



Collecting and Preserving Scarce Natural Range Seed Plants

Ms. Ghada Ahmadein

Technical Coordinator

Arab Office for Youth and Environment
(AOYE)

Workshop on Implementation of
Nature-based Solutions to tackle climate
change

*Marseille (France)
22-24 January 2019*

Introduction



Introduction

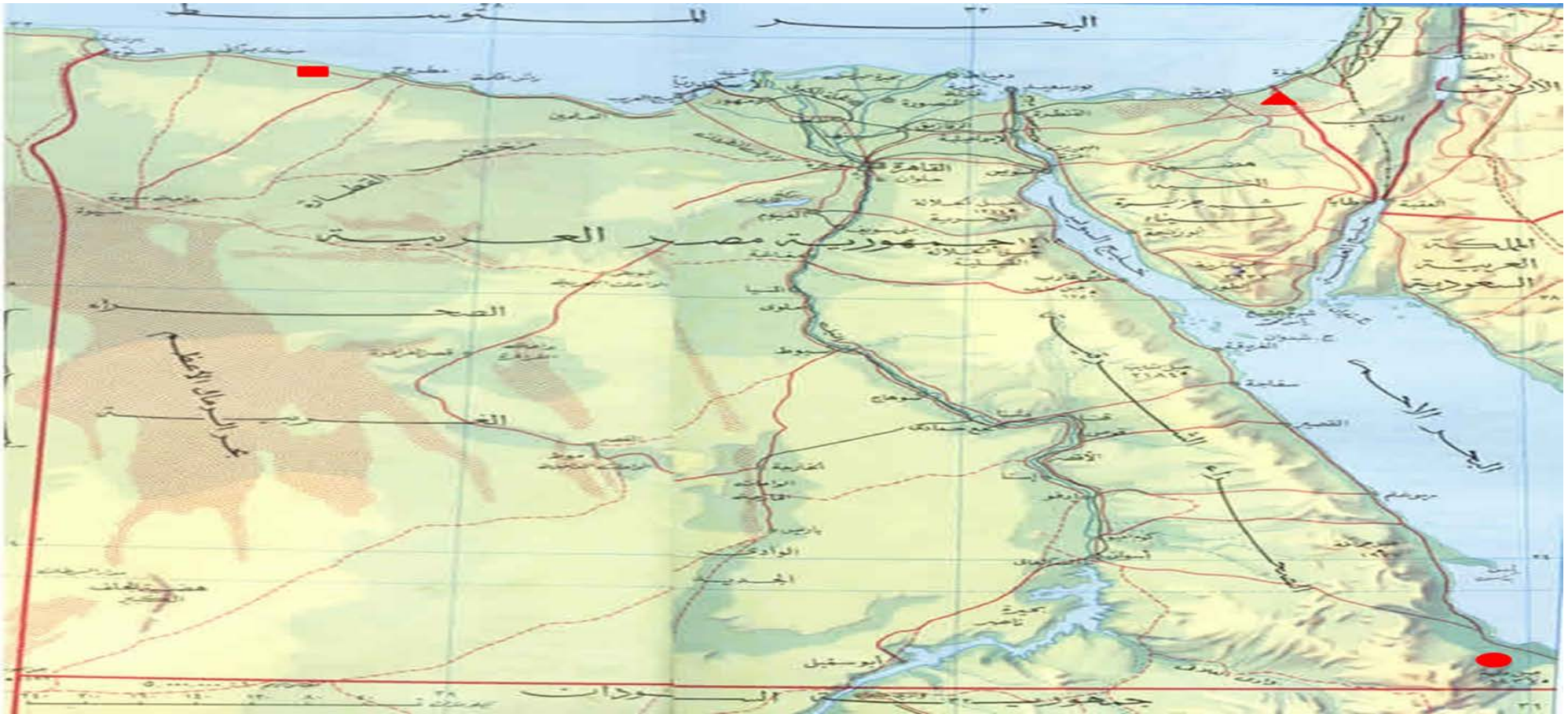
- **Issue of Climate change:** drought, heat & water scarcity.

- **Type of ecosystem:** Rangelands

The total rangeland area of Egypt is about 4 million Hectares distributed among three sub-ecological zones as follows:

- 2,300,000 Ha in the **North West Coast (NWC)** sub-zone.
 - 1,100,000 Ha in Sinai
 - 600,000 Ha in **Shalateen – Halayb** region
-
- **Type of NbS:** Ecosystem restoration & Area-based conservation

Distribution of the main areas of natural rangelands in Egypt



- North West Coast Pastures
- North West Coast and Sinai Pastures
- Egyptian South East Pastures

Introduction

- **Project leader and partners:** Al Ramis Society for Local Community Development of Barrani (an Egyptian NGO)

Partners:

- Desert Research Center (DRC) – Ministry of Agriculture
- Sustainable Development Centre for Matrouh
- Center of Agriculture
- Faculty of Agriculture
- **Calendar:** July 2012 – June 2015
- **Funding:** 29,353 \$ - co-finance: 6,300\$



Objectives

MAIN OBJECTIVE

Managing and maintaining natural rangelands, conserving their biological diversity through the collection of endangered species seeds. Then, propagating and re-cultivating those seeds in deteriorated areas / lands, in addition to developing the breeders' skills to maintain this

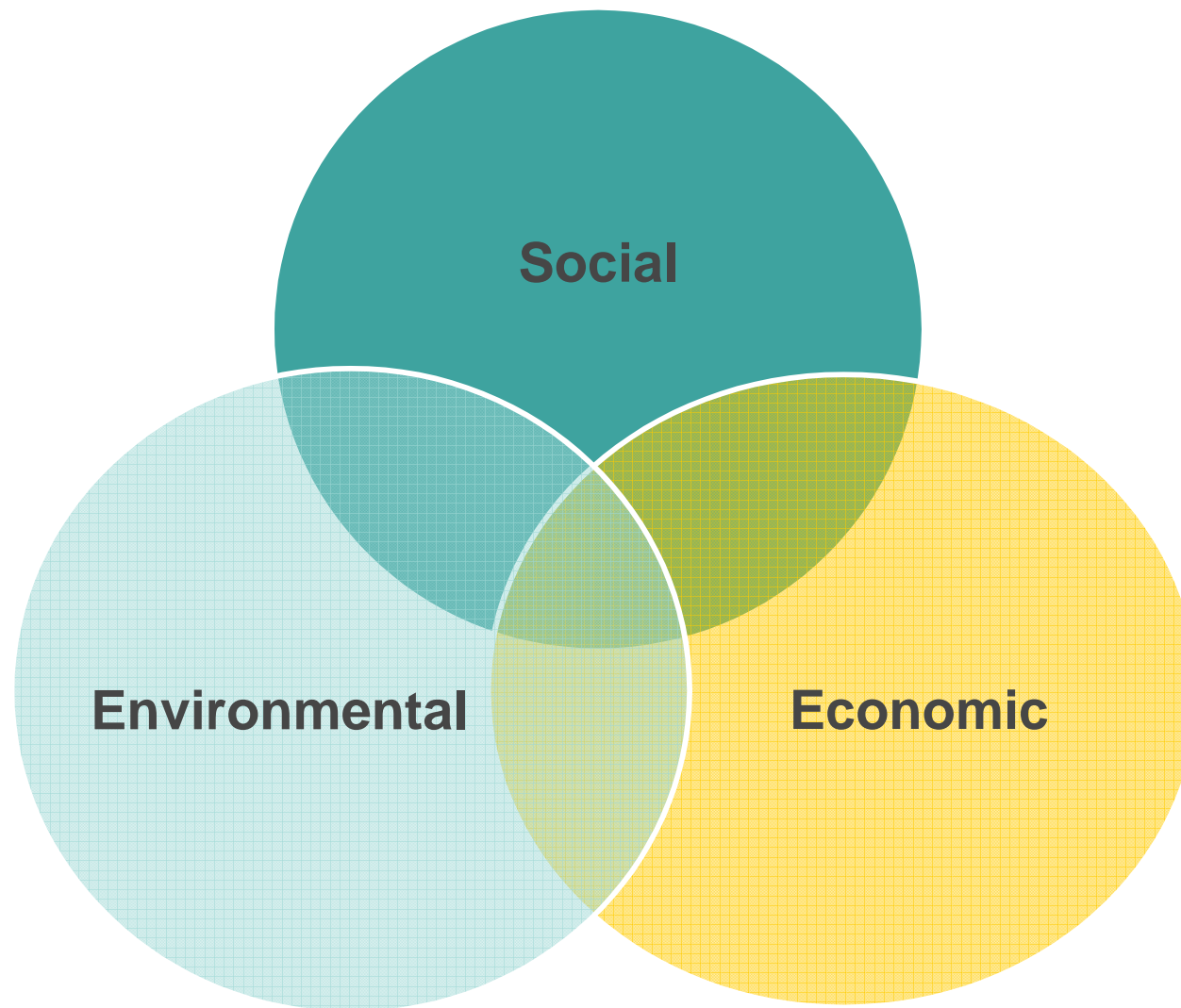


Objectives

DETAILED OBJECTIVES

- **Collect endangered and rare natural rangelands plant seeds from their original locations / areas;**
- **Initiate seeds breeding using supplemental irrigation with low quality water;**
- **Collect of perennial fodder shrubs seeds and production of seedlings to be planted in other areas;**
- **Provide training for sheep herders on rangeland management, sustainable use of rangelands and regulation of livestock grazing, sustainable irrigation;**
- **Increase public awareness regarding the importance of rangelands and their environmental, social and economic impacts on farmers,**

Results



Implementation challenges

The most significant challenge that faced this Bedouin community was the decrease in water resources. The area witnessed significant decrease in the quantity of rain due to climate change impacts (high temperature).

The climate in this area is arid Mediterranean, with an average rainfall of 138 mm at Marsa Matrouh, 162 mm at Barani and 106 mm at Saloum. Rainfall declines rapidly to the south, down to 100 mm within the first 15 Km, and about 50 mm at 50 Km.

Ref. "Sustainable Development of the Egyptian Rangelands to Combat Desertification", by Dr. Mostafa El-Hakeem, Prof. of Range Management, Egypt 2017

Implementation challenges

Accordingly, the community suffered from the decrease in livestock (sheep and goats) due to the degradation of natural range and the heavy grazing by some breeders and this has definitely affected their food security.

The community was considered a threatened vulnerable community and most of the families were willing to move to other areas to secure food and water, which will lead to internal



Best practices

Through this initiative, the community was convinced that they should not only wait for or depend on the government and local authorities to provide solutions to their problems, and that following a participatory approach and establishing effective partnerships between concerned stakeholders in the area such as research centers, NGOs, cooperatives, community leaders, etc... would definitely contribute to the development of this natural range area and overcome their challenges.

Main Results

1- The project had a positive effect as a result of the participation of women, children and young people in the project activities (collecting endangered seeds, treating them after collection, breeding and cultivating the annual seeds in the permanent land, as well as breeding seedlings in greenhouses).

2- It has emphasized the concept of preventing overgrazing and the necessity of leaving plants continue their life cycle then implant their seeds in the soil. These procedures are the vital bank for the sustainability of biological diversity.

Main Results

3- It has conserved six endangered species (which are fodder for animals) These species are local, natural pasture plants that have adapted to the conditions of the region.

4- 1397 kg of endangered species seeds were collected and used in the development of some of the deteriorated areas.

5- During the first year, there were only 3 sites, but due to the success of the project, they reached 15 sites in the second year, in 4 areas (Sidi Barani, AlNakhila, Foukah, AlMatani).

3 areas = 23 Feddans in total = 96,600 meters (Feddan = 4200 meters)

15 areas = 115 Feddans in total = 483,000 meters.

Main Results

6- 38 community meetings were held, either in Bedouin tents or fields. Local community members participated to monitor the activities.

- 275 community members from 5 tribes attended the awareness raising seminars.**

- 102 participants were involved in the trainings (68 men & 34 women)**

(which is not considered familiar in Bedouin conservative community).

Guidance flyers and brochures have been prepared and distributed during these meetings.



Main Results

8- The total number of environmental and endangered plant species has been listed. The local community; elders, young people, boys and girls have participated in the registration of these species.

298 plants were documented with their scientific names, families, common names, uses and environmental aspects, with their pictures.

9- The project has been included among the projects implemented by Egypt, in the updated Egyptian National Report to Combat Desertification (2014-2024) due to its importance

RECOMMENDATIONS

- **Stakeholder engagement including women, youth and children**
- **Effective and continuous partnerships between NGOs, local authorities, academia, local community members, etc... is essential**
- **Monitoring (preferably by community members)**
- **Exchange of knowledge and experience, especially experience transfer to younger generation**
- **Capacity Building**

What is next

In Egypt, the coming steps are through the following:

1- Through the funding available through the GEF / Small Grants Programme in its Operational Phase 6 (2017-2020/), through which several projects are expected to be funded and implemented that are encouraged to find natural based solutions to several environmental problems in the field of biodiversity and land degradation.

2- Egypt has hosted the CBD COP 14 in Sharm El Skeikh, 13-27 November, 2018. The Egyptian government has adopted an initiative entitled “A coherent approach for addressing biodiversity loss, climate change, and land and ecosystems degradation” aiming to achieve the integration between the 3 UN conventions.

We are encouraging and working with the NGOs network to play a role within this initiative, though designing and implementing NBs initiatives.



Thank you
For more information :

Arab Office for Youth and Environment (AOYE)

Address: 3A Masaken Masr Iel-Taameer, Zahraa El-
Maadi Str., Cairo, Egypt

Tel.: +20 2 25161519/245

email: aoye@link.net



**Workshop on Implementation of
Nature-based Solutions to tackle climate
change**