

How bioeconomy is transforming agriculture



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istock/owngarden

Reported by:



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CABR

Workshop Theme Leaders



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Ulrich Schurr
Forschungszentrum
Jülich
[PhenoRob](#)



Angela Sessitsch
Austrian Institute
of Technology (AIT)
[Microbiome Support](#)



Monika Schreiner & Philip Albers
Leibniz Institute of Vegetable and
Ornamental Crops (IGZ)
[Agricultural Systems of the Future](#)



Justus Wesseler
University of Wageningen
[BioMonitor](#)

25 speakers in 8 parallel sessions on November 18

Guiding questions



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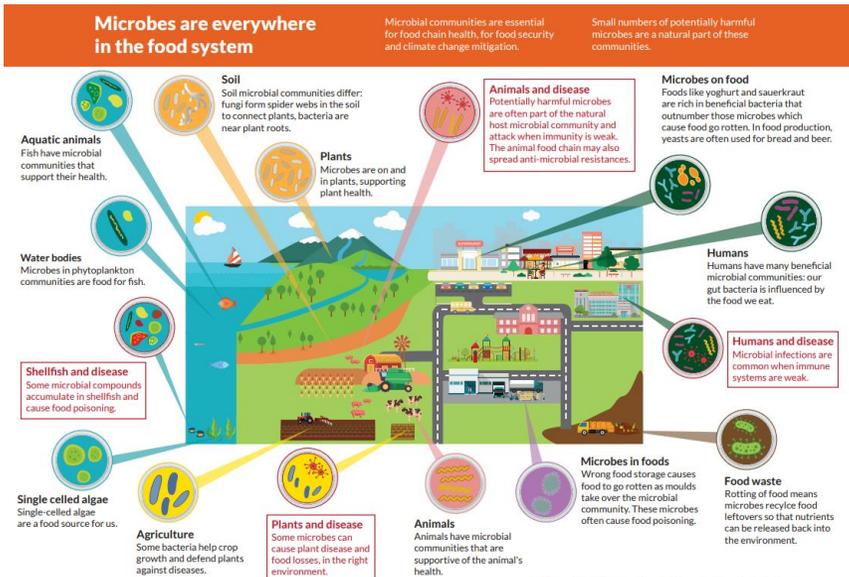
- *What is the potential of **digital technologies** to revolutionize agricultural production and value chains?*
- *How does the **biological revolution** transform agriculture?*
 - *What is the role of **microbiome-based innovations** and **gene technologies**?*
- *What are the main **barriers and incentives** for the transformation of agricultural systems?*
- *What are **success stories** in the implementation of **bioeconomy strategies**?*
- *What are the most important **policy and regulatory issues** regarding the acceleration of the bioeconomy?*

Impressions

Exciting insights from major transdisciplinary bioeconomy research projects



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Lively discussions in breakout groups

Fascinating success stories
Example: Hemp Farm

The project MicrobiomeSupport (www.microbiomesupport.eu) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 818116.

Outcome



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Key messages:

- **Sensor-based digital technologies and data analysis** lead to a new understanding of crops and environment and may thus revolutionize agriculture and value chains, both in high- and low-tech systems.
- **Microbiome** research needs a holistic approach: plants, animals, humans and their biomes are all connected. Artificial Intelligence, robotics and sensor technologies will push microbiome R&D forward.
- We need to respect **citizens** as being more than just consumers and advocate for co-creation, e.g. through living labs and citizen science.
- **Private sector** initiatives can have large positive regional impact.
- **Science-based regulation** of new technologies is required.
- Large & growing **research funding gaps** between the Global South and wealthy countries + China, India, Brazil need to be addressed.

Follow-up:

[ICABR Conference](#) in 2021

Policy brief of the workshop

Forming networks for digital innovation, involving the Global South

Workshop outputs will be used by the EU project

[MicrobiomeSupport](#)

Consensus papers sustainable „[Agricultural Systems of the Future](#)“