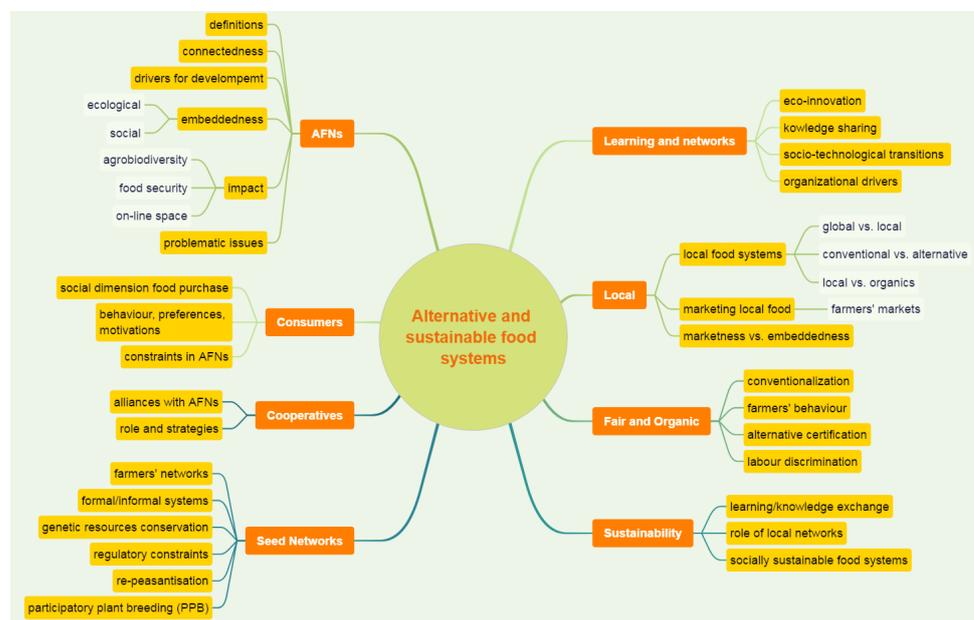
The multi-actor approach involved more than 50 figures, including European professionals, researchers and experts, during all the phases of the review process: from the initial identification of documents of interest, to the selection procedure – which involved screening for admissibility, methodology and relevance – to the final review of the contents of the accepted documents (those, that is, that were approved upon having passed all the control stages). Ninety-eight documents were selected in the thematic area "Alternative and sustainable food systems", 48 in "Health and nutrition" and 104 in "Agronomy and food processing".

All the selected studies were inventoried, and for each one a summary chart was made to the end of briefly indicating the general content and of organizing each study according to its main topics and keywords. The charts subsequently represented the material from which content analysis, subdivided by topic, was carried out for each of the selected documents.

Content analysis

With regard to the thematic area "Alternative and sustainable food systems", content analysis revealed eight principal topics. Within each of these eight topics, subtopics were identified based on recurrence and on the reciprocity of the subjects examined in the various articles. As an example, Figure 1 shows the concept map with the topics and relative subtopics that emerged from content analysis.

Figure 1. Concept map of the topics and subtopics of the area “Alternative and sustainable food systems” that emerged from content analysis.



In the area “Health and nutrition,” the following four recurring topics were identified: glycemic profile; lipid profile; oxidative stress and inflammatory properties; and disorders related to gluten intake. Finally, content analysis of the articles from the thematic area “Agronomy and food processing” produced five main topics: breeding, crop management, diversity, food products, and processing.

Results

Literature reviews that result from multi-actor approaches can be considered a starting point for integrating the results of scientific research with good practices, to the end of promoting sustainable methods in cereal production systems. The participatory approach is the main innovation in this type of literature review. On the one hand, the participatory method constitutes a strength in that the selected literature deals with questions which are relevant for the partners; on the other hand, coverage of themes and articles is not general but rather reflects the specific interests, value systems and viewpoints of those participating in the consortium, and in particular of the three farmer networks. Although such a strategy means that coverage of themes will be partial, the systematic approach used here guarantees the transparency and integrity of the entire review process.

References

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