TECHNICAL COOPERATION PROGRAMME BETWEEN THE MINISTRY OF AGRICULTURE AND THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

IMPACT AND DEVELOPMENT OF THE MAJOR TROPICAL FRUITS IN THE RURAL AREAS OF KINGDOM OF SAUDI ARABIA

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Kingdom of Saudi Arabia:
80% of Arabian Peninsula, Arable land: 52.684 million hectare; 4.19 million hectares currently cultivated
<table>
<thead>
<tr>
<th>Fruit</th>
<th>Area (Ha)</th>
<th>Production (MT)</th>
<th>Tree Population (No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mango</td>
<td>6,350</td>
<td>32,000</td>
<td>830,000</td>
</tr>
<tr>
<td>Citrus</td>
<td>13,015</td>
<td>105,000</td>
<td>-</td>
</tr>
<tr>
<td>Dates</td>
<td>155,000</td>
<td>23,000,000</td>
<td>23,000,000</td>
</tr>
<tr>
<td>Figs</td>
<td>2,857</td>
<td>4,571</td>
<td>31,960</td>
</tr>
<tr>
<td>Guava</td>
<td>-</td>
<td>3,212</td>
<td>35,690</td>
</tr>
<tr>
<td>Papaya</td>
<td>-</td>
<td>2,350</td>
<td>25,360</td>
</tr>
</tbody>
</table>
# IMPORTS AND SELF SUFFICIENCY

## Imports:
Mango, guava, mangosteens (fresh/dried)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT</td>
<td>63,497</td>
<td>57,857</td>
</tr>
<tr>
<td>USD</td>
<td>51,260,000</td>
<td>49,090,000</td>
</tr>
</tbody>
</table>

## Self Sufficiency:
- Vegetables ................... 86.9%
- Dates ........................... 100%
- Grapes ......................... 79.1%
- Citrus ........................... 18.2%
- All other fruits .............. 31.1%
Development of Major Tropical Fruits in Kingdom of Saudi Arabia

• Started and progressed through the Technical Cooperation Programme
• The Technical Cooperation between FAO and the Ministry of Agriculture began as early as 1950
• The major thrust of development started with the Unilateral Trust Fund Agreements (UTFA) since 1981
• The UTFA is continuously renewed every 5 years up to the current one (2011-2016) (includes 16 development projects, USD 67 million)
• The Horticulture and Technology Transfer Project (USD USD 4,514,508) (Tropical fruits, Citrus and Grapes)
Leading Tropical and Subtropical Fruits Research Centres

- Jazan Agricultural Research Centre (Tropical Fruits)

- Najran Horticulture Research Centre (Citrus and Tropical Fruits)
Najran Horticulture Research Centre
Agricultural Research Center in Jazan
Development Approach

- Introduction and improvement of genebanks
- Capacity development
- Generation of technologies
- Development and strengthening of infrastructure
- Technology transfer
Citrus Gene banks
Includes 125 citrus cultivars (74 cultivars field experimented and adopted by growers)
Mango gene bank:
Includes 52 mango cultivars
الصنف: ملكا / Mallilka
تاريخ الزراعة: 2008
المصدر: الهند
<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Cultivars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>11</td>
<td>Tommi Atkin, Palmer, Julie, Zell, Kent, Haden, Keitt, Sabrie, Apple, Borebo, Kitchener</td>
</tr>
<tr>
<td>1983</td>
<td>5</td>
<td>Glenn, Van Dyke, Najwa, Otto, Sensation</td>
</tr>
<tr>
<td>1984</td>
<td>12</td>
<td>Hindi Khass, Parie, Bulk Heart, Zibda, Vajr Klein, Hindi Bosennara, Golluk, Awaise, Yemenia, Karabau, Neilum, Taymour</td>
</tr>
<tr>
<td>1989</td>
<td>4</td>
<td>Kingston, Onno, Florigen, Nam Dog My</td>
</tr>
<tr>
<td>2007</td>
<td>8</td>
<td>13-1, Turpentine, Kaisar, Benshan, Royal Special, Malika, Valencia Bright, Langra</td>
</tr>
<tr>
<td>2010</td>
<td>7</td>
<td>Kubania, Goose Neck, Dibsha, Mabruka, Aromanis, Sukarie, Naoumi</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>Vazlie, Kazalla, Imperial</td>
</tr>
</tbody>
</table>
Other introduced fruits (1982-2014)

- Pineapple (Perola, Jupi, Hawaii, Red Spanish)
- Guava (FAO, Jazan)
- Figs (Brown Turkey, Local, Mailly)
- Cashew
- Carambola
- Sapote
- Annona
- Papaya (Solo, Somali, Jordanian)
- Pitaya
Capacity development and technology transfer
Generation of technologies
Development and strengthening of infrastructure
Soil and water control

Environmental Stress and Physiology

Production and Quality control

Protection and micropropagation
Tropical fruit development: Results
Major constraints

- Irrigation water scarcity
- Increasing soil salinity
THANK YOU