



# EcoRegen

**UrbanLab** for Green Cities  
Suceava, 25-27 October, 2024

*Nr. 3*

# About the team

**Carmen – Francesca  
BERARU**

**Steliana – Georgiana  
APOSTOL**



# The problem - Definition and causes of drought

## Short description about the problem:

- ❑ **Decrease in agricultural production**
- ❑ **Increasing production costs**
- ❑ **Rural population migration**
- ❑ **Competition for water resources**
- ❑ **Impact on public health**



# The problem visualised & data points

**Water deficit caused by drought**



**Decline in agricultural production**



**Migration and urbanization.**



**Increase in production costs**

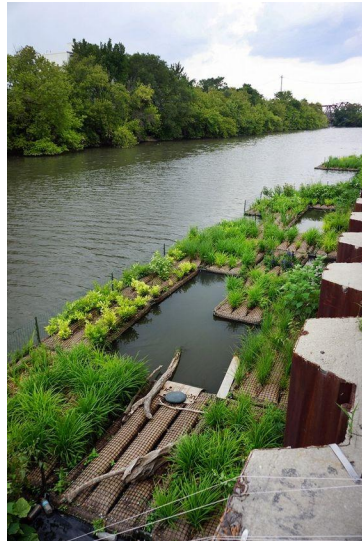


# Existing solutions

Rainwater  
harvesting and  
storage  
systems



River gardens



Underground  
cistern



Creative  
containers



## Our solution – PLUVIO+

The project aims to develop an innovative system for efficient water capture and use in agriculture by collecting moisture from the air and alternative natural sources, ensuring farmers have constant access to a sustainable water source and promoting long-term sustainability in agriculture, even under low rainfall or drought conditions.

*The project contributes to ecosystem protection by reducing dependence on traditional water resources and minimizing the carbon footprint through sustainable methods of water capture and use.*





# Our solution - visual representation



# Our solution - the competitive advantage

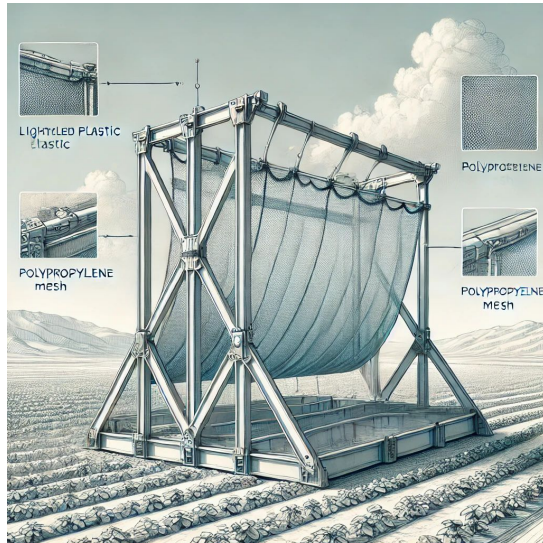
	<i>Our solution</i>	Rainwater harvesting and storage systems	River gardens	Underground cistern	Creative containers
Efficiency in water collection and usage	✓	✗	✓	✓	✗
Short- and long-term costs	✓	✓	✗	✓	✗
Sustainability and environmental impact	✓	✗	✓	✗	✗
Automation and smart technologies	✓	✗	✗	✗	✗
Adaptability to variable climate conditions	✓	✗	✓	✗	✓
Maintenance costs and durability	✓	✗	✗	✓	✓



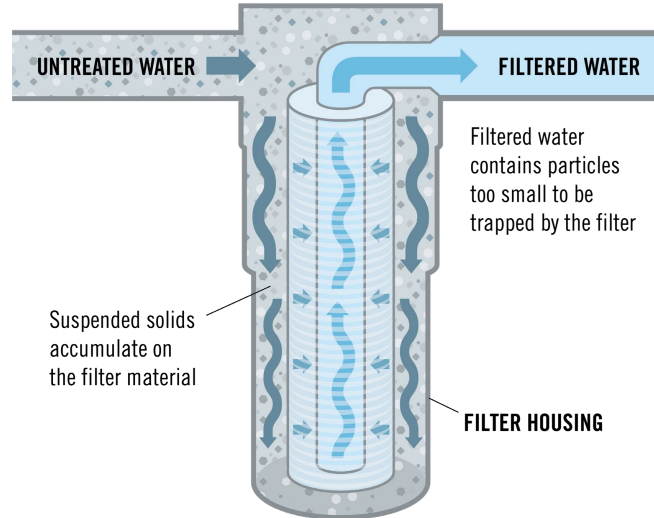


# Scalability & replicability potential

Capture structure



Modular filtration system



Mobile app development



# Implementation plan

## Months 1 – 3

Building together: team, collaborations, and market knowledge!

## Months 3 – 12

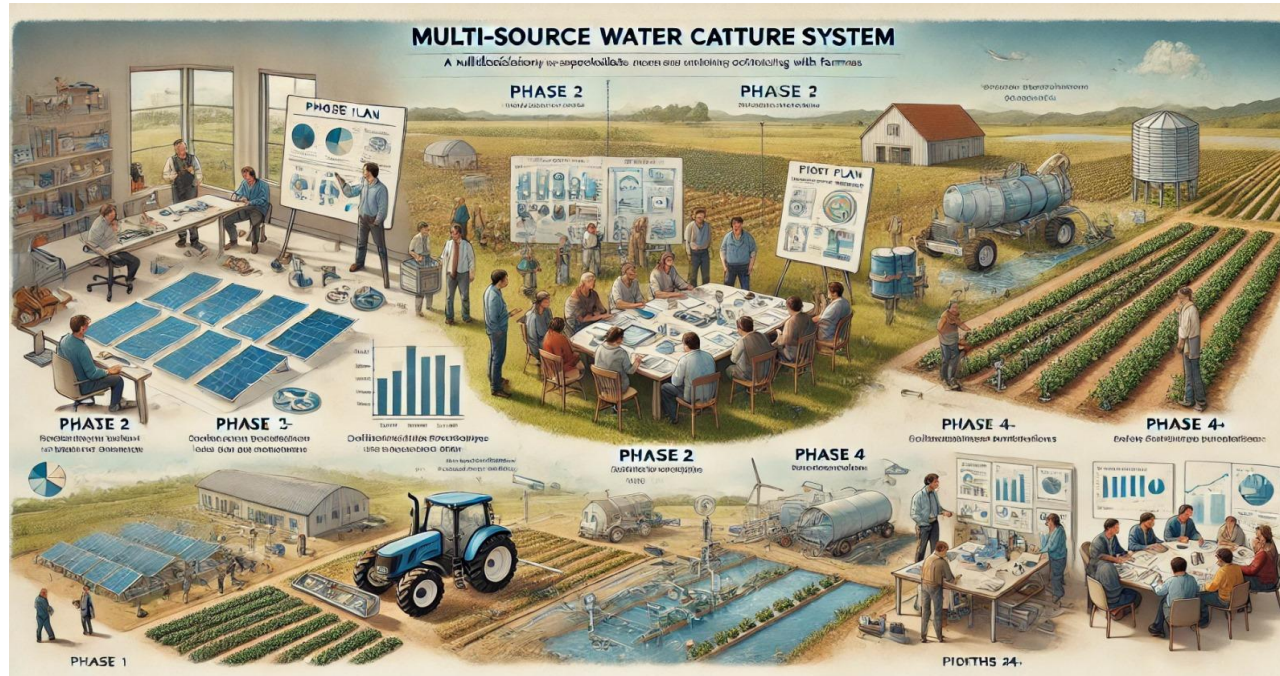
Innovate and Implement: Prototype, Test, and Expand!

## Months 12 – 24

Evaluate and Optimize: Impact Assessment, Product Enhancement, and Growth!

## Months 24 +

Sustain and Innovate: Long-term Support, Continuous Improvement, and National Expansion!



# Necessary investments

<b>Investment</b>	<b>Price</b>	<b>Nr. items</b>	<b>Total</b>
hydrophobic nets, frames, tanks	100 Euro	10	1000
hydrophobic nylon, recycled metal frames, recycled plastic tanks	200 Euro	10	2000
Mobile Application Development	-	-	10000
Marketing and Distribution	-	-	5000
<b>Total investments</b>			<b>18.000 Euro</b>





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Thank you!

