Workshop Invitation

"Advancing the Transformation to Agroecology through Emerging Technologies:

Addressing Research Gaps and contribution of digital technologies"

Date: 14 November 2024
Time: 10:00 AM - 12:00 PM
Location: ATB, Potsdam Bornim

Workshop Focus:

The role of **innovative digital technologies** in facilitating the transition to **agroecological agriculture**.

Objectives:

- Identify **research needs** and **gaps** in the field of sustainable agroecological practices.
- Discuss the potential of **digital technologies** in supporting this transition.
- Collaborate on developing policy recommendations at **national** and **European** levels.

This workshop is a unique opportunity to exchange ideas, shape future research directions, and contribute to sustainable agricultural policy development.

Register here!

Best regards,
The D4AgEcol Team

Funded by the European Union

Background

This workshop, as part of the EU-funded D4AgEcol project, will focus on innovative digital technologies designed to facilitate the transition to agroecological agriculture.

D4AgEcol is a Horizon Europe Coordination and Support Action to harness the potential of digital tools and technologies to enable Agroecology. The consortium, consisting of 12 partners from 8 European countries, is exploring the barriers and opportunities associated with various digital tools and technologies, aiming to develop a roadmap for digitalisation as a key enabler of agroecology.

Agriculture in Europe is in transition towards a greener agriculture, where agroecology, can make a great contribution. To what extend can the current trend on digitalisation help to foster that process (e.g. reduce use of chemical substances, reduce emissions from agricultural systems, enabling biodiversity in agricultural landscapes or improving animal welfare)? According to Gliessmann the transition of the agri-food sector to agroecology can be described in five levels (see Figure 1). During the Digital Tool Scoping Workshops we already assessed the possible contributions of available technologies (TRL9) like the YARA N-Sensor, the Bolus Sensor of smaXtec. Now we want to explore how upcoming and emerging technologies can contribute and identify research needs on how to unlock their potential and get them "to the next level".

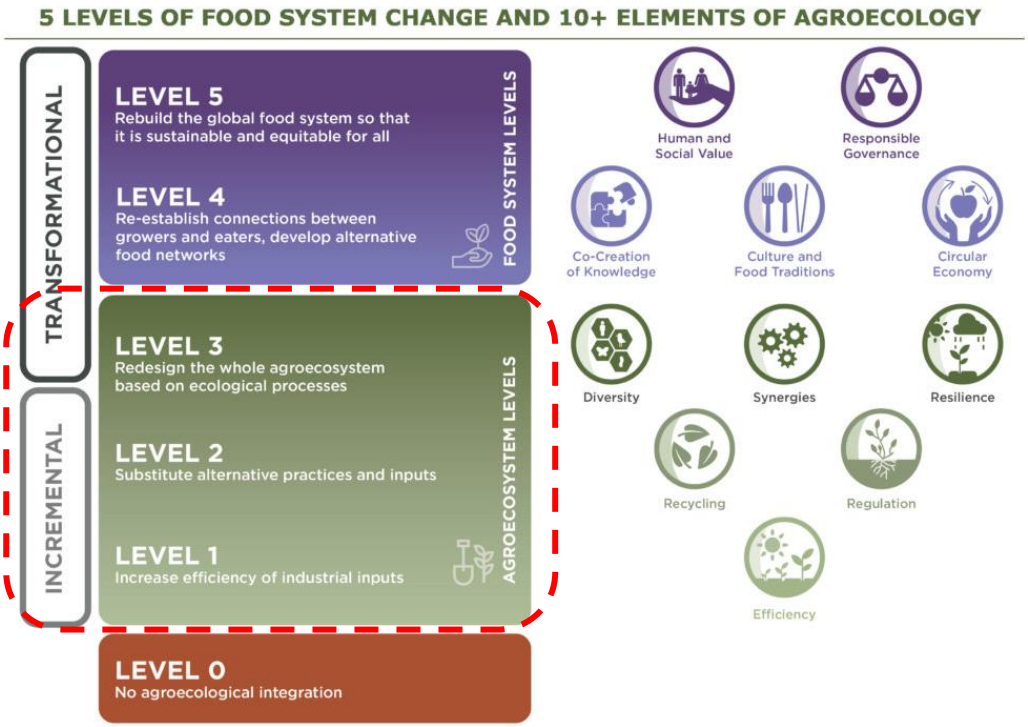

Figure 1: 5 Levels of Food System Change by Gliessmann, Source: https://www.agroecology-pool.org/methodology/

Workshop Overview

This two-part workshop (2 hours) will take place at ATB in Potsdam Bornim. The first part features presentations from various projects showcasing emerging digital solutions that can support the transformation towards agroecological farming. This is a unique opportunity to gain insights into current research directions and identify the most promising trends from a research perspective.

The second part of the workshop will feature a discussion in a world café format with the aim to identify research needs and key aspects to a roadmap for advancing research and innovation in this sector.

Discussion of Research Needs and a Roadmap for Research and Development

After the presentations, we aim to engage in a lively discussion on the question 'What is still missing from a scientific perspective?' with key topics, including:

- What contributions can current emerging technologies make to agroecological agriculture?
- What research questions remain to harness these technologies for AE?
- What additional research is needed to close knowledge gaps and fully transform today's agricultural systems?
- What is the potential role of AI in supporting this transition?

The insights gained from our discussions will play a crucial role in creating a scientific basis for policy roadmaps on both national and European scale that aim to transform European agriculture into an agroecological system. We look forward to your participation and an exciting exchange of ideas!

Agenda

Where: ATB Potsdam Bornim, Circle, Z003
When: 14. November 2024; 10am-12pm

Thursday 14. November 2024		
	Start of Emerging Technologies Workshop	
10:00	Welcome & Introduction	Andreas Meyer-Aurich; All
10:20	**Part I** Technology Pitches (3' each) ▪ Proximal soil sensing for site specific soil management ▪ Animal Sensors ▪ WeedAISeek ▪ patchCROP	 Sebastian Vogel Gundula Hoffmann Michael Schirrmann Kathrin Grahmann (ZALF)
10:45	Introduction group work and set up	Andreas Meyer-Aurich
11:00	**Part II** World Café	 All
11:45	Collection of results	All
12:00	End of Meeting	

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