

Mango: Pakistan 4th Largest Prodducer in the World

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Pakistan is an agricultural country and production of fruits is the part and parcel of this sector. Mango is the king of fruits and one of the most important fruit crop in the world as well as in Pakistan. It's a tropical, climacteric fruit liked by all due to its taste, flavour and excellent nutritional properties.

The rapid growth of global Mango production in recent years has been due to its expansion into new growing regions of the New Worlds, China and parts of Africa; the planting of regular bearing selections; and the adoption of modern field practices, which include irrigation management, control of flowering, etc. There is an estimated 3.7 million hectares of mango worldwide. Mangoes form a regular part of the diet of people in areas where the fruit is easily grown; it may be eaten ripe or green.

The Mango is the most important fruit of Asia, and Pakistan ranks fourth in the total production among major fruit crops worldwide after bananas and plantain, citrus, grapes and apples. The major Mango exporting countries are Mexico, India, Brazil, Peru, Pakistan and the Philippines.



The top five Mango importing countries are the USA, the Netherlands, the United Arab Emirates, Saudi Arabia and Bangladesh with import valued at US\$703.9 million. Approximately 1% of Mango production is utilized for processing for juice, nectars, preserves, fruit leather, dried fruit slices, frozen pulp, and as flavouring for baked goods, ice cream, yoghurt, etc.

In Pakistan, total area under fruit cultivation is 853.4 thousand hectares with the production of 7178.8 thousand tonnes while area under Mango cultivation is 175 thousand hectares with the production of 1,784 thousand tonnes being the second major fruit crop of Pakistan produces 8.5% of world's Mango and mainly exports to Middle East, Iran, Germany, Japan, China and Hong Kong making its valuable contribution as an important foreign currency earning fruit crop. Pakistan is now the 4th largest producer in the world behind India, China, Mexico and Thailand. The climate earlier than that of Punjab, which has given the province the privilege to grow early varieties of Mango. It has been observed that in the past few years the production of quality Mangoes is on the decrease. Pakistan's horticulture has been badly hit by global warming and extreme weather, and a major casualty this season has been the Mango crop in

Table 1: Production of Mango (Tonnes)

Province	2011-12	2012-13	2013-14	2014-15
Punjab	1,304,223	1,280,211	1,370,150	1,380,135
Sindh	391,781	396,137	398,580	399,650
KPK	22,922	2,964	2,950	2,960
Baluchistan	1,084	1,076	1,083	1,090
Total	1,700,010	1,680,388	1,772,763	1,783,835

Source: Ministry of National Food Security and Reseach, Government of Pakistan, Islamabad

Punjab. Mango output has also been affected in south Punjab where fruit plants in Rahim Yar Khan, Muzaffargarh and Multan.

However, the crop in Sindh is comparatively less affected and only a 10% reduction is likely in its share of 35% in the country's total Mango output. In southern Sindh, Mango production has not been a viable business over the years due to harsh weather.

The country has so far exported 65,311 tonnes of Mangoes valued US \$46 million in 2014-15 to the UAE, Gulf States, Central Asian states, the EU, Australia, US and Canada. Climatic changes have also hit the European horticulture sector in recent years but they have adopted measures to effectively combat climate change effects.

Pakistani Mango is recognized as one of the best of its kind in the world market. With a production of 1.8 million tonnes per year, Pakistan is among the leading Mango producers and is considered the Original and natural habitat of Mangoes. Punjab has the major share of Mango production with 67% whereas Sindh produces 24% and KPK produces 1% of the fruit. Province-wise production of Mango is given in Table-1.

Pakistani Mangoes are high in fibre, low in calories and contain a small amount of carbohydrates, calcium, iron, potassium and a little protein. They are rich in vitamins A, B and C and also contain other antioxidant vitamins. There are



a number of varieties of this fruit including Sindhri, Langra, Dusehri, Anwar Rataul, GulabKhas, Sunera, Chaunsa, Black Chaunsa, White Chaunsa, Began Phali, Fajri etc. All of these diverse varieties have distinctive colours, aromas and tastes.

Nature has blessed Pakistan with agro-climatic conditions which permit quality production of Mango. Per hectare average yield of Pakistan is 11.20 tonnes per hectare which is on the low side as compared to the other major mango producing countries of the world e.g. China and Brazil. Most of the countries cultivate varieties like Haden, Tommy Atkins, Kent and Keitt. While most important commercial cultivars of Pakistan are Dashehari, Anwar Ratul, Langra, Chaunsa, Sindhri, Maldha, Fajri. More than half of Mango area (110 thousand hectares) lies in Punjab followed by Sindh (69 thousand

hectares) with minor acreage in Baluchistan (0.6 thousand hectares) and KPT (0.3 thousand hectares). Districts which are important regarding cultivation of Mango in Pakistan are Bahawalpur, Dera Ismail Khan, Hyderabad, Multan, Khanewal Sahiwal, Muzaffar Garh, Sadiqabad, Rahim Yar Khan, Vehari and Thatta.

Exports: Overall export of Mango has witnessed a steady growth. In 2012-13, Mango exports were

103,187 tonnes valued at US\$ 48.6 million which decreased to 65,311 tonnes valued at US \$ 45.7 million in 2014- 15. The most important reason of Pakistani Mangoes popularity is its sweet taste and a beautiful golden colour. These Mangoes have a lavish size with a sweet taste, but its sugar taste is not horribly sweet. Unlike the other Mangoes which have large sugar counterparts, Pakistani Mangoes have a normal sweet taste which helps more than one Mango at a time. Export trend of Mangoes from Pakistan are given in Table 2.

Pakistan mainly exports Mango to Afghanistan, Oman, Qatar, Saudi Arabia, UAE and Germany. UAE is the largest importer with market while Oman and Saudi Arabia are second and third largest importers. Country-wise exports of Mango from Pakistan are given in Table-3.

In addition to major crop losses, bad luck awaited Pakistan at another front. A Pakistani Mango consignment of 4.5 tonnes was rejected last year in Amsterdam after discovering fruit fly in the fruit, making the first such instance last year. The EU had already made it clear last year that more than five rejections will mean a complete ban on Pakistani fruit and vegetable imports in the European markets.

Risk factor in Mango exports with the end of current Mango season, exporters resumed their sales to the European Union and the UK. The exporters had voluntarily stopped operations to the EU soon after the UK Customs intercepted two Mango consignments of 4,490kg

Table 2: Export of Mango from Pakistan

Year	Quantity (Tonnes)	Value	
		(Rs. Million)	US \$ (000)
2007-08	68,879	1,744	22,280
2008-09	73,437	2,307	29,491
2009-10	84,921	2,522	29,382
2010-11	89,552	2,889	33,797
2011-12	85,119	3,272	36,623
2012-13	103,487	4,706	48,646
2013-14	86,001	4,977	48,370
2014-15	65,311	4,627	45,677

Source: (i) Pakistan Bureau of Statistics, (ii) Trade Development Authority of Pakistan

from Pakistan with live fruit fly larvae on July 14 and 15, 2015. Another shipment, weighing 5,200kg, was intercepted in similar condition in Holland on June 14, 2015.

Pakistan will face a blanket ban on its Mango exports, a fate similar to that of India. The European Commission, through a notification on March 27 last year, banned imports from India and also alerted Pakistan about such an eventuality if safety measures were not taken to ensure pest-free exports in the future.

Despite the decline in quantity, exporters

earned more than double the amount they got in 2013 because of the stringent quality standards applied by the government for exports to the EU in the 2014 season.

Problems

The Soil and climatic conditions in Pakistan support Mango production in terms of yield and quality. However, the country is not able to acquire the desired results. Number of factors contributes towards low production of Mango. Unchecked use of unhealthy seeds form-

ing diseased seedlings, Insect attack (Mango mealy bug, fruit fly, Mango weevil, scales, mites), alternate bearing, Mango malformation(vegetative or reproductive) and diseases (powdery mildew, anthracnose, quick decline, sooty mold, fruit rot and stem blight) are the greatest threat to the industry in major Mango producing countries, including Pakistan. Also, low pollination, less fruit setting (less than 0.1%), high fruit drop percentage, unnecessary stresses (injury) and improper management practices during budding or grafting, time of irrigation, pruning and time of application of fertilizers are contributing substantially to the downfall of the industry. Adding to the ever increasing problems are the post-harvest losses contributing almost 40% to 50%.

Different countries have their own requirements for processing and treatment, but the most commonly used method in vogue is hot water treatment (HWT), radiation and vapour treatment. Shortage of hot water treatment plants in the country has a major role in declining export to the valued markets, especially European markets. Total number of hot water treatment plants has increased to 29 in 2015. These plants have the capacity to treat 2,000 tonnes to 2,500 tonnes of Mangoes per day.

References

1. Ministry of National Food Security and Reseach, Government of Pakistan, Islamabad
2. Pakistan Bureau of Statistics.
3. Pakistan Economic Survey- 2014-15, Government of Pakistan.
4. Trade Development Authority of Pakistan. ◆

Table 3: Country-wise Export of Mango (Major Countries)

Quantity: 000 Kg
Value: Rs. 000

Country	2012-13		2013-14		2014-15	
	Quantity	Value	Quantity	Value	Quantity	Value
Afghanistan	9,502	378,676	357	14,220	239	95,749
Bahrin	1,626	73,942	2,000	90,475	5,631	53,580
Belgium	1,248	65,174	313	45,676	298	48,418
Germany	1,632	142,884	1,220	191,368	1,066	138,685
kuwait	555	28,436	384	21,285	295	18,893
Malysia	447	36,471	627	70,698	690	61,539
Netherlands	424	49,487	250	40,656	224	23,128
Oman	1,268	402,052	10,086	391,867	6,263	365,470
Qatar	1,923	127,188	1,473	110,836	1,212	131,312
Saudi Arabia	8,275	415,070	4,319	36,770	4,672	436,093
U.A.E	45,330	1,544,575	43,602	1,682,534	6,203	685,670
All others	28,852	3,161,810	21,370	2,280,290	38,518	2,568,530
Total	103,487	4,706,385	86,001	4,976,675	65,311	4,627,067

Source: Pakistan Bureau of Statistics.