

Implementation of the "City of the Future" initiative

PRODUCTIVE. SUSTAINABLE. VIVID.

Green Fingers for Urban Climate Resilience

»Implementing long-term measures to enhance climate resilience requires sociocultural change that, in turn, can only be achieved by social innovations, courageous experiments, and co-creative participatory formats.«

1. Background

The "Green Fingers" of Osnabrück consist of ten landscape corridors that reach from the outskirts into the city center. This system of green and open spaces (1) fulfils multiple ecological functions, such as fresh air supply, water retention, and carbon storage, (2) provides income through urban agricultural production, and (3) has a high recreational value for the town's population.

Despite these functions and uses and their pivotal role for urban climate resilience, the Green Fingers are not (yet) recognized as a connected system that needs to be preserved as a whole. Due to lack of awareness, the growing demand for housing and limited possibilities to implement inner-development, the Green Fingers are currently not sufficiently protected.

2. Goals

The research project "Productive. Sustainable. Vivid. Green Fingers for Urban Climate Resilience" (orig. "Produktiv. Nachhaltig. Lebendig. Grüne Finger für eine klimaresiliente Stadt") seeks to preserve the Green Fingers as a system of multifunctional open spaces that is relevant to the city structure and identity.

- **Productive:** The project engages agricultural actors to jointly develop and test innovative agricultural cropping system as well as novel marketing and sales channels for local produce – both to sustain multifunctionality of the Green Fingers and to offer good prospects for urban agriculture;
- **Sustainable:** The project aims at enhancing the town's resilience towards climate change

("climate resilience"), e.g. through the participatory development of scenarios and guiding principles and the facilitation of joint activities and initial projects on the ground;

- **Vivid:** The project offers a wide range of participatory formats, incl. spatial experiences, for actors from the spheres of politics, city administration and civil society. The idea is to raise awareness about the relevance of the Green Fingers and to strengthen their ownership for the continuing transformation of these spaces.

The early engagement of various local actors aims to ensure the perpetuation of this participatory process beyond the duration of the project. The results will be processed and published for different audiences in Osnabrück and other towns with similar challenges.

3. Struktur & Vorgehen

Nine interlinked Working Packages (WPs) collaborate to reach these project goals:

- WP 1: Coordination & Communication
- WP 2: Analysis of functions and utilization of open spaces
- WP 3: Integration of urban planning and the town's development plans
- WP 4: Development and testing of agricultural cropping systems
- WP 5: Initiation of rooftop cropping systems
- WP 6: Participation of stakeholders and the general public through various formats
- WP 7: Development and discussion of scenarios
- WP 8+9: Development and implementation of measures within the purview of the city administration



Fig. 1: Impressions from the "Green Fingers".

In order to preserve this system of green and open spaces, it is necessary to highlight the potentials of urban agriculture and to strengthen their position in politics and planning. Prospects for urban agriculture will only be considered in urban planning concepts if the agricultural economy manages to establish and tighten its relationship with civil society, e.g. through direct marketing of local produce, events and spatial experiences. Photos 1, 2, 4: H. von Dressler Photo 3: D. Münderlein

Further Information

The Osnabrück University of Applied Sciences and the City of Osnabrück have been working separately on the "Green Fingers" for many years. The research project "Productive. Sustainable. Vivid. Green Fingers for Urban Climate Resilience" provides the project partners now with the opportunity to jointly address the long-term question of how to preserve this system of green and open spaces. The research is sponsored by the Federal Ministry of Education and Research.

Team at the Osnabrück University of Applied Sciences:

Prof. Hubertus von Dressler, Dr. Sina Zacharias, Prof. Dr. Kathrin Kiehl, Prof. Dirk Manzke, Prof. Dr. Friedrich Rück, Prof. Dr. Henrik Schultz, Prof. Dr. Dieter Trautz, Prof. Dr. Andreas Ulbrich, Daniel Janko

Team at the City of Osnabrück:

Christiane Balks-Lehmann, Wiebke Holste

www.gruene-finger.de

Fig. 2: Research Approach.

The collaboration between the University and the City Administration is critical to the successful completion of this project. For accomplishing the project goals, however, it is equally important to cooperate with actors from the agricultural economy, civil society as well as politics. Graph: D. Janko

