Crop production in the Mediterranean Partner Countries continues to increase

The main crops in the Mediterranean Partner Countries (MPCs) detailed in this publication include cereals, rice, fresh vegetables, fresh fruit, grapes, olives and dates. Of these, the leading crops are vegetables which account for nearly 40% of total production, with 38.9 million tonnes produced on average per year over the period 2000-2006. The second largest crop is cereals, which account for 33% with 32.0 million tonnes. Fresh fruit ranks third representing 14% of total production with 13.6 million tonnes.

A steady increase in production for most crops can be observed in the MPCs in the period from 2000 to 2006. This is due mainly to increased yield, as the area devoted to agriculture remained relatively stable. Among the MPCs, Egypt has the highest percentage of irrigated agricultural area and is the largest producer for most of the crops, with the lowest variability in production over the period.

Figure 1: Breakdown of main crops in the MPCs (% of total production by weight, average 2000-2006)

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1 The MPCs are Algeria (DZ), Egypt (EG), Israel (IL), Jordan (JO), Lebanon (LB), Morocco (MA), occupied Palestinian territory (PS), Syria (SY) and Tunisia (TN).
Fresh vegetables are the most widely grown crops, with almost 39 million tonnes produced annually.

Fresh vegetables (including potatoes) are the most widely grown crops in the MPCs (Figure 1) with an average yearly production of nearly 39 million tonnes over the period 2000-2006 (Table 1). Since 2000, the production increased by an annual average of 5.4%, reaching 45.0 million tonnes in 2006. The most commonly produced vegetables are tomatoes, potatoes and onions.

Among the MPCs, Egypt is the main producer, with 18.0 million tonnes produced on average each year, followed by Morocco, Algeria and Syria with 5.8, 4.7 and 3.0 million tonnes respectively. The breakdown of vegetable production in the MPCs is shown in Figure 2.

Production in Egypt peaked in 2005, with 20.7 million tonnes of fresh vegetables, while production in Morocco and Algeria reached its highest level in 2006, with 7.3 and 5.9 million tonnes respectively.

At 3.5 million tonnes, vegetable production in Syria has been stable in the last three years of the observed period.

Table 1: Vegetables, fruit, grapes, olives and dates: average yearly production 2000-2006; tonnes

<table>
<thead>
<tr>
<th>MPCs</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Grapes</th>
<th>Olive</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>DZ</td>
<td>4 678 904</td>
<td>1 231 043</td>
<td>275 466</td>
<td>261 004</td>
<td>449 251</td>
</tr>
<tr>
<td>EG</td>
<td>18 036 983</td>
<td>5 564 996</td>
<td>1 217 670</td>
<td>327 300</td>
<td>1 140 924</td>
</tr>
<tr>
<td>IL</td>
<td>1 946 026</td>
<td>1 248 361</td>
<td>127 641</td>
<td>41 500</td>
<td>14 685</td>
</tr>
<tr>
<td>JO</td>
<td>1 209 077</td>
<td>229 454</td>
<td>30 017</td>
<td>130 815</td>
<td>2 363</td>
</tr>
<tr>
<td>LB</td>
<td>1 201 486</td>
<td>805 686</td>
<td>113 529</td>
<td>123 314</td>
<td>-</td>
</tr>
<tr>
<td>MA</td>
<td>5 841 440</td>
<td>2 076 946</td>
<td>271 333</td>
<td>571 749</td>
<td>50 713</td>
</tr>
<tr>
<td>PS</td>
<td>578 196</td>
<td>140 768</td>
<td>61 303</td>
<td>112 648</td>
<td>3 921</td>
</tr>
<tr>
<td>SY</td>
<td>3 021 943</td>
<td>1 637 657</td>
<td>333 343</td>
<td>812 357</td>
<td>3 686</td>
</tr>
<tr>
<td>TN</td>
<td>2 434 786</td>
<td>625 214</td>
<td>123 314</td>
<td>762 143</td>
<td>111 857</td>
</tr>
<tr>
<td>Total MPCs</td>
<td>38 948 840</td>
<td>13 560 125</td>
<td>2 553 615</td>
<td>3 142 829</td>
<td>1 777 401</td>
</tr>
</tbody>
</table>

Notes: 1) The MPCs are Algeria (DZ), Egypt (EG), Israel (IL), Jordan (JO), Lebanon (LB), Morocco (MA), occupied Palestinian territory (PS), Syria (SY) and Tunisia (TN).

Data in italic are estimates.

Figure 2: Vegetable production by country (based on 2000 - 2006 average)
An average of 32 million tonnes of cereals are produced in the MPCs annually

After fresh vegetables, cereals were the most widely produced crop over the period 2000-2006 in the MPCs (Figure 1) with an average production of 32.0 million tonnes annually. 2006 was the best year with nearly 38.0 million tonnes produced.

As shown in Figure 3, Egypt is, by far, the major producer with an average yearly production of almost 15 million tonnes. Egypt is followed by Morocco and Syria with an average yearly production of respectively 6.0 and 5.7 million tonnes, over the referred period, and Algeria and Tunisia with 3.1 and 1.7 million tonnes respectively (Table 2). The rest of the production – 0.6 million tonnes – comes from the remaining countries, Lebanon, Israel, Jordan and the occupied Palestinian territory.

Production of cereals in the MPCs in the last years has tended to increase for most countries except Jordan and the occupied Palestinian territory where the production is relatively low but stable. On the whole, the annual average growth rate over the period 2000-2006 was 9.6%, reflecting an increase in yield due also to an increased use of fertilisers. As seen in Figure 4, cereal harvests in the countries of the Maghreb tend to be highly volatile due to irregular annual rainfall and lack of irrigation systems.

Among the MPCs rice is cultivated mainly in Egypt, mostly in the Lower Valley of the Nile River. The quantities harvested have been fairly stable over the analysed period. More than 6.8 million tonnes were harvested in 2006, the best year over the period observed. Rice is also produced, in much lower quantities, in the irrigated area of Gharb in Morocco (34 thousand tonnes in 2006).

Figure 3: Cereal production by country (based on 2000 - 2006 average)

Figure 4: Cereal production in the main MPC producers in 1000 tonnes

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2 Source: FAO/International Center for Soil Fertility and Agricultural Development (IFDC)
3 Morocco, Algeria and Tunisia.
Citrus fruits dominate fresh fruit production in the MPCs

Fresh fruit is the third largest crop in the MPCs, after vegetables and cereals. Production, which includes kitchen gardens, was rather stable over the period 2000-2006, with a yearly average of 13.6 million tonnes harvested (Table 1). Egypt was again the main producer, with a yearly average of 5.6 million tonnes, followed by Morocco with 2.1 million tonnes, Syria with 1.6 million tonnes and Algeria and Israel with 1.2 million tonnes each. The breakdown of fruit production in the MPCs is shown in Figure 5. Production of fruit in these countries is dominated by citrus fruit: 3.2 million tonnes were produced in Egypt and 1.2 million tonnes in Morocco in 2006.

Table 2: Cereal production in the MPCs (excluding rice), in tonnes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DZ</td>
<td>3 053 470</td>
<td>931 818</td>
<td>4 264 374</td>
</tr>
<tr>
<td>EG</td>
<td>14 954 926</td>
<td>14 058 873</td>
<td>16 859 329</td>
</tr>
<tr>
<td>IL</td>
<td>188 286</td>
<td>99 800</td>
<td>249 100</td>
</tr>
<tr>
<td>JO</td>
<td>73 729</td>
<td>47 600</td>
<td>114 500</td>
</tr>
<tr>
<td>LB</td>
<td>299 814</td>
<td>150 100</td>
<td>396 300</td>
</tr>
<tr>
<td>MA</td>
<td>5 955 100</td>
<td>1 961 100</td>
<td>9 192 760</td>
</tr>
<tr>
<td>PS</td>
<td>62 105</td>
<td>37 903</td>
<td>76 701</td>
</tr>
<tr>
<td>SY</td>
<td>5 683 514</td>
<td>3 510 400</td>
<td>6 918 700</td>
</tr>
<tr>
<td>TN</td>
<td>1 701 714</td>
<td>513 400</td>
<td>2 904 100</td>
</tr>
</tbody>
</table>

Note: Data in italic are estimates.
Increase in grapes produced for table use and wine

Grapes are produced in all MPCs, where the level of production showed a steady annual increase from 2000 to 2006, reaching nearly 3.0 million tonnes in the last year. Egypt is the largest producer, with a peak in production of 1.4 million tonnes in 2006 and a yearly average production of 1.2 million tonnes over 2000-2006. Syria, Algeria and Morocco follow with 333, 275 and 271 thousand tonnes on average per year respectively over the analysed period. The occupied Palestinian territory (61 thousand tonnes) and Jordan (30 thousand tonnes) are relatively smaller producers (Table 1).

Grapes in the MPCs are mainly intended for fresh consumption, but some MPCs are increasingly using their cultivated grapes for wine and juice production. Tunisia and Israel use 38% and 36% respectively of their harvested grapes for wine and juice production, followed by Morocco, Algeria and Syria with 25%, 21% and 20% respectively. The figure drops to 10% in Lebanon, where wine is mainly produced in the Bekaa valley.

Olive production: over 3 million tonnes produced in the MPCs on average

Over the referred period, olive production in the MPCs showed significant annual variations typical for this crop. The average yearly production for 2000-2006 is 3.1 million tonnes in the MPCs (Table 1). The production is mainly intended for olive oil. Syria is the largest producer (Figure 7) with 812 thousand tonnes of olives harvested on average per year, followed by Tunisia (762 thousand tonnes) and Morocco (572 thousand tonnes). 

Figure 6: Grape production by country (based on 2000 – 2006 average)

Figure 7: Olive production by country (based on 2000 - 2006 average)
Dates are a characteristic crop for the MPCs, with 1.8 million tonnes produced on average.

Dates are grown in all MPCs, except for Lebanon. The average yearly production over the period 2000-2006 is 1.8 million tonnes (Table 1), most of which comes from Egypt with 1.1 million tonnes. Egypt is followed by Algeria (449 thousand tonnes), Tunisia (112 thousand tonnes) and Morocco (51 thousand tonnes), while between them, Israel, the occupied Palestinian territory, Syria and Jordan only produce 25 thousand tonnes on average per year.

**Figure 8: Date production by country (based on 2000 - 2006 average)**

Utilised agricultural area and irrigated land

Morocco is the country with the largest utilised agricultural area (UAA): 9 million hectares on average per year, followed by Algeria, Syria and Tunisia with 8.3, 5.5 and 4.9 million hectares respectively. UAA in the MPCs did not vary significantly over the period, with the exception of Egypt and Lebanon whose UAA increased by almost 10%.

The percentage of UAA that is irrigated noticeably influences agricultural production. On average, in Egypt, 77% of the UAA (located around the Nile valley and its delta) was irrigated: clearly a high rate when compared with its neighbouring countries. This makes Egypt the largest agricultural producer among the MPCs. Other countries with a relatively high percentage of irrigated land are Lebanon (47%) and Israel (46%), followed by Jordan (26%), whose irrigated area is mainly located in the Jordan River Valley, and by Syria (25%).

**Table 3: Utilised Agricultural Area in the MPCs**

<table>
<thead>
<tr>
<th>MPCs</th>
<th>UAA Average 2000-2006 (1000 ha)</th>
<th>UAA 2006 (1000 ha)</th>
<th>% Change in UAA 2000-2006</th>
<th>% of irrigated land in total UAA Average 2000-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>DZ</td>
<td>8 291</td>
<td>8 404</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>EG</td>
<td>3 420</td>
<td>3 533</td>
<td>9</td>
<td>77</td>
</tr>
<tr>
<td>IL†</td>
<td>:</td>
<td>296²</td>
<td>:</td>
<td>46²</td>
</tr>
<tr>
<td>JO</td>
<td>295</td>
<td>295</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>LB</td>
<td>262 ⁴</td>
<td>273²</td>
<td>10⁴</td>
<td>47⁴</td>
</tr>
<tr>
<td>MA</td>
<td>9 005</td>
<td>8 951</td>
<td>-1</td>
<td>14²</td>
</tr>
<tr>
<td>PS</td>
<td>183 ⁴</td>
<td>183²</td>
<td>0⁴</td>
<td>13⁴</td>
</tr>
<tr>
<td>SY</td>
<td>5 482</td>
<td>5 588</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>TN</td>
<td>4 936</td>
<td>4 946</td>
<td>-1</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: 1) In Israel, the methodology of UAA data collection was changed in 2003. Data are not comparable over the period. 2) 2005 data. 3) 2000 data. 4) 2000-2005.
ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

The data are primarily obtained by sample surveys and supplemented by estimates based on expert observations as well as by administrative data. The sources are not the same for each MPC as they are adapted according to national conditions and statistical practices. Data are definitive official statistics in the MPCs except for Jordan which labels its data as ‘estimates’ for all years supplied. The data analysed refer to the main crops which include: cereals (excluding rice), total fresh fruit including kitchen gardens (excluding grapes, olives and dates), total grapes, total olives and total dates. Data are available for the period 2000-2006 for all MPCs except Lebanon. To include Lebanon in the aggregate figures for 2006, 2005 figures have been used.

In all tables and graphs average 2000-2006 refers to simple arithmetic mean of the yearly values during that period.

Sources of data transmitted by the 9 MPCs:
- Algeria: Office National des Statistiques
- Egypt: Central Administration for Public Mobilisation and Statistics
- Israel: Central Bureau of Statistics
- Jordan: Department of Statistics
- Lebanon: Administration Centrale de la Statistique
- Morocco: Direction de la Statistique
- Occupied Palestinian territory: Palestinian Central Bureau of Statistics
- Syria: Central Bureau of Statistics
- Tunisia: Institut National de la Statistique

Abbreviations:
- DZ: Algeria
- MA: Morocco
- EG: Egypt
- PS: occupied Palestinian territory
- IL: Israel
- SY: Syria
- JO: Jordan
- TN: Tunisia
- LB: Lebanon

Definitions:

Total utilised agricultural area (UAA): The whole agricultural land (main area) in hectares. The utilised agricultural area means the total area used for crop production, which is exhaustively described as arable land including temporary grassland and fallow and green manure, permanent pastures and meadows, permanent crops (e.g. fruits and grapes), crops under glass and kitchen gardens. The agricultural area utilised for farming includes the area under main crops for harvest in the year of the survey (successive crops and cultivated mushrooms are excluded).

Total irrigated agricultural land: An area of crops which have actually been irrigated at least once during the agricultural season. Crops under glass and kitchen gardens, which are almost always irrigated, are not included.

Cereals (excluding rice): Total of all cereals (including winter and spring). The data on cereals refer to crops harvested for the production of dry grain only. Crops harvested or consumed green for forage, silage or grazing are excluded, and are classified as fodder crops. Cereals include: common wheat and spelt, durum wheat; rye; barley; oats; grain maize; rice; sorghum; triticale; buckwheat, millet and canary seed.

Rice: Oryza sativa L. harvested as dry grain, including seed.

Total fresh vegetables: For the compilation of the production of this heading, the amounts produced in greenhouses are included. Potatoes are also included.

Total fresh fruit: including kitchen gardens (excluding grapes, olives and dates) for the compilation of the production of this heading, the amounts produced in greenhouses are included.


Total dates: Phoenix dactylifera.

This document has been prepared with the collaboration of M. Valerio Lucchesi and M. Dominique Kong, experts in Agriculture Statistics within the framework of MEDSTAT II, the EU-funded regional Euro-Mediterranean Statistical Co-operation programme.

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