FOG WATER HARVESTING IN BOLIVIA

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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
1. **Climate change**: rainfall pattern is changing and frequent extreme events

2. Agriculture and livestock farming are aimed at **higher productivity**:
   - Deforestation
   - Less water infiltration
WATER SCARCITY IS BECOMING A MAJOR PROBLEM

1. **Climate change**: rainfall pattern is changing and frequent extreme events

2. Agriculture and livestock farming are aimed at **higher productivity**:

   - Water supply cut-offs
   - Degradation of local ecosystem
WATER MANAGEMENT WITH TERRITORIAL AND GLOBAL APPROACH

- Environmental awareness
- Legal and physical protection of water springs
- Land-use planning
- Efficient use of water: reservoirs, distribution, irrigation
- Empowerment of community organisation
- Water management training
- Fog water harvesting
Pilot study 2013-2014, to collect fog water in order to:

1. Improve water supply for families

NEBLINOMETER (SFC)

Aquair Optimizer (5.8 m² + 4 m²)

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/m²·day in neblinometer

> 65 litres/m² 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