Promoting dates as extraordinary fruits for economic, environmental and social development

The date palm (*Phoenix dactylifera*) has been cultivated since 4000 B.C. and is potentially the oldest domesticated tree in the world. It has been linked to ancient populations including Sumerians, Akadians and Babylonians, and is mentioned in Islamic, Jewish and Christian texts and used as the symbol for a year in Egyptian hieroglyphics. Due to the long history of cultivation and international exchanges, it is difficult to identify the exact centre of origin for date palm, although evidence suggests this could be Iraq. However, what is certain is that date palm has served as a critically important staple food, a chief source of wealth and is of unrivaled cultural importance in arid regions of North Africa and the Middle East.

Spanish missionaries in the 18th and early 19th century further distributed date palm and it is currently cultivated in the Canary islands, Pakistan, India, Mexico, Peru, the U.S. state of California, Albania, Turkey, China, Benin, Cameroon, Eswatini, Kenya, Namibia and Nigeria. Global production covers 13.4 million Hectares, yielding 31 million tonnes (FAOSTAT, 2017). Leading date producing and exporting countries include Egypt, Kingdom of Saudi Arabia and Iran. Date palms are genetically diverse with several known varieties: 595 accessions are conserved in genebanks held in Afghanistan, Cuba, Spain, UK, India, Jordan, Libya, Pakistan, Sudan, Trinidad and Tobago, Tunisia, USA and South Africa. In addition, there are 1104 accessions of date palm relatives (belonging to the same genus) conserved in genebanks that can be used for breeding purposes (WIEWS, FAO database).

Date palm trees are traditionally propagated from either seeds or suckers (basal stem offshoots produced in the early years of the life of the palm). However, FAO has championed tissue culture systems for *in vitro* supply of high quality seedlings that vastly improve yields. The climatic requirements for date palm cultivation are hot and arid conditions and therefore access to water/irrigation is essential. Male and female flowers are borne on separate plants so when cultivated the female flowers are artificially pollinated. Palm trees begin to provide fruit after four to five years and can live as long as 150 years, but fruit production declines with increasing age and under commercial cultivation trees are replaced much earlier. The shape, size, colour, quality, and consistency of date flesh varies according to the variety cultivated and the growing conditions, but potentially more than 1,000 dates can appear on a single bunch, weighing 8 kg.

Date palm is a multipurpose tree that provides fruit, fibre, sheltering material and fuel. Its trunk furnishes timber; leaves, roofing materials; leaf midribs, supply material for crates and furniture; the leaflets, for basketry; the leaf bases, for fuel; the fruit stalks, for rope and fuel; the fibre, for cordage and packing material; and the seeds can be ground and used as stock feed. Syrup, alcohol, vinegar can be derived from the fruit. The sap is also used as a beverage, either fresh or fermented, but, because the method of extraction seriously harms the tree, only those that produce little fruit are used for sap. When palm trees are felled, the tender terminal bud can be eaten as a salad. The fruits have an excellent shelf life that facilitate lucrative local, domestic
and international trade. Fresh and dried fruits are eaten as a key component in traditional diets, as snacks and are processed into confectionary products. Like many dried fruits, dates provide significant energy, being 50 percent to 65 percent sugar (fructose and glucose) by dry weight and are a rich source of fibre. They contain relatively low protein (2%), fat (<2%) and sodium, and low to moderate concentrations of potassium, calcium, chloride, magnesium, phosphorous. Interestingly, their low sodium: potassium ratio makes them potentially suitable for people with hypertension. Dates are a good source of vitamins including B1 (thiamine), B2 (riboflavin), and B7 (niacin). They have also been reported to contain a range of antioxidant compounds such as phenolic acids, carotenoids, and polyphenols.

In 2016, the world production of dates was valued at about USD 8.4 billion, while global trade amounted to some USD 1.2 billion, providing a major source export revenues as well as of livelihoods and income for millions of rural smallholders. Through the economic activities they generate, date production and trade can make a positive contribution to the achievements of the 2030 Agenda for Sustainable Development and a number of Sustainable Development Goals (SDGs). The reliance on dates for livelihood and export earnings highlights the necessity to understand the fundamentals that drive the market as well as to identify opportunities for expanding demand and trade.

The Codex Alimentarius Commission has up to now developed two specific commodity standards to protect the health of consumers and ensure fair practices in the food trade: Dates (CXS 143-1985) and Date Paste (Near East) (CXS 314R-2013). The standards establish the key essential composition and quality factors (including labeling and packaging provisions), the use of food additives as well as other safety provisions related to food hygiene, contaminants and pesticide residues. Safety provisions have been formulated by referencing general texts such as the General Principles of Food Hygiene (CXC 1-1969), General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995) and maximum residue limits for pesticides. For any claims with regards to nutrition and/or health, the Guidelines for Use of Nutrition and Health Claims (CXG 23-1997) and other relevant Codex labeling texts apply. A standard on fresh dates, focusing on quality requirements, is expected for adoption in 2020.

This side event is sponsored by the Kingdom of Saudi Arabia to increase awareness, promote discussions and partnership opportunities among date producing and importing countries based on the following topics:

1. the extra-nutritive value and bioactive properties of date fruits
2. other commercial uses of dates and palm tree products
3. extraordinary potential of dates to deal with the risk of global challenges of hidden hunger, Kingdom of Saudi Arabia proposing dates as superfruit
4. date palm products: ready-to-use date products and derived products
5. understanding key driving factors of international trade and demand for dates
6. contribution of date palms to the International Year of Fruits and Vegetable in 2021

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<th>Time</th>
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| 17:30 – 17:35 | Opening remarks                           | Dr Mohammed Alghamdi  
Permanent Representative of Saudi Arabia to FAO |
| 17:35 – 17:40 | Remarks                                   | Deputy Director-General Climate and Natural Resources  
Maria Helena M.Q. Semedo  
And  
Eng. Ahmed Saleh Alkhmshi,  
Deputy Minister of Environment, Water and Agriculture  
Saudi Arabia |
| 17:40 – 17:50 | Nutritional and health benefits of dates  | Dr Reda MEZIANI,  
Head of the Regional Center of Agronomic Research  
Morocco |
| 17:50 – 18:00 | Promotion of dates in European markets    | Dr Mazen Alkhateeb,  
Organic Farming Development Project, PALLADIUM, Germany |
| 18:00 – 18:10 | Nutritional and health benefits of dates  | Dr Munirah Al- Mssallem – Saudi Arabia  
Assistant Professor King Faisal University, Saudi Arabia |
| 18:10 – 18:25 | Discussion                               | Moderated By Dr Mohammed Alnuwairan,  
Executive Director of the National Center for Palm and Dates |
| 18:25 – 18:30 | Closing remarks                          | Dr Suliman Alkhateeb,  
Director General of Plant Resources, Saudi Arabia |

**Audience of the event:**
The Mission of Saudi Arabia to FAO welcomes all Permanent Representatives, conference delegation, and member states to this event.

**Responsible office:**
Organized by Saudi Arabia Permanent Representation and FAO.

**Languages:**
Arabic, English, French, Spanish.
Refreshments and snacks will be served.
Brochures and samples of date fruits will be distributed in this event.