



WASSERSTIFTUNG  
WATER FOUNDATION



FogNet Alliance



Munich Re  
Foundation  
From Knowledge  
to Action

**FogNet Alliance – Learning Sessions 7 October 2021**

# FOG WATER HARVESTING IN BOLIVIA

**Teresa López de Armentia**



**ZaBalketa**

30 años





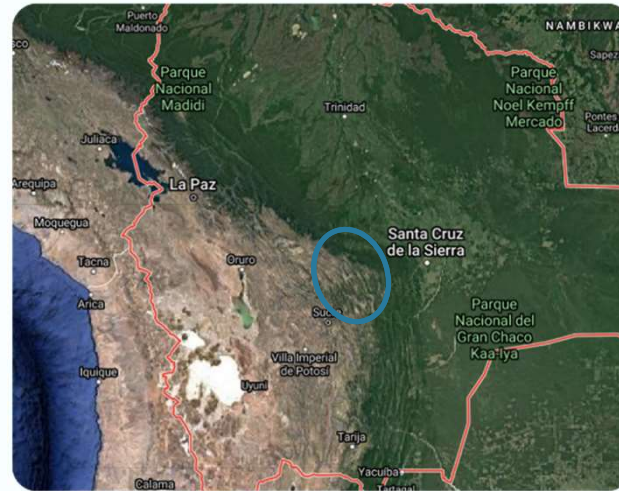
NGO from the Basque Country

Projects of sustainable development in Perú, Colombia, Bolivia, Nigeria and the Philippines



Bolivian NGO

**Local partner of Zabalketa in Valles Cruceños** region for more than 20 years



## BOLIVIA – Valles Cruceños

- 500 – 3.500 m altitude
- Rural communities: agriculture and livestock farming





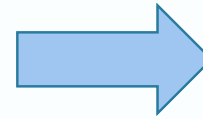
## WATER SCARCITY IS BECOMING A MAJOR PROBLEM

1. **Climate change:** rainfall patter is changing and frequent extreme events
2. Agriculture and livestock farming are aimed at **higher productivity:**
  - Deforestation
  - Less water infiltration



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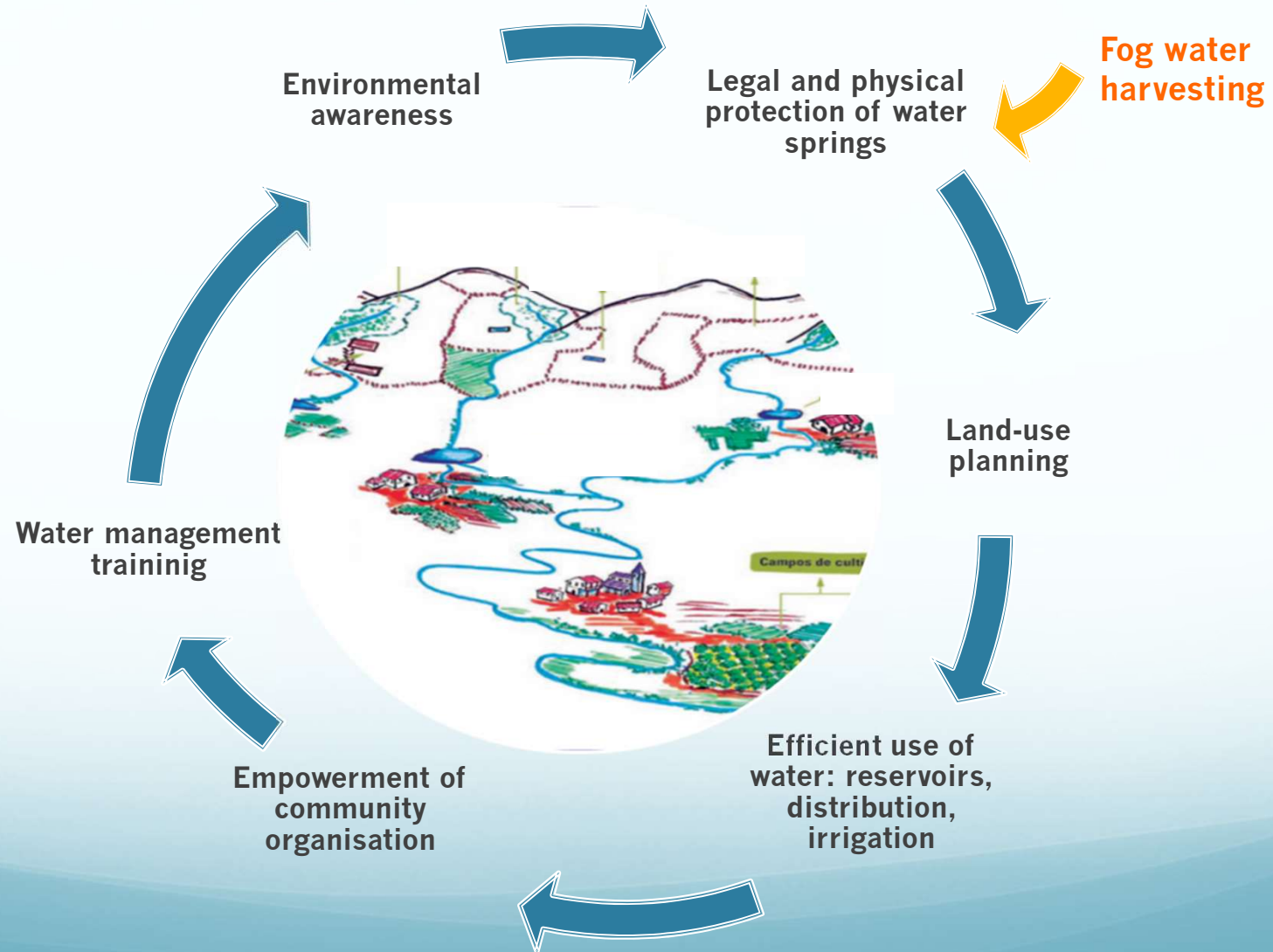


**Water supply cut-offs**

**Degradation of local ecosystem**



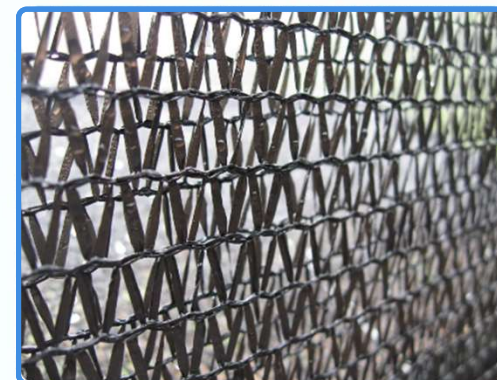
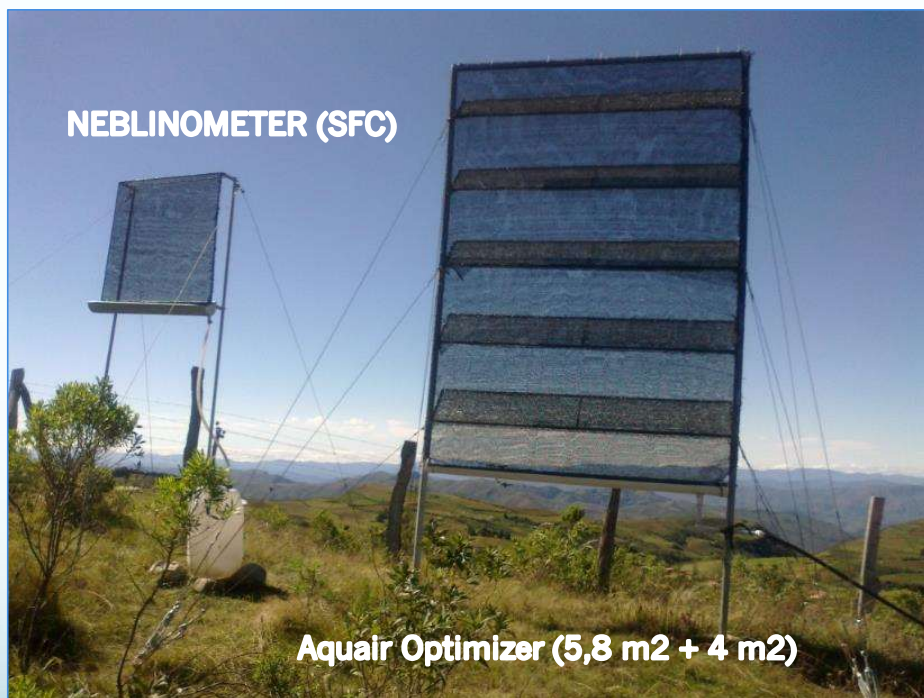
## WATER MANAGEMENT WITH TERRITORIAL AND GLOBAL APPROACH





**Pilot study 2013-2014**, to collect fog water in order to:

1. Improve water supply for families



35% shade plastic mesh  
(Raschel)

**Pilot study 2013-2014**, to collect fog water in order to:

2. Reforest with native species for the restoration of local ecosystem

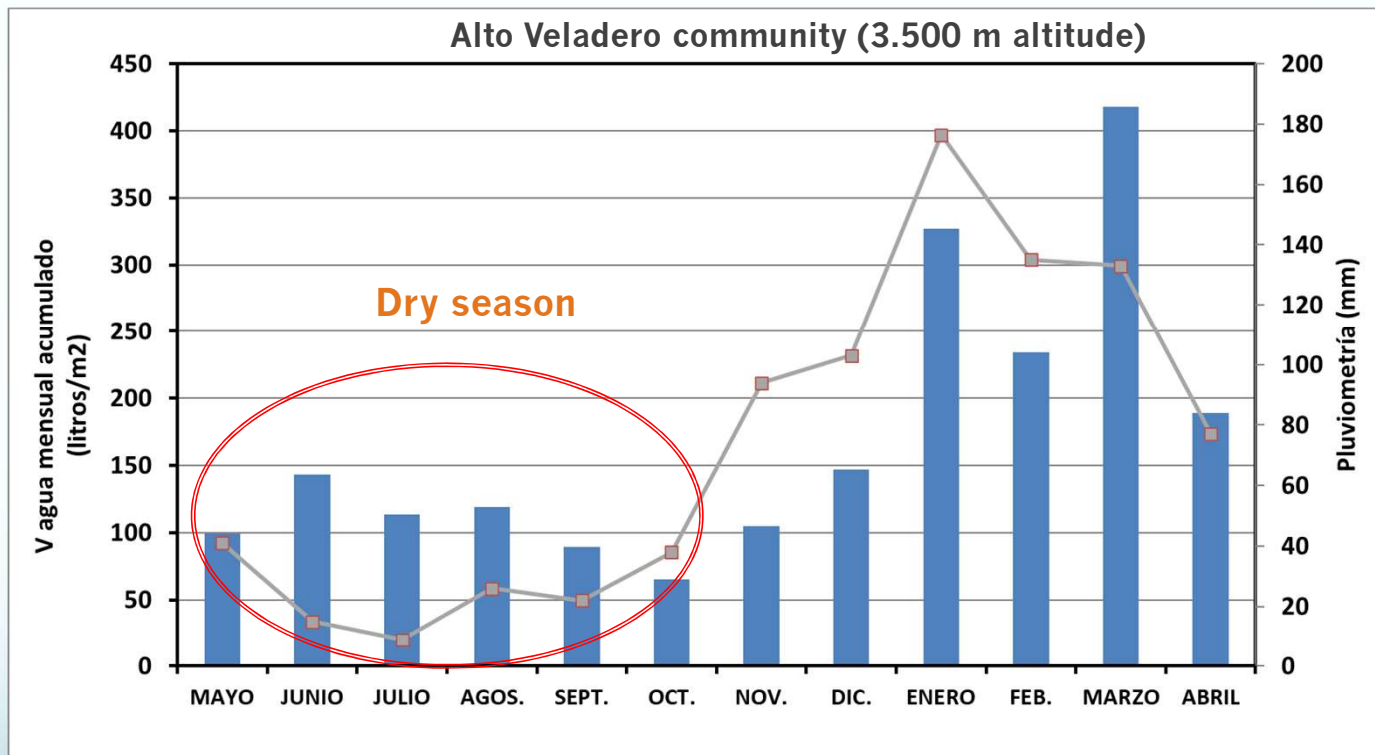




## GOOD RESULTS!!

7 – 15 litres/m<sup>2</sup>·day in neblinometer

> 65 litres/m<sup>2</sup> accumulated per month without rain



In the following years, larger fog net system (2x 6 m)



## Important participation of local population during construction and operation





***WHAT'S NEXT?***

**CLOUD FISHER IN BOLIVIA**



**Alto Veladero School (Primary and Secondary)**

**130 students and 15 teachers**

**Drinking water, hygiene and vegetable garden**





## CLOUD FISHER IN BOLIVIA

Initial site check  
Sept. 2019



Materials arrived in Vallegrande  
February 2020



## RECOMMENDATIONS FOR NEW PROJECTS

- **Technology:** balance between efficiency, simplicity, adaptation to the local context (social and economic) and durability
- **Broad approach to water management:** protection of water springs, techniques to improve infiltration, adaptation of productive activities, etc.
- Empowerment of **local organisations: capacity building activities**, work plans, etc
- Promote **engaged environmental governance and strengthening women's participation in decision making**
- **Promote partnership with local** (municipal and regional government) **and international institutions**





Thanks for your attention! Dankeschön!  
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## VIDEO about this experience



Zabalketa. AGUA DE NIEBLA

<https://www.youtube.com/watch?v=xtTzv893ObA>

