Chapter - VI
INDIAN PRODUCTION, TRADE SCENARIO AND EXPORT POTENTIAL

The trade in fruits and vegetables has become increasingly globalize. This has been possible because of advanced technology, changing consumer preferences and year round supply. As a result, large volumes of fruits and vegetables move from one continent to another, reducing seasonality of produce markets. Also multiple, regional and bilateral trade agreements and reduction of tariff barriers as a result of WTO negotiations, have further boosted the trade and access to markets, thus providing consumers with an expanding array of fruits and vegetables.

This chapter speaks of the extent of production of specific crops/products, pattern of trade, availability against demand, future production potential and export opportunities along with global scenario.

6.1. PRODUCTION IN INDIA VS. WORLD

The production of fruits and vegetables in India and other products, commodities, etc. vis-à-vis of the world during 2006 are compiled in Table 11 & graphical representation may be seen in Fig. 1.

Table 11: Production level in India and World

Crop (1)	India's Production (000'tons) in 2005-06 (2)	World's Production (000'tons) in 2006 (3)
Fruits	58740.00[1]	536,591[1]
Vegetables	109050.00[1]	917,200[1]
Ginger	517.80[2]	1470[2]
Turmeric	846.70[3]	1030[2] (E)

(1)	(2)	(3)
Sesame	641.00[2]	3380[2]
Soyameal	5280.00[4]	145862[4]
Cotton	4148.05[5]	24750[5]
Total	**179,223.60**	**1630,283**

E = Estimate

[1] Production in India & World –NHB database

[2] Production *www.faostat.fao.org*

[3] Production *www.indianspices.com*

[4] SOPA, Indore www.sopa.org data for 2006-07

[5] CCI, Mumbai.

Total production in India during 2005-06 is 179,223 thousand tons compared to world production of 1,630,283 thousand tons in 2006. The production in India of above crops/products is 10.9% of total world production.

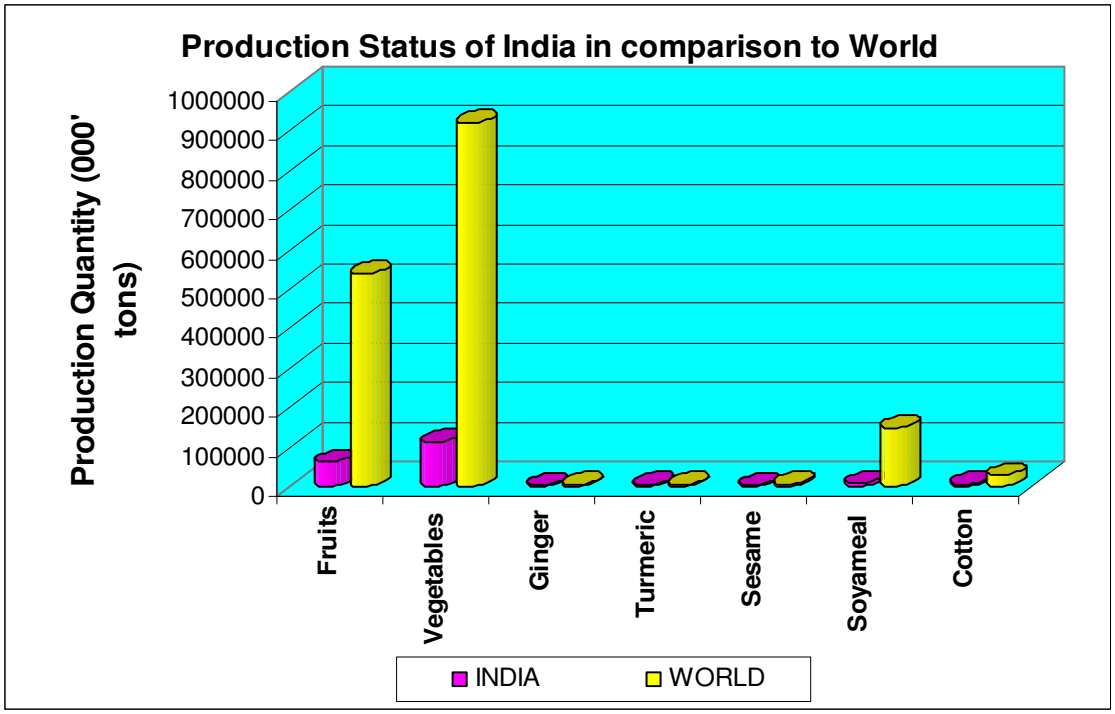

Fig. 1

6.2. TRADING PATTERN IN INDIA COMPARED TO WORLD

Values of export of crops and products during 2006-07 from India and from world during 2006 are presented in Table 12. This table shows that India exports worth 2.855 billion US dollars compared to world export value of 113.9 billion US dollars. The exports from India are only 2.5% of total world export value. This is quite low as India produces 10.9% of total world production of fruits, vegetables and other products. This is not at all encouraging as India is the maximum producer of ginger, turmeric and sesame seeds in the world, second largest producer of fruits, vegetables and cotton. A graphical comparison of export in India to that of the World is depicted in Fig. 2

Table 12: Indian exports compared to world (Year 2006-07)

Crop	India's Export (Value)		World's Export (Value[6] in thousand $ US)
	Value in Lakh Rupees	Value in thousand $ US	
Fruits	70028[1]	155617.77[1]	52399634
Vegetables	159323[1]	354051.11[1]	38095130
Ginger	3975[2]	8833.33[2]	256575
Turmeric	16480[2]	36622.22[2]	54122
Sesame	93271[3]	207268.88[3]	900536
Soyameal	407012[4]	904471.11[4]	11390150
Cotton	535109[5]	1189131.11[5]	10849910
Total	**1285198**	**2855995.42 (or 2.855 billion $ US)**	**113941051 (or 113.9 billion $ US)**

[1] APEDA database

[2] Export www.indianspices.com

[3] Export www.trademap.com

[4] SOPA, Indore www.sopa.org

[5] CCI, Mumbai

[6] *www.comtrade.org*

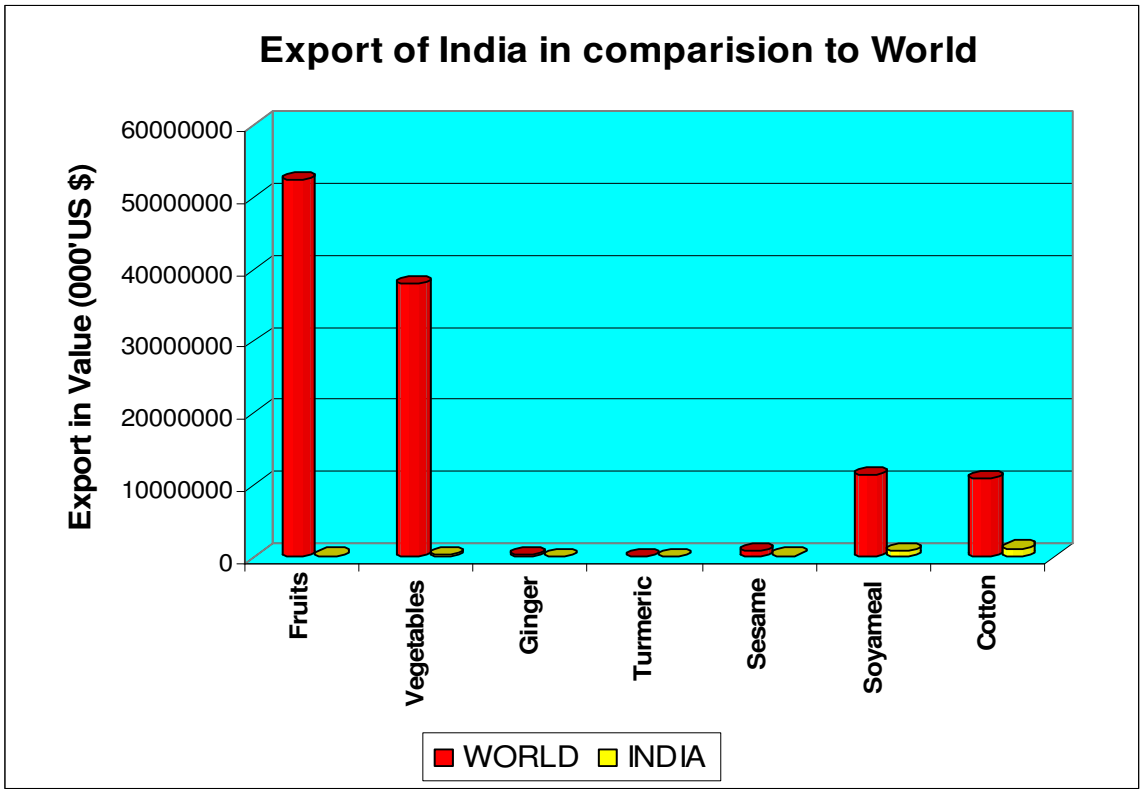

Fig. 2

6.3. AVAILABILITY OF VARIOUS COMMODITIES FOR DOMESTIC CONSUMPTION AGAINST DEMAND

The availability of soyameal, sesame and cotton in India is in surplus quantities and that is why the exports are substantial of these commodities amounting to 79%, 36% and 24% respectively of production. However, in case of fruits and vegetables, with total production of 58.7 and 109 million tons respectively during 2005-06, only 98 gms of fruits and 201 gms of vegetables per day per person are available against norms of ICMR of 120 gms of fruits and 280 gms of vegetables.

6.4. PROJECTION OF PRODUCTION OF FRUITS AND VEGETABLES AT THE END OF XI PLAN

Taking serious concern of shortfall in production of fruits and vegetables, Govt. of India launched Technology Mission for Integrated Development of Horticulture in North East and Himalayan states and National Horticulture Mission for all other states. The main

objective is to double the production of fruits from a level of 43 million tons in 2001-02 to 85 million tons in 2011-12 and vegetables from a level of 88 million tons in 2001-02 to 160.0 million tons in 2011-12. This is expected to be achieved with expansion of area with better varieties, better cultivation practices and increasing productivity of existing area under fruits and vegetables.

With the envisaged production of 85 million tons of fruits and 160 million tons of vegetables at the end of XI plan (i.e 2011-12); it will be possible to provide minimum recommended quantities of fruits (120 gms) and vegetables (280 gms) per person per day. These minimum domestic requirements are achievable even with 15-20% of production as post harvest losses and enough provision for export.

6.5. EXPORT POTENTIAL

With the anticipated production of 85 million tons of fruits and 160 million tons of vegetables, it is estimated that there will be surplus to the tune of approx 3-4 million tons of fruits and approximately 7-8 million tons of vegetables at the end of 2011-12, India has exported only 0.32 million tons of fruits and 1.6 million tons of vegetables during 2006-07.This shows there is an ample scope of accelerating the exports of fruits and vegetables.

It is also expected that as a result of special measures taken up like, Technology Mission for cotton and integrated development programmes for soyabean, oilseeds, etc. the production of crops like spices, sesame, soyabean and cotton, is expected to increase to a level of 9.5 to10 million tons in case of spices, 0.85 to 0.9 million tons in case of sesame, 8.7 to 9.0 million tons of soyameal and 5.0 to 5.5 million tons of cotton at the end of 2011-12. With the rise in production of fruits, vegetables and other products, there is a great scope/opportunity for exporting the above commodities in larger quantities.

The export potential of various crops/commodities has been analyzed is based on report on International Market Research conducted in importing countries i.e. EU, GCC,

ASEAN, Australia, Korea, China, U.S.A, etc., import analysis comprising export data of countries competing with India, prices realized by other exporting countries, etc. As far as exports from India are concerned information from APEDA database has been used. Export potential of the commodities analyzed is discussed at length in the following pages:

A. MANGO

India is the largest producer of mango in the world. The production of mango during 2005-06 was reported to be 12,537.9 thousand tons (Details are given in crop profiles, Volume – II Domestic Market Research, Chapter 2).

♦ Export trend

Export of mango has shown a phenomenal growth as its export amount has increased from 38,003 tons in 2002-2003 to 79,060 tons 2006-2007 indicating a rise of 107% in the last five years. (Table 13 & Fig. 3).

As per APEDA database of 2006-2007, major portion of exports (50,942 tons) is to SAARC countries and only 24,545 tons have been exported to GCC countries. For EU countries only 2658 tons has been exported. India has all the facilities to meet the requirements of various importing countries.

Table 13: Export of mango for last five years

Year	Quantity(tons)	Value (in Rs. Lakh)
2002-2003	38003	8419.4
2003-2004	60551	11051.9
2004-2005	53480	8961.0
2005-2006	69606	12811.1
2006-2007	79060	14193.9

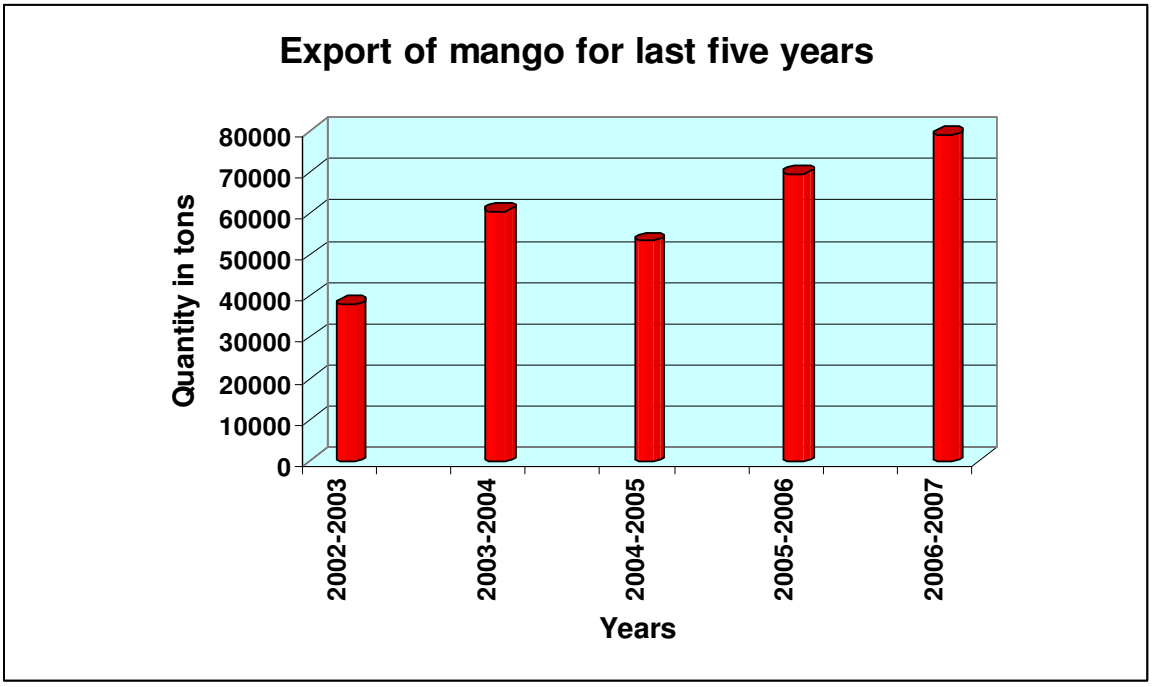

Fig. 3

Looking in to the Global demand the potential of exports is much higher. The details of existing level of export and opportunities of exports in different regions are discussed as below:

(i) GCC Countries

GCC countries imported 1, 44,042 tons during 2006 and there is 15% increase in demand from the year 2003 (Comtrade database). India exported only 24,545 tons to GCC countries as per APEDA data during 2006-2007. However, there is tremendous scope for expanding exports to these countries, as India produces finest quality mangoes.

As per data given in Table 14, imports of mango by GCC countries are substantial; however, our contribution in Saudi Arabia, Oman, Kuwait and other markets in GCC is negligible and there is need to accelerate the process.

Table 14: Import/Export of mangoes in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	UAE	63519	22045
2	Saudi Arabia	48330	1323
3	Oman	16438	170
4	Kuwait	8900	428
5	Bahrain	3617	489
6	Qatar	3238	90

Source: Comtrade Database, 2006 & APEDA

India's exports reduce significantly during May onwards because of competition from Pakistan. Efforts are required to increase production & productivity to explore better opportunities to export. Further facilities like reefer containers, growing of demand based varieties like Kesar and other popular types will improve the export scenario in India.

(ii) EU countries

EU countries import mangoes varying from 2, 50,000 tons to 3, 00,000 tons every year. There is 31% increase in demand from the year 2003. However, during 2006-07, only 2519 tons were exported from India. Out of this amount, maximum quantity was exported to UK (1883 tons). India is not able to penetrate other EU countries in a significant way. The growth of export to EU countries is almost negligible. The main reason for the absence of upsurge of export of mangoes to EU is the supply of mangoes by countries like Brazil, Peru, and Israel at cheaper rates. The EU markets also prefer coloured mangoes. Consumers at times pay higher price for these coloured mangoes. Even superior edible quality of Indian mangoes does not get much attention in the presence of coloured mangoes like Tommy Atkins, Kent and Haden.

Therefore, India must explore production and export of coloured mangoes like Arka Anmol, Arka Puneet, Pusa Arunima, Ambika, etc.

(iii) ASEAN countries

ASEAN countries are importing mangoes to the tune of 50,327tons (2006). However, exports from India to ASEAN countries are very little which may be seen from Table 15. Thailand is supplying mangoes at much cheaper price to Malaysia and Singapore for which it has captured a larger share.

Table 15: Import/Export of mangoes in ASEAN countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	ASEAN	50327	582
2	Malaysia	23521	332
3	Singapore	16027	230
4	Vietnam	7212	20

Source: Comtrade Database, 2006 & APEDA

Therefore, the strategy for India should be to make available much cheaper mangoes like Totapuri (Banglora) in Malaysian market on one hand and campaign for quality and having red blush varieties like Suvarnrekha, Kesar and Alphonso varieties on the other hand for Singapore market. For competing with Thailand, Totapuri (Banglora) variety requires to be exported from Eastern Port of Andhra Pradesh to save logistic costs. Simultaneously India must reduce the cost of production by increasing the productivity by high density plantations, group farming, etc.

(iv) Hong Kong

Hong Kong is an established centre for trade for fruits and vegetables. It imported up to 42,422 tons and exported 19,988 tons of mangoes during the year 2006. The

prices prevailing in Hong Kong market are also quite high. However, India has exported only 49 tons during 2006.Therefore; concerted campaign needs to be launched for our quality mangoes in this market.

(v) Pacific Rim countries and China

Pacific Rim countries comprise Australia, Japan, Korea, etc. and potential for exports of mangoes to these countries is given below:

(a) Australia

Australia imported only 810 tons during 2006. However, Australia has very strict regulations for entry of Indian mangoes in their country.

Australia has put mangoes from India under Import Risk Analysis (IRA). By this, Australia is to identify and classify potential quarantine risks and develop policies to manage them. Provisional IRA has been released, but still, one cannot export mangoes to Australia, till it is totally finalized.

At present Indo-Australian agreement is under negotiation, and export of mangoes is expected to be covered in the agreement. As India has already standardized irradiation treatment of mango before shipping for eliminating fruit fly, the risk has been minimized to a great extent to fulfill the import requirements.

(b) South Korea

South Korea has imported 1235 tons of mangoes during 2006. At present South Korea has high duties on imported mangoes, however, India is likely to finalize Free Trade Agreement with Korea soon and it is expected that export of mangoes to South Korea may commence thereafter.

(c) Japan

According to comtrade database, Japan imported 12,586 tons of mangoes in 2006. Japan has a requirement of Vapour Heat Treatment (VHT) for eliminating fruit fly. India has already established facilities for VHT treatment and exported 74

tons during 2006. There is still good opportunity for accelerating export of mangoes to Japan.

(d) China

China has imposed moderate import duties on import of mangoes under Asia Pacific Trade Agreement. Some amount of mangoes has already been exported to China. There is good scope of exporting mangoes to China, as it imported to the tune of 23,763 tons during 2006 (Comtrade database).

(e) U.S.A and Canada

According to Comtrade database, USA imported 2, 98,088 tons of mangoes and Canada imported 42,161 tons during the year 2006. There was no export of mangoes to U.S.A during 2006 from India and only 75 tons were exported to Canada during the year 2006.

Now India has signed MOU with USA for export of mangoes since India has created irradiation facilities at a number of locations. Both U.S.A. and Canada require irradiation of mangoes before export.

B. GRAPES

Production of grapes in India during 2005-06 is 1630.7 thousand tons (Details are available in crop profile, Volume – II Domestic Market Research, Chapter 3).

- **Export trend**

There is a phenomenal rise in export of grapes from India. As per the data published by APEDA, India has exported only 25,567 tons during 2002-2003 which has increased to 85,562 tons in 2006-2007.This, increase has been observed mainly in the last 2-3 years, because India was able to minimize the pesticide residues in the grapes to meet the requirements of EU countries.

(Table 16 & Fig .4)

Table 16: Exports of grapes from India

Years	Quantity (tons)	Value (in Rs. Lakh)
2002-2003	25567	10867.1
2003-2004	26469	10368.3
2004-2005	38898	12643.7
2005-2006	53908	21382.8
2006-2007	85562	30058.4

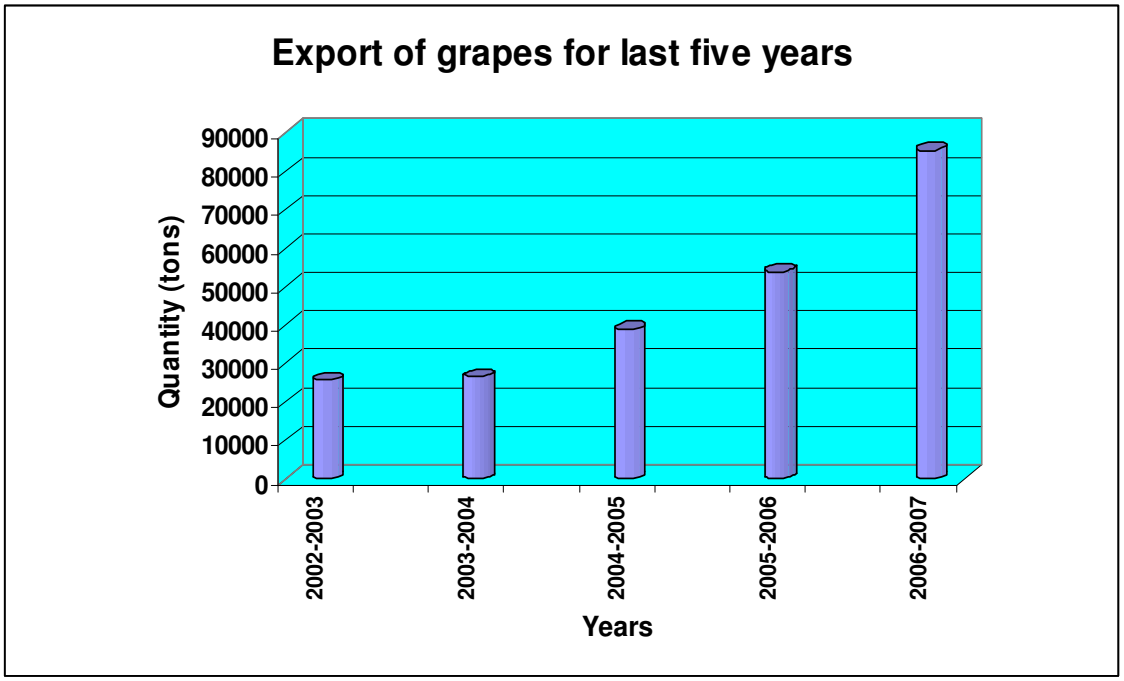

Fig. 4

Export potential of grapes to different countries/regions is discussed below:

(i) GCC Countries

As per APEDA database, the export of grapes from India to various countries is shown below in Table 17.

Table 17: Import/Export of grapes in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	GCC	64170	9677
2	UAE	21240	8140
3	Saudi Arabia	31853	1115

Source: Comtrade database, 2006 & APEDA

The data shows that our exports of grapes to various countries were negligible. Main competition of India is with South Africa and Chile. The quality of Indian grapes is good and by offering at competitive prices, it should not be difficult to accelerate exports of grapes to the tune of 40,000 to 50,000 tons to GCC countries in next 4-5 years.

(ii) European Union

Exports of grapes from India were maximum to European Union during 2006-2007. As much as 34,186 tons were exported during the year. Largest importers were Netherlands (19,020 tons) and UK (13,579 tons). India produces grapes mainly during January to April months, where as countries like U.S.A, Argentina, Italy, Spain, etc. produce grapes during September to December months. Our competition is mainly with countries like South Africa, Chile and Israel who also supply grapes in the same period. These countries have exported up to 3, 42,896 tons during 2006 to the countries namely U.K, Netherlands, France, Belgium, Italy and Spain.

Since India is meeting quality requirements including pesticide residue levels of all the importing countries in EU and supplying grapes at competitive prices. There is every possibility to penetrate in the markets of Belgium, Germany, Spain, Netherlands and UK targeting export of 60,000 to 70,000 tons in the next 4-5 years.

(iii) Russia and Ukraine

India should also explore the possibility of export of grapes to Russian Federation and Ukraine which import as much as 3, 20,677 tons and 55,168 tons respectively. Concerted attention needs to be paid for exporting grapes to these countries.

(iv) ASEAN countries

ASEAN countries import grapes to the tune of 1, 05,000 tons. The demand for grapes has increased by 50% from the year 2003. The main importers are Indonesia (26,366 tons), Philippines (14,748 tons), Singapore (12,166 tons) and Vietnam (11,025 tons).

Main competitors with India for export of grapes to these countries are U.S.A, Australia, China and South Africa. Out of total quantity of 1,05,000 tons, approx 40,000-50,000 tons are supplied by U.S.A , 17,000 - 20,000 tons by Australia and 10,000- 11,000 tons by China and South Africa each. However, supplies from U.S.A and China are during September to December months and thus India's competition is with South Africa and Australia. India can easily compete with these countries, as location wise India is closer to ASEAN countries compared to South Africa. Moreover, India is supplying grapes at competitive prices.

India has exported only 196 tons to Malaysia, 93 tons to Singapore, 78 tons to Thailand, 34 tons to Indonesia and 13 tons Vietnam during 2006. These export volumes are negligible compared to the existing potential. Moreover because of free trade agreements with Thailand and Singapore, exports of grapes are likely to accelerate. Export can be boosted in Malaysia, Philippines and Indonesia as well as the import duties are only of the order of 5-7% in these countries. Thus, in next 4-5 years time, India may aim to achieve a target of export of 10,000-15,000 tons considering the quality production and meeting of International standards. India needs to devise a proper marketing strategy and campaign aggressively to nurture these markets.

(v) Hong Kong

Hong Kong is a trade hub and imported up to 91,517 tons and exported up to 46,868 tons during 2006. However, India exported only 156 tons during 2006.There is excellent potential and strategies need to be worked out to capture a larger share in this market.

(vi) Pacific Rim countries and China

Pacific Rim countries comprising South Korea, Japan and Australia are also importing grapes to the extent of 17,291, 9949 and 4759 tons, respectively. At present India is not exporting any quantity of grapes to these countries.

It is expected that while finalizing Free Trade Agreement with South Korea, export of grapes will also be included. The export of grape to China should be explored as China has imported 46,021 tons of grapes during 2006. India and China are participants in Asia Pacific Trade Agreement which gives a scope for such opportunities.

C. POMEGRANATE

India produces pomegranates to the tune of 849 thousand tons a year (see details in crop profile, Volume – II Domestic Market Research, Chapter 4).

♦ Export Trend

India is largest producer of pomegranates in the world and produces finest edible quality pomegranates which are available almost throughout the year.

Although export of pomegranate from India has upsurge by more than 300% from 6303 tons in 2002-2003 to 21,670 tons in 2006-2007 (Table18 & Fig. 5), yet there is still tremendous potential for exports of pomegranate. This is evident from the fact that Spain exports about 75% of its estimated production of 1, 20,000 tons, Iran exports about 20% of its estimated production of 1,20,000 tons whereas India exports only 2.55% (21,670 tons) of its total production of 8,49,100 tons

Table 18: Export of pomegranates in the last five years

Years	Quantity (tons)	Value (in Rs. Lakh)
2002-2003	6303	1434.5
2003-2004	10315	2109.0
2004-2005	14039	2988.7
2005-2006	19652	5670.0
2006-2007	21670	7957.3

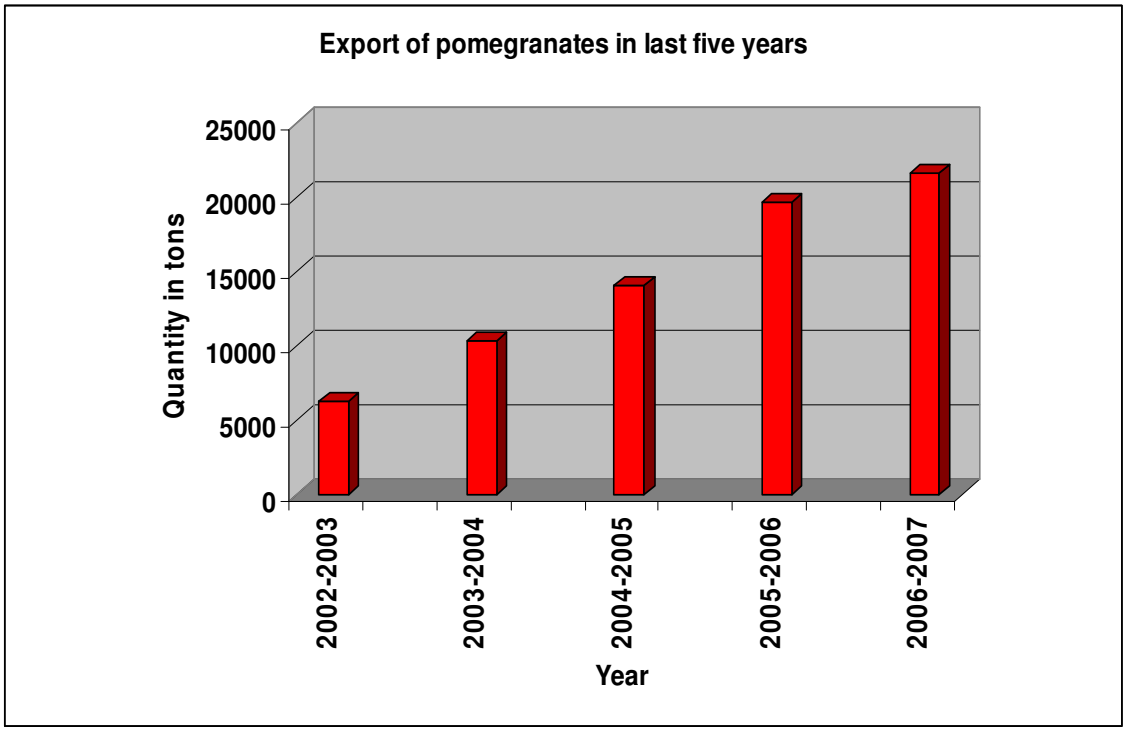

Fig. 5

- **Export Potential**

There is great opportunity for increasing the export of pomegranates to different countries as discussed below:

(i) GCC Countries

India exported only 11,924 tons of pomegranates to Gulf countries during 2006-2007. Although, no data is available on exact quantity of imports from other

countries like Spain and Iran, however, because of nearness, Iran and Lebanon are the main suppliers of pomegranates to Gulf countries. Supplies from Iran and Lebanon are from September to December and start declining from January onwards. However, in India, production of pomegranate is at peak from December to March and continues up to April - June with the production of Hast Bahar and Ambe Bahar crops. Thus, India can further explore the opportunity of exporting pomegranate to Gulf countries from January to June with least competition from Iran and other countries.

(ii) European Union

Export of pomegranate from India to EU including Russia was 4011 tons during 2005-2006 and 6342 tons during 2006-2007 as per APEDA database. In EU countries, Spain is the main supplier of pomegranate during September to December which starts tapering from January onwards.

India with the arrival of Hast Bahar and Ambe Bahar crops can supply from January onwards to July and can dominate the market without much competition from Chile, Peru, etc. whose production is very low as compared to India.

(iii) ASEAN Countries

Indian pomegranates are slowly finding market in ASEAN countries as there were exports of 125 tons to Malaysia, 89 tons to Singapore, 36 tons to Thailand and 17 tons to Indonesia during 2006-07.However, aggressive campaign about its therapeutical properties needs to be made by holding fruit shows/exhibitions in these countries and signing of Trade Agreements.

(iv) Pacific Rim countries and China

Exports to these countries are very negligible as only 40 tons were exported to Japan and 36 tons to China during 2006-07. These countries need to be further explored. If there is requirement of irradiation for eliminating fruit fly, this can also be done; as such facilities for same have been created in India.

(v) U.S.A. and Canada

India exported 275 tons of pomegranates to Canada and 46 tons to U.S.A. during 2006. Exports of pomegranates to these countries should be further explored.

D. LITCHI

India is the largest producer of litchi in the world. It produced 381.4 thousand tons during 2005-06. (Details are given in crop profile, Volume – II Domestic Market Research, Chapter 6).

- **Export trend**

Export of litchi has increased from 347 tons in 2002-03 to 1661 tons in 2006-07 (APEDA database). Major amount of these exports i.e 1642 tons were to SAARC countries and only 17 tons were sent to UAE. (Table 19 & Fig. 6).

Table 19: Export of litchi in the last five years

Years	Quantity (tons)	Value (in Rs. Lakh)
2002-2003	347	100.2
2003-2004	962	133.9
2004-2005	544	70.8
2005-2006	718	93.6
2006-2007	1661	164.3

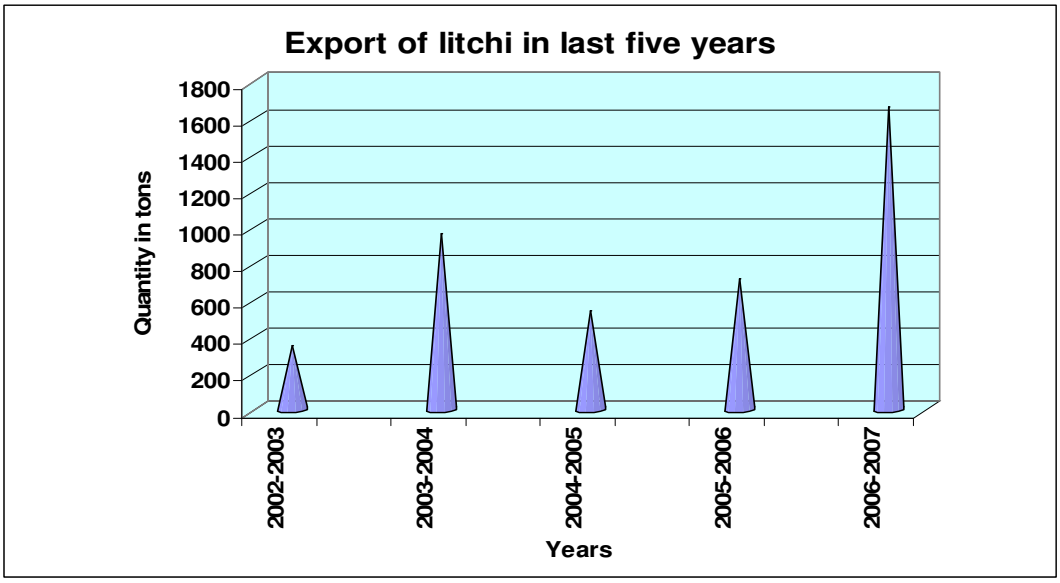

Fig. 6

As per the data of 2005-06, virtually there were no exports to Gulf countries. For both the years, 2005-06 and 2006-07 there were no exports to European countries too. However during 2003-04, 140 tons of litchis were exported to Belgium, 64 tons to UK and 34 tons to Netherlands. This shows that the exports to EU have declined inspite of the fact that the Indian litchi is available 2-3 weeks ahead of Thai litchi and 4-5 weeks ahead of Chinese litchi.

The potential for export of litchi is discussed in the following paras:

(i) GCC countries

Gulf countries imported litchi during 2006 up to 45,545 tons (Comtrade database). As per this database, India exported litchi to GCC countries to the tune of 16,410 tons, however APEDA database depicts no export of litchi during 2005-06 and 2006-07 to Gulf countries.

Nevertheless, there is excellent potential for export of litchi to GCC countries, as India produces finest quality litchis. Litchis in India are available from 15th April (Tripura) onwards up to third week of June (Gurdaspur, Punjab). India is supplying litchis to GCC countries at competitive prices and is also nearer to Gulf countries compared to Thailand and China.

(ii) EU countries

EU countries imported sizeable quantities of litchi during 2006. However, inspite of excellent potential for exports and even nearness to EU countries, compared to Thailand and China, India has not been able to avail visible gains. The potential needs to be exploited by aggressive marketing and supplying better quality litchi.

E. PINEAPPLE

Production of pineapple during 2005-06 was 1353.1 thousand tons (Details see crop profile, Volume – II Domestic Market Research, Chapter 5)

- **Export trend**

Export of pineapples has significantly increased in last few years; however, the total quantity exported is negligible. Increase in exports has taken place from 717 tons in 2002-03 to 3785 tons in 2006-07 (Table 20 & Fig. 7). However, export, has decreased from 4407 tons in 2005-06 to 3785 tons in 2006-07.

Table 20: Export of pineapple for last five years

Year	Quantity(tons)	Value(in Rs. Lakh)
2002-2003	717	142.2
2003-2004	1623	201.7
2004-2005	1765	245.1
2005-2006	4407	515.4
2006-2007	3785	360.9

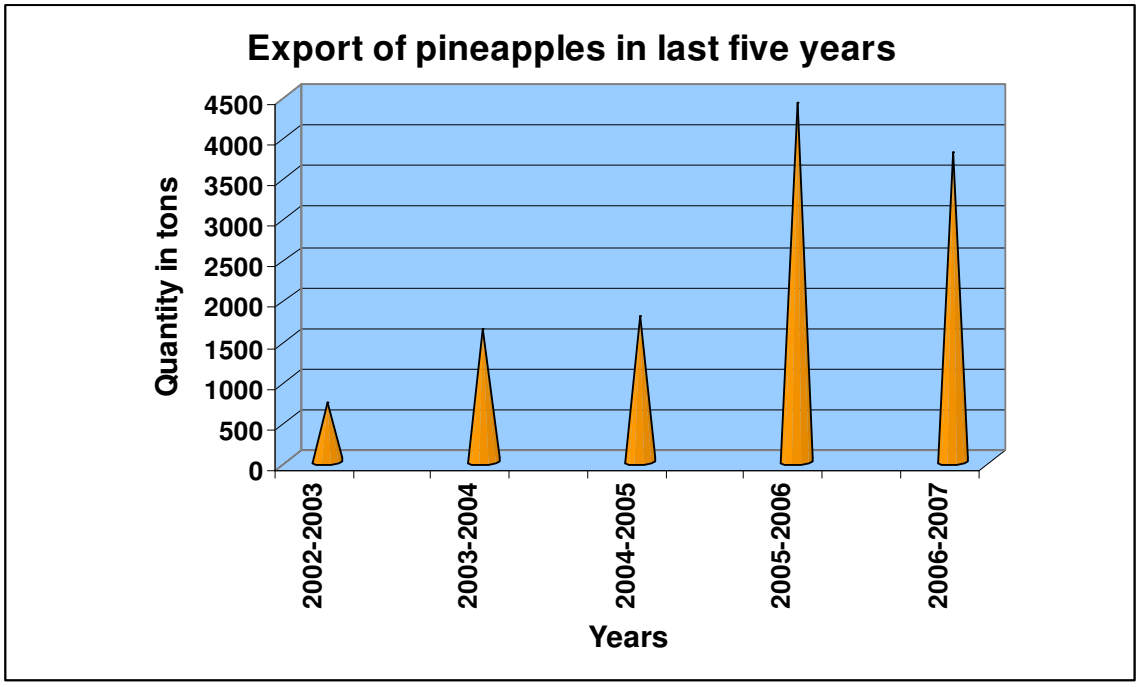

Fig. 7

The export potential of pineapple is discussed region wise as under:

(i) GCC Countries

GCC countries have imported 17,888 tons of pineapples during 2006. The increase in demand is only 12% over the year 2003 (Comtrade database). Total imports by GCC countries are given below in Table 21 along with India's exports as per APEDA database during 2006-07.

Table 21: Import/Export of pineapples in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	UAE	8345	559
2	Saudi Arabia	3581	107
3	Oman	2758	42
4	Kuwait	2054	32

Source: Comtrade database, 2006 & APEDA

India's exports of pineapples are negligible and have actually declined during 2006-07 compared to previous year. India is at advantage being nearer to GCC countries compared to Philippines and Thailand. It can easily compete with them by upgrading quality and creating infrastructure for post-harvest handling of pineapples. Philippines, especially is better organized because companies like Dole and Delmonte have large pineapple plantations to cut costs and make available at cheaper prices.

(ii) EU Countries

European countries imported up to 11, 87,556 tons of pineapples during 2006. There is 50% increase in demand since the year 2003. Largest importers in EU are Belgium (2, 50,885 tons), Netherlands (2, 00,454 tons), Germany (1, 55,635 tons), Italy (1, 33,464 tons) and other countries importing in large quantities are France, U.K., Spain and Portugal.

Our exports were only 237 tons to Spain, 42 tons to Netherlands and 16 tons to Belgium during 2006. India has to compete with quality fruits made available at lower prices by Costa Rica, Ecuador and Panama in Central and South America. To accelerate pineapple export to these countries, India will have to improve quality of fruits and supply at competitive prices.

(iii) Russia and Ukraine

There is excellent scope for exporting to Russia and other nearby countries. Russia imported to the tune of 26,133 tons of pineapple during 2006. However, India will have to address reducing cost of production and improving quality.

F. BANANA

Production of banana is 18,702 thousand tons (2005-06). India is the largest producer of banana in the world (For details see crop profile, Volume – II Domestic Market Research, Chapter 7).

- **Export trend**

Total export of Banana has increased from 8655 tons in 2002-03 to 11,475 tons during 2006-07. However exports were higher during 2005-06 i.e 14,411 tons. (Table 22 & Fig. 8).

Table 22: Export of banana for last five years

Year	Quantity(tons)	Value(in Rs. Lakh)
2002-2003	8655	1272.3
2003-2004	10876	1171.8
2004-2005	12817	1342.7
2005-2006	14411	2336.1
2006-2007	11475	1606.7

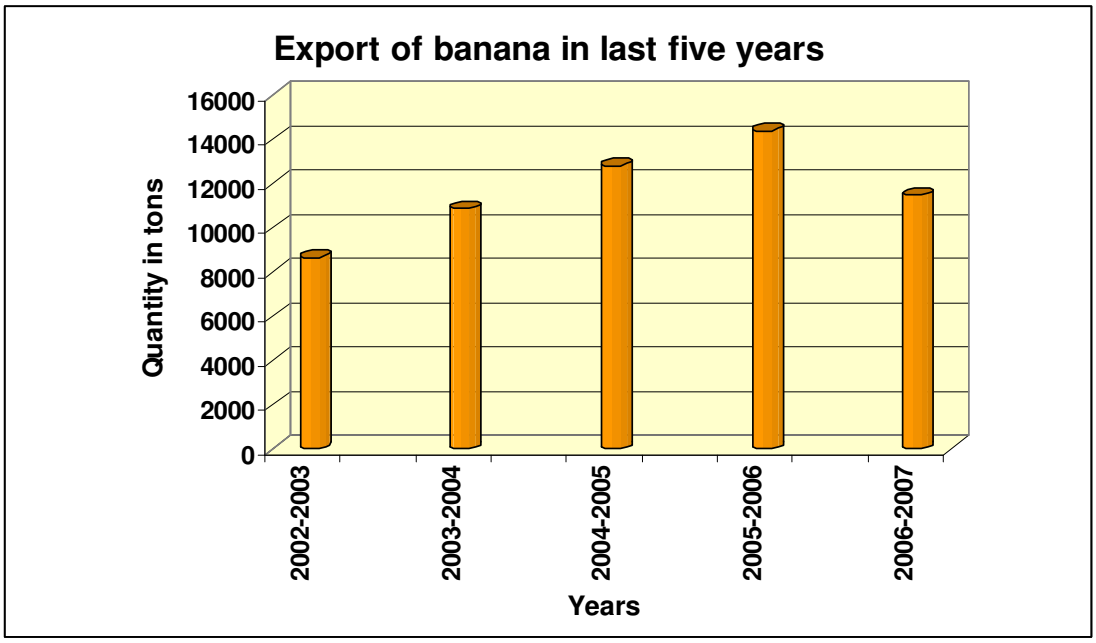

Fig. 8

Export potential of banana is presented and discussed region wise as below:

(i) GCC countries

Export of banana from India has decreased to 4774 tons during 2006-07 compared to 7145 tons in 2005-06. Details of exports are given below in table 23. Exports of banana from India to GCC countries are negligible compared to the total imports.

Table 23: Import/Export of banana in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	GCC	491747	4774
2	UAE	210419	2288
3	Saudi Arabia	236284	670

Source: Comtrade database, 2006 & APEDA

Exports of table bananas from India have stuck up because of the fact that Philippines is able to supply in large quantities at cheaper rates with the advantage that large banana plantations are owned by multinational companies and are organized in a better way. Thus, we will have to organize properly and cut down on costs for accelerating exports of banana.

(ii) Iran

According to Tradecom database, Iran also imported to the tune of 2, 94,080 tons of banana during 2006. It will therefore be appropriate to explore this market.

(iii) EU countries

EU countries imported 7,149,513 tons of bananas during 2006. Although India exported 200 tons of banana to EU including Ukraine and Russia. However, there is not much scope as large quantities of banana are exported by countries like Ecuador, Costa Rica and Colombia in Central and South America and Cameroon in Africa. Moreover, EU has special preferential agreement with African, Caribbean and Pacific

countries. Other countries exporting to EU have to pay tariff duties and thus are not able to compete with them.

(iv) Russia and Ukraine

There is some scope of exporting banana to Russia and Ukraine provided we have some preferential arrangement with these countries.

G. AONLA

India is the largest producer of aonla in the world and produced 150.5 thousand tons during 2000 (See crop profile for details, Volume – II Domestic Market Research, Chapter 8).

Although exact figures of export of Aonla as a whole fruit in dried form or its flakes are not available, but it has great potential for exports as it is used in both pharmaceutical and cosmetics. Aonla is also used in tanning industry.

Aggressive campaign about its useful properties can only initiate export of Aonla in fresh form. Export of dried flakes of Aonla can be accelerated with the help of bringing awareness in foreign countries about its therepeutical uses.

H. TOMATO

Production of tomato during 2005-06 was 9361.8 thousand tons. India ranks fourth in production at world level. (For details, see crop profile, Volume – II Domestic Market Research, Chapter 10).

- **Export trend**

Export of tomatoes has increased from 12,886 tons in 2002-03 to 33,592 tons in 2006-07. A significant increase has been recorded of more than 250 %.(Table 24 & Fig. 9)

Table 24: Export of tomatoes in last five years

Year	Quantity(tons)	Value(in Rs. Lakh)
2002-2003	12886	1185.0
2003-2004	11328	685.4
2004-2005	7446	589.3
2005-2006	11743	1086.0
2006-2007	33592	3410.1

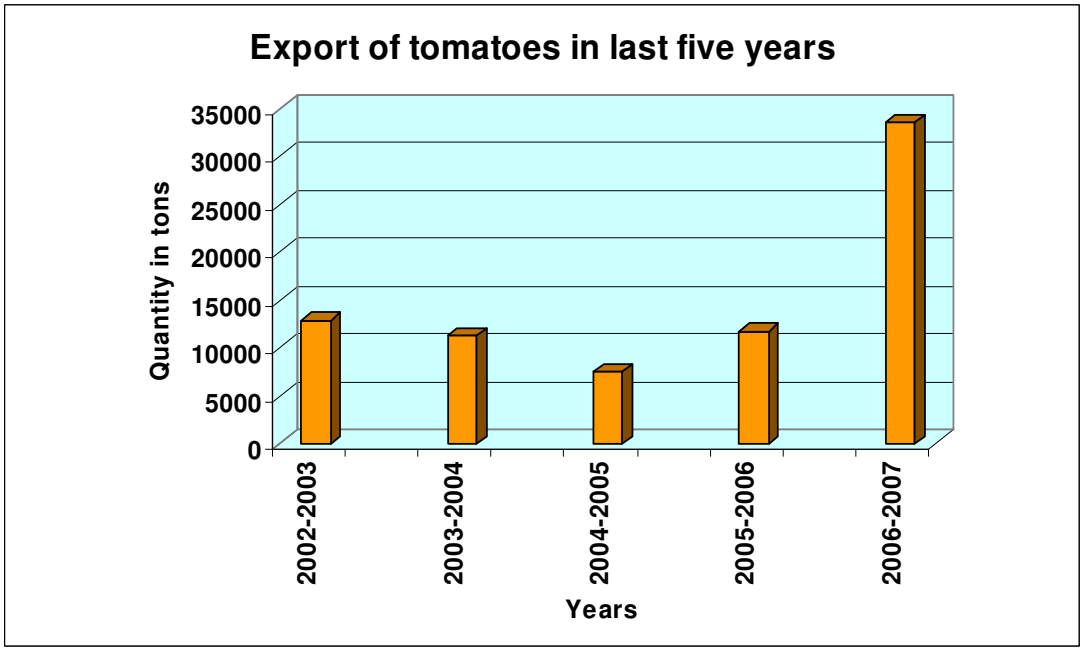

Fig. 9

Export potential

Export potential of tomatoes is discussed region wise as below:

(i) GCC countries

During 2006-07, 10,352 tons of tomatoes were exported. This is a substantial increase from 1019 tons in 2005-06. Details of total imports compared to exports from India are given in table 25.

Table 25: Import/Export of tomatoes in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	UAE	125821	10176
2	Saudi Arabia	210199	43
3	Kuwait	82475	84

Source: Comtrade database, 2006 & APEDA

The exports from India are negligible compared to imports; however, data shows there is substantial export potential for export of tomatoes to GCC countries provided India maintains quality standards. India needs to penetrate markets of Saudi Arabia, Kuwait, Qatar, etc. by meeting their requirements. India's competing countries are Jordan and Syria. India is able to supply tomatoes at competitive prices compared to Jordan, but Syria supplies at much lower prices and thus, India will have to provide tomatoes at competitive rates by reducing cost of production.

(ii) ASEAN countries

For the first time India exported 406 tons to Singapore during 2006-07. There is huge potential for exports of tomatoes to these countries. Considering the nominal import duties in Indonesia, Philippines and no tariff duties in Malaysia on imports of tomatoes, there is scope to expand the trade.

The export potential can be gauged by imports of tomatoes by Singapore (24,007 tons), Vietnam (12,910 tons) and Malaysia (3,589 tons).

For India, the best opportunity is to export to Singapore. India should meet the requirements of Singapore market which is an important destination.

(iii) Pacific Rim countries and China

There is no scope of exports of tomatoes to these countries for the time being.

(iv) EU countries

EU countries imported to a level of 2,478,794 tons during 2006. Export from India are not a possibility till we improve upon our technology and can export by sea may be by using MA cartons.

I. GREEN CHILLIES

India produced 59.1 thousand tons of green chillies as per FAO database during 2006 (See crop profile for details, Volume – II Domestic Market Research, Chapter 12).

- **Export trend**

There has been phenomenal increase in exports of green chillies just from 1385 tons in 2002-03 to 18,187 tons in 2006-07 (Table 26 & Fig 10).

Table 26: Export of green chillies in last five years

Year	Quantity(tons)	Value(in Rs. Lakh)
2002-2003	1385	284.4
2003-2004	3838	898.9
2004-2005	7952	909.2
2005-2006	8764	1482.5
2006-2007	18187	2216.3

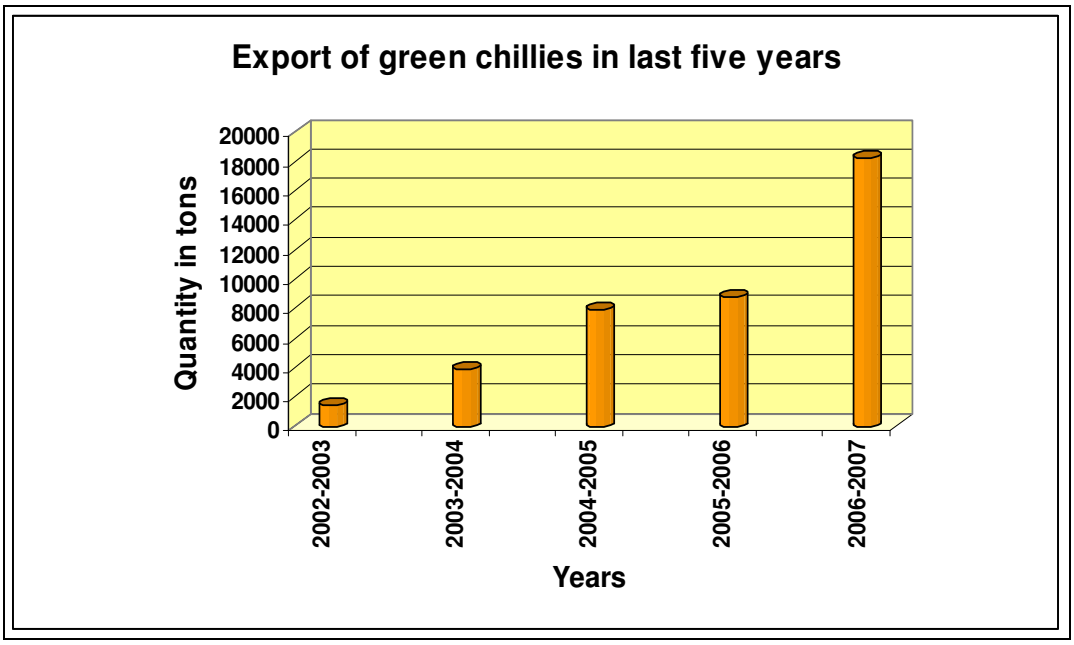

Fig. 10

Export Potential

Region wise export potential is discussed in following paras:

(i) GCC countries

Out of total exports of green chillies during 2006-07 from India, maximum amount of green chillies were exported to Gulf countries (16,674 tons).Details of exports are given below in table 27. Exports are comparatively little compared to imports by GCC countries. There is 158% increase in demand over the year 2003. There is a need to penetrate Saudi Arabia, Oman, Qatar and Kuwait markets by appropriate campaigns & negotiations. The main competition of India is with Jordan.

Table 27: Import/Export of green chillies in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	GCC	56280	16674
2	UAE	30457	15716
3	Saudi Arabia	10343	51

Source: Comtrade database, 2006 & APEDA

(ii) ASEAN countries

ASEAN countries imported green chillies to the tune of 46,705 tons in 2006 Major importers in ASEAN countries were Malaysia (32,427 tons) and Singapore (13,255 tons).

India's export of green chillies was very meager, as only 19 tons were exported to Singapore during 2006-07. However, during 2005-06, India exported 196 tons of green chillies to Malaysia and shows that there is a good potential for exporting to Malaysia and Singapore among ASEAN countries. But India will have to provide at competitive prices by cutting cost of production by increasing productivity.

(iv) European Union

European Union has imported green chillies including peppers to the extent of 1,032,194 tons during 2006. India's export of green chillies to EU comprised 70 tons to UK, 14 tons to Italy and 11 tons to France. There is some potential in exports of green chillies to EU and needs to be pursued vigorously. India should supply at competitive prices as Spain and Jordan are main competitors who supply relatively at lower prices.

(v) Australia

There is a good potential for exporting green chillies to Australia. Australian market is monopolized by New Zealand, however, Indian chillies are totally different from New Zealand with specific characteristics and therefore export must be explored citing the preferential qualities.

J. OKRA

Present production of okra is 3684 thousand tons (2005-06). India is the largest producer in the world (For details please see crop profile, Volume – II Domestic Market Research, Chapter 11).

♦ **Export trend**

There is no separate data for export of okra, as its exports are included in mixed vegetables.

The export of mixed vegetables was stagnant from 2002-03 to 2005-06, however suddenly during 2006-07, export of mixed vegetables spurted to 50,992 tons compared to 27,849 tons in 2002-03 and 22,768 tons during 2005-06.(Table 28 & Fig. 11)

Table 28: Export of mixed vegetables in last five years

Year	Quantity(tons)	Value (in Rs. Lakh)
2002-2003	27849	4796.9
2003-2004	18490	3724.1
2004-2005	28833	4798.7
2005-2006	22768	4522.8
2006-2007	50992	12830.1

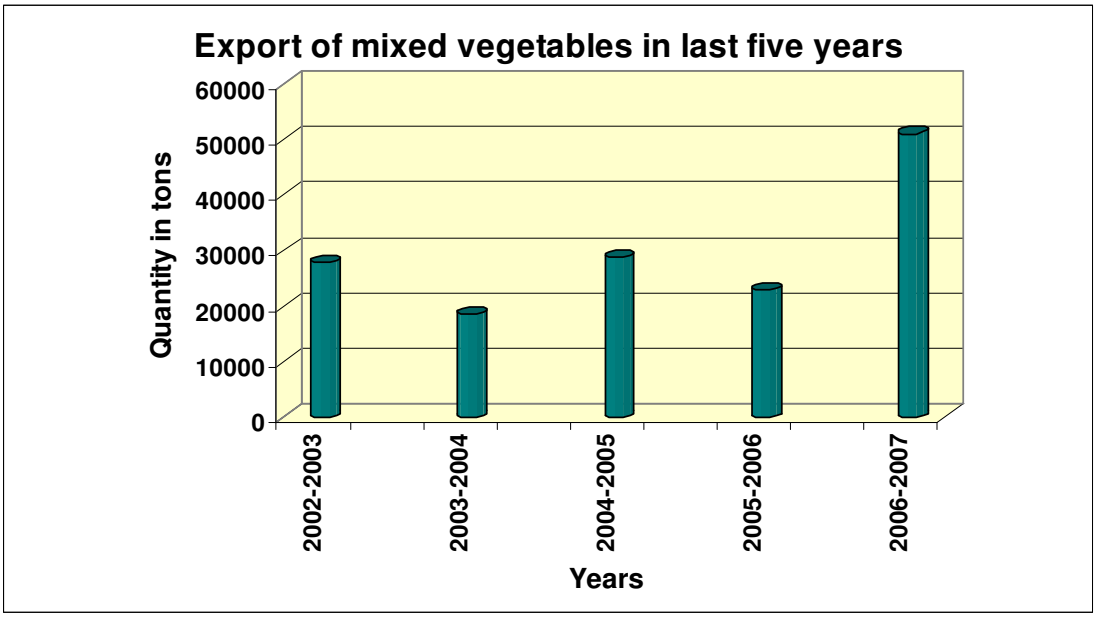

Fig. 11

Since mixed vegetables comprise vegetables like okra, broccoli, capsicum, torai (ridge gourd), karela (bitter gourd) and lauki (long gourd), etc., it is estimated that about 17,500 – 20,000 tons of okra are being exported at present (taking an estimate of 35-40%) out of total exports of mixed vegetables.

Maximum amount of these vegetables are exported to GCC countries and largest importers are UAE, Saudi Arabia, Qatar and Kuwait. The exports to EU countries are lesser (almost 1/3rd of GCC countries) and the largest importers are U.K, Germany, Switzerland and France.

As far as ASEAN countries are concerned, exports of mixed vegetables were made only to Singapore (832 tons) and Indonesia (40 tons).Since data on imports from other countries either on Comtrade or Trademap is not available, analysis to this effect has not been carried out.

K. ONION

The level of production is 9248.4 thousand tons as recorded during 2005-06. India is the second largest producer of onions in the world. (See crop profile for details, Volume – II Domestic Market Research, Chapter 9).

♦ Export trend

Export of onions from India has increased at a faster rate in the last five years. Export has increased from 5, 88,711 tons in 2002-03 to 13, 78,373 tons in 2006-07. An increase of 133% in exports has been recorded (Table 29 & Fig. 12)

Table 29: Export of onion in last five years

Year	Quantity(tons)	Value (in Rs. Lakh)
2002-2003	588711	36180.0
2003-2004	859938	71586.7
2004-2005	870216	64411.9
2005-2006	960507	70815.8
2006-2007	1378373	116330.5

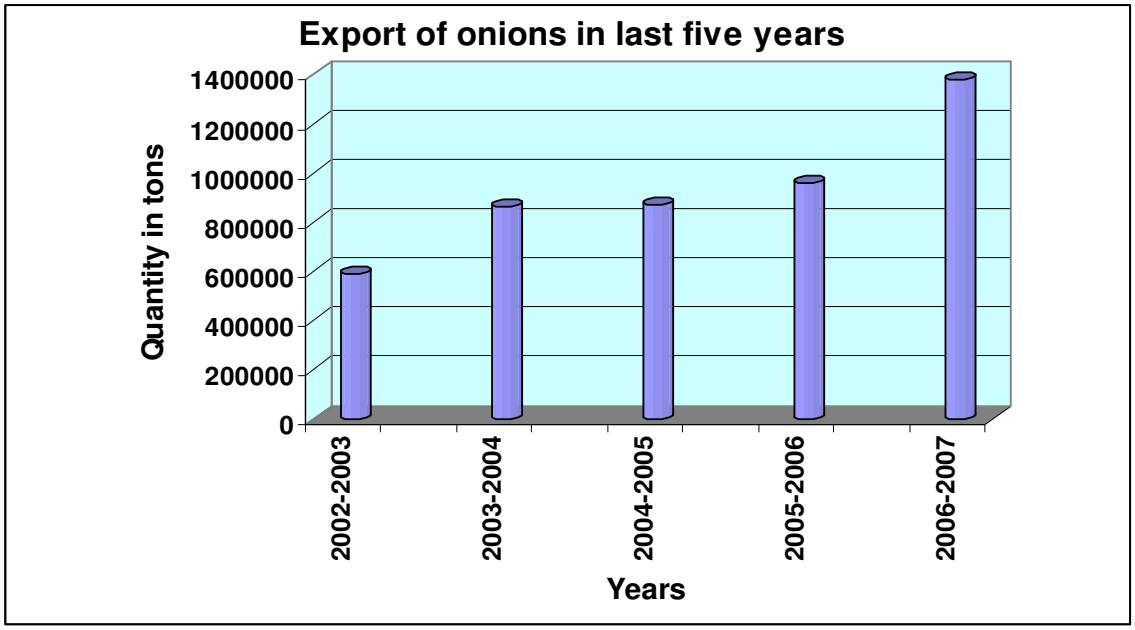

Fig. 12

Maximum exports of onions were to SAARC countries, followed by ASEAN and GCC countries.

An account of region wise export potential is given below:

(i) ASEAN countries

ASEAN countries as per Comtrade database imported 7, 83,035 tons during 2006 compared to 439,154 tons in 2003 and thus there is an increase of 78% in demand for onions in these years. Details of imports of onions by ASEAN countries and exports from India during 2006-07 as per APEDA database is given below in table 30.

Table 30: Import/Export of onions during 2006

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	ASEAN	783035	377103
2	Malaysia	470552	319857
3	Indonesia	99890	1203

4	Philippines	75855	32894
5	Singapore	43887	22960
6	Vietnam	48411	189

Source: Comtrade database, 2006 & APEDA

China is competing with India and is supplying onion at a cheaper rate under APTA to Indonesia and Thailand. Possibly with the implementation of Free Trade Agreements with ASEAN countries, export of onions will further increase.

(ii) GCC countries

GCC countries imported 606,866 tons of onions during 2006.There was 134% increase in demand for onions over the year 2003. Details of imports and exports from India are given in the table 31. India has not been able to penetrate Saudi Arabian market. Efforts are to be made to meet the requirements of Saudi Arabia in near future so that a boost to onion exports can be given. India will have to compete with Egypt, Turkey and Iran by supplying onions at competitive prices.

Table 31: Import/Export of onions in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	GCC	606866	292919
2	UAE	254413	235912
3	Saudi Arabia	233992	7690

Source: Comtrade database, 2006 & APEDA

(iii) European Union

European Union imported onions up to 1,776,544 tons during 2006.Data on total imports and exports from India are given below in table 32.

Table 32: Import/Export of onions in EU countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	EU	1776544	4540
2	UK	316723	598
3	Germany	276587	325
4	Netherlands	103357	666
5	Spain	-	1071

Source: Comtrade database & APEDA

The distribution of Indian onions to major countries in EU shows that acceptability of Indian onions is increasing. Further enhancement in exports of onions to EU is a great possibility if India supplies yellow onions with less pungency, along with thick and fleshy layers. A suitable variety Arad H has already been identified and export of this needs to be explored in a concerted manner.

L. GINGER

Present production of ginger is 517.8 thousand tons (2006). India is the largest producer in the world. (For details see crop profile, Volume – II Domestic Market Research, Chapter 13).

♦ Export trend

Export of ginger increased from 4696.5 tons in 2003-04 to 13889 tons in 2004-05, however, after this, it started declining as only 9411.3 tons was exported during 2005-06 and it further declined to 7500 tons in 2006-07.(Table 33 & Fig 13).

Table 33: Export of ginger from India

Year	Quantity(tons)	Value (in Rs. Lakh)
2003-2004	4696.5	2275.5
2004-2005	13889.9	5985.8
2005-2006	9411.3	4295.5
2006-2007	7500.1	3975.0

Fig. 13

Export potential of ginger is discussed region wise in the following paragraphs:

(i) GCC countries

India exported 1109 tons to GCC during 2006-07, of which Saudi Arabia imported 930 tons and UAE imported 179 tons of ginger from India, (as per Report of Spice Board of India). Comtrade database, however shows that GCC countries imported as much as 38,630 tons during 2006.The GCC market has been dominated by ginger from China, Ethiopia and Nigeria. China supplies ginger at cheaper rates and Ethiopia and Nigeria are also able to provide cheaper ginger compared to India.

India though largest producer of ginger in the world but productivity is very low. If India has to compete in world markets, it must increase productivity and lower cost of production by cultivating high yielding cultivars with better agricultural practices.

(ii) Middle East and African countries

Apart from GCC countries, India has exported ginger during 2006-07, to a number of Middle East and African countries comprising Yemen Arab Republic (480 tons), Morocco (281 tons) and Israel (139 tons). This suggests that there is a potential of exporting ginger to these countries also which can be further explored.

(iii) European Union

European Union imported ginger up to 43,056 tons during 2006. Largest importers were UK, Netherlands and Germany. Major export of ginger to European Union is done by China (36%) and Thailand (13%). Exports to some extent are also done by Nigeria and Brazil. These countries are also India's competitors and supply ginger to EU at much cheaper prices. India's exports are negligible as is shown in table 34. As stated earlier India must offer ginger at competitive prices for enhancing exports.

Table 34: Imports/Exports of ginger in EU (2006)

S.No.	Countries	Total imports (in tons)	Exports by India (in tons)
1	EU	43056	1384
2	UK	15962	554
3	Netherlands	13204	174
4	Germany	4364	145
5	Spain	-	393

Source: Comtrade database & APEDA

(iv) Pacific Rim countries

India exported some quantities of ginger to Australia (131 tons) and Japan (73 tons) during 2006-07.

Australia imported 869 tons of ginger in 2006, the imports of Australia decreased to 663 tons during 2007.India's main competition is with China and Fiji Islands who supply ginger at cheaper rates than India. India must initiate appropriate strategies to explore it further.

As far as Japan is concerned, maximum imports of ginger all over the world amounting to 58,465 tons are done by Japan, but India exported only 73 tons to Japan. India needs to explore Japanese market in a better way.

(v) U.S.A and Canada

Both USA and Canada imported 32,553 tons and 8360 tons of ginger respectively during 2006. India exported 444 tons of ginger to USA and 112 tons to Canada. Looking into the potential for exporting to these countries, a concerted effort in this direction is required.

M. TURMERIC

India produced turmeric to the tune of 846.7 thousand tons during 2006. India is the largest producer of turmeric in the world. (For details see crop profile, Volume – II Domestic Market Research, Chapter 14).

♦ Export trend

India has monopoly in turmeric trade at world level. Although India is the largest producer of turmeric in the world (8,46,700 tons) but it exported only 6% of the total production. India, exported 51500 tons of turmeric during 2006-07. This is substantial compared to 37,644 tons during 2003-04. (Table 35 & Fig 14).

Table 35: Export of turmeric from India

Year	Quantity(tons)	Value (in Rs. Lakh)
2003-2004	37044.3	13111.7
2004-2005	43096.6	15625.0
2005-2006	46404.9	15286.0
2006-2007	51500.0	16480.0

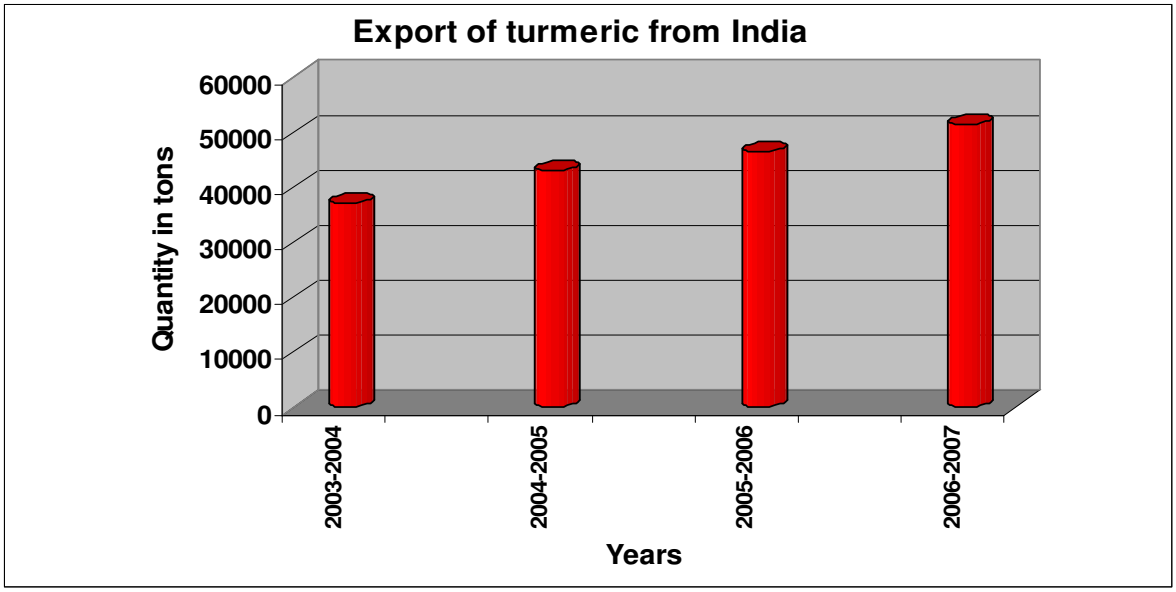

Fig. 14

Present exports and export potential of turmeric, region wise is discussed in the following pages:

(i) GCC countries

India exported 9550 tons of turmeric to GCC countries. UAE imported maximum quantity of 7823 tons, whereas Saudi Arabia imported 1406 tons and Kuwait 320 tons. Export potential should be further exploited by exploring exports to Bahrain, Oman and Qatar.

(ii) Middle East and African countries

Exports of turmeric was made mainly to countries like Iran (6094 tons), Egypt (2057 tons), Morocco (736 tons), Israel (632 tons), etc. amounting approx. to 9821 tons. India must also explore the opportunity of expanding the trade to Turkey, Algeria, Kenya, Yemen, Jordan, etc.

(iii) European countries

Turmeric was exported to EU countries up to 9508 tons; the largest importers were UK (2896 tons), Netherlands (1816 tons), Germany (1155 tons), France (627 tons),

etc. Export of turmeric needs to be explored in remaining European countries as there is huge potential for export.

(iv) Russia

India exported 567 tons of turmeric to Russia. Export of turmeric should be further explored to Russia and other adjoining countries.

(v) ASEAN countries

Some amount of turmeric was also exported to ASEAN countries comprising Malaysia (2263 tons) and Singapore (622 tons). Export needs to be pursued in Philippines, also. There is no scope of exporting to Indonesia.

(vi) Pacific Rim countries and China

India exported 2631 tons of turmeric to Japan as per Spices Board database. There are no authentic figures about exports of Indian turmeric to South Korea and Australia, but as per Comtrade database India exported 267 tons to South Korea and 462 tons to Australia.

Further exports to these countries need to be explored, but there is no potential of exporting to China, as this country is itself an exporting country.

(vii) U.S.A and Canada

India exported 2460 tons of turmeric to USA and 347 tons to Canada during 2006. Efforts for further enhancement of exports must be made to these countries.

Since India is exporting only 6% of its total production, therefore adequate campaign needs to be launched for boosting exports of turmeric highlighting its medicinal properties. Export of turmeric needs to be further explored in Central and South American countries.

N. SESAME

India produced 641 thousand tons of sesame during 2005-06 and produced 670 thousand

tons during 2007. India at present is largest producer of sesame in the world. (See crop profile for details, Volume – II Domestic Market Research, Chapter 15).

- **Export trend**

Export data of FAO website shows that 218,970 tons of sesame seeds were exported from India during 2001-02, however it declined to 118,376 tons during 2002-03. Thereafter, there was again good upsurge in exports during 2003-04 to the tune of 189,113 tons and 1, 99,808 tons during 2005-06. No data for 2006-07 is available on FAO database; however, Comtrade database shows exports of 233,345 tons during the year (Table 36 & Fig 15).This database also depicted 302,345 tons of exports during 2007.

Table 36: Export of sesame from India

Year	Quantity(tons)	Value(in Rs. Lakh)
2002-2003	118376	37203
2003-2004	189113	70043
2004-2005	156664	65067
2005-2006	199808	74513
2006-2007	233345	93271

Fig. 15

Export potential of sesame, region wise is discussed below:

(i) GCC countries

As per Comtrade database, GCC countries imported 45,849 tons of sesame during 2006. There is 101% increase in demand. The details of imports and India's exports to GCC countries indicates a lower achievement compared to the existing potential (table 37).

Table 37: Import/Export of sesame in GCC countries (year 2006)

S.No.	Countries	Total Import (in tons)	Export by India (in tons)
1	GCC	45849	6714
2	Saudi Arabia	28626	2726
3	UAE	14463	3224
4	Kuwait	2496	764

Main competition is from Ethiopia and Sudan who are able to supply at cheaper rates, as they are near to GCC countries compared to India. Moreover, India's productivity of sesame is 50% of the productivity of Ethiopia. Thus in order to be competitive; India must enhance the productivity in addition to improve quality standards.

(ii) Middle East and African countries

India is exporting to the tune of 10,467 tons to Turkey, 1665 tons to Cyprus, 1069 tons to Jordan and 153 tons to Morocco. India should explore these markets including Egypt to further enhance exports. (Egypt imported 48,294 tons of sesame seeds during 2006).

(iii) European Union

European Union imported sesame seeds up to 1, 21,053 tons during 2006. India's exports to EU were maximum, as 48% of the requirements were met by India and

other exporters are Guatemala, Sudan, and Paraguay supplying only limited quantity. Largest importers of sesame from India during 2006 were Germany (14,288 tons), Netherlands (11,993 tons), Greece (9748 tons), Poland (6231 tons), Italy (4671 tons), UK (3343 tons) and France (2016 tons).

India must keep up the momentum and to maintain position as largest supplier/ exporter to EU, must improve upon quality and cut on cost of production to be more competitive.

(iv) ASEAN countries

ASEAN countries imported sesame seeds up to 22,510 tons during 2006.There is a 21.6% increase in demand. India is meeting 60% demand of ASEAN countries. Main importers of Indian sesame are Malaysia (7195 tons), Indonesia (3258 tons), Singapore (1876 tons) and Philippines (921 tons).

Major competition with India in ASEAN region is from Myanmar, but India is able to make available sesame in these markets at competitive prices.

(v) Pacific Rim countries and China

Export potential in these countries is as follows:

(a) South Korea

South Korea imported 85,567 tons of sesame seeds during 2006. Out of this total import, 38,686 tons were exported by India and 33,081 tons by China. India supplied at much competitive price over China and thus there is a scope of increasing share in imports of South Korea.

(b) Australia

Australia imported 6604 tons of sesame during 2006, out of which India supplied 4836 tons and rest by Mexico, Guatemala and China. However, India supplied sesame at much competitive price compared to other countries mentioned above.

(c) China

China imported 2, 63,587 tons of sesame during 2006.Major exporters to China were Ethiopia (1, 34,989 tons), Sudan (67,426 tons), and Tanzania (12,570 tons). India exported only 13,487 tons during this year. India exported sesame at much competitive rates over Ethiopia and Sudan.

During 2007, China imported 1, 94,461 tons of sesame. This year Ethiopia's share was only 75,563 tons, whereas India's share increased to 37,214 tons compared to 13,487 tons in 2006.

Since India is nearer to China compared to Ethiopia and Sudan, we have to expand the trade in China.

(d) Japan

Japan is second largest importer of sesame next to China in the world and imported 1, 59,110 tons during the year 2006. India did not export sesame to Japan at all.

However, requirements of sesame were met by Nigeria (45,388 tons), Paraguay (21,986 tons), Tanzania (17,579 tons), China (9497 tons), Bolivia (10,439 tons) and Guatemala (7369 tons). India must explore exports to Japanese market, as India is closer to Japan compared to Guatemala, Paraguay, Nigeria, Tanzania etc and can offer competitive price over Paraguay, China, Guatemala and Bolivia.

(vi) North America

USA alone imported 43,316 tons of sesame during 2006. Canada also imported sizeable quantities of sesame although exact figures are not known.

India exported during the year (2006), 18,436 tons of sesame seeds to U.S.A and 4265 tons to Canada. Although India supplies 42% of demand of U.S.A, however still effort needs to be made to have higher share in imports of U.S.A.

O. SOYAMEAL

Present production of soyameal in India is 5280 thousand tons (2006-07). (Please see crop profile for more details, Volume – II Domestic Market Research, Chapter 16).

- **Export trend**

There is a significant spurt in exports of soyameal as only 615,328 tons were exported during 2004-05 but it increased to 4,196,245 tons during 2006-07.(Table 38 & Fig. 16).

Table 38: Export of soyameal from India

Year	Quantity(tons)
2004-2005	615328
2005-2006	3494860
2006-2007	4196295

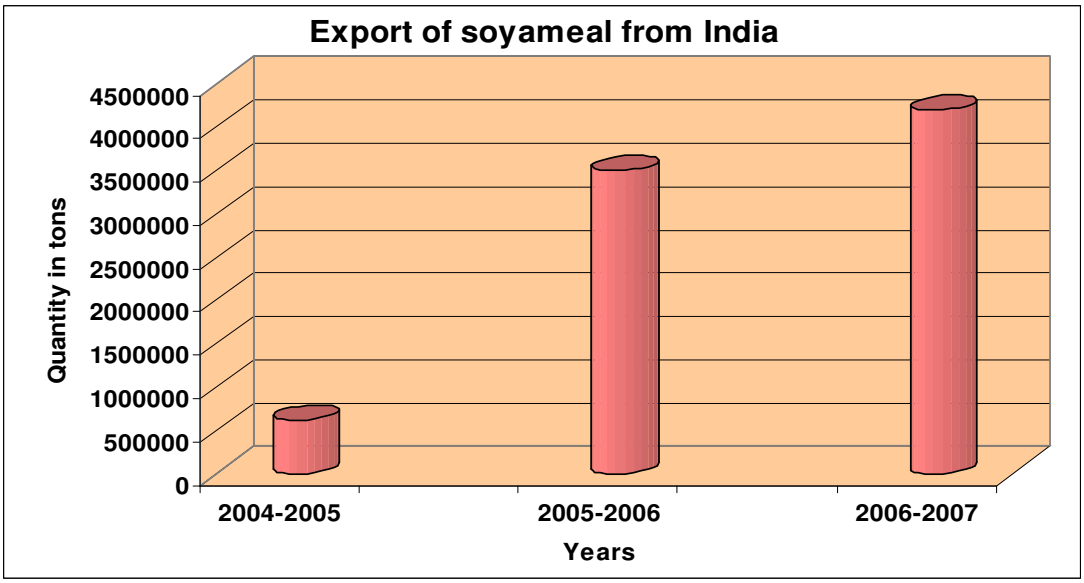

Fig. 14

The potential for exports is discussed in the following paragraphs:

(i) GCC countries

GCC countries imported to the tune of 8, 01,916 tons during 2006. There is 55.5% increase in demand over the year 2003. The largest importers in GCC countries are

Saudi Arabia (7, 20,026 tons), Kuwait (49,852 tons), UAE (21,564 tons), Oman (9672 tons) and Qatar (802 tons).

India in its exports is meeting almost entire requirements of UAE, Kuwait and Qatar, however, in case of Saudi Arabia which imported to the extent of 7, 20,026 tons during 2006; there was no export. The requirements of Saudi Arabia were met by Brazil (4, 49,780 tons), U.S.A (1, 06,213 tons) and Argentina (49,829 tons).

India is exporting to other GCC countries at most competitive prices over Brazil, U.S.A and Argentina and moreover India is closer to GCC countries compared to above countries. India thus must make sincere efforts to penetrate the market of Saudi Arabia.

(ii) ASEAN countries

ASEAN countries imported up to 8,230,166 tons of soyameal during 2006. Data on imports by ASEAN countries and exports from India are given below in table 39.

Table 39: Imports/Exports of soyameal in 2006

S.No.	Countries	Total imports (in tons)	India's exports (in tons)
1	ASEAN	8230166	1968767
2	Thailand	2174201	288765
3	Indonesia	2116058	656024
4	Vietnam	1820338	892772
5	Philippines	1359315	82285
6	Malaysia	740572	48901
7	Singapore	-	222896

India's total exports during 2006 to ASEAN countries were only 1/4th of the total demand. Main competitors with India are Argentina, Brazil and U.S.A, who inspite of the fact are quite away in distance from ASEAN countries, still are able to supply soyameal at competitive prices.

Thus, India must increase productivity of soyabean, so that it can lower the cost of production and offer soyameal to ASEAN countries at much lower prices to increase exports to these countries.

(iii) Pacific Rim countries and China

During 2006, Pacific Rim countries comprising South Korea, Japan and China imported soyameal 1,709,150 tons, 1,647,492 tons and 6,74,177 tons respectively, India exported 5,35,810 tons to Japan, 6,82,104 tons to South Korea, 3,15,028 tons to China and 89,388 tons to Taiwan during this year.

Main competition of India is with Argentina, Brazil and to some extent with U.S.A. India is much closer to these countries and must make sincere efforts to have larger share in imports of these countries by offering competitive prices.

P. COTTON

Production of cotton lint in India was 4740 thousand tons during 2006-07 and 5270 thousand tons during 2007-08. (See crop profile for details, Volume – II Domestic Market Research, Chapter 17).

♦ Export trend

India's export of cotton lint was insignificant up to 2004-05 and increased only during 2005-06 and 2006-07. Cotton lint export from India increased from 13,306 tons in 2002-03 to 1,001,718 tons in 2006-07 (Table 40 & Fig 17).

Table 40: Export of cotton lint from India

Year	Quantity(tons)	Value(in Rs. Lakh)
2002-2003	13306	6058
2003-2004	201372	88114
2004-2005	160600	70237
2005-2006	776632	384038
2006-2007	1001718	535109

Fig. 17

Export potential of cotton is discussed region / areas wise in the following paras:

(i) ASEAN countries

ASEAN countries imported 1,059,967 tons during 2006. There is a decrease of 3% in demand over 2003. India's exports to these countries are approx 11% of their requirements. The details of imports and exports from India are given below in the table 41.

Table 41: Imports/Exports of cotton lint in 2006

S.No.	Countries	Total imports (in tons)	India's exports (in tons)
1	ASEAN	1059967	118682
2	Thailand	422042	44478
3	Indonesia	463205	50534
4	Vietnam	119021	33670

Main competition for India for export of cotton is from Australia and U.S.A. India is nearer to these countries from location point of view compared to U.S.A. India is also supplying at much lower prices compared to U.S.A and Australia but still, India is not

able to corner more than 11% share of imports. India needs to strive for higher productivity and lower cost of production on one hand and improve quality on the other for enhancing exports to these countries.

(ii) South Korea

Republic of Korea imported 2, 16,268 tons of cotton during 2006; however India exported only 6999 tons of cotton to it. The other exporters were U.S.A (83,944 tons), Australia (53,458 tons) and Brazil (40,091 tons).

Inspite of the fact that India is supplying cotton at much competitive prices over U.S.A and Australia and India is also nearer to South Korea location wise, yet India's export share is very less. India should make serious efforts to explore the market.

(iii) China

China imported 3,641,417 tons of cotton during 2006 whereas India exported only 4, 65,388 tons of cotton during 2006. The major competition is from U.S.A, Uzbekistan and Australia. U.S.A is the largest exporter to China and India is second largest exporter.

India location wise is closer to China and should have larger share in imports of China by offering at more competitive prices and supplying better quality cotton.

(iv) Japan

Japan imported cotton to the tune of 1, 35,574 tons during 2006. However, India did not export any quantity of cotton to Japan. It will be appropriate to explore the exports of Indian cotton to Japan.

(v) Turkey

Turkey imported total quantity of 7, 37,734 tons of raw cotton during 2006 and India exported only 89,932 tons. India should try to penetrate this market in an effective manner as there is good potential there.

6.6. EXPORT PROJECTIONS AT THE END OF XITH PLAN

With the special measures taken up during XIth plan, total production of all crops (being studied at present) is bound to increase substantially.

There is a likely production of 85 million tons of fruits and 160 million tons of vegetables at the end of XIth plan as a result of several measures taken like TMNE, NHM, ISOPOM, etc.

It is estimated that the exports of all the commodities are likely to increase to a level of 14.44 million tons at the end of XIth plan compared to present level of exports of 7.46 million tons. An increase of 93.7% from the present level is envisaged and quite justified in next five years (Table 42). The projections have been worked out considering the previous growth pattern and other factors.

There are very high prospects of fulfilling these targets because of extraordinary measures taken for creating infrastructure and other facilities required for export by APEDA and recent attempts by National Horticulture Mission especially in the areas of fruits and vegetables.

Achieving these targets in fruits and vegetables as stated in Table 42 of 0.68 million tons of fruits and 3.54 million tons of vegetables is just minimal, compared to the potential that exists for exports. It all depends, how India meets the challenge of gearing up all the stake holders in the export programme.

In other crops also there is worldwide demand like for sesame and soyameal and exports targeted can easily be fulfilled. Spices Board of India has special programme to take exports of spices to new heights. In cotton also, there is a boost in production due to adoption of GM varieties. In 2008-09, there is a surplus of 10 million bales of cotton (1.7 million tons) and thus there is excellent scope of export in cotton because of higher demand in China and other countries and India is now world's favourite shopping destination for affordable good quality cotton at competitive prices.

Table 42: Present volume of exports and projection during 2011-12

Crop	Present Export Volumes[1] in tons during 2006-07	Projected Export Volume in tons during 2011-12
Fruits	324526[1]	681508
Vegetables	1654252[1]	3540099
Ginger	7500[2]	15000
Turmeric	51500[2]	77234
Sesame	233345[3]	483234
Soyameal	4196245[4]	7500000
Cotton	1001718[5]	2150000
Total	**7469086**	**14447075**

Sources: [1] APEDA database
[2] Export www.indianspices.com
[3] Export www.trademap.com
[4] SOPA, Indore www.sopa.org
[5] CCI, Mumbai

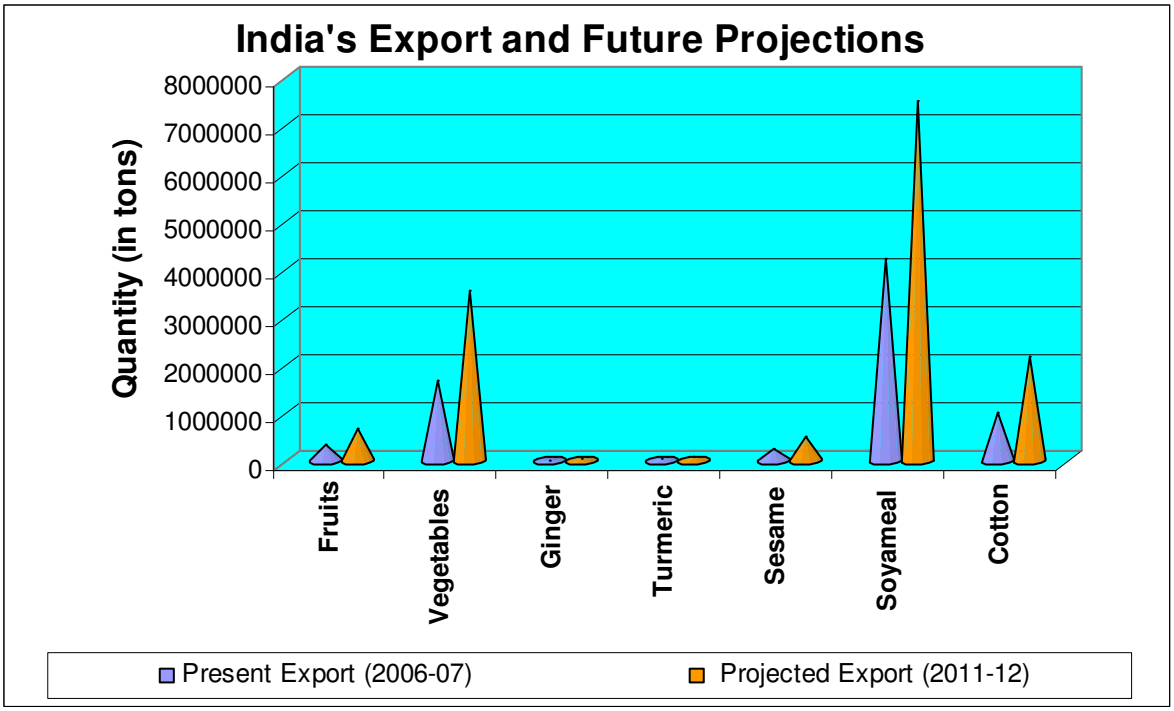

Fig. 18