LEC .2 FRUIT PRODUCTION SCENARIO, STATE AND NATIONAL LEVEL, IMPACT AND ECONOMIC TREND WITH EMPHASIS TO EXPORT

India is the second largest producer of fruits after Brazil. The total production of fruits in the world is around 370 million MT. India ranks first in the world with an annual output of 32 million MT. While there are almost 180 families of fruits that are grown all over the world, citrus fruits constitute around 20% of world's total fruit production. India with its current production of around 32 million MT accounts for about 8% of the world's fruit production. The major fruits for export are mango, banana, citrus fruits, apple, guava, papaya, pineapple and grapes. The diverse agroclimatic zones of the country makes it possible to grow almost all varieties of fruits and vegetables in India. The fruit production in India has recorded a growth rate of 3.9%, whereas the fruit processing sector has grown at about 20% per annum. However, the growth rates have been extensively higher for frozen fruits & vegetables (121%).

Mango production accounts for an estimated 38 percent of total tropical fruit output in 2002, two percent higher than the most recent estimates, again due to increased production in China and India which offset declines in mango output in Mexico. Area dedicated to mango production continues to steadily increase in recent years in India, covering an estimated 39 percent of all agricultural area dedicated to fruit crops. Pineapple production is estimated at 14.4 million tonnes 13.7 million tonnes for 2001, or 21 percent of global output, with papaya and avocado production estimated to reach 8.9 and 2.6 million tonnes, respectively. Total papaya output registered a slight decline in 2002, although production in Brazil and India, the two largest producers, increased nearly 3 percent for each country over 2001. The production of minor tropical fruits, such as lychees, durian, rambuttan, guavas and passionfruit continues to steadily increase, and are estimated to have reached 15.5 million tonnes, or 23 percent of total global output.

India has 1655 lakh ha of land and a operational holding of agricultural farming is about 153 lakh ha is under horticulture and yields about 142 million tonnes of fruits and vegetables. India ranks first in the production of mango, banana, sapota and acid limes in the world. It is among the first 10 in the production of apples, papaya, oranges, grapes and pineapples. The five fruits namely Mango, Banana, Citrus, Guava and Apple account for 75% of the total fruit production.

Although India is the largest producer of fruits in the world, the production per capital is only about 100 gms per day. However, it is estimated that more than 20-22% of the total production of fruits is lost due to spoilage at various post harvest stages. Thus the per capita availability of fruits is further reduced to around 80 gms per day which is almost half the requirement for a balanced diet.

Area and production of fruits

| Year | Area (Lakh ha) | Production (lakh Mt) | | |
|-----------|-------------------|-------------------------|--|--|
| 1991-92 | 28.74 | 268.32 | | |
| 1992-93 | 32.06 | 329.55 | | |
| 1993-94 | 31.84 | 372.55 | | |
| 1994-95 | 43.10 | 386.03 | | |
| 1995-96 | 33.57 | 415.07 | | |
| 1996-97 | 35.79 | 404.58 | | |
| *1997-98 | 37.50 | 432.60 | | |
| *1998-99 | 37.40 | 440.40 | | |
| 1999-2000 | 38.00 | 450.00 | | |
| 2000-2001 | 39.40 | 498.00 | | |

India's Export of Fresh Fruits (Quantity: MT, Value: Rs. Lakhs)

| Crop | 1998-99 | | 1999-2000 | | 2000 |)-01 | 2001-02 | | |
|-----------|---------|---------|-----------|---------|---------|-------------|---------|---------|--|
| | Quality | Value | Quality | Value | Quality | Value | Quality | Value | |
| Banana | 8111.00 | 1689.40 | 6290.00 | 1280.81 | 8629.00 | 1800.30 | 8100.00 | 1583.94 | |
| Dates | 49.00 | 20.78 | 27.00 | 9.88 | 5.00 | 3.30 | 530.00 | 16.50 | |
| Fig | 34.00 | 14.53 | 10.00 | 1.29 | 81.00 | 20.32 | 633.00 | 49.04 | |
| Pineapple | 245.00 | 16.79 | 138.00 | 38.04 | 757.00 | 128.59 | 837.00 | 159.97 | |
| Guava | 487.00 | 69.22 | 2102.00 | 272.10 | 640.00 | 127.84 | 890.00 | 172.30 | |
| Mango | 45408 | 7913.67 | 34631 | 7154.89 | 39274 | 7420.12 | 44429 | 8099.13 | |
| Citrus | 12786 | 1519.39 | 26915 | 2824.62 | 30464 | 3407.99 | 33171 | 3915.20 | |

| Grapes | 11382 | 3709.07 | 14006 | 5513.82 | 20780 | 8391.85 | 14694 | 6043.22 |
|-----------------------|-------|---------|-------|---------|---------|---------|--------|---------|
| Papaya | 2505 | 342.64 | 12660 | 2076.10 | 11928 | 1619.91 | 1976 | 286.89 |
| Apples | 7442 | 1002.36 | 5477 | 884.34 | 2847 | 417.29 | 19296 | 1339.29 |
| Pear & quinces | 182 | 9.43 | 99 | 5.18 | 4 | 0.64 | 13 | 1.66 |
| Cherries and apricots | 60 | 40.13 | 96 | 23.35 | 5 | 1.76 | 133 | 39.07 |
| Peaches & plum | 25 | 42.50 | 14 | 1.36 | - | - | - | - |
| Strawberry | 68 | 44.66 | 78 | 103.57 | 40 | 39.17 | 118 | 12.74 |
| Kiwi | - | - | 4291 | 386.82 | - | - | - | - |
| Pomegranate | 4239 | 896.07 | 5726 | 1153.69 | 4456 | 991.56 | 4774 | 1041.85 |
| Sapota | 1049 | 136.96 | 1572 | 243.10 | 911 | 161.85 | 1150 | 214.47 |
| Custard apple | 81 | 13.41 | 277 | 45.64 | 640 | 117.69 | 170.93 | 29.80 |
| Litchi | 45 | 13.95 | 299 | 73.82 | 167 | 157.84 | 29 | 35.99 |
| Other fruits | 2411 | 504.48 | 4946 | 1084.23 | 1913.14 | 36241 | - | 5082.89 |
| Almonds | 21 | 32.20 | 61 | 23.82 | 21.60 | 20 | - | 1.93 |
| Hazelnuts | 21 | 32.14 | - | - | - | 10 | - | 20.23 |
| Walnuts | 5328 | 6892 | 4993 | 6056 | 11001 | 7402 | - | 11778 |
| Pistachio | 1 | 1.08 | - | - | 0.01 | - | - | - |

Statewise area and production of fruits in india (area in lakh ha, output in lakh mt)

| State | 1993-94 | | 1994-95 | | 1995-9 | 1995-96 | | 1996-97 | | 1997-98 | | 1998-99 | |
|-------------------|---------|-------|---------|-------|--------|---------|------|---------|------|---------|------|---------|--|
| | Area | Outpu | Area | Outpu | Area | Outpu | Area | Outpu | Area | Outpu | Area | Outpu | |
| | | t | | t | | t | | t | | t | | t | |
| Andhraprades | 3.45 | 50.23 | 3.72 | 51.62 | 3.91 | 54.70 | 4.07 | 56.58 | 4.15 | 58.99 | 3.79 | 5.90 | |
| h | | | | | | | | | | | | | |
| Arunachal pradesh | 0.25 | 0.50 | 0.25 | 0.50 | 0.27 | 0.66 | 0.29 | 0.88 | 0.29 | 0.88 | 0.30 | 0.92 | |
| Assam | 1.10 | 11.66 | 1.10 | 12.39 | 1.01 | 12.12 | 1.03 | 12.29 | 1.04 | 12.20 | 1.05 | 12.50 | |
| Bihar | 2.82 | 35.83 | 2.79 | 33.78 | 2.86 | 60.45 | 2.93 | 27.52 | 3.00 | 37.55 | 3.04 | 7.97 | |
| Goa | 0.11 | 0.88 | 0.11 | 1.21 | 0.12 | 0.93 | 0.12 | 0.94 | 0.12 | 0.85 | 0.12 | 0.97 | |
| Gujarat | 1.04 | 22.44 | 1.14 | 24.48 | 1.50 | 20.68 | 1.38 | 18.20 | 1.59 | 22.68 | 1.63 | 22.94 | |
| Haryana | 0.17 | 1.23 | 0.18 | 1.34 | 0.20 | 1.45 | 0.22 | 1.51 | 0.24 | 1.76 | 0.24 | 1.92 | |
| Himachal pradesh | 1.68 | 3.25 | 1.90 | 3.25 | 1.96 | 3.72 | 2.24 | 3.75 | 2.31 | 3.03 | 2.07 | 4.48 | |

| Jammu and Kashmir | 1.24 | 8.68 | 1.27 | 7.46 | 1.30 | 7.90 | 1.44 | 9.45 | 1.47 | 10.47 | 1.36 | 8.81 |
|----------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
| Karnataka | 2.42 | 41.97 | 2.59 | 45.11 | 2.76 | 4.73 | 2.99 | 51.34 | 3.15 | 54.46 | 3.15 | 54.46 |
| Kerala | 1.94 | 17.83 | 1.95 | 18.10 | 1.95 | 18.27 | 1.96 | 18.26 | 1.96 | 18.26 | 2.33 | 16.21 |
| Madhyaprades h | 0.69 | 13.20 | 0.60 | 11.18 | 0.62 | 11.43 | 0.60 | 11.27 | 0.62 | 11.84 | 0.63 | 13.74 |
| Maharastra | 3.22 | 51.13 | 3.67 | 50.99 | 3.11 | 47.99 | 3.73 | 63.33 | 3.80 | 64.73 | 4.36 | 75.22 |
| Manipur | 0.21 | 1.10 | 0.23 | 11.10 | 0.23 | 11.10 | 0.23 | 1.11 | 0.23 | 1.11 | 0.23 | 1.15 |
| Meghalaya | 0.25 | 2.37 | 0.24 | 2.02 | 0.25 | 239 | 0.25 | 2.39 | 0.23 | 1.86 | 0.23 | 1.86 |
| Mizoram | 0.10 | 0.46 | 0.12 | 0.51 | 0.15 | 0.71 | 0.14 | 0.66 | 0.15 | 0.69 | 0.16 | 0.77 |
| Nagaland | 0.06 | 0.56 | 0.05 | 0.73 | 0.05 | 0.72 | 0.14 | 1.69 | 0.16 | 1.90 | 0.11 | 1.52 |
| Orissa | 1.61 | 11.16 | 1.76 | 12.72 | 1.87 | 12.42 | 2.07 | 13.42 | 2.27 | 15.12 | 2.49 | 17.18 |
| Punjab | 0.82 | 7.28 | 0.82 | 7.37 | 0.84 | 7.61 | 0.90 | 8.14 | 0.90 | 8.14 | 0.93 | 8.45 |
| Rajasthan | 0.21 | 0.95 | 0.20 | 2.30 | 0.20 | 2.38 | 0.21 | 2.67 | 0.20 | 2.78 | 0.21 | 3.10 |
| Sikkim | 0.09 | 0.22 | 0.09 | 0.12 | 0.09 | 0.12 | 0.09 | 0.13 | 0.10 | 0.13 | 0.10 | 0.08 |
| Tamil Nadu | 1.80 | 36.21 | 1.86 | 48.19 | 1.86 | 48.19 | 2.21 | 38.63 | 2.34 | 36.84 | 2.14 | 54.48 |
| Tripura | 0.47 | 3.26 | 0.47 | 3.25 | 0.32 | 4.01 | 0.32 | 4.00 | 0.32 | 4.01 | 0.30 | .72 |
| U.P (Hills) | 1.63 | 4.60 | 1.82 | 4.93 | 1.84 | 5.02 | 1.86 | 5.10 | 1.87 | 5.15 | 1.88 | 5.20 |
| U.P (Plain) | 3.02 | 30.10 | 3.08 | 28.71 | 3.10 | 30.09 | 3.19 | 40.45 | 3.29 | 42.93 | 3.05 | 30.98 |
| West Bengal | 1.35 | 14.58 | 1.12 | 12.19 | 1.16 | 12.83 | 1.16 | 10.35 | 1.17 | 13.74 | 1.28 | 15.36 |
| A&N Islands | 0.04 | 0.16 | 0.03 | 0.17 | 0.04 | 0.17 | 0.04 | 0.17 | 0.04 | 0.17 | 0.04 | 0.17 |
| All India | 31.8 | 372.5 | 43.1 | 386.0 | 33.5 | 415.0 | 35.7 | 404.5 | 37.0 | 432.6 | 37.2 | 440.4 |
| (C. N. | 4 | 5 | 0 | 3 | 7 | 7 | 9 | 8 | 2 | 3 | 7 | 2 |

(Source : National Horticulture Board)

Despite such high levels of production in this sector about 30% of the produce sets spoiled due to improper storage, post harvest handling and lack of processing facilities. The present output of fruits in the country is about 48 million tonnes while the demand has been estimated at 72 million tonnes.

AREA AND OUTPUT OF MAJOR FRUIT CROPS
(Area in million has output million MT)

| Crop 1997-98 1998-99 1999-2000 2000-01* | | | | | | | | | | |
|---|---------|--------|---------|--------|---------|--------|----------|--------|--|--|
| Crop | 1997-98 | i | 1998-99 | 1 | 1999-20 | 00 | 2000-01* | | | |
| | Area | Output | Area | Output | Area | Output | Area | Output | | |
| Apples | 0.23 | 1.32 | 0.23 | 1.38 | 0.23 | 1.04 | 0.24 | 1.30 | | |
| Bananas | 0.44 | 13.34 | 0.46 | 15.07 | 0.49 | 16.81 | 0.50 | 17.50 | | |
| Citrus fruits | 0.48 | 4.31 | 0.48 | 4.57 | 0.52 | 4.65 | 0.53 | 4.80 | | |
| Grapes | 0.04 | 0.97 | 0.04 | 1.08 | 0.04 | 1.13 | 0.04 | 1.20 | | |

| Guavas | 0.15 | 1.61 | 0.15 | 1.80 | 0.15 | 1.71 | 0.16 | 1.85 |
|--------------|------|-------|------|------|------|-------|------|-------|
| Litchi | 0.05 | 0.45 | 0.05 | 0.43 | 0.05 | 0.43 | 0.06 | 0.45 |
| Mangoes | 1.38 | 10.23 | 1.40 | 9.78 | 1.48 | 10.50 | 1.50 | 11.40 |
| Papaya | 0.07 | 1.62 | 0.06 | 1.58 | 0.06 | 1.66 | 0.07 | 1.70 |
| Pineapples | 0.07 | 0.94 | 0.07 | 1.01 | 0.07 | 1.02 | 0.07 | 1.10 |
| Sapota | 0.04 | 0.44 | 0.05 | 0.68 | 0.06 | 0.80 | 0.07 | 0.90 |
| Other fruits | 0.78 | 8.03 | 0.75 | 6.66 | 0.65 | 5.75 | 0.70 | 7.60 |

^{*} Provisional (Source : National Horticultural Board, Ministry of Agriculture)