Agriculture, Traditions and Healthy Diets in the Mediterranean and beyond.
FAO WEBINAR
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Resilience, Climate Change Adaptation and Local Diets in Gafsa Historical Oasis, Tunisia
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1- Location
2- Gafsa Historical Oasis Food Habits
3- Cereal-based Food
4- Legume-based Food
5- Vegetable-based Food
6- Gafsa Historic Oasis Diet Basics
7- Adaptation Measures
A Way of Life

“Diet derives from the Greek *diaita* [meaning] ‘a way of life’ […] [It is ] not a nutritional model, but a phenomenon encompassing food production, marketing, consumption, conviviality, ritual and symbology of the Mediterranean.”
Gafsa Historical Oasis Food Habits

- Cereals is the staple ingredient (wheat and barley)

Kuskus Morchene

Vegetable Kuskus
Cereal-based Food

BASICALLY FLOUR, OLIVE OIL, WATER, SUGAR AND NUTS.

ALMONDS AND PISTACHIOS BESSISSA
Legume-based Food

Legumes (chickpeas, lentils, Fenugreek, beans)
Vegetable-based Food

Vegetables (pumpkin, onions, garlic, spinach, blet, coret, parsley, tomato, turnip, pepper, lettuce, eggplant)
Vegetable-based Dishes
Gafsa Historic Oasis Diet Basics

<table>
<thead>
<tr>
<th>Non-locally-produced Ingredients</th>
<th>Locally-produced Ingredients</th>
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<tbody>
<tr>
<td>• Cereals</td>
<td>• Dattes</td>
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<tr>
<td>• Legumes</td>
<td>• Olives/ Olive oil</td>
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<tr>
<td>• Meats</td>
<td>• Nuts</td>
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<td></td>
<td>• Vegetables</td>
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<td>• Corn</td>
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Meat is considered a secondary ingredient and cereals and legumes exotic ones.

Shortage of resources encouraged communication with other communities to create a combination between production and commercial activities.

Great Storage capacities

Reduction in the demand for animal-based food products

Moving to plant-based proteins
1- Corn Introduction in the Oasis:

- High fiber content
- Root mass returns considerable organic matter to the soil
- Animal feed
- Best to rotate with forage culture
- An already available niche product
- Easily adapted to cooking with vegetables.
Adaptation Measures

2- Two Corn Varieties are Naturalized and have Locally-developed Seeds
Adaptation Measures

3- Gafsa Historical Oasis Seed Sovereignty
Adaptation Measures

- Locally-developed seeds are more climate resilient than generic commercial varieties.

- We develop small seed exchange networks and banks to protect local agro-biodiversity and landraces both within the oasis of Gafsa and with other Tunisian oases.

- Oasis farmers are in a fair competition to produce the most enduring seeds.

- These seeds play a key role in increasing dietary diversity.
Adaptation Measures

4- Demand-side Adaptation Measures

Increasing proportions of plant-based foods in diets, particularly vegetables and replacing meat with other more-efficient protein sources.

This reduces pressure on land and water and thus vulnerability to climate change and inputs limitations in an area where the average land parcel is less than two hectares.
Adaptation Measures
Adaptation Measures

5- Cultural Values

- We are an indigenous oasis community. Historically, we are brought up in a context of continuous resistance and adaptation to most risks, mainly locust invasions. We ate them, by the way. So we have our own culturally-sensitive risk analysis and how to better adapt.
Adaptation Measures

5- Manure Management

Conservation of agricultural practices for soil organic carbon and a congenial environment for plant growth,