The Future of Agriculture and Food in the Mediterranean countries

A Report for discussion and decision-making
A Mediterranean Will

13 Members Countries
4 Institutes
A Mediterranean Report

- CIHEAM’s new annual report provides a prospective study of the situation likely to be facing Mediterranean agriculture, food and rural affairs in 2020.

  - A multi-disciplinary approach reflecting the many dimensions of agriculture in the Mediterranean area

  - Mediterra 2008 is the fruit of collective effort involving both experts from CIHEAM and a panel of international experts

  - A veritable Information Tool and basis for decision-making

  - Publication in 5 languages (English, Arabic, Spanish, French and Italian)
Plan of the Report

- **Analysis** of Agriculture and Agro-Food situation
- **Action priorities** for the Mediterranean
- **Global** scenarios for Mediterranean Agriculture
- **Proposals** for action
Mediterra 2008

Analysis based on the dynamics of the Mediterranean situation

- The socio-demographic context
- The geo-economic context
- Natural resources
- Science, technology and innovation
- Dietary patterns and trends in consumption
- Governance in the rural and agricultural worlds
The demographic growth

Chart 1 - The population of the Mediterranean, 1990-2020

Total Mediterranean

Thousands

550,000
500,000
450,000
400,000
378,249

1990 95 2000 05 10 15 2020

543,423 High
522,858 Medium
502,222 Low

Chart 2 - The urban population of the Mediterranean, 2005

Thousands

A rapid demographic ageing

Map 5 - Age of the population, 2005

Chart 4 - Average age of the population, 1990-2020

A rural world still populated

Map 4 - The rural population of the Mediterranean, 2005

Chart 3 - The rural population of the Mediterranean, 2005

Annex 3 - Human Development Index of the Mediterranean

HDI in 2004

Variation 1990-2004

**Map 2 - Share of working farm population in total labour force, 2004**

**Chart 11 - Share of working farm population in total labour force, 2004**

<table>
<thead>
<tr>
<th>Country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>46</td>
</tr>
<tr>
<td>Turkey</td>
<td>43</td>
</tr>
<tr>
<td>Morocco</td>
<td>33</td>
</tr>
<tr>
<td>Egypt</td>
<td>31</td>
</tr>
<tr>
<td>Syria</td>
<td>26</td>
</tr>
<tr>
<td>Algeria</td>
<td>23</td>
</tr>
<tr>
<td>Tunisia</td>
<td>23</td>
</tr>
<tr>
<td>Greece</td>
<td>15</td>
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<tr>
<td>Portugal</td>
<td>11</td>
</tr>
<tr>
<td>Jordan</td>
<td>10</td>
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<tr>
<td>Cyprus</td>
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<td>Spain</td>
<td>6</td>
</tr>
<tr>
<td>Libya</td>
<td>5</td>
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<td>Italy</td>
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<tr>
<td>France</td>
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<tr>
<td>Lebanon</td>
<td>3</td>
</tr>
<tr>
<td>Israel</td>
<td>2</td>
</tr>
<tr>
<td>Malta</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: Faostat 2006.*
The core of the national economies

Chart 12 - Agriculture in GDP formation in the Mediterranean region, 1990-2005

<table>
<thead>
<tr>
<th>Country</th>
<th>% of total GDP</th>
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<tbody>
<tr>
<td>Greece</td>
<td>5.3</td>
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<tr>
<td>Spain</td>
<td>3.2</td>
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<tr>
<td>Portugal</td>
<td>2.9</td>
</tr>
<tr>
<td>France</td>
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<tr>
<td>Italy</td>
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<tr>
<td>Med. EU</td>
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<td>Syria</td>
<td>22.6</td>
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<td>Egypt</td>
<td>14.9</td>
</tr>
<tr>
<td>Morocco</td>
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<tr>
<td>Tunisia</td>
<td>12.6</td>
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<tr>
<td>Algeria</td>
<td>8.3</td>
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<td>Lebanon</td>
<td>6.9</td>
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<tr>
<td>Jordan</td>
<td>2.5</td>
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<td>Arab SEMCs</td>
<td>11.6</td>
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<tr>
<td>Turkey</td>
<td>10.5</td>
</tr>
<tr>
<td>Israel</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(Average)

Source: Faostat 2006.
SEMCs: chronic food dependence

Chart 13 - Trends in SEMC agricultural trade balances

Source: Faostat 2006.
Cereals: a strategic issue

Map 3 - Net cereals imports in the Mediterranean region, 1963-2003

Variation index

Source: Faostat 2006.
The land gap
Bonification land in Egypt
Land evolution
Water: the Blue Gold?

**Chart 3** - Variation in per capita water resources, 1950-2025

**Chart 4** - Water exploitation index, 2003

Source: our calculations based on PAI data.

Source: our calculations based on FAOstat 2005 data.
SURFACES IRRIGUÉES TOTALES DES PAYS MÉDITERRANÉENS, 1961-2005

En % des surfaces cultivées

Source : Plan Bleu (2008a) d’après WDI et FAO.
Water: the Blue Gold?

**Chart 3 - Variation in per capita water resources, 1950-2025**

- Libya
- Israel
- Jordan
- Syria
- Algeria
- Morocco
- Turkey
- Egypt
- Albania
- Tunisia
- Lebanon
- Cyprus
- Spain
- France
- Greece
- Italy
- Malta
- Portugal

*Source: our calculations based on PAI data.*

**Chart 4 - Water exploitation index, 2003**

*Source: our calculations based on FAOSTAT 2005 data.*
Share of irrigated acreage equipped with spray or drip irrigation system
Climate change

Several impacts on agro-food systems:

- Increase in the frequency of extreme weather conditions
- Expansion of the desertification process
- Intensification of water stress
- Development of zoonoses
- Biodiversity decline
- Economic effects
- Roll Back Human Development
- Political and strategic disturbance

Chart 1 - Trends in mean annual surface temperature of the Mediterranean Sea, 1985-2002

Food – the core issue in everyday Mediterranean life

But contrasting dynamics in the region

- Food excesses in the North and aggravation of imbalances in the South
- New life styles, new dietary practices
- Decreasing consumption of traditional products
- Focus on both food safety and food security
- What will become of the Mediterranean diet?
Chart 4 - Percentage of overweight and obesity in adults, 2004

Note: Obesity and overweight are calculated by means of the Body Mass Index (BMI), which is defined by the weight (W) in kilograms divided by the square of the height (H²) in metres. Weight is deemed to be normal if the coefficient is below 24.9; there is overweight when it is between 25 and 29.9 and obesity when it is over 30; there is underweight when the coefficient is below 18.

Agricultural policies

Trends in modes of governance

• The CAP in the North: first geared to quantity, now to quality given the "longing for things rural"

• In the SEMCs:
  - From interventionism to liberalisation
  - Precedence given to export crops
  - Poverty, lagging development, disconnections in coastal urban dynamics – hence the "misfortunes" of rural areas
  - New agricultural and rural plans geared to more sustainability
  - Emergence of civil societies in the Mediterranean rural world
Two initial scenarios can be developed from the prospective analyses

- **A Mediterranean without conviction**
  - This is a trend scenario, the continuation of the current dynamics

  Environmental degradation, regional divides, food disorders, a passive attitude to socio-demographic changes, fragility of agricultural systems in the face of trade globalisation, vulnerabilities in agricultural trade, limited technological innovation, lack of political interest in agriculture, distrust in Euro-Mediterranean relations

- **A Mediterranean under tension**
  - In this scenario, the trends are aggravated; it is the scenario of a region that is the epicentre of global tension

  Increasingly coveted water and land resources, return to food insecurity, multiple impacts of climate change on agricultural systems and rural areas, spread of zoonoses, explosion of malnutrition, development of social inequalities, growing migratory flows, declining Euro-Mediterranean cooperation
Actions priorities

5 challenges to be met

- Reconciling production and management of scare resources
- Ensuring food security and food safety
- To develop the supply and marketing of agricultural commodities
- To work out development strategies for rural areas
- Strengthening and consolidating education and research capacities
Possible futures

Two other scenarios are conceivable

3. A fragmented but reactive Mediterranean

• This is a future where a multi-pace Mediterranean emerges

    *Ad hoc partnerships, focus on emergency issues, cooperation à la carte, rivalries or agreements amongst State actors, role of the private sector, precedence given to reactivity, lack of foresight, no convergence or integration within the Mediterranean area…*

4. A confident Euro-Mediterranean

• For agricultural and environmental solidarity in the Mediterranean

    *Agriculture and food are the key issues in Euro-Mediterranean cooperation that is built on new foundations of strategic priorities: responsible resources management, measures to ensure the security of food supply and to promote food that is good, clean and fair, integrated regional development, measures to combat climate change, emergence of a farm-to-table agro-food system, devising of a new CAP that is open to the Euro-Mediterranean region*
Several Proposals for action
presented to establish a Euro-Mediterranean Framework
for Agriculture, Food and Rural Cooperation

Mediterra 2008 is published to restate the triple question
of the Future of the Mediterranean, its relationship with Europe and
the place that agriculture can play in creating a strategic link between
these two geographical masses whose destiny is bound together