



PACON

EXPLORATORY
PROJECT
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Knowledge sharing through digital technology for the (re)design of organic farms

Coordination

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Digital technology could play an important role in the organic agriculture scale change by promoting sharing and the mobilization of knowledge to (re)design organic systems within a diversity of contexts.

Keywords

Knowledge
Semantic Web
Design
Users
Open access

Focused on the production of organic vegetables, two case studies (GECO and MESCLUN) and existing communities were the subject of workshops and interviews designed to address three issues concerning the development of digital tools:

- What are the types and structures of knowledge, interfaces and functionalities necessary to support the (re)design of organic farms via digital technology at different scales (plot, cropping system, farm)?
- How can we ensure the interoperability of knowledge and tools for different uses, at different scales (plot, crop system, farm)?
- What are the obstacles and levers involved in the creation of a community of stakeholders dedicated to the use of digital tools in open access to further organic agriculture?



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Crop planning tool co-design workshop organized by the MESCLUN collective, including market gardeners, designers, researchers and computer scientists.

In response to these three issues, the project made it possible to:

- Formalize the needs and uses of market gardeners for the development of crop planning tools. For example, the tools need to be flexible enough to respond to a variety of contexts, as well as to different approaches to planning and to different stages of the user's thought process.
- Integrate service plants in vegetable production into a shared, interoperable and evolving thesaurus (enriched by the farmers themselves).
- Demonstrate the decisive role played by the team coordinating the collectives involved in capitalizing on agroecological knowledge and the essential stages of the process (identification, collection, formalization, dissemination), which require know-how and which initially rely on non-dematerializable human interactions.

The initiatives, often local, raise the question of deployment at the national level so as to capitalize on farmers' knowledge and to increase its dissemination.

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