

Pilot of Reed bed filter treatment plant



Localization:

Bcharreh, Caza of Bcharreh

Date:

2012-2013

Budget:

550,000 euros by AFD

100,000 euros by the Municipality for the acquisition of the land

Financing:

French Agency for Development

Beneficiaries :

300 inhab. from Harim locality, Bcharreh

TIMELINE

The realization of Bcharreh Pilot Station is a continuation of the decentralized cooperation [project](#) between the North Lebanon Water Establishment (NLWE), the Union of Municipalities of Bcharreh, the Rhône-Alpes Region and the Water Agency Rhône Mediterranean Corsica (AERMC).

In 2009, the Master Plan for Sanitation (SDA) of Bcharreh Caza was adopted. It plan ahead the implementation of 14 Reed bed filter treatment plant and 10 activated sludge stations. Bcharreh station represents a pilot enrolling in this Master Plan for Sanitation.

CONTEXT

In 1998, the United Nations Educational, Scientific and Cultural Organization (UNESCO) listed three sites in the Caza of Bcharreh in World Heritage of Humanity, including Qannoubine Valley.

It is located in the heart of the Valley of Bcharreh and at its bottom flows Qadisha River.

Improvements must be made to ensure the preservation of these sites in the World Heritage of Humanity.

One of these developments focuses on the preservation of water resources and the establishment of sanitation systems.

Actors associated to the project:

French Agency for Development (AFD)

Ministry of Energy and Water

Council for Development and Reconstruction

North Lebanon Water Establishment

Union of the Municipalities of Bcharreh

Corail Association

CONTACTS

French Agency for Development

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MORE INFORMATION

Videos for project presentation:

[Improve sanitation in Lebanon \(AFD\)](#)

[Reeds bed for filtering wastewater \(OLJ\)](#)

OBJECTIVES

Construction of a pilot system for sanitation meeting the following criteria:

- Proper landscape integration;
- Functioning without electricity;
- Low operating costs;
- Adaptation to rapid population changes;
- Insensitivity to temperature changes up to 1,600m altitude;
- Reuse of treated wastewater for irrigation.

ACTIVITIES

- 1,720m of watertight collection and transfer networks;
- 40 household connections;
- 1 pumping station;
- 1 station of reed bed filter treatment plant for 300 inhabitants



DEVELOPMENTS

As the objectives have been completed, the French Agency for Development has granted funding (34 million euros) for the realization of the entire Master Plan for Sanitation of the Caza of Bcharreh.