« Agricultural sector of TUNISIA »
Summary

- Macro economic context,
- Agricultural sector contribution to national economics and trade balance
- Farm structure/Production system.
- Main agricultural production
- Importance of cereals
- Typical farm
TUNISIA is part of AFRICA
Humid and sub-humid > 600 mm/year
Semi arid superior > 400 mm/year
Semi arid inferior > 200 mm/year
Arid > 50 mm/year
Saharien < 50 mm/year
**Macro economic context**

- Total area of Tunisia is 162,155 km² (less than half the size of Germany)
- Population is 10.5 million with a growth rate of 1.2% (68% live in urban areas)
- 53% of the population has less than 30 years of age
- Per capita income is 5000 DT ± 3700 $ with a growth rate of 4.6%/year
- GDP (58% services, 30% industry, 12% agriculture)
- Unemployment is relatively high (14.7%)
- Free trade agreement with E. U. for manufactured products operational
Agricultural sector importance

- Agricultural contribution, 12% of GDP, 18.3% of employment, 13.5% of total exports
- 87% of agricultural imports are covered with agricultural exports. (average 2000/2008)
- Agricultural production annual growth is 2.6% (average 2002-2006)
- Agricultural investment in a steady decline:
  - Hydraulic investment is 40% of total agricultural investment since 30 years
Government agricultural strategy

- Improve the competitiveness of the sector
- Promotion of export as growth generator
- Natural resources conservation for sustainable agricultural development
- Consolidation of food security as a vector of national sovereignty.
Tunisia is a main producer and exporter of olive oil in the world. Other exported products are seafood, dates and citrus.
Agricultural Imports

Sugar 9%
Tea & coffee 3%
Vegetable oil 18%
Milk & dairy 3%
Other 13%
Potatoes 2%
Cereals 52%

Cereals imports represent on average 52% of all agricultural imports.
54% of the farmers own only 11% of the land.
Farm structure/Production system

- 89% of farm land is privately owned
- 10% of farm land are state owned
- Average farm size 10.2 ha
- 0.5 ha of agricultural land per inhabitant
- 31% of farmers live in urban areas
- Only 39% of all farms are managed by full time farmers
- 8.5% of agricultural land is irrigated
The geographic location of crops is:

- Durum wheat and other cereals in the north
- Livestock mainly in the center
- Olive orchard in the Sahel (central coastal region)
- Dates down south in the oasis
Main agricultural productions

Distribution of cultivated area

- Arboriculture: 48%
- Cereals: 36%
- Fodder: 9%
- Gardening: 4%
- Industrial crops: 1%
- Legumes: 2%
Main agricultural productions

Contribution of each group of products to the agricultural total production

- Livestock
- Arboriculture
- Vegetables
- Cereals
- Sea products
- Others

VIIème Plan
VIIIème Plan
IXème Plan
Xème Plan

2007-2009
Importance of cereals

Production

- Durum wheat
- Soft wheat
- Barley

Imports
TUNISIAN TYPICAL FARM
Location of the farm

- North East of Tunisia
- Agro-ecological zone: Upper semi-arid and sub-humid
- Average rainfall: 480 mm/an
- Type of soil: clay loam (Argilo limoneux)
GENERAL OVERVIEW

- 200 ha farm (arable land).
- Conventional farming - intensive tillage (plough).
- Cereals and cattle oriented farm
- 50 "Tarentaise" cows producing an average of 3,600 liters per lactation.
GENERAL OVERVIEW

Rain fed farming

Family labor: The manager (10 hours per day)

160 hectares private property and 40 ha rented from family members

An occupancy rate of 100%, no fallow.

Integrated Production System: Cattle and crops
Cropping system: 2 rotations

- First rotation on 180 ha: 50% durum wheat and 50% legumes (most frequently beans) as a rotation crop.

- Second rotation of 20 ha: 50% durum wheat and 50% crop forage (usually hay: oat vetch) as a rotation crop.

Note: Use of manure in the second rotation.
# Yields

## A- Crops

<table>
<thead>
<tr>
<th>Rotation Durum wheat/beans</th>
<th>Yield/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durum wheat</td>
<td>3,5 tons</td>
</tr>
<tr>
<td>Beans</td>
<td>2,0 tons</td>
</tr>
<tr>
<td>Rotation Durum wheat/hay</td>
<td></td>
</tr>
<tr>
<td>Durum wheat</td>
<td>3,5 tons</td>
</tr>
<tr>
<td>Hay</td>
<td>36 tons</td>
</tr>
</tbody>
</table>

## B- Livestock

<table>
<thead>
<tr>
<th>Milk production</th>
<th>Veal</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 liters * 300 days * 0.580 TD/liter, or 2088 TD/an</td>
<td>1 veal per year, or 600 TD/an</td>
</tr>
</tbody>
</table>
Direct cost in USD per ha per crop
Labor and machinery cost (operating cost in USD per ha)
Total cost including opportunity cost and depreciation VS gross revenue (market revenue plus eventually direct payment) in USD per ha
Composition of cash cost in USD per ha

- Direct cost
- Operating cost
- Buildings
- Land cost
- Miscellaneous

Cost breakdown for:
- Beans
- Durum after beans
- Durum after fodder crops

Cost values range from 0 to 1200 USD.
Thank you