

# Indian Mango – Production and Export Scenario

N. J. Thakor\*

Vishwashanti Colony, Pimple Saudagar, Pune, Maharashtra (India)

## Introduction

Mango (*Mangifera indica* Linn) is known the world over as a fruit with many nutritional qualities, as it is rich in minerals, fibre, vitamins and provitamins. Also referred to as the “peach of the tropics”, this fruit is one of the main types of fruit considered exotic. Because it is sweet, refreshing and aromatic, it is commercialized throughout the world. It is the national fruit of India, Pakistan, and the Philippines, and the national tree of Bangladesh. Approximately 50% of all tropical fruits produced worldwide are mangoes. Mango is commercially grown in more than 80 countries. World production of mango for the year 2014 was more than 46 million tons (FAO-STAT 2016). Major Mango producing countries of the world are India, Brazil, China, Thailand, Egypt, Indonesia, Mexico, Pakistan, Philippines, and Vietnam. By far, Asian countries produce the largest volumes of mangoes worldwide. India is the world’s largest producer by a wide margin, with more than 40% of global production. India produced 18.77 million tons of mango of the total world mango production in 2014 (FAO-STAT 2016). China and Thailand stood at second and third position among mango producing countries in the world with 4.77 and 3.43 million tons respectively. The other top-ten mango producing countries in the world during 2014 were Mexico (2.20 million tons), Indonesia (2.18 million tons), Pakistan (1.61 million tons), Brazil (4.17 million tons), Egypt (1.28 million tons), Bangladesh (1.16 million tons), and Nigeria (0.92 million tons). Production figures for the top ten mango producing countries of the world for 2014 is given in the Table 1.

## Importance

Mango is the national fruit of India. It is also one of the

**Corresponding author:** nayan07@gmail.com

Dr. N. J. Thakor is Former Dean, Faculty of Agricultural Engineering, (DBSKKV) and presently Agricultural Processing and Food Technology Consultant.

Received Date: 10/05/2018; Accepted Date: 25/12/2018

most important and popular Asian fruits. Cultivation of Mangoes is deeply embedded in Indian history. According to Indian beliefs, mangoes symbolize the life and are used in almost every sacred ritual. Mango leaves are almost always used for festivals and wedding decorations. The fruit is very popular with the masses due to its wide range of adaptability, high nutritive value, richness in variety, delicious taste and excellent flavour (Anonymous 2013). Mango fruits vary in shape (nearly round, oval, ovoid-oblong), size and color, depending upon the variety. Ripe Mangoes may be greenish, greenish-yellow, yellow, red, orange, or purple and weigh from a few grams to kilo grams (2.3 kg). The skin is smooth and leathery, surrounding the fleshy, pale-yellow to deep-orange edible portion. The fruits possess a single large, flattened, kidney-shaped seed that is enclosed in a woody husk (Anonymous 2013).

The fruit is consumed in both forms raw and ripe. The fruit contains nearly 81 per cent moisture, 0.4 per cent fat, 0.6 per cent proteins, 0.8 per cent of fibres. It also contains nearly 17 per cent of carbohydrate. The fruit is rich with important minerals contains important minerals like Potassium, magnesium, Sodium, Phosphorus, and Sulphur. Mangoes are a good source of dietary fibre, therefore, it is associated with a reduced risk of some types of cancer, protecting against heart disease and cholesterol build up. Mangoes contain over 20 different vitamins and minerals (Anonymous 2013). Every part of the Mango is utilised in some form or another. Bark, leaves, skin or pit, all have been concocted into various types of treatments or preventatives down through centuries (Anonymous 2013). Raw fruits of local varieties of Mango trees are used for preparing various traditional products like raw slices in brine, amchur, pickle, murabba, chutney, panhe (sherbet) etc. The wood is used as timber, and dried twigs are used for religious purposes. Mango kernel also contains about 8-10% good quality fat, which can be used for saponification. Its starch is used in confectionery industry (Anonymous 2013).

## Mango-Production

India is a fruit hub. It produces more than 90 million

**Table 1:** Top Ten Mango producing countries of the world in 2016

Sr. No.	Country	Production (Tonnes)	Production Share (%)
1	India	18779000	40.28
2	China	4771038	10.23
3	Thailand	3432129	7.36
4	Mexico	2197313	4.71
5	Indonesia	2184399	4.68
6	Pakistan	1606091	3.44
7	Brazil	1417149	3.04
8	Egypt	1277008	2.73
9	Bangladesh	1161685	2.49
10	Nigeria	917617	1.96
	World total	46615462	

Source: FAO\_Stat, FAO, 2016

tonnes of variety of fruits from an area of about 6.3 million hectares. Area and Production of different fruit crops grown in the country (PIB 2017) are given in Table 2. One-fifth of the total fruit produced in the country is mango next to Banana. The mango is cultivated in the largest area of 2,500 thousand ha and the production is around 18 million tonnes, contributing 40 % of the total world production of mango (FAO STAT, 2013). The main mango producing states in India are Uttar Pradesh (23.72%), Andhra Pradesh (18.13%), Telangana (9.61%), Karnataka (9.46%), Bihar (7.28%), Gujarat (6.09%), Maharashtra (4.74%) and Tamil Nadu (4.36%) (Anonymous, 2016).

Mango is grown in India in tropical and subtropical regions from sea to an altitude of 1500 meters. It is grown almost in all states of the country. Details of State wise production of mango in the country is given in Table 3. (Anonymous 2016). Andhra Pradesh, Telangana, Uttar Pradesh, Bihar, Maharashtra, Karnataka, Tamil Nadu, Odisha, West Bengal and Gujrat are the major states having a lion share. Uttar Pradesh and Andhra Pradesh together produces more than 40 per cent of the mangoes produced by the country. Uttar Pradesh produces more than 40 lakh tonnes of mangoes followed by Andhra Pradesh producing

**Table 2.** Area and Production of different fruit crops produced in India for the year 2015-16

Sr. No.	Name	Area (000 ha)	Production (000 tonnes)	Share (%)
1	Almond	12	8	0.01
2	Aonla/Gooseberry	88	972	1.08
3	Apple	277	2521	2.80
4	Banana	841	29135	32.31
5	Ber	44	425	0.47
6	(i) Lime/Lemon	245	2438	2.70
7	(ii) Mandarin	397	4113	4.56
8	(iii) Sweet Orange	244	3468	3.85
9	(iv) Others	138	1562	1.73
	Citrus Total (i to iv)	1024	11581	12.84
10	Custardapple	37	298	0.33
11	Grapes	122	2590	2.87
12	Guava	255	4048	4.49
13	Jackfruit	151	1732	1.92
14	Kiwi	4	11	0.01
15	Litchi	90	559	0.62
16	Mango	2209	18643	20.67
17	Muskmelon	45	935	1.04
18	Papaya	132	5667	6.28
19	Passion Fruit	13	78	0.09
20	Peach	18	107	0.12
21	Pear	40	323	0.36
22	Picanut	1	1	0.00
23	Pineapple	110	1924	2.13
24	Plum	22	82	0.09
25	Pomegranate	197	2306	2.56
26	Sapota	107	1294	1.43
27	Strawberry	1	5	0.01
28	Walnut	92	229	0.25
29	Watermelon	95	2325	2.58
30	Others	275	2386	2.65
	Total Fruits	6301	90183	

Source: PIB, 2017

more than 30 lakh tonnes. Production of mango in Maharashtra is about 8.68 lakh tonnes shares 5% of the total production of the country (Table 3)

### Important Mango Varieties

India is the home of more than 1000 varieties of mangoes, however, only 3% of these are having predominance in the trade and export business. Totapuri, Alphonso, Dasher, Kesar, Banganpalli, Langra and Chausa are few to list (Anonymous 2013). Different states are having different mango varieties based on weather, topography and taste characteristics. State wise varieties of mango having commercial importance are

**Table 3.** State wise production of mango ('000 tonnes) for 2012 to 2014-15.

Sr. No.	States/UTs	2012-13	2013-14	2014-15	3 years Mean	Share (%)
1	Uttar Pradesh	4386.99	4300.98	4347.50	4345.16	23.72
2	Andhra Pradesh	4406.92	2737.01	2822.08	3322.00	18.13
3	Telangana	---	1717.88	1801.75	1159.81	9.61
4	Karnataka	1795.10	1755.56	1646.51	1732.39	9.46
5	Bihar	1363.80	1367.57	1272.00	1334.46	7.28
6	Gujarat	1003.71	1125.61	1219.71	1116.34	6.09
7	Maharashtra	633.00	1212.50	758.84	868.11	4.74
8	Tamil Nadu	714.08	785.50	896.78	798.79	4.36
9	Odisha	753.79	751.02	769.93	758.25	4.14
10	West Bengal	735.00	430.71	799.65	655.12	3.58
11	Jharkhand	517.92	517.92	523.14	519.66	2.84
12	Madhya Pradesh	376.00	379.73	396.00	383.91	2.10
13	Kerala	441.03	441.03	252.86	378.31	2.06
14	Chhatisgarh	291.83	327.91	386.67	335.47	1.83
15	Uttarakhand	148.64	150.44	150.62	149.90	0.82
16	Punjab	105.92	107.57	113.44	108.98	0.59
17	Haryana	79.55	86.61	88.72	84.96	0.46
18	Rajasthan	70.17	79.90	78.68	76.25	0.42
19	Tripura	28.85	56.28	62.56	49.23	0.27
20	Assam	55.27	44.59	45.69	48.52	0.26
21	Himachal Pradesh	50.00	25.41	47.61	41.01	0.22
22	Jammu & Kashmir	23.09	6.99	20.93	17.00	0.09
23	Goa	9.04	8.94	8.89	8.96	0.05
24	Andaman Nicobar	2.80	3.85	2.93	3.19	0.02
25	Mizoram	3.47	3.68	4.18	3.78	0.02
26	Nagaland	3.00	3.57	3.57	3.38	0.02
27	Puducherry	3.41	2.57	3.57	3.18	0.02
28	Daman & Diu	0.00	0.00	2.05	0.68	0.00
29	Delhi	0.00	0.00	0.15	0.05	0.00
	Total	18002.38	18431.33	18526.98	18320.23	100.00

Source: Anonymous, 2016.

given in Table 4. Salient features and characteristics of some of the important Indian mango varieties are given below (Anonymous 2013):

#### Alphonso

Cultivated and grown abundantly in Western Ghats especially in Sindgudurga, Ratnagiri and Raigad districts of Konkan region of Maharashtra. Alphonso mango

is most loved by people and is rightly known as the 'King of mangoes'. These mangoes are slightly overpriced compared to others but nothing can beat its rich and awesome taste. Alphonso mango export has only risen in the last few years owing to its demand in the western countries. Fruit is medium in size, ovate oblique in shape, orange yellow in colour. Juice is moderate-abundant, excellent keeping quality, good for pulping and canning. Mainly exported as fresh fruit. Flesh develops spongy tissue.

#### Banganpalli

This variety is grown abundantly in Andhra Pradesh especially in a town known as Banganpalli from where it derives its name. It has a peculiar shape – oblique and oval and is yellow in colour. They are large in size and each mango can weigh around 400 grams or more. Banganpalli mangoes have thin, edible skin and are largely used for preparing preservatives. They are available between April and June and are also known as Began Phali in some parts of the country. Fruit is large sized, obliquely oval in shape, golden yellow in colour, good keeping quality, and good for canning, biennial in habit.

#### Chausa

Found in northern parts of India, Chausa mangoes are one of the sweetest and juiciest mangoes. It gets its name after emperor Sher Shah Suri who defeated Humayun in Chausa (present day Bihar). It has an oblong shape with a

beautiful golden yellow colour and a tint of red blush. This is available during July and August and is mostly used to make mango juice pulp. Fruit is large, ovate to oval oblique in shape and light yellow in colour. Flesh is fibrous. Medium keeping quality. Extremely sweet in taste. Alternate bearing variety. It is mostly grown for table and processing purposes.

#### Dasheri

Also known as Malihabadi this variety is grown in Lucknow, Uttar Pradesh. It was first cultivated 200 years back in the garden of a Nawab in Lucknow. It has a perfect long shape, strong aroma, fibreless and bright yellow in colour. Dasheri is mostly used for making aamras (mango pulp) and chutney. As fresh mango exporters we ensure that our clients receive the freshest and best variety from India. Fruit size is small-medium, shape is elongated with yellow fruit colour. Flesh is

fibreless. Good keeping quality. Mainly used for table purpose.

#### Kesar

If you are a Aamras (mango pulp) lover then this is the right variety of mango to produce delicious aam ras. It is grown largely in the Gujrath and Maharashtra state. It gets its name due to its bright orange colour. It can be consumed raw and is available between April and July. Mango exporters in India ensure that this variety of mango gets its due abroad too and leave no stone unturned to export fresh Kesar mangoes. Fruit is medium oblong with a red blush on the shoulders. Good keeping quality. Ideal for pulping and juice concentrates. Early season variety.

#### Langra

This mango variety is cultivated in Varanasi. It is believed

**Table 4.** State wise varieties of mango having commercial importance grown in major districts.

State	Districts	Important varieties
Andhra Pradesh	- Chittor, Ranga Reddy, Medak and Parts of Mahaboob nagar, Krishna	Banganpalli, Bangalora, Cherukurasam, Himayuddin, Suvarnarekha, Totapuri, Kesar, Dasheri, Himayat, Peddarasam, Chinnarasam, Manjeera, Neeleshan, Amrapali, Mallika, Ratana, Arkapuneet, Sindhu, K.M.H.-1
Gujrat	- Ahmedabad, Kheda, Anand, Vadodra, Surat, Navsari, Valsad, Bharuch and Narmada	Alphonso, Kesar, Rajapuri, Vanraj
Kerala	- Thrissur, Ernakulam, Kottayaam, Alappuzha, Pathanumthitta, Kollam, Thiruvanthapuram, Idukki and Palakkod	Mundappa, Olour, Pairi, Neelam, Nadassala, Suvarnarekha, Muthalamookkam
Maharashtra	- Ratnagiri, Sindhudurg, Raigad and Thane, Aurangabad, Jalna, Beed, Latur, Ahmednagar and Nasik	Alphonso, Kesar, Mankurad, Mulgoa, Pairi, Rajapuri, Neelam, Totapuri
Odisha	- Kandhamal	Baneshan, Langra, Neelum, Suvarnarekha and mostly seedling types
Tamil Nadu	- Madurai, Theni, Dindigul, Virudhunagar and Tirunelveli	Banganpalli, Bangalora, Neelum, Rumani, Mulgoa, Alphonso, Kalepad, Sendurga, Malguavo, Immampasant, Kallmai
Uttar Pradesh	- Lucknow, Unnao, Hardoi, Sitapur, Barabanki, Sahranpur, Muzaffarnagar, Bijnaur, Meerut, Baghpat, Bulandshar and Jyotifulenagar	Bombay Green, Dasheri, Fajri, Langra, Safeda Lucknow, Chausa, Ratual, S.Saurabh, Amrapali, Malihabadi, Bombay yellow
West Bengal	- Malda and Murshidabad	Bombai, Himsagar, Kishan Bhog, Langra

Source: Anonymous, 2013

that this variety was first cultivated in the farmlands of a person who was lame and hence it is named 'Langra'. It is available between July and August and it retains its green in colour even when it is ripe. It is a fibrous variety and is frequently exported across the world. Fruit is medium, ovate in shape with lettuce green colour. Poor keeping quality. Skin is very thin and pulp is very sweet. Alternate bearing variety mostly used for table purpose.

### Raspuri

If Alphonso mangoes are the king of mangoes then Raspuri is considered to be the 'Queen of Mangoes' in India. They are cultivated in Karnataka, are oval in shape and are juicy mangoes with an excellent flavour. They are also known as Peddarasalu in Karnataka.

### Totapuri

Grown in several parts of Karnataka. This variety of mango has several names: Gilli, Mukku, Kallamai, Sandersha, Bangalora to name a few. It gets its name because of its parrot beak shape and green colour with red tinges. It is also known to be the parent variety to Anderson and Brooks cultivars. Totapuri mangoes aren't the sweetest of the mangoes and are used to prepare pickles, salads and mango juices. The fruit is medium-large, oblong shaped with pointed base with golden yellow colour. Good keeping quality; used for processing; heavy and regular bears variety, Susceptible to bacterial spot.

### Mango – Agri-Export Zones (AEZ)

Agri-Export Zones helps in developing and sourcing raw materials, their processing/packaging, leading to final exports in respect of a particular produce/product located in a contiguous area. It is also a cluster approach of identifying potential products, the geographical region in which these products are grown and adopting an end-to-end approach of integrating entire process right from stage of production till it reaches market. At these zones, any difficulty, faced right from the developing and sourcing raw materials, their processing/packaging, leading to final exports are identified and solution thereof are suggested (Anonymous 2013).

AEZ are identified by the State Government, and evolve a comprehensive package of services provided by all State Government agencies, State agriculture universities and all institutions, and agencies of the Union Government for intensive delivery in these zones. Corporate sector with proven credentials are encouraged to sponsor new agri-export zone or take over already notified agri-export zone or part of such zones for boosting agri-

exports from the zones. Services, which are managed and coordinated by State Government/corporate sector and include provision of pre/post-harvest treatment and operations, plant protection, processing, packaging, storage and related research & development etc., APEDA supplement within its schemes and provisions. State Governments also make efforts for facilitating such exports. Units in AEZ are entitled for all the facilities available for exports of goods in terms of provisions of the respective schemes. Agri-Export Zones for different states and the district/area covered for mango are given below:

### Mango-World Trade

Mangoes were not commonly known among the consumers outside the tropics before 1960s and there was virtually no trade of fresh fruit (Mitra 2016). In recent years, mangoes have become well established as fresh fruit and processed products in the global market. World demand for mango is ascertained to be increasing particularly from temperate countries where mangoes are rapidly gaining in popularity. Export of mango in 2000 was just 628 thousand tonnes which has increased to 1656 thousand tonnes (2.6 times) in the year 2013 (Evans 2008; FAO STAT 2013). Mexico, India, Thailand, Brazil, Peru, Netherlands, Pakistan, Ecuador, and Philippines are some of the leading countries which have lion share for the export of mangoes and its trade in the world. Export trend since 2000 for top ten countries is given in Table 5. Mexico, India, Peru and Pakistan have shown and significant rising trend over a period of one decade.

**Table 5.** World's top ten mango exporting countries and export trend since 2000. (Quantity in 000 tonnes).

Sr.	Country	2000	2005	2013
1	Mexico	207	195	338
2	India	39	223	264
3	Brazil	67	114	122
4	Pakistan	48	49	99
5	Netherlands	34	69	111
6	Peru	21	58	127
7	Ecuador	26	40	61
8	Phillipines	40	25	21
9	Thailand	9	2	253
10	China	5	4	8
11	Others	132	135	252
	World Total	628	913	1656

Source: Evans, 2008; FAOSTAT, 2013.

**Table 6.** Production vis-à-vis export of mango by different countries during the year 2013.

Sr. No.	Country	Production (Tonnes)	World Share (%)	Export (Tonnes)	World Share (%)	Export Share of Country's Production (%)
1	India	18002000	36.64	263918	15.94	1.47
2	China	4620041	9.40	7790	0.47	0.17
3	Thailand	3421213	6.96	252904	15.27	7.39
4	Indonesia	2514187	5.12	1089	0.07	0.04
5	Mexico	1901871	3.87	338169	20.42	17.78
6	Pakistan	1658562	3.38	98926	5.97	5.96
7	Brazil	1512615	3.08	122178	7.38	8.08
8	Bangladesh	956867	1.95	0	0.00	0.00
9	Nigeria	858000	1.75	0	0.00	0.00
10	Philippines	831224	1.69	20879	1.26	2.51
11	Egypt	712537	1.45	0	0.00	0.00
12	Viet Nam	705865	1.44	558	0.03	0.08
13	Sudan	636300	1.30	0	0.00	0.00
14	Haiti	615744	1.25	10228	0.62	1.66
15	Kenya	581290	1.18	15743	0.95	2.71
16	Peru	461214	0.94	126815	7.66	27.50
	World total	49130908		1655975		

Source: FAO-STAT, 2013.

Production of mango vis-a-vis export for the year 2013 is given in Table 6. Mexico accounted for 20% of world mango exports, positioning it as the largest exporter of this fruit, with 338,169 tonnes shipped that year. Mexico is followed by India, Thailand and Peru. It is to note that though the world production of mango is to the tune of 49 million tonnes, however trade is only of 1.65 million tonnes (less than 4%). Also, though the India is largest (18 million tonnes) mango producing country in the world, it exports around 0.26 million tonnes of mango only which less than 1.5% of its total production. Mexico is the country which is exporting 17.78 % of its total produce. Brazil and Thailand are the countries having good share of exporting mango over the production (Table 6).

As per the report of APEDA, total export of mangoes from India during 2016-17 is 52.76 thousand tonnes, valuing ₹ 44,366 Lakhs. India exports mango to over 41 countries worldwide (Table 7). The major importing countries of India's Mangoes during the period of 2016-17 were UAE (53.99%), Nepal (17.85%), Bangladesh

(2.2%), UK (5.74%), Saudi Arabia (4.5%), Kuwait (2.09%), and Bahrain (2.06%) respectively (APEDA 2017)

Overall mango importing countries are US, United Arab Emirates, Saudi Arabia, United Kingdom, France, Germany and Malaysia. Mango market supply-demand and trade patterns are dynamic both globally and, in the Asia-Pacific region. Domestic demand and export markets are steadily growing and becoming more diversified and sophisticated. Increasing consumer demand for quality, safety, variety, seasonal availability and consistency are creating opportunities and possible barriers for smallholder farmers. World demand for mangoes is on the rise and is expected to continue increasing, especially in markets such as the United States, Canada, the European Union, and even Asian markets including China.

### Export of Indian Mango

#### *Varieties in Demand*

India is a home land of mangoes having more than 1000

**Table 7.** Export of fresh mangoes from India during 2016-17.

Sr. No.	Country	Quantity (Tonnes)	Value ₹ Lakh
1	UAE	28,483.16	24,744.65
2	U K	3,030.79	4,956.51
3	Saudi Arab	2,371.99	2,445.85
4	Qatar	2,254.19	2,147.25
5	Kuwait	1,100.19	1,911.26
6	Nepal	9,415.38	1,603.54
7	U S A	615.53	1,548.63
8	Baharain Is	1,086.00	978.53
9	Singapore	840.69	878.08
10	Oman	897.88	822.57
11	Canada	458.88	606.30
12	Malaysia	262.96	301.88
13	Bangladesh Pr	1,158.20	266.96
14	Germany	108.31	223.53
15	Hong Kong	151.41	206.86
16	Italy	89.90	152.78
17	Japan	47.99	108.64
18	Switzerland	64.81	105.99
19	France	81.27	103.23
20	New Zealand	20.76	51.27
21	Maldives	53.80	48.79
22	Bhutan	82.00	46.81
23	Brunei	22.98	27.19
24	Netherland	12.12	14.04
25	Sweden	10.26	11.92
26	Russia	7.19	9.53
27	Belgium	5.90	9.41
28	Mauritius	4.29	7.13
29	Norway	3.78	5.47
30	Swaziland	2.29	4.41
31	Turkey	1.00	2.91
32	South Africa	8.97	2.61
33	Indonesia	1.27	2.44
34	Thailand	1.08	2.31
35	Tanzania Rep	1.00	1.78
36	Iran	1.00	1.49
37	Serbia	0.11	1.23
38	Ireland	1.00	1.10
39	Korea Rp	0.26	0.86
40	Lebanon	0.30	0.18
41	Senegal	0.10	0.11
	Total	52,760.99	44,366.03

Source: APEDA, Agri-Exchange, 2017

varieties of mangoes. Out of these, more than 30 mango varieties having a great commercial value and potential for export business. Many Indian mango varieties have

gained international acclaim because of their unique colour, flavour, aroma and taste. Some of the principle mango varieties are Totapuri, Alphonso, Kesar, Badami, Banganpalli, Rajapuri, and Dasher which are showing an increased demand for trading and export.

India have Exported mango worth of 40 million USD during the period of January to April 2017. Variety wise export of mango with its export value and share is given in Table 8. It is observed that Totapuri mangoes are the most exported mango of India with the value of 19.50 million USD (Export Genius 2017). Its share is 47% of the total export mango value. Alphonso mango stood second in the export with a value of 14.08 million USD having share of about 34 % of the total export value. Kesar, Badami, Banganpalli and Rajapuri were the next in the list of varieties in demand for the export. Share of Kesar mango in the export value is to the tune of 11 %.

#### Type or Form of export

Export of mangoes from India is in various forms or types like Ripe, Pulp, Puree, Dices, Slices, Concentrate, Chunks, etc. The Export value for the different forms of mango export is given in Table 9. India has generated highest value of 27.83 Million USD from the export of Mango Pulp. It is followed by ripe type

**Table 8.** Variety wise export of Mango from India during January to April 2017.

Sr. No.	Variety of Mango	Export Value in USD	Share (%)
1	Totapuri	19273809	47.37
2	Alphonso	14081737	34.61
3	Kesar Mango	4826395	11.86
4	Badami	1699190	4.18
5	Banganpalli	549835	1.35
6	Rajapuri	130788	0.32
7	Green Mango	127381	0.31
	Total export value	40689135	100

Source: Export Genius, 2017

**Table 9:** Type of mango in the different form exported from India during January to April 2017.

Sr. No.	Types of Mangoes	Value in USD Million
1	Pulp	27.83
2	Ripe	26.31
3	Puree	1.98
4	Dices	1.24
5	Slices	1.15

Source: Export Genius, 2017

mangoes. Ripe mango export from India, recorded value of 26.83 Million USD during the period of January to April 2017 (Export Genius 2017). Export of mango in the form of Puree, Dices and slices was relatively smaller in value compared to the Pulp and Ripe mangoes.

### Mango Exporters in India

There are more than 480 mango exporter companies in India. Capricorn Food Products India Ltd. Chennai, is the largest mango exporter in India, the company has recorded USD 3968160 export value from January to April 2017. Sunrise Naturals Private limited Mumbai is the second largest mango exporter company in India with the export value of USD 3350639 (Export Genius 2017). Indian mango exporters mandatorily give their products hot water treatment before exporting them to the European market. Top 10 mango exporters in India with their export rank is given in Table 10.

### Mango Importing Nations

United Arab Emirates (UAE) is the top market for mango exporters in India. The value of mango export from India to UAE is 14.99 Million USD during the period from January to April 2017. Saudi Arabia, Kuwait and United Kingdoms are the other major mango importer countries of India after the UAE (Export Genius 2017). Details of the top mango importing nations and export value is given in Table 11. According to Indian Mango Export data, around 25% of mango exports in terms of value go to United Arab Emirates, while around 19% is shipped to the Saudi Arabia. Kuwait and UK are other major export destinations for Indian mangoes. The value of Mango export from India to USA is USD 3.07 Million while it is USD 1.01 Million for mango export from India to Canada.

**Table 10.** Top 10 Mango exporters with rank.

Rank	Exporter Company
1	Capricorn Food Products India Ltd, Chennai.
2	Sunrise Naturals Pvt. Ltd., Mumbai
3	Allanasons Private Limited, Mumbai
4	Raian Fresh Produce Pvt Ltd., Mumbai
5	Keventer Agro Ltd., Kolkata.
6	Bombay Fruits & Vegetables Import Export Pvt. Ltd., Mumbai
7	Vimal Agro Products Pvt Ltd., Bardoli, Gujrat
8	Royal Foodstuffs Private Limited., Navi Mumbai.
9	Shree Devaraja Agro Aseptic Industries, Krishnagiri, Tamil Nadu.
10	Raj Impex, Mumbai.

Source: Export Genius, 2017

### Export Share of Different States

17 Indian states have exported various types of mangoes during the period from January to April 2017. Maharashtra, Tamil Nadu, Gujarat, West Bengal, Karnataka are the major contributor for the export of mangoes from India. Details of the export value and the states exporting mango is given in Table 12. Maharashtra is the largest mango exporter state in India having export value of about 33.45 million USD sharing 55% of the total export value of the country. (Export Genius 2017). Tamil Nadu is the second largest mango exporter state in India with the export value of USD 10.52 million USD. Gujrat (4.7 million USD), West Bengal (3.13 million USD), Karnataka (2.95 million USD) and Andhra Pradesh (1.94 million USD) are next in the list.

### Port Wise Export

Mango export from India are done through around 32 Indian Ports. JNPT is the largest Indian port which has recorded highest mango export value of 22.91 million USD from the period of January to April 2017. The port wise details for export of Mango from India is given in Table 13. Chennai Sea with the value of 9.95 million USD is the second in the list for the mango export.

### Summary

Mango is the fruit referred world over as the peach of tropics. It is the national fruit of India, Pakistan and Philippines and national tree of Bangladesh. 50 per cent of all the tropical fruits produced worldwide are Mangoes. Mangoes are commercially grown in more than 80 countries. World production of mangoes is around 46 million tonnes and India is the world's biggest grower of mangoes, with a 40 per cent share of total world production.

Export of mangoes has amplified significantly and increased by 2.6 times in the last decade. Leading mango exporting countries are India, Thailand, Brazil, Peru, Netherland and Pakistan and leading mango importing

**Table 11.** Top Mango importing nations and export value for 2017.

Sr. No.	Nation	Value in USD Million
1	United Arab Emirates	14.99
2	Saudi Arabia	11.68
3	Kuwait	5.01
4	United Kingdom	4.01
5	Netherlands	3.67
6	United States	3.07
7	Yemen, Democratic	1.74

Source: Export Genius, 2017



**Table 12.** Different Indian States exporting the mango and export value

Sr. No.	Indian States	Export Value USD	Share (%)
1	Maharashtra	33415172	57.02
2	Tamil Nadu	10522394	17.96
3	Gujarat	4788200	8.17
4	West Bengal	3136865	5.35
5	Karnataka	2959335	5.05
6	Andhra Pradesh	1944413	3.32
7	Delhi	1833701	3.13
		58600080	100.00

Source: Export Genius, 2017

countries are United Arab Emirates, US, Saudi Arabia, UK, France, Germany and Malaysia. Only 3.4 percent of the mangoes are traded (1.65 mnT) of the total world mango production (49.1 mnT). Mexico, Thailand and Brazil export more of the mango produced. India's share in the world trade of mango is around 15 per cent, however, it is just 1.5 per cent of its total mango production.

Total fruit production of India is about 90 million tonnes of which mango production is about 18 million tonnes sharing 20% of the total fruit production. Leading mango producing states are Uttar Pradesh, Andhra Pradesh, Telangana, Karnataka, Bihar Gujrat, Maharashtra, and Tamil Nadu. Leading mango exporting states of the country are Maharashtra, Tamil Nadu, Gujrat, West Bengal, Karnataka and Andhra Pradesh.

India has potential and capacity to have more share in the world trade of mangoes as many Indian varieties are superior in terms of unique color, flavour, aroma and taste. 40 million USD was earned through the export of mangoes in the last year. Totapuri, Alphonso, Kesar, Badami, Banganpalli, Rajapuri, and Dasherri has great demand in the International market of mango. Totapuri mangoes are the most exported mango of India sharing 47% of the total export. Alphonso was second having a share of about 43% and Kesar shared the 11% of the total export value of the country for mangoes. Mango is exported in the form of Ripe, Pulp, Puree, Dices and slices and share in the form of Pulp and Ripe is maximum.

In general, to capture new markets and to sustain the

**Table 13:** Export of mango from different ports of India and export value.

Sr. No.	Indian Port	Value USD Million
1	JNPT	22.91
2	Chennai Sea	9.95
3	Kattupalli Port Sea, Chennai	8.19
4	Sahar Air Cargo, Mumbai	7.34
5	Tuticorin Sea, Tamil Nadu	2.36
6	Hazira Port, Surat	2.26
7	Pipavav, Saurashtra, Gujrat	1.51
8	Cochin Air	1.36
9	Bangalore ICD	1.02

Source: Export Genius, 2017

traditional lucrative markets of developed countries, the available systematic and scientific approach to risk assessment and management in fresh mango supply chain need to put in practice for identification of hazards validated control measures operated at Critical Control Points.

## References

- Anonymous. 2013. Post-Harvest Profile of Mango. Directorate of Marketing & Inspection Branch, Ministry of Agriculture, Government of India, Nagpur
- Anonymous. 2016. Horticultural Statistics at a Glance 2015. Ministry of Agriculture & Farmers Welfare, Government of India. Published by Oxford University Press, New Delhi, India.
- APEDA. Agri-Exchange. 2017. <http://agriexchange.apeda.gov.in/index/reportlist.aspx>
- Evans E. A. 2008. Recent Trends in World and U.S. Mango Production, Trade, and Consumption. EDIS document FE718, Florida Cooperative Extension Service, University of Florida, Gainesville, FL. (<http://edis.ifas.ufl.edu>.)
- Export Genius. 2017. <http://www.exportgenius.in/blog/mango-export-from-india-jan-to-april-2017-analysis-report-37.php> dated
- FAOSTAT. 2007. FAO Statistics, Food and Agriculture Organization of the United Nations, Rome, Italy. <http://faostat.fao.org/>
- FAOSTAT. 2013. FAO Statistics, Food and Agriculture Organization of the United Nations, Rome, Italy. <http://faostat.fao.org/>
- FAOSTAT. 2016. FAO Statistics, Food and Agriculture Organization of the United Nations, Rome, Italy. <http://faostat.fao.org/>
- PIB. 2017. <http://pibphoto.nic.in/documents/rlink/2017/aug/p201783101.pdf> dated 14.1.18
- Mitra S. K. 2016. Mango production in the world – present situation and future prospect. Acta Hort. 1111, 287-29
- Wikipedia. <https://en.wikipedia.org/wiki/Mango> dated 14.1.18