Centro UC
Desierto de Atacama

Lessons learned about Fog as Freshwater resource

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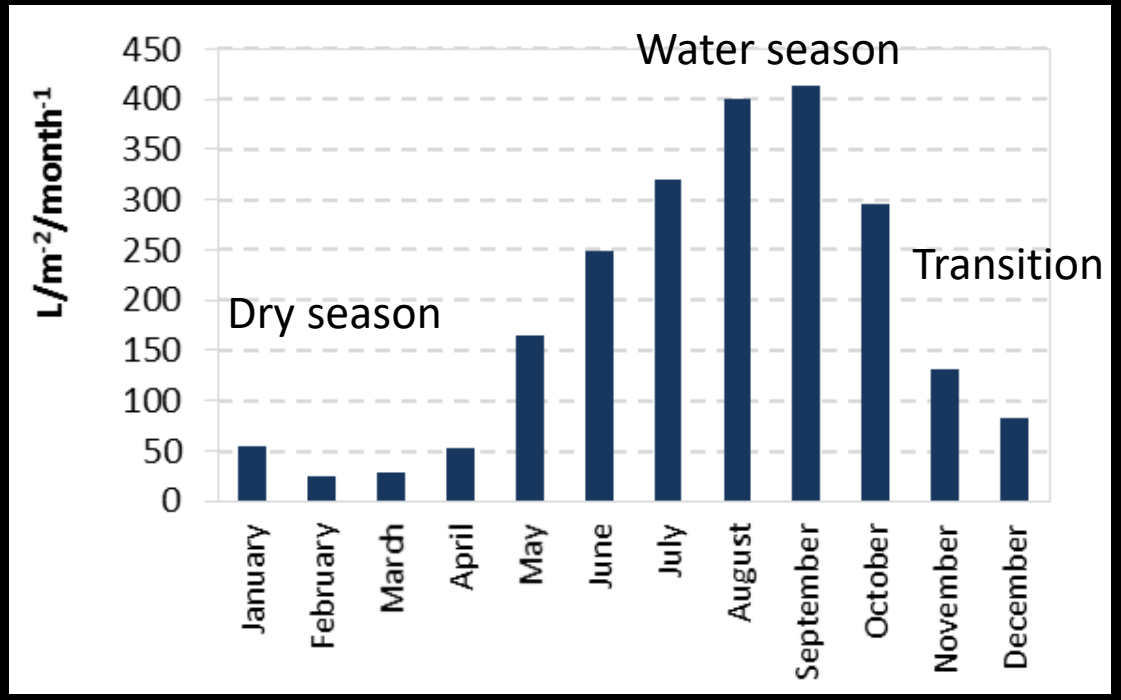
WasserStiftung®
WATER FOUNDATION

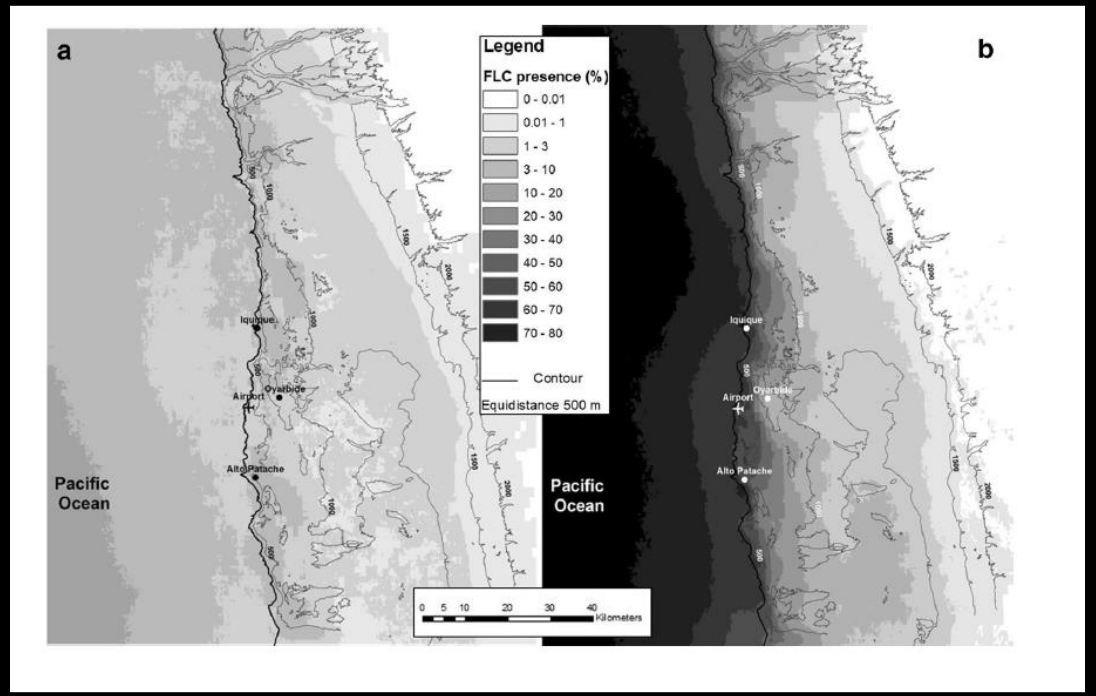
FogNet Alliance

Munich Re
Foundation

Science did the job producing knowledge about:

- Where is the fog we need
- When is the right one, seasonality and daily behavior
- How much water we can get from a Standard Fog Collector (SFC)
- Coastal Atacama is an average of: 5 L/m2/ day (SFC)


L/m-2/month-1
450
400
350
300
250
200
150
100
50
0
Water season
Transition
Dry season
January
February
March
April
May
June
July
August
September
October
November
December


a
b
Legend
FLC presence (%)
0 - 0.01
0.01 - 1
1 - 3
3 - 10
10 - 20
20 - 30
30 - 40
40 - 50
50 - 60
60 - 70
70 - 80
Contour
Equidistance 500 m
Iquique
Airport
Oyarbide
Alto Patache
Pacific Ocean
Pacific Ocean
0 5 10 20 30 40
Kilometers

Successful projects

Chungungo Chile: 10 year of water from Fog for 600 people

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Successful projects

Guatemala Tojquia: 15 years water from Fog; 8000 liters a day.

Successful projects

Alto Patache: 20 years of water for education, research and conservation

¿Why is not full of Large Fog Collectors?

To produce water is a serious activity

Common sources:
- Rivers
- Underground water
- Disalination from salty water

Infrastructure needed:
- Pipeline
- Pumps
- Potabilization plants

All them are in a industrial scale
All them are into a public policy framework
All them are managed by a company
(public or private)

Other sources:
- Springs
- Rain
- Fog

Infrastructure needed:
- Pipeline
- Fog or rain collector in this case
- Potabilization process

A critical aspect is to consider Fog Water as a formal source, under a public policy framework

Site selection

Is critical, because behind the action there is a HOPE

So, as any water supply iniciative, should be a serious prospection

Fog water is NOT everywhere and every time

BAD forecasting of water availability end in a damage in the trustability of the fog as water resource


People and Community
Gender


Skills


Education


Organization

Technology: ¿what we expect?

Technology: ¿what we expect?

Low price
Local materials
Short life
Just to show it …
Other …

?

My opinion…..
Not very low price but attractive and feasible
Trustability and long lasting
Low and easy maintenance
¿spare parts?

Government role in a Fog water policy

Muchas graciasjj
Thank youjj
Danke shönjj