



ROOF  
WATER  
FARM



## ABOUT

ROOF WATER - FARM demonstrates paths towards innovative city water management and urban food production. Potentials and risks of redesigning across sectors of infrastructure redesign will be explored and communicated. The research association investigates opportunities for building-integrated water treatment systems to irrigate and fertilize roof-top greenhouses.

The transferability of the ROOF WATER - FARM concepts into the urban realm will be examined based on preliminary findings. Structural variants of greenhouse plant and fish production in greenhouses will be projected for the scale of a building unit, and upscaled for urban spaces at large.

Over the course of the project, researchers will develop process-related communication and training tools for building-integrated water treatments and urban food production.

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GEFÖRDERT VOM



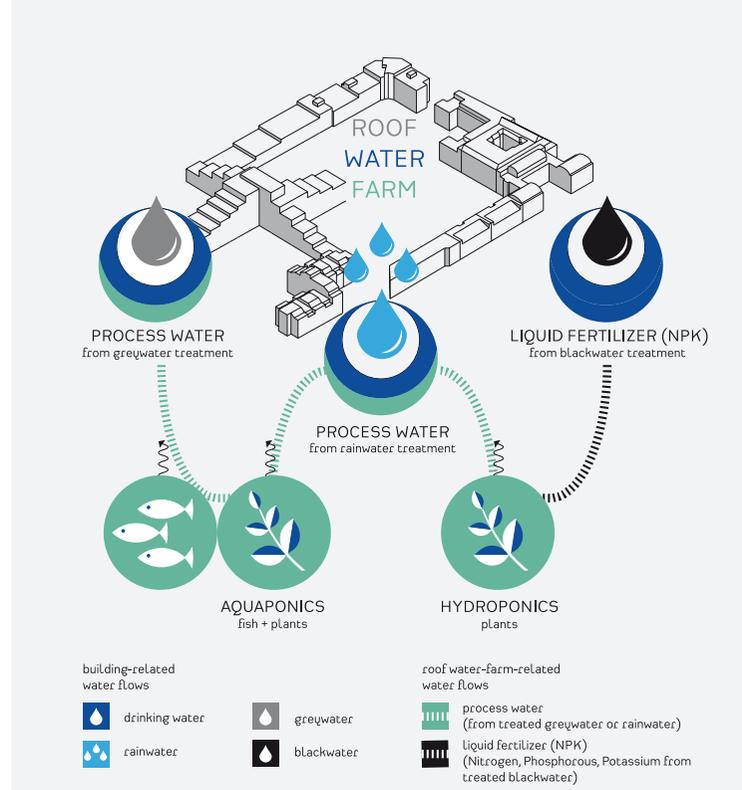
## RESEARCH

ROOF WATER - FARM investigates technologies at a demonstration and test site at Block 6 in Berlin-Kreuzberg, an IBA social housing project from 1987 with an innovative water concept, by:

- > developing cultivation technologies of water-based plant and fish production (hydroponics, aquaponics) combined with decentralised water treatment technologies for rainwater, greywater and blackwater,
- > testing hygienic safety of cultivation including significant micro-pollutants,
- > assessing product quality according to relevant national and European requirements and
- > extracting and testing liquid fertilizer.

ROOF WATER - FARM explores ways to disseminate these technologies in the urban realm by:

- > developing and communicating the technical concepts of ROOF WATER - FARM as typological building design studies,
- > performing cost-benefit analyses and life-cycle assessments,
- > identifying the socio-cultural impacts and effects of urban water management and design on selected residential districts in Berlin,
- > analysing potentials and risks of integrating



and diffusing the urban water management concept across sectors,

- > analysing drivers and constraints in the innovation arena, and developing strategic approaches for the diffusion of ROOF WATER - FARM concepts,
- > determining recommendations of action for different actors and
- > developing communication and training media about decentralized water treatment and urban food production.

## PARTNERS

**FACHGEBIET STÄDTEBAU UND SIEDLUNGSWESEN**  
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## CONTACT

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