Focus on: production, quality control and certification of potatoes in the region

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Under the auspices of UNECE and MALR
International Workshop on Seed Potatoes for Countries of Africa and the Middle East
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SURVEY RESULTS
12 countries

- Morocco
- Algeria
- Tunisia
- Egypt
- Sudan
- Kenya
- South Africa

- Turkey
- Syria
- Lebanon
- Jordan
- Saudi Arabia
PRODUCTION: area, volume, yield, consumption

The studied region:

- Total potato area of **670 000 ha**
  (3.5% of the potato area in the world)

- Total potato production of **15 million tons**
  (4.6% of world potato production)

- Average yield of **22 T/ha**
  (5 tons per ha higher than the average world yield)

- Average consumption of **33 kg/capita/year**
  (almost equal to average world consumption)

Source: UNECE potato questionnaire, FAOSTAT
PRODUCTION: area (hectares)

- General
- Production indicators
- Seed Production
- UNECE standards

- TURKEY
- KENYA
- EGYPT
- ALGERIA
- MOROCCO
- SOUTH AFRICA
- SYRIA
- TUNISIA
- LEBANON
- SUDAN
- JORDAN
- KSA
PRODUCTION:
volume (tons)

- TURKEY
- EGYPT
- SOUTH AFRICA
- ALGERIA
- KENYA
- MOROCCO
- SYRIA
- LEBANON
- JORDAN
- TUNISIA
- KSA
- SUDAN

0 500 000 1 000 000 1 500 000 2 000 000 2 500 000 3 000 000 3 500 000 4 000 000 4 500 000

General
Production indicators
Seed Production
UNECE standards
PRODUCTION:
average yield (T/ha)

- General
- Production indicators
- Seed Production
- UNECE standards
PRODUCTION: consumption (kg/capita/year)

- General
- Production indicators
- Seed Production
- UNECE standards
PRODUCTION: expectations

All countries expect potato production to grow:

• Depending on product availability
• Especially for processing market
• Because of new consumption habits
• Potato more and more considered as diversification products (for growers and consumers)
PRODUCTION:
seasons (number)

- All over the year
- 1
- 1-2
- 2
- 3
- 3-4
- 2-3
- 2
- 3
- 4

General
Production indicators
Seed Production
UNECE standards
PRODUCTION:

- General
- Production indicators
- Seed Production
- UNECE standards

**Potato area**
- = 100 ha
- = 1000 ha

**Altitude**
(meters above sea level)
- > 2000
- 500 - 2000
- < 500

- Sea cost
- Water availability
- High Lands
- Yield may vary from 1 to 3 according to the region and the season

Source: R.J. Hijmans, International Potato Center, Lima, Perú, 2000
PRODUCTION:
agronomic practices

- Seed cutting according to size of seed potatoes, period of plantation, risks of diseases, price of seed potatoes (especially for imported seeds)

- Irrigation (flooding, drip, sprinklers, pivot), rainfall for some countries

- Storage (traditional and cold store), mainly for seed potatoes

- Imported and local seed potatoes (rate varies according to countries and depends on period of production)

- Actual needs of seed potatoes difficult to evaluate because of use of informal (or farm-saved) seeds

Turkey: 450 000 t
Egypt: 325 000 t
Algeria: 220 000 t
South Africa: 187 500 t
PRODUCTION:
agronomic practices
PRODUCTION: main constraints

- Diseases and pests seem to be main constraints in countries studied, especially late blight (and bacteria wilt for some countries) and tuber moth. For seed potato production, high pressure of aphids transmitting the viruses

- Climate (drought, frost, heavy rains)

- Cost of inputs (especially high price of seed potatoes)

- Seed quality (sanitary, physiological)

- Price of final product

- Soil quality (soil nature, salinity)

- Storage (especially traditionnal)
10 countries import some seed potatoes (mainly E but also SE and A), for example:
- **Algeria:** 80,000 to 90,000 t
- **Egypt:** 60,000 to 75,000 t
- **Morocco:** 42,000 t
- **Tunisia:** 18,000 to 24,000 t
- **Syria:** 5,000 t

- South Africa may sometimes import mini-tubers or vitro-plants to start multiplication scheme

- Kenya does not import seed potatoes or starting material
PRODUCTION: imported seed potatoes
(Periods of plantations)

- January-February: plantations with imported seeds
- March-April: plantations with imported seeds
- November: plantations with imported seeds

General

Production indicators

Seed Production

UNECE standards
PRODUCTION:

varieties

• « SPUNTA » in 8 countries (KSA + mediterranean countries, except Turkey)

• Use of varieties for processing (French Fries and crisps)

• Introduction of more and more protected varieties (especially in counties with only 1 or 2 multiplications)

• Protected varieties multiplied in South Africa (variety protection system)

• Not dependant on imported seed potatoes, Kenya has a breeding and multiplication program (collaboration with CIP)
SEED PRODUCTION:
local seed storage (months)

Almost all countries are using certified and saved-farm seeds (varying rate)
SEED PRODUCTION: seed production system, including certification

- 9 countries have seed production system including certification

- 2 countries have recently started to set up a seed production system with certification (Lebanon and Sudan)

- KSA no system yet

Some countries have a complete system, including:
- grower admission for seed potato production
- field inspection with standards for isolation, rotation, varietal purity
- lot inspection in the packing station and cold store
- lab analyses
- post control

Kenya and South Africa have certification systems from tissue culture to certified seeds (longer multiplication schemes). Egypt is also studying certification system from mini-tubers.
SEED PRODUCTION: seed production system, including certification

<table>
<thead>
<tr>
<th>Country</th>
<th>Certified seed potatoes (tons, average)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>140 000</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>110 000</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>55 000</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>41 764</td>
<td></td>
</tr>
<tr>
<td>Syria</td>
<td>21 600 Including 600 tons SE and 1000 tons E</td>
<td></td>
</tr>
<tr>
<td>Tunisia</td>
<td>7 000 Project to certify from 10 to 15 000 tons</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>2 000</td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td>1 000</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

378 464
Almost all countries intend to use the UNECE standards. They expect from these standards:

- Facilitate accession to WTO
- More respect of the quality seeds standards (diseases, variety)
- Follow the evolution of the European standards
- Establish new standards (if no conflict with the existing national standards)
- Build complete, coherent and efficient certification system (through a common Project)
- Upgrade, if necessary, their national standards
- Facilitate international trade (importing and exporting)

But they also need further examination of the standards and, under some conditions, parts of the standards could be used.
THANK YOU

MERCI

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DANKE

СПАСИБО

شكرا لكم

TEŞEKKÜRLER

ASANTE

DANKIE

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