



1TREETRILLION  
.org

Tali Orad, CEO  
Planting with People for People



**NATURE AND PEOPLE COMPETE FOR  
RESOURCES AS OUR PLANET WARMES UP**

**TREES NEED TO SURVIVE  
PEOPLE NEED TO EAT**

# OUR MISSION STATEMENT

Revolutionizing reforestation in arid, salt-affected areas, leveraging a partnership between 1treellion and Planet

Innovative freshwater production from salt water and irrigation system

Local reforestation and water security for people and the environment. Agroforestry and reforestation efforts



Community-centered economic benefits through carbon credits and agroforestry



# EXPECTED OUTCOME



## PEOPLE

- Job creation
- Education & engagement
- Food security



## TREES

- 54,000 trees planted
- Ecological positive impact
- Carbon capture & soil regeneration
- Ecosystem restoration

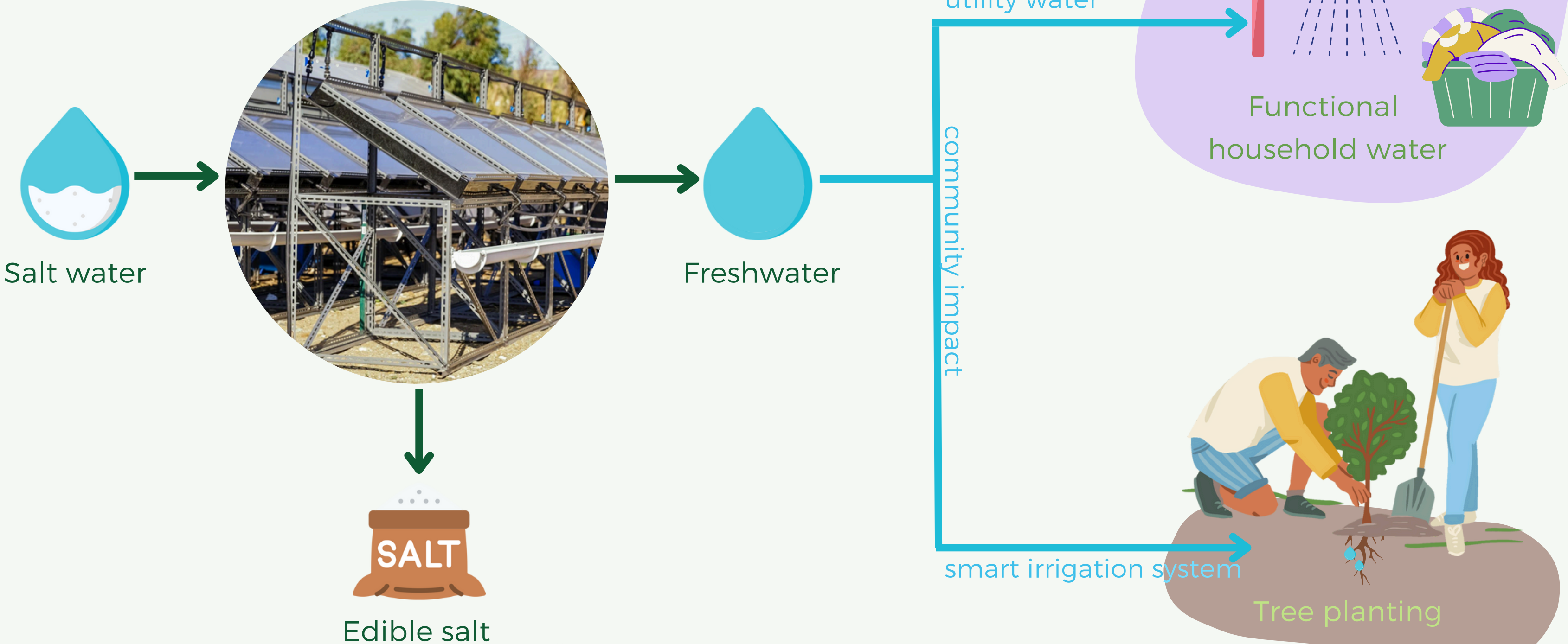


## WATER

- Desalination technology
- Smart irrigation
- Optimization of water usage within the tree planting



# HOW IT WORKS



# IMPACT

For the **environment**:

- Carbon Sequestration
- Micro-Climate Regulation
- Biodiversity Enhancement
- Water Conservation
- Soil regeneration



And for **people**:

- Technological Innovations
- Sustainable Agriculture
- Carbon Credits
- Community Engagement
- Education
- Scalability
- Resilience

# RISKS & MITIGATION

Risk Area	Risk Description	Mitigating actions
Community engagement	<ul style="list-style-type: none"> <li>Lack of community engagement</li> </ul>	<ul style="list-style-type: none"> <li>Preventative screening process: Matching expectations, interviews, check of track record.</li> <li>Monitoring: Progress reports, carbon credit reporting, establishing dependency.</li> </ul>
Technology installation and logistics	<ul style="list-style-type: none"> <li>Data quality and availability for tailored design.</li> <li>Delays in ordering and arrival of components.</li> <li>Technology platform running and maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>Use of secondary data, estimation through hypothesis, possible manual data acquisition.</li> <li>Action plan, alternative providers within the area/region.</li> <li>Training session of min. 2 people, remote assistance.</li> </ul>

# HOW WE MEASURE SUCCESS

- **Tree** growth and survival rate
- Biodiversity increases through native species planting
- Carbon capture through carbon credits emission
- **Community** engagement
- Community resiliency to climate change
- **Water** resource management: quality and infiltration from reforestation
- Water production indicators: freshwater production, soil improvement, and system autonomy



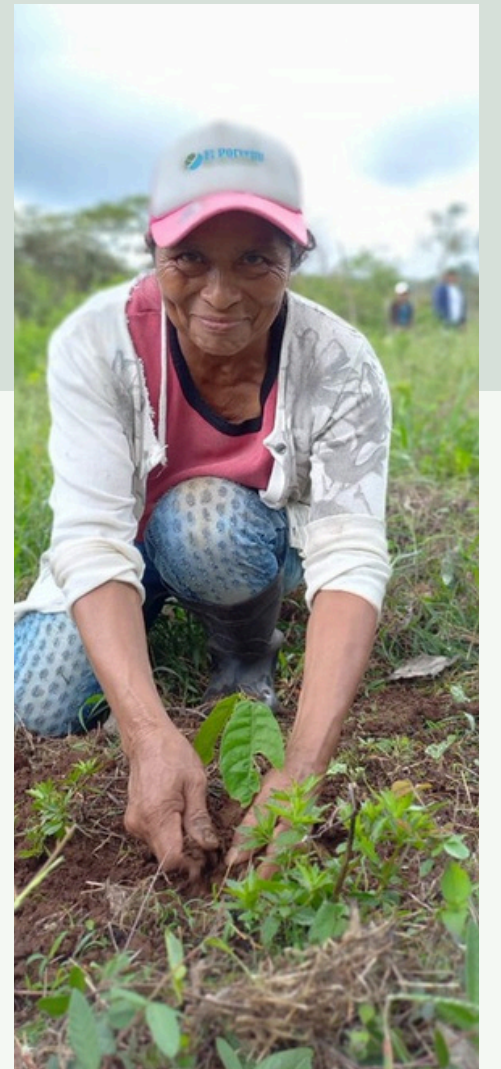
# PILOT PROJECT

500 Trees / 2021

- Species: Brasil Blanco (*Caesalpinia velutina*), Madero Negro (*Gliricidia sepium*), Genízaro (*Albizia saman*), Guapinol (*Hymenaea courbaril*), Cedro Real (*Cedrela odorata* L.), Sparrowhawk (*Albizia guachapale*), and Mahogany (*Swietenia humilis* zucc.)
- Carbon sink - \*11 metric tons per year
- Canopy cover increased by 16%

## People

- 35 people directly / 130 indirectly
- Ongoing maintenance - 3 men, 2 women



\* This calculation assumes an average carbon sequestration rate of 22 kg per tree per year for tropical trees



# GREECE



**Goal** - produce water for the irrigation of a local tropical fruit greenhouse and support agricultural activity during the highly touristic season.

- Operational since 2020
- **Water:** 75.000 L/year
- **People:** 3 trained locals
- Treated brine: 15.000 L/year (avoided discharge)
- Food-grade salt: 700 kg/year
- Organic tropical fruits: 500 kg/year



# EXAMPLE PROJECTS



NICARAGUA



GREECE



TANZANIA



KENYA

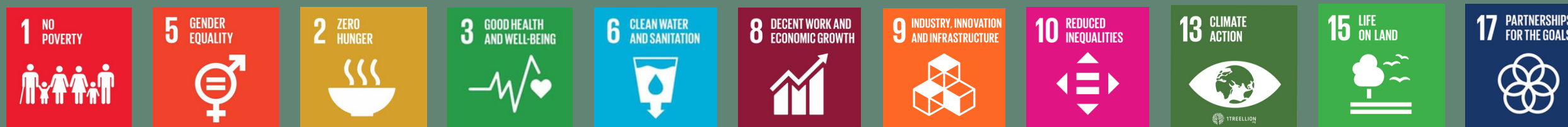
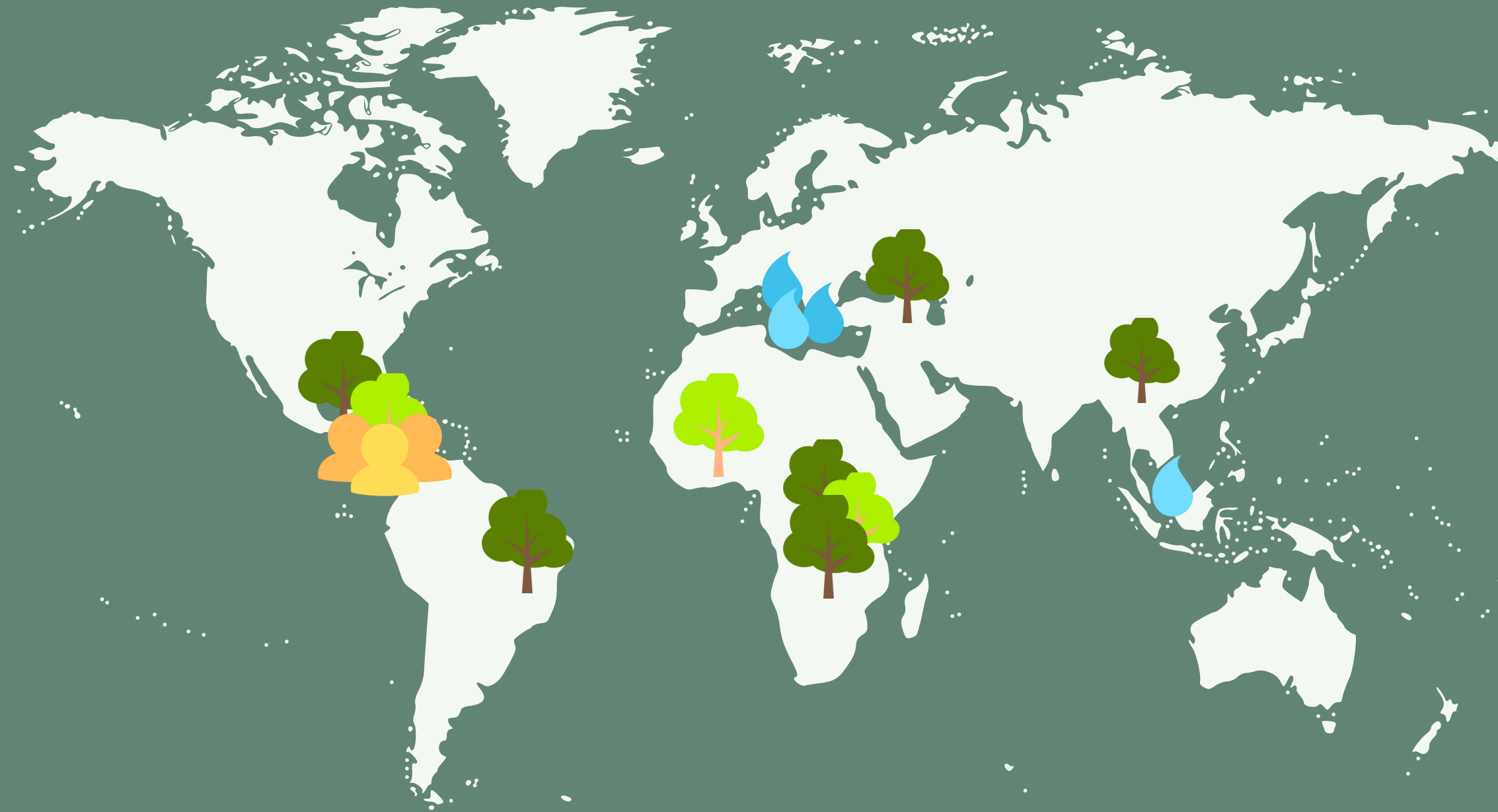


TUSCANY



# TRACK RECORD

-  Planet demosite
-  1treellion community
-  Joint project location



# PARTNERSHIP



Tali Orad  
1treellion's CEO



Alessandro Villa  
Planet's CEO



Giulia Berni  
Agricultural biotechnology



Leonardo Ferreira  
Climate Change Policies



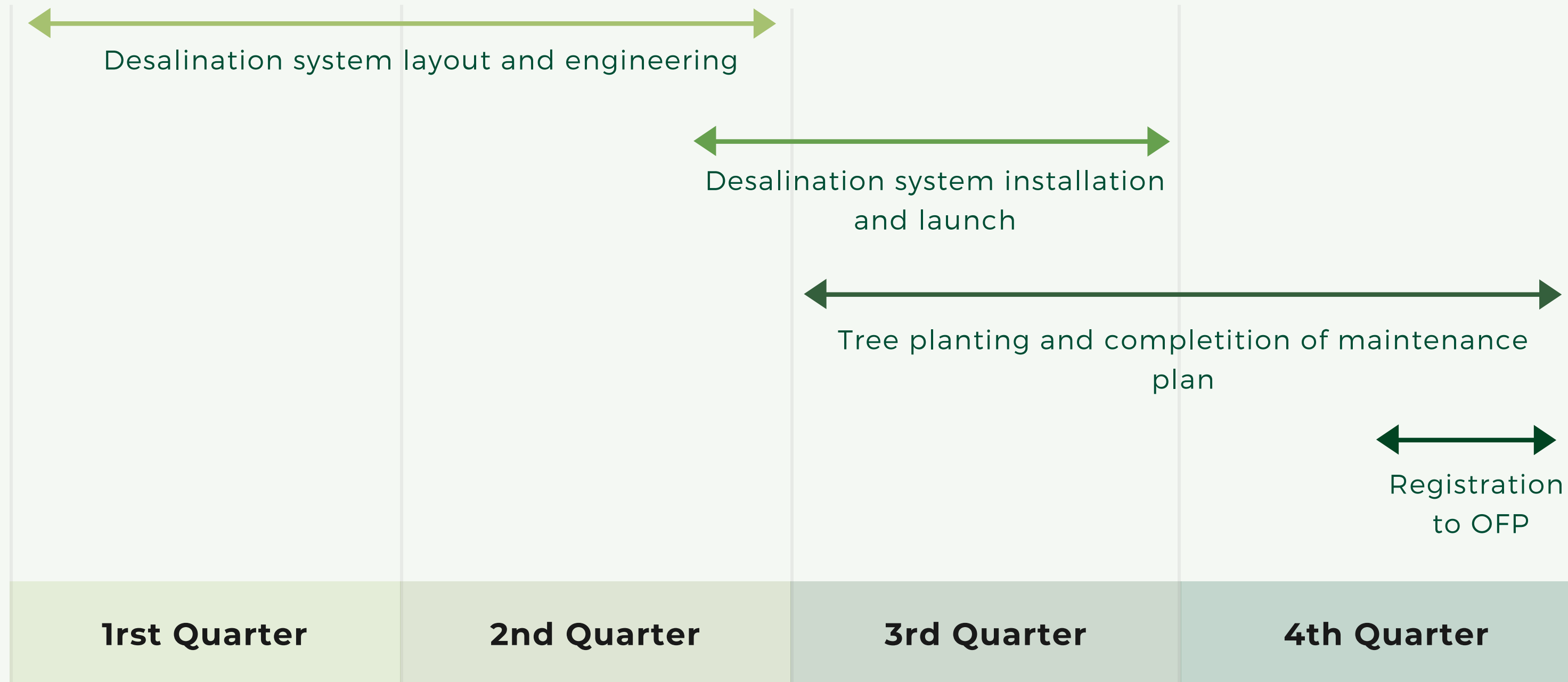
Camila Charpentier  
Chemical engineering



Alessandro Zecca  
Project management



# TIMELINE



# BUDGET - 54,000 TREES

Activity	Responsible	Estimated budget (USD)
Desalination system (MTP) materials, construction and logistics	Planet	40,000
Travel expenses and personel costs	Planet & 1treellion	70,000
Tree planting (including nursery, equipment and saplings)	1treellion	160,000
Taxes and administration	1treellion	30,000
<b>Total</b>		<b>300,000</b>

# Thank you

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[WWW.1TREELLION.ORG](http://WWW.1TREELLION.ORG)  
[WWW.NOGREENWITHOUTBLUE.IT](http://WWW.NOGREENWITHOUTBLUE.IT)





# APPENDIX



# THE PROCESS

## VETTING ALL COMMUNITIES LEADS TO

- 80% tree survival rate across all projects
- 421% higher survival vs large-scale projects
- Lower average cost per survived tree as a result
- 60,000 people directly impacted
- 220,000+ indirectly impacted
- 12 communities
- 1 ecological restoration project
- 11 countries

**Project Name:** 1TREETION  
**Project coordinator:** Ms Msambwe Madiwa Hozza  
**Reporting period:** Every after 3 Months  
**Location of planting:** Mlongwema High School  
**GPS coordinates of planting:** -4.6258, 38.42494  
**Project description:**  
**Project Purpose:**  
The purpose of the project is to make contribution in sustainable conservation and management of the Mlola zone Forests reserve and water sources.  
**Goals:**  
The goal of the project is to enhance tree planting in villages adjacent to Forest reserves and conserve water sources so as to reduce pressure on the degradation of the natural resources whilst assured adequate Trees availability to communities adjacent to Usambara Mountains especially on Forest Nature reserve so as to encourage self-esteemed Tree planting habit among the communities while generating income for the schools hence improving living standards to the community.  
The project aim is to: Grow, plant and guard large-scale reforestation projects, To prevent deforestation by alleviating extreme poverty through employment. Restore the environment through reforestation efforts, improving agriculture and carbon sequestration. Restore vital animal habitat, our Project has a goal to address the following under these topics whereby;

**1TREETION**  
The project is an effective instrument to combat deforestation, global warming and freshwater water shortages in Lushoto district. It also seeks to re-establish the link between Magamba natural resources management and nature as well as remove the people out of the old day practices that lead to loss of biodiversity. This project given consideration will go a long way to stimulate tree planting, reforestation and encourage community actions against the phenomenon of climate change and then more importantly, restore hope in a population that for the past 20 years has witnessed a drastic decline in population and cultivation of the Magamba nature reserve.

The project involved 100 people where 8 of them were women whose main activities were taking care of trees on F&I trees nursery and loading trees to the truck. The remaining 92 people were youth where 62 were girls and 29 were boys whose task for these youths was unloading trees from the truck, digging holes, planting trees and finally taking care of the planted trees.

**MORE OUTCOMES INCLUDING BUT NOT LIMITED TO:**

**ENVIRONMENT:** Increase global tree cover, promote deforestation and appropriate tree cultivation; this will be achieved through the planting exercise whereby at this pilot phase 2,500 tree seedlings planted. Trees planted in reforestation projects help to replace the lost forests. Trees planted in Agroforestry sequester atmospheric CO<sub>2</sub>, while offering subsistence farmers nutritional and income generation benefits especially to the women around the mountains. Trees planted protect the Nature Reserve from poachers, maintaining biodiversity.

**EDUCATION:** foster an understanding of the amenity, ecological and economic value of trees. Classroom and practical sessions on tree nursery preparation and management. Students and women at the villages plant trees in the area to maintain biodiversity. Trees are sold to maintain sustainable school tree nurseries. Agroforestry tree products help subsistence women farmers improve nutrition and income

**LIVELIHOODS:** Enable communities to develop (restore) sustainable and productive landscapes by tree cultivation, through free distribution of tree species suitable for agroforestry especially Tree species natives to the Mountains.

**CAPACITY BUILDING:** Build capacity of women in the community organizations to advocate for and implement community-based forestry and agroforestry. Participants in school environmental clubs will be empowered with basic skills on tree nurseries establishment and management. Trees are marketable today so students can possibly start their own commercial tree nursery small business ventures when they are done with school, resulting in both greater agroforestry development and economic improvement. Project will help the Society reach toward its goal of planting 15 million trees which is Organization annual target starting in 2021

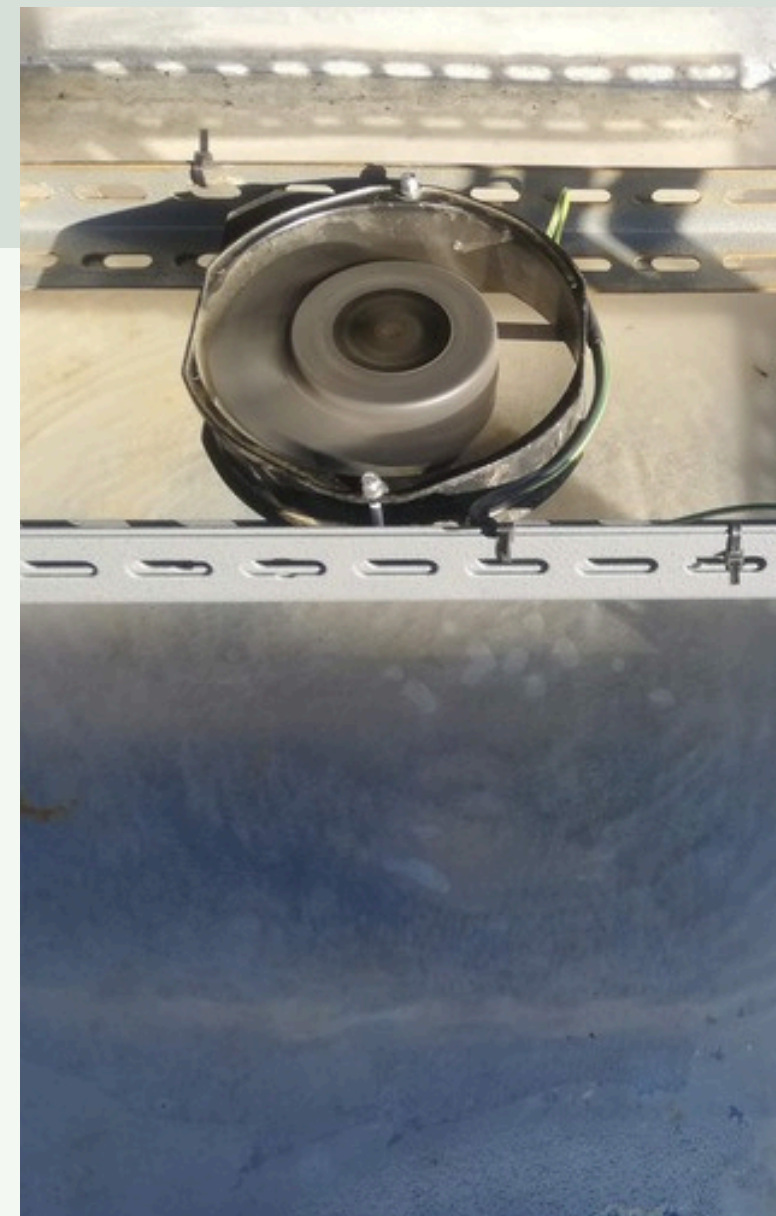
**1TREETION**  
The project also has an ablishment of Green school program. \*Green chools which aims to support teachers and local and global importance of trees and forests



# TECHNOLOGY PLATFORM: MTP



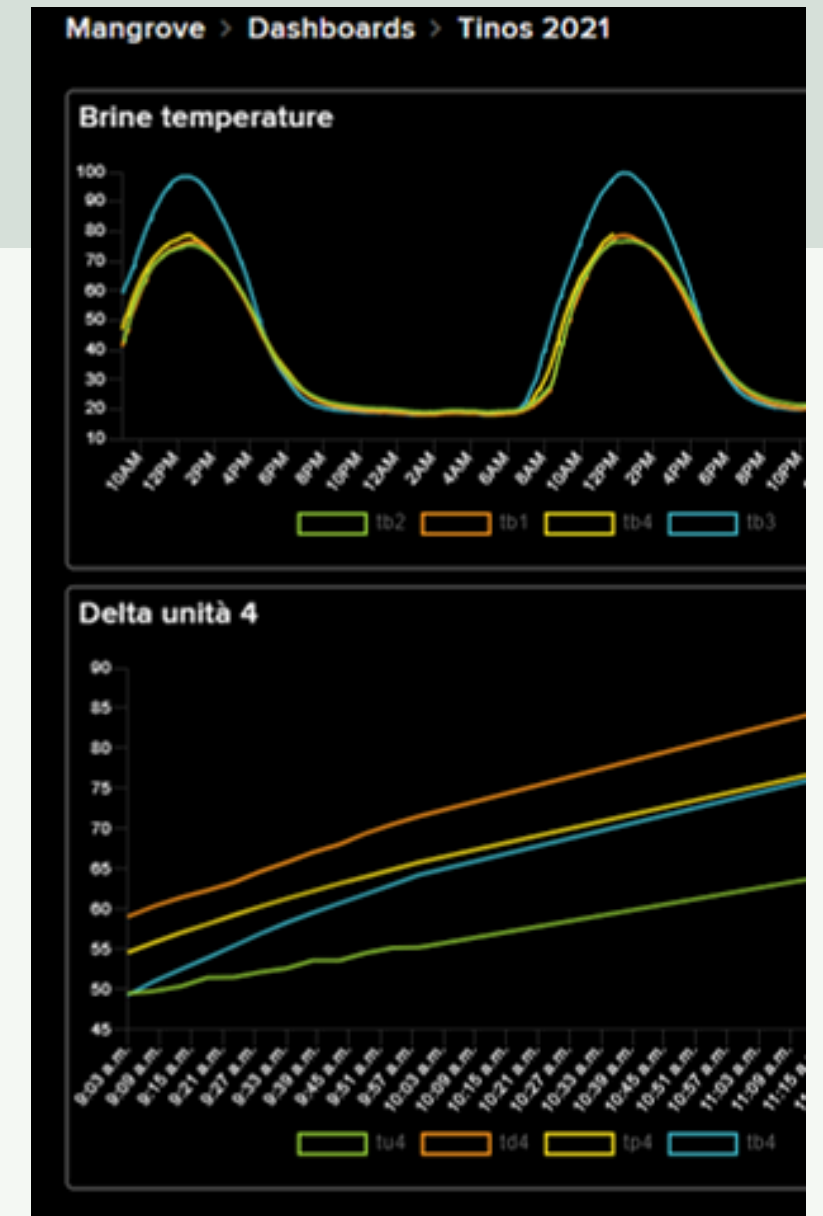
Modular desalination units



Embedded salt factory



Deep root irrigation system



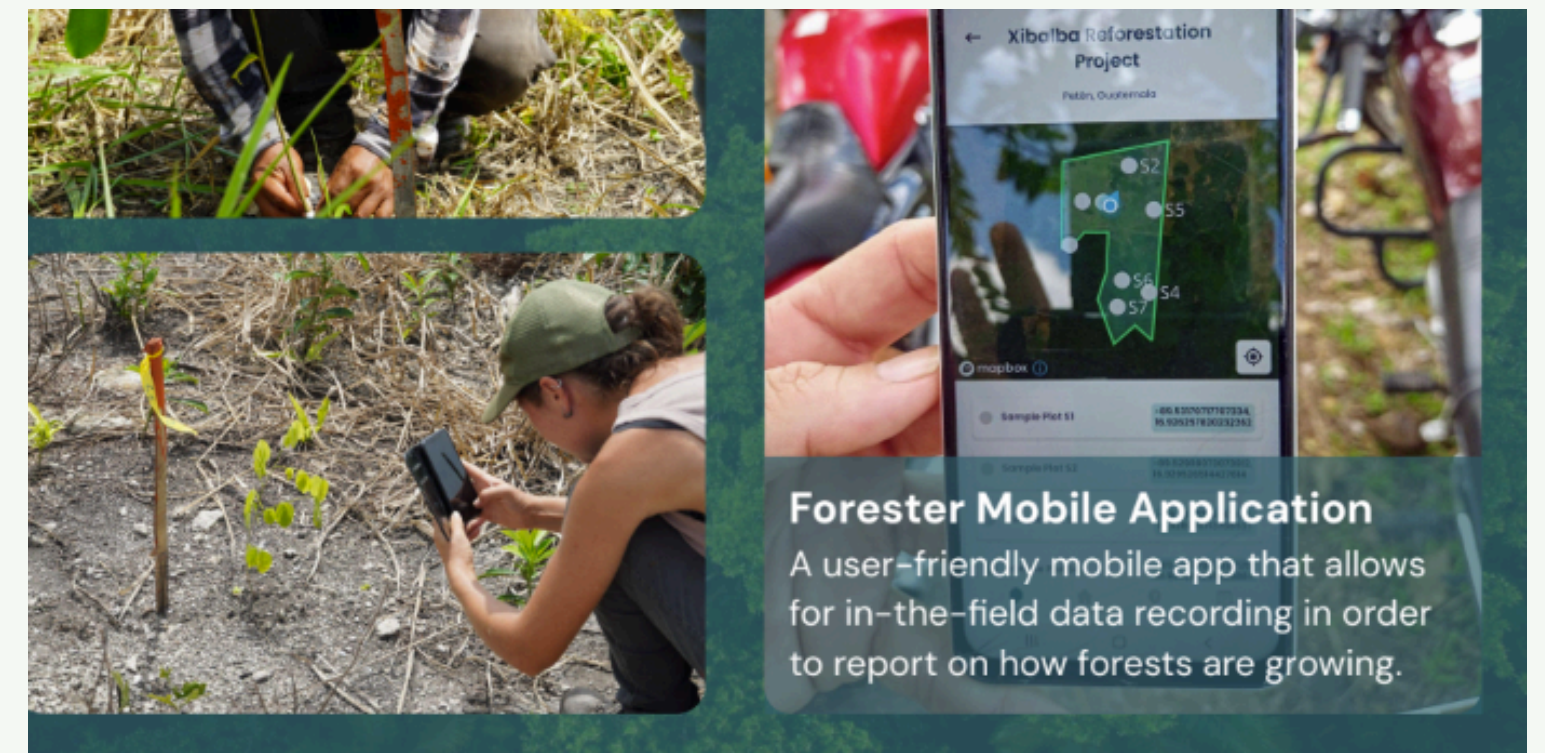
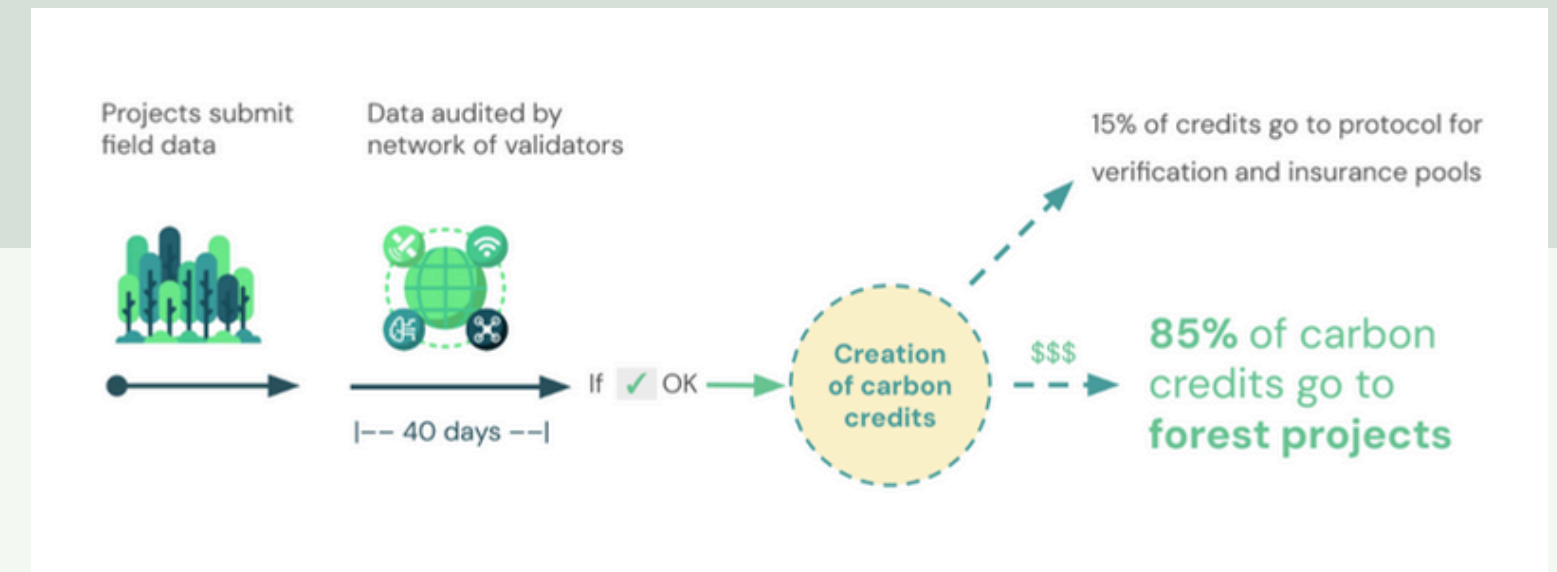
Process control using IoT devices



# CARBON CREDITS

1treellion is partnering with Open Forest Protocol (OFP) a 3rd party provider to digitalize and simplify the monitoring process.

The project will be registered for carbon credits. Those credits go directly toward the project. Not to 1treellion or Planet, providing an incentive and income source to the community involved.



# DETAILED WORKPLAN

Activity	Responsible	Start	End
Data collection of the site and general engineering project layout	Planet	M1	M3
Desalination system engineering and bill of materials		M4	M6
Order, purchase, shipment of the components to the site		M4	M6
Assembly, installation and launch of the desalination system		M7	M9
Training of local community for the management of the desalination units		M7	M9
Nursery work and plant purchase	1treellion	M3	M6
Soil preparation and fancying		M3	M6
Planting season (during the wet season)		M6	M12
Plantation maintenance (organic pest control, weeding, etc.)		M9	M12
Registration of the plantation to Open Forest Protocol		M12	M12