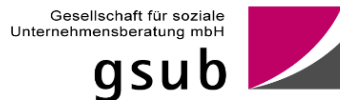


PROJECT PARTNERS

CUBES Circle is supported by an interdisciplinary consortium of researchers and partners with expertise in industry, production, consulting and commerce.



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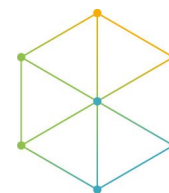


www.cubescircle.de



Instagram

GEFÖRDERT VOM



CUBES Circle

Future Food Production

AGRICULTURAL SYSTEMS OF THE FUTURE

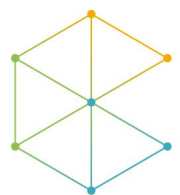
Sustainable, resource-efficient and adaptable
production of food



See for further information:
www.cubescircle.de

AGRARSYSTEME DER ZUKUNFT

Version: April 2022



CUBES Circle

Future Food Production

Besides population growth and climate change, urban growth is one of the largest **CHALLENGES OF THE 21ST CENTURY**. The ever increasing scarcity of cultivation areas can neither be compensated by current innovations in animal breeding and plant cultivation nor by measures for increasing productivity.

Our **VISION OF AGRICULTURAL SYSTEMS OF THE FUTURE** is based on the idea that food will be produced in connected, mutually communicating and standardized production units, the so-called CUBES. Those CUBES are the basis for a system with largely **CLOSED ENERGY- AND NUTRIENT FLUXES**.



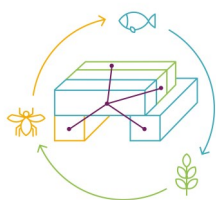
OBJECTIVE AND INNOVATION of the project is the smart connection of intensive agricultural production systems using the organisms fish, plants and insects (CUBES).

RESOURCE- AND ENERGY EFFICIENCY while optimizing the productivity of healthy food is reached by:

- usage of the newest production technologies
- the application of a commercial off-the-shelf strategy
- the coupling of the system with its environment
- following a zero-waste approach

The scientific work is carried out in **9 SUBPROJECTS**:

Subproject (SP) 1



Investigation of the project from a holistic perspective while considering the individual innovations as well as their interplay within the CUBES Circle

SP 2, 3, und 4



Modular production entities for the production of plants, insects and fish

SP 5



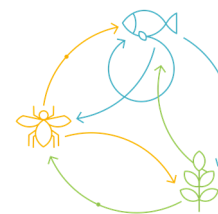
Methods for regulating the CUBES Circle

SP 6



Connection of the single entities in regard to material and energy to a common production system

SP 7



Evaluation of the efficiency of nutrient fluxes between the different trophic levels

SP 8



Diffusion of the CUBES innovations through application- and location-specific innovation systems as well as interactive design aspects

SP 9



Organisation of the consortium that represents CUBES Circle