



REPUBLIC of TUNISIA  
MINISTRY OF AGRICULTURE,  
WATER RESOURCES AND FISHERIES



**THE 7<sup>th</sup> MEETING OF THE COMCEC  
AGRICULTURE WORKING GROUP**  
*“Reducing On-Farm Food Losses in the OIC  
Member Countries.”*

## ***FOOD LOSSES AND WASTE IN TUNISIA***

*Mrs Nadoua Gmir Dhaou*  
**Director of studies and  
Planification**  
**Ankara March 3<sup>rd</sup> 2016**

# PLAN

- 1. COUNTRY OVERVIEW
- 2. **Agriculture importance and politics priorities**
- 3. 4.EXPERIENCE IN FOOD AND LOST REDUCTION
- 4. FOOD LOSSES AND WASTE PROJECT



# 1- COUNTRY OVERVIEW

- Tunisia total area is 16,2 millions of hectares .
- Population is about 11 millions .
- Geographic situation of Tunisia is as to permit the country a diversified climate.



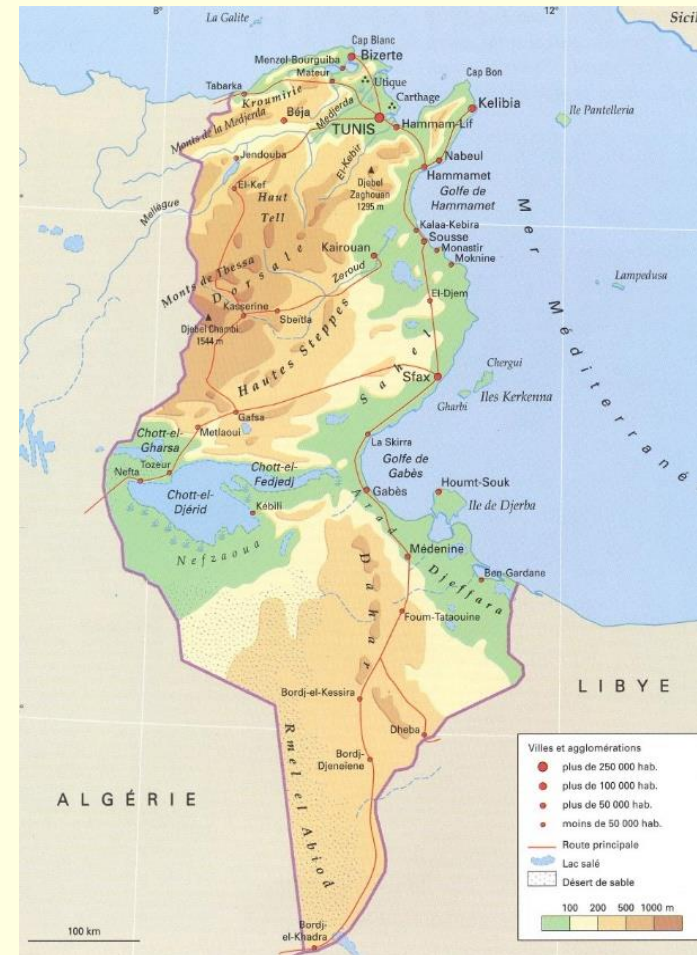
# CLIMATE

The country can be divided into five bio-climatic areas

- Humid
- Sub- humid
- Sub- dry
- Dry
- Desert or saharien area

Precipitation is varying between

- 1200 and 1500 mm in the extreme North
- 400 and 1000 mm in the North.
- 200 and 400 mm in the Center
- under 50 mm in saharien areas.



**More than two thirds of the Tunisian territory are located in the dry and the saharien areas.**

**The climate is typically Mediterranean, characterized by irregularity and the violence of its rains as well as by the length of the seasons and even dry years .**

**The total agricultural area is 10,5 millions ha .**

- **Cultivated area :** 4 233 420
- **Intercropping area :** 217 580
- **Crop area :** 4 451 000
- **Afforested area:** 658 320
- **Pasture :** 4 359 420
- **Alfa (stipa tenacissima) :** 525 960
- **Irrigated area :** 428 000



## 2. AGRICULTURE IMPORTANCE AND POLITICS PRIORITIES

- *Agriculture contributes 9 % to the GDP*
- *Agricultural exports account for 9% of the total national exports.*

*Main exported products are : olive oil, sea products, dates and citrus fruit,*

*Main imported products : cereal, seeds oil, sugar, tea and coffee.*

- *Agriculture contribution to employment is 16%.*



## ***Agricultural politic priorities***

The agriculture politic priorities are mainly focused on:

- ✓ Sustainable growth of production and improving competitiveness of agricultur products
- ✓ Rural development and agricultural producers incomes improvement,
- ✓ Development of natural resources and rationalization of their exploitation.



## ***Agriculture products***

***Agricultural production in Tunisia is based on 5 main agro-systems :***

- ***livestock (39%)***
- ***arboriculture (26%)***
- ***horticulture (16%)***
- ***cereals (11%)***
- ***fisheries (6%)***





### 3. EXPERIENCE IN REDUCE OF FOOD LOSSES AND WASTE

There is no studies wich investigated a complete evaluation of food losses and waste throughout the food supply chains, but some research and studies have been conducted for some specific segments such as :

- Evaluation of losses during cereal harvesting on sloping fields in the northwest region,  
Evaluation of the impact of some post-harvest processing technics, storage to extend the period of preservation some fruits (apples, pears, peaches, citrus,..),
- Evaluation of bread waste at the level of consumer (about 50 millions dollars/year)

We are aware that the FL&W problem is a serious matter in our country for many raisons (lack of good agriculture practices, lack of infrastructure and financing and services providers, inefficient transportation and storage equipment and lack of cold chain, low market value for the products, ...)



## Degree of losses and waste: (personnal perception)

	Degree of Losses (Minor/Moderate /Severe)	Explanation
<ul style="list-style-type: none"> <li>On-Farm Losses</li> </ul>	<ul style="list-style-type: none"> <li>severe</li> </ul>	<ul style="list-style-type: none"> <li>80% of Tunisian farmers are small</li> <li>Very low level of organization in professionals structures</li> <li>Adoption of traditional production technics</li> <li>low farmers awareness about importance of losses</li> <li>low level of farmers assistance to improve production and reduce losses</li> </ul>
<ul style="list-style-type: none"> <li>Post-harvest Losses</li> </ul>	<ul style="list-style-type: none"> <li>moderate</li> </ul>	<ul style="list-style-type: none"> <li>inappropriate marketing channels for agriculture products</li> <li>weak link in value chain</li> </ul>
<ul style="list-style-type: none"> <li>Food Waste</li> </ul>	<ul style="list-style-type: none"> <li>moderate</li> </ul>	<ul style="list-style-type: none"> <li>low awareness of importance of waste food by consumers</li> <li>Inappropriate consumption price political (bread subsidies)</li> </ul>



## Classification of causes of on-farm losses:

Possible Causes of On-Farm Losses	Priority Rank	Explanation
• <b>1. Poor information and planning</b>	<b>6</b>	Lack of organisation of farmers in professional structures to link with markets
• <b>2. Lack of inputs (fertilizer, etc.)</b>	<b>1</b>	Lack of technical support to farmers Lack of service providers
• <b>3. Poor quality seeds, planting material</b>	<b>2</b>	Most of farmers use standard seeds particularly for cereals
• <b>4. Pests on the farm (weeds, insects, rodents)</b>	<b>8</b>	Lack of awareness of farmers Lack of services providers
• <b>5. Poor cultural practices (pruning, fertilizing, Pesticide spraying)</b>	<b>3</b>	Traditional techniques most of farms are small lack of funding agencies
• <b>6. Poor water management or drought</b>	<b>5</b>	Irregular mediterranean climate Old infrastructure in irrigated areas
• <b>7. Plant or animal diseases on the farm (fungi, viruses, bacterial rots)</b>	<b>7</b>	Lack of awareness of farmers Lack of services providers
• <b>8. Poor harvesting practices (damaged by cuts, bruises, etc.)</b>	<b>4</b>	Traditional harvesting practices aging fleet of machinery
• <b>9. Wrong time for harvest (immature, over mature)</b>	<b>9</b>	Lack of technicality for some products

## **4. FOOD LOSSES AND WASTE PROJECT**

- Recipient Countries: TUNISIA AND EGYPT**
- Cooperation: FAO and ITALIAN GOUVERNEMENT**
- Budget : USD 2 300 000**
- Project duration: (3 years) 2016-2018**
- General context: BUILDING RESILIENCE TO ENHANCE FOOD SECURITY AND NUTRITION FOR THE NEAR EAST AND NORTH AFRICA AS WELL AS SMALL-SCALE AGRICULTURE FOR INCLUSIVE DEVELOPMENT.**



# OBJECTIVE AND EXPECTED RESULTS

## Tunisia

**CONTRIBUTE TO STRENGTHENING THE ECONOMIC, SOCIAL AND ENVIRONMENTAL PERFORMANCE OF THE FOOD VALUE CHAIN THROUGHOUT FOOD LOSS AND WASTE REDUCTION**



**IMPROVE THE KNOWLEDGE ON THE STATUS, MAGNITUDE AND EXTEND OF FOOD LOSSES**



**INCREASE TECHNICAL AND MANAGERIAL CAPACITY OF DEFINED FOOD VALUA CHAIN ORGANIZATIONS TO BETTER COORDINATE, NEGOCIATE AND ORGANIZE IN FOOD CHAIN ACTIVITIES**




**ACQUIRE AND ADOPT TECHGNOLOGIES AND GOOD PRACTICES TO REDUCE FOOD LOSSES AND WASTE BY DEFINED VALUE CHAIN ACTORS.**




**IMPROVE AND ACTIVATE BUSINESS PARTNERSHIPS TO INCREASE VALUE ADDITION IN SELECTED VALUE CHAINE**

# Tunisia

## MAIN ACTIVITIES ARE



Adapt the food loss and waste analysis methodologies developed by FAO to the tunisian agri-food sector context and make analyses and assessments for the selected food value chains in Tunisia



Conduct appraisals, analyses and assessments of the value chains in specific geographic zones and provide identified food chains actors with in-filed training on improved technologies in harvesting and post harvesting operations, storage and processing



Build the capacity of small-scale traders and small and medium agri-food firms on value addition and support elaboration of business plans for them to introduce technologies and best practices for all operations.



Active inter-country and intra-country working groups on lessons learnt and identify recommendations for policy makers for upscaling good practices.



# VALUE CHAINS CHOSEN

## Cereals

- Importance in food security
- Vegetable value chain
- Important consumption
- 50% of our consumption is imported
- Object of Public Subsidies
- Importance of food losses and waste concerning this value chain;

The project has just begun a startup workshop was organised on 27 janury 2016

## Milk

- Importance in food security
- Animal value chain
- Important consumption
- Sensitivity to various factors like temperature, inefficient transportation, lack of cold chain.
- importance of food losses and waste mainly because of the seasonality of production



**THANK YOU FOR YOUR ATTENTION**

