

## **Technical Solutions**

**Country: Morocco** 

Organization: Organization Dar Si Hmad for Development,

**Education & Culture (DSH)** 

Representative: Jamila Bargach, Executive Director

Email: j.bargach@darsihmad.org



## Drinking from the clouds: women and men transform dew and fog into potable water

**Description:** The village Ait Baamrane, bordering the Sahara Desert, can no longer rely on well-water as it was depleted by overuse, poor management, and increasing droughts. This fog water harvesting project is based on technology inspired by ancestral knowledge on dew and fog collecting. It provides potable water to over 400 people. Reduced labour burden for women enables them to create income generating activities. DSH Water School also provides beneficiary villages with children's learning programs on environment and STEM education — Science, Technology, Engineering.



**Climate impact:** By facilitating sustainable access to water in this arid region, an adaptation mechanism has been designed. Women in the communities have put in place a sustained environmental monitoring system. Harvesting dew and fog-water reduces the use of fossil fuels and the need for digging boreholes that depletes deep-aquifer water. Keeping their grazing animals and bees are vital for the maintenance of the cycle of Argan trees and the unique ecosystem of the region (Sahara and Atlantic intersection).

**Gender Impact:** Harvesting fog water in homes significantly reduces women and girls' hard labour burden for water collection from distant sources. Girl's time for school and education has improved. DSH has also started a female mentoring and leadership program to encourage girls to stay in school after adolescence. Women's empowerment is realized through capacity building on environmental monitoring and knowledge transfer on engineering skills. Women have engaged in new income-generating activities.

**Scalability /replicability:** Ten years of applied research and feasibility studies by DSH confirm that harvesting fog can be expanded to other sites. Current beneficiaries are ambassadors for the concept in Morocco. Where the climate is suitable, DSH is supporting the building of other locally-led fog projects through transfer of knowledge, extensive open-source materials and outreach (manual in French & Arabic) for replication and scalability.

## Organization Dar Si Hmad for Development, Education & Culture (DSH), Ait Baâmrane Amazigh Community

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