CHAPTER - 3
PRODUCTION, CONSUMPTION AND DISTRIBUTION OF VANASPATI

The chapter analyses the production and consumption pattern of vanaspati in India. This analysis is also done zone-wise in order to identify the surplus areas and the consumption centres. This analysis leads to the distribution pattern of vanaspati in India. The chapter also briefly outlines the output of the selected units and their impact on the distribution pattern of vanaspati.

A. Licensed, Installed and Capacity Utilization of Vanaspati Industry in India

(a) Licensed and Installed Capacity:-

It is clear from table 3.1(Appendix -1) that the licensed capacity of vanaspati industry in India has been continuously increasing from the very inception of the vanaspati industry in the country. Till 1990, there were 115 Vanaspati units with a licensed capacity of 20,60,250 MTs out of which 15 units with a licensed capacity of 3,24,000 MTs were in the state of Uttar Pradesh. However, some units, also started production under the banner of S.S.I., in which no licensing policy was applicable. The licensed capacity of Indian vanaspati industry reached a level of 26,31,175 MTs per annum in 1993-94 as against 15,92,550 MTs per annum in 1987-88. The licensed capacity of Indian vanaspati industry has been continuously increasing with the exception of 1993-94 during which it declined from 29,49,675 MTs in
1992-93 to 26,31,175 MTs in 1993-94 as a result of a surrender of licenses by some sick units.

Table 3.1 (appendix -I) further depicts that the increase in licensing capacity upto 1992-93 has been faster than that of the installed capacity. This is due to the fact that, most of the companies got licenses, but were unable to install or commission the plant due to different causes. For example, in 1991-92, licenses were given to 15 new units but only one unit started its production. All this resulted in an additional licensed capacity of 2,32,800 MTs and additional installed capacity of 48000 MTs only. The increase in installed capacity is generally lower than that of licensed capacity. One of the reports\(^1\) of the Indian Vanaspati Producers Association observed that out of 15 new units to which licenses had been granted, only six units got their plants commissioned, and only one unit started its production in 1991-92. The trend in production, licensed capacity and installed capacity has also been shown in Graph. 3.1(Appendix-II).

(b) **Capacity Utilization :-**

The poor capacity utilization has been a perennial problem with the vanaspati industry of India. From 1930 to 1987-88, there was a significant increase in the capacity utilization of vanaspati industry as shown by Table 3.1.(Appendix-I) The year 1945, in fact, represented a land mark in the history of Indian vanaspati industry, as the capacity utilization in that year touched an all time height of 74.5%. From 1945 to 1987-88, the industry experienced a number of ups and downs in the capacity utilization. But since

\(^1\) IVPA: Annual Report 1992-93.
1987-88, the capacity utilization has gradually been decreasing as shown by Table 3.1 (Appendix-I).

The period 1988-89 to 1993-94 witnessed a consistent and rapid fall in the operating performance of Indian vanaspati industry as shown in Table 3.1 (Appendix-I). Thus, the all India capacity utilization of vanaspati industry decreased from 60.6% in 1988-89 to 35.8% in 1993-94. However, it is a paradox that while India is named amongst the largest producer of vanaspati in the world, it has the lowest per capita availability of vanaspati. It is basically due to the under utilization of capacity in the industry. Graph 3.1 (Appendix-II) shows the trend in the growth rate of licensed, installed and actually utilised capacity of Indian vanaspati industry from 1987-88 to 1993-94.

A variety of reasons have contributed to this inadequate capacity utilization of vanaspati industry. More important of these reasons were:

- Non-availability of raw-material, because industry is to some extent dependent on import of edible oil which is further affected by government policies.

- Failure of monsoon affects the production of indigenous edible oils, which is the main source of raw-material to the industry.

- Old technology is employed in most of the factories.

- Labour unions cause breakdowns and strikes in the vanaspati factories.

- Time taken by personnel to develop the necessary degree of skill to run and handle modern plants.
- Lack of management skill.

- A large number of units got commissioned which resulted in a faster capacity creation than the increase in demand of vanaspati.

- Special privileges or facilities to new units as against the old ones which affected the competitive ability of old units; and ultimately the low capacity utilization in old units.

- Lack of capital formation and finance. Every year, a number of licenses are granted, but only few of them are able to install. Similarly, sick units are also feeling inadequacy of finance for their day to day operations.

- Failure to make timely provision of inputs like; fuel, power, and feed stock.

- Prior to de-licensing, a number of problems were faced by the entrepreneurs to get license.

- Lazy and irresponsible officials of government and co-operative sector companies.

The poor utilization of capacity has kept the actual production of vanaspati far short of the licensed and installed capacity. This shortfall in production is proving extremely costly to the nation because it increases the total cost of production per unit, which results in hike in prices. To minimise this production loss, emphasis has been laid on systematic inspection, equipment over haul, modernization of old plants and timely replacement and installation of additional equipments. With the implementation of de-
bottlenecks and installation of new technologies in old plants, it is hoped that the production performance or capacity utilization will improve.

(b -i) Capacity Utilization of Different Trade Sectors:

Despite, the low capacity utilization, there seems to be a wide variation in the capacity utilization among the various vanaspati producing units in different trade sectors say; public sector, co-operative sector; joint sector, and private sector. The following table shows, the classification of various units operating under different trade-sectors as on 31st March 1993. It is identified from this table that a major segment of vanaspati industry belongs to the private sector, i.e., 99 factories out of 120 in 1992-93.

**Table**

**Sector-wise Classification of Units Producing Vanaspati and Capacity Utilization as on 31-3-93**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Trade Sector</th>
<th>No. of Units in Operation</th>
<th>Capacity Utilization (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Public Sector</td>
<td>4</td>
<td>15.8</td>
</tr>
<tr>
<td>2.</td>
<td>Co-operative Sector</td>
<td>8</td>
<td>45.0</td>
</tr>
<tr>
<td>3.</td>
<td>Joint Sector</td>
<td>9</td>
<td>57.0</td>
</tr>
<tr>
<td>4.</td>
<td>Private Sector</td>
<td>99</td>
<td>44.2</td>
</tr>
<tr>
<td>5.</td>
<td>Total</td>
<td>120</td>
<td>43.8</td>
</tr>
</tbody>
</table>

*Source: Directorate of Vanaspati, Vegetable Oils and Fats, New Delhi.*
Further, Table 3.2 (Appendix-I) shows, the sectoral performance in terms of capacity utilization of Indian vanaspati industry from 1989-90 to 1993-94. From the table, it is clear that, the capacity utilization in public, co-operative and private sectors has been decreasing during 1989-90 to 1993-94. The capacity utilization of joint sector in 1990-91 was 21.9% as against 44.8% in 1989-90. After 1990-91, this sector showed a rising trend in terms of capacity utilization. It is also seen from table 3.2 (Appendix-I) that the capacity utilization in public sector has been throughout lower than that of other three sectors (i.e. co-operative, joint and private sector). The capacity utilization has steadily been falling in the public sector.

Basically, the following may be said to be the reasons of fall in the capacity utilization in various trade sectors:

- Low capacity utilization of old units due to old technology.
- Installation of new units but late start of production due to different reasons.
- Some reasons are already explained earlier in the chapter.
- Non-functioning of some installed units in joint sectors like; Manipur Vanaspati and Allied Industries Ltd. Nilakuthi; Barar Vanaspati Ltd. in Orissa, Navcom oil products in Maharashtra; Sikkim Vanaspati Ltd, at Gangtok, Agro Tech India Ltd. in Punjab at Ludhiana etc.

(b -ii). Zonal Performance of Capacity Utilization:-

The zonal capacity utilization in Indian vanaspati industry has also been decreasing over the years. Table 3.3 (Appendix-I) shows the Zone-wise (i.e North, West, East & South) position of Indian vanaspati industry.
From this table, it is identified that, capacity utilization has continuously been falling from 1988-89 to 1993-94 in all the zones. According to this table, capacity utilization of North Zone, West Zone, East Zone and South Zone decreased from 71.6%, 57.5%, 40.01% and 48.2% in 1988-89 to 40.1%, 35.5%, 22.2% and 28.8% in 1993-94 respectively. It shows a vertical fall in the capacity utilization of every zone. Further, the capacity utilization of all India vanaspati industry decreased from 60.6% in 1988-89 to 35.8% in 1993-94.

B. Production and Consumption of Vanaspati in India

Having been introduced and produced in France first, 'margarine' was soon adopted in other countries of the world. Its production rose sharply from 21,00,000 M.T in 1938 to 46,44,900 M.T in 1958 and further to 63,55,900 M.T in 1967. In India however, margarine did not become popular because of the general belief that it was manufactured from animal fat to which majority of the Indians have great aversion. The world production figure shows that the production of margarine rose by 16,91,000 M.T during the period of 10 years (1958-1967). It rose at an average rate of 16,91,00 MTs. per year. The latest data of margarine production is not available.

In India, vanaspati is more popular than margarine. The reason is that vanaspati serves as a substitute for ghee. Ghee is very costly and suits the budget of only the higher and the middle class. Margarine and other synthetic fats are however very popular among the rest of the consumers of the world.

---

The production of vanaspati has been continuously increasing since 1930, when the Indian vanaspati industry came into being. The Indian vanaspati scene has been continuously expanding, embracing a whole range of vanaspati technology, using a wide spectrum of oil seeds and producing a variety of products. Table 3.1 (Appendix-I) shows that the vanaspati production was growing at a rapid rate from the very inception up to 1981-82. But, after 1981-82, the rate of increase of vanaspati production became slower. From 1981-82, the industry faced a number of ups and downs in the vanaspati production. During oil year 1993-94, the vanaspati production was 9.41 lac tonnes as against 8.97 lac tonnes during the previous year and registering an overall increase of 5%. This happened because new units enjoyed sale tax exemption and other benefits offered by central and respective state governments started production. While at the same time, the production of most of the old units decreased considerably. Some of the old units also shutdown because of their inability to compete with new units with latest technology enjoying number of privileges.

Production of vanaspati has been growing along with the growth of population and production of edible oils. The production of edible oil provides raw material to the vanaspati industry. On the other hand, increase in population leads to an increase in vanaspati demand. From Table 3.1 (Appendix-I), it is clear that from the very inception of the vanaspati industry, the vanaspati production increased at a very high rate up to 1946. In 1947, the production of vanaspati decreased. Then, again, it shows rising trend up to 1972-73. During 1973-74, there was again, a decline in vanaspati production from 4,88,200 M.T in 1972-73 to 3,95,500 MT in 1973-74.
Further, from 1974-75 to 1981-82, the industry witnessed a high rate of growth in the vanaspati production. After 1981-82, the vanaspati production grew at a very slow rate. The vanaspati production continuously decreased from 1987-88 to 1990-91. From 1990-91, there has been a continuous increase in the production of vanaspati particularly as a result of the establishment of new units with latest technology and modernisation of old units encouraged by de-licensing and sale tax exemption policies of central and state governments. The increase in vanaspati production was much sharper from 1930 to 1987-88, which was mainly due to the significant improvement in the capacity utilization.

When the production and consumption are compared from Table 3.4 (Appendix-I), it is seen that generally north is surplus in production, while the west generally is able to meet the demand in the region. The east and the south zones have to procure vanaspati from the north to fulfil its consumption level. State-wise in the north Haryana, Himachal Pradesh and J.& K are also deficit states. In the west Maharashtra is a deficit state. The highest amount of consumption in Uttar Pradesh.

Thus, the difference between production and consumption in different states leads to the need for rational distribution. Thus, the organizations in the north, like MARKFED, ABC and HVOC have to think in terms of distribution policy.

The poor growth rate of vanaspati consumption is not the only weakness of vanaspati industry in India. There are various other features, which have to be described as weaknesses. Some important among them are:
(i) There are wide variations in consumption among different states and districts in the country. Vanaspati consumption varies, widely from state to state and district to district within the same state. In the year 1991-92, for example, the per capita consumption of vanaspati varied from 16.06 kg in case of Goa to only 0.151 kg in case of Orissa. State-wise per capita consumption of vanaspati in India during 1991-92 is shown in Table 3.4. (Appendix-I) It is further seen from the table that, in India the overall per capita consumption is only one kilogram which is very less as compared to other developed and developing countries.

(ii) There is non-uniformity in the consumption of different cooking media such as vanaspati, margarine, industrial hard oils; and desi ghee. At present, consumption of vanaspati is far greater than the consumption of other cooking media.

(iii) There are found variations in the consumption of vanaspati over the different months of the year. It is due to the fact that, the consumption of vanaspati is affected by social customs, marriages, festivals and traditions of the country. It is found that the consumption during October, November, December, January, February, March and April months is relatively high as compared to other months of the year.

(v) Again there are wide variations in the consumption of vanaspati among the four zones over the country. Table 3.5 (Appendix-I) shows the consumption trend of different zones.
The foregoing analysis, clearly indicates, the potential of vanaspati consumption in the country. There are some areas in the country, where the consumption of vanaspati is very nominal. Therefore, there is a considerable scope to increase the vanaspati consumption in these areas.

Zonal Pattern of Vanaspati Production and Consumption

a) Zonal Production: -

In 1968, the entire country was statutorily divided into four zones for the purpose of fixing vanaspati prices although informally these zones had been in existence, since 1961 when the statutory price control was imposed. A brief outline of these zones is given as under.

(i) North Zone

This zone consists of the states of J&K, H.P, Haryana, Punjab, Rajasthan; Uttar Pradesh; New Delhi and the union territory of Chandigarh. This zone is primarily ghee-consuming area and as such, the demand for vanaspati is quite large. North zone's share at present is more than 55% of the total production of vanaspati in the country as shown by table 3.3 (Appendix-I).

The pattern of production in the north zone is slightly in excess of its demand pattern. The table on the next page shows that this zone had 78 vanaspati producing units out of 156 units in India during 1993-94.
Table
Zone-wise Vanaspati Producing Units in 1993-94

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Zone</th>
<th>No. of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North Zone</td>
<td>78</td>
</tr>
<tr>
<td>2</td>
<td>West Zone</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>South Zone</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>East Zone</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>All India Total</td>
<td>156</td>
</tr>
</tbody>
</table>

Source: Field Survey.

(ii) South Zone

This zone is made up of the states of Andhra Pradesh, Kerala, Mysore, Karnataka, Tamilnadu and Pondicherry. Except the metropolitan cities of Hyderabad, Madras and Bangalore, people, who are primarily coconut oil consumers, inhabit the entire zone. The consumption and production of this zone are lowest of all the zones. Table 3.3 (Appendix-I) shows that this zone contributes only 6% to 7% to the total vanaspati in India. This zone is having 25 vanaspati producing units out of 156 during 1993-94 as shown in the previous table.

(iii) East Zone

This zone consists of the states of Assam, Bihar, Nagaland, Orissa and West Bengal. This is mainly mustard oil-consuming zone and the vanaspati is not very popular in this zone. According to data shown in Table 3.3 (Appendix-I), this zone accounts for 7% to 9% of the total vanaspati production of the country. The table also shows that the share of this zone in the total production has been decreasing every year. Inspite of the fact that this zone is primarily mustard oil-consuming zone in the
metropolitan cities like Calcutta, Bhubaneswer, Patna etc., vanaspati is still quite popular as a cooking medium. This zone was having 16 units only in 1993-94, which was very nominal as compared to other zones.

iv) West Zone

This zone comprises of, the states of Gujarat, Madhya Pradesh and Maharashtra. This is the main groundnut-producing zone and as such groundnut oil has been very popular as a cooking medium. Vanaspati has also become popular because this is manufactured with groundnut oil as its main raw material. This zone is also treated as excessive vanaspati producing zone and also satisfies the requirements of east and south zone. This zone was having 37 vanaspati producing units out of 156 units in India in 1993-94. Table 3.3 (Appendix-I) shows that this zone accounts for 27% to 29% of the total production of vanaspati. But, its share in the total production has been decreasing gradually as shown by Table 3.3 (Appendix-I).

It will be seen from Table 3.3 (Appendix-I) that the north zone has all along been the producer of maximum vanaspati in the country from the very beginning. Its production rose up to 60% of the total vanaspati production of the country in 1993-94. The minimum production was found in the south zone where the percentage of production ranged between 4.49 and 8.27 of the total production of the country.

Western and Eastern zones together have been producing 33.9 to 39.2 percent of the total vanaspati in the country. Graph 3.2 (Appendix-II) gives a more clear view of the zonal pattern of vanaspati production.

Production of vanaspati is concentrated in the states of Punjab and Uttar Pradesh mainly, as shown by Table 3.4 (Appendix-I). It is due to two
reasons; i.e. concentration of population and production of oil seeds which provides raw material for production in these states. Table 3.4 (Appendix-I) also shows that there are wide variations in the production of vanaspati among different states of India. Similarly, it is also identified from this table that production and consumption patterns of these states do not coincide with each other. In some states there has been over production and in some other states production is not sufficient to satisfy the regional needs of vanaspati. It is concluded that there is a considerable scope of production of vanaspati in under producing zones and states.

(b) Zonal Consumption

There are wide variations in the consumption of vanaspati among four zones i.e North zone, East zone, West zone and South zone in the country. Table 3.5 (Appendix-I) shows the zone-wise position and trend of vanaspati consumption. From the table, it is identified that north zone has occupied an eminent place in the vanaspati consumption scene followed by western zone, eastern zone and southern zone respectively. The north zone contributes about 50% to 55% in the total consumption of vanaspati in India. On the other hand, southern zone is the least consuming zone and accounts for 9% to 11% of total consumption. The west and east zone, are contributing about 15% to 16% and from 20% to 22% in total consumption of vanaspati respectively in India. Graph 3.3 (Appendix-II) shows the all India and zone-wise consumption position of vanaspati in absolute terms.

In India, there is a wide variation in the consumption of vanaspati in different states depending upon the size of population and other factors like availability of pasture land, production of oils, income of people etc. Table
3.4 (Appendix-I) shows, the state-wise view of the total consumption of vanaspati in different states in 1993-94. From this table, it is examined that Uttar Pradesh is the highest consuming state of vanaspati followed by Maharashtra, Punjab and Madhya Pradesh. Orissa is the least consuming state of vanaspati in India.

The variations in the consumption are not found at the state level only, but at the regional level as well. Further, there is found to be a wide variation in the per capita consumption of vanaspati in different states. The per capita consumption is maximum in the state of Goa i.e. 16.06 Kg. p.a. followed by Chandigarh as shown by Table 3.4 (Appendix-I). The per capita consumption of vanaspati is lowest in the state of Mizoram i.e. 0.112 Kg.

Thus, it is concluded that, there is a scope for an increase in consumption in some states like U.P., Tamilnadu, Mizoram, Arunachal Pradesh, West Bengal etc. where, per capita consumption of vanaspati is very low. Again, there is a need for transporting the product from excessive producing states/zones to the deficient states. Thus, the problem of proper distribution of vanaspati arises.

Due to non-similarity in production and consumption of vanaspati in different zones and states there is a considerable scope for the adoption of a suitable physical distribution policy.

C Vanaspati Production and Capacity Utilization Trends in Selected Companies

1.) Hindustan Vegetable Oils Corporation Ltd. (HVOC)

An analysis of the total capacity and total production of vanaspati in all the three units of HVOC is given in table 3.6 (Appendix-I). This table
shows the production trend on a year to year basis between 1989-90 and 1995-96. Production in 1989-90 was maximum. From this table, it is identified that the total production of HVOC has been declining at a galloping rate. The production in 1989-90 was 53218 M.T, which declined to 41273 M.T in 1990-91. In 1995-96 the production was only 3767 M.T which witnessed a 55.5% decrease from the previous year. The production in 1995-96 is only 7% of the production in 1989-90. From the table, it is found that the position of HVOC has become poorer and poorer every year and was the poorest in 1995-96. The production of HVOC from 1989-90 to 1995-96 showed a very discouraging trend. This decrease in production is mainly due to an overall poor capacity utilization throughout since 1989-90 i.e. the capacity utilization declines from 51% in 1989-90 to only 3.6% in 1995-96. The table further shows that capacity utilization in all the units of HVOC i.e. AVU, DVU and KVU declined steadily from 1989-90 to 1995-96. In case of AVU, it declined to 5.76% in 1995-96 from 41.2% in 1989-90 where as, it declined to 2.34% and 1.7% from 59.8% and 56.67% in case of DVU and KVU respectively during this period. In fact, the capacity utilization in AVU, DVU and KVU during the period from 1989-90 to 1993-94 was an all time low, resulting in a decreased overall capacity utilization of HVOC at 3.6%.

2.) Markfed Vanaspati and Allied Industries Khanna (Vanaspati Unit of MARKFED)

The total installed capacity and the production of vanaspati in Markfed vanaspati and Allied Industries Ltd. Khanna (Vanaspati Unit of MARKFED) during 1988-89 to 1995-96 are shown in Table 3.7 (Appendix-
I). This table shows that the production approached to 24490 M.T in 1989-90 from 24175 M.T in 1988-89. After 1989-90, the company witnessed a negative trend up to 1991-92 when, its production came down to 20184 M.T. The year 1992-93 witnessed the highest rate of growth i.e. 30.8% p.a and established a milestone in the history of last 8 years of the company. The year 1994-95 experienced, the worst position, which witnessed a 33.03% p.a. fall in the production over the previous year. The production in 1995-96 increased by 8% p.a. over the previous year. In nutshell, it can be concluded that the production in 1995-96 came down to 15914 M.T from 26408 M.T in 1992-93. This decrease in production is mainly due to an over all low capacity utilization throughout since 1992-93.

Table 3.7 (Appendix-I) shows the details of capacity utilization of Markfed Vanaspati and Allied Industries, Khanna. The table shows that in 1989-90 the capacity utilization increased to 102.04% from 100.7% in 1988-89. After 1989-90, the capacity utilization of the company fell down to 84.1% in 1991-92. In 1992-93 the capacity utilization was maximum of 110.03% in the history of the company. After the year 1992-93 the capacity utilization again fell and came down to only 49.2% in 1994-95. But, in 1995-96, the position slightly improved.

Thus, it is evident that the trend of production and capacity utilization in Markfed Vanaspati and Allied Industry, Khanna has not been satisfactory. Both production and capacity utilization showed a steep fall from 1988-89 to 1995-96.
3.) Amrit Banaspati Company Limited (ABC)

ABC's total capacity and total production of vanaspati (Gagan) during the years 1988-89 to 1993-94 are given in Table 3.8 (Appendix-I). The production of vanaspati of ABC in 1988-89 was 79359 M.T, which increased to 81364 M.T by the next year. After 1989-90, the production of vanaspati in this company continuously decreased up to 1991-92 and was 62671 M.T in 1991-92. In the year 1992-93, the production of vanaspati again increased and was 77251 M.T marking a meager growth of 23.3% over the previous year. However, in the year 1993-94 the company's production again declined by 1.9% over the previous year. Graph 3.4 (Appendix-II) gives a comprehensive view of vanaspati produced by the selected companies i.e. HVOC, MARKFED and ABC.

Table 3.8 (Appendix-I) also shows the unit-wise capacity utilization of ABC from 1988-89 to 1993-94. From the table, it is identified that, both the units of the ABC have been making over capacity utilization except ABC(R) in 1991-92. During 1993-94 the capacity utilization of ABC (R) and ABC (G) was 133.14 and 126.3 percent respectively as against 137.5 and 132.3 percent in 1988-89. The trend of capacity utilization showed a slight decline but, the over all position was satisfactory. The over all position of capacity utilization of ABC was 126.3% in 1993-94, which increased to 128.8% and 132.3% during 1992-93 and 1988-89 respectively.

Of all the three companies selected under the present study, only ABC seems to have been making good and full use of its production capacity. The position of MARKFED is not satisfactory but its position is better than the capacity utilization at the national level. HVOC is the only company in which all the three units are the worst performers. Their capacity utilization
is very low which is ever lower than that of other vanaspati companies in India. All the units of HVOC are expected to be closed in the near future. The main cause of its poorest capacity utilization is that these are the oldest units in India having very old technology which leads to its inability to compete with new units with latest technology enjoying a number of facilities granted by the central and state governments.

Graph 3.5 (Appendix-II) gives a view of the comparative capacity utilization in the selected companies (MARKFED, HVOC, ABC) and also of the Indian vanaspati Industry. This graph shows that, the capacity utilization trend of all India vanaspati Industry and HVOC indicates a continuous fall from 1988-89 to 1993-94. On the other hand, MARKFED and ABC show a fluctuating trend. From 1989-90 to 1991-92, both ABC and MARKFED show a downward trend where as both the companies from 1991-92 to 1992-93 shows an increasing trend. Further, from 1992-93 to 1993-94 both ABC and MARKFED registered a downward trend in terms of capacity utilization.

From the foregoing analysis, it is concluded that Indian vanaspati industry has not done well in terms of its capacity utilization. Thus, there is a need for an improvement in the capacity utilization of the industry.

(D) Consumption Trend of Vanaspati Produced by the Selected companies

The detailed analysis of Table 3.9 (Appendix-I) shows that the consumption trends in the case of all the selected companies under study i.e HVOC, MARKFED and ABC were uneven. The growth rate in the case of
HVOC has been continuously negative and falling steadily. In the year 1990-91, there was a significant fall in the consumption of vanaspati, of all the selected companies, showing a negative growth rate of -17.70%, -13.2% and -16.5% for HVOC, MARKFED and ABC respectively. Further, in the year 1992-93, there has been a steady increase in the consumption of MARKFED and ABC vanaspati showing a growth rate of 23.2% and 21% respectively. But, consumption of HVOC Vanaspati had a negative growth rate of 8.9% over the previous year. In fact, the vanaspati consumption trends quite wavy in Markfed and ABC but the consumption trend of HVOC is very much unsatisfactory.

The share of vanaspati consumption of all the three selected companies of all India consumption during the year 1989-90 to 1993-94, varied between 1.9 to 5.9, 2.4 to 2.9 and 8.0 to 9.3 percent in case of HVOC, MARKFED and ABC respectively. 'ABC' accounted for, the highest percentage share in all India consumption of vanaspati amongst all the three selected companies. Previously i.e. earlier than 1991-92, HVOC was occupying the second position in the consumption of vanaspati in India. But, its share in the total consumption of the country is decreased to 1.9% in 1993-94. In 1993-94 MARKFED came to occupy the second position among the three selected companies in the total consumption of vanaspati.

Table 3.10 (Appendix-I) shows that the consumption of vanaspati in the states of Punjab and Haryana, marked an overall fall except, the year 1990-91 in which there was a slight increase in the trend. The percentage
The share of Punjab to the total consumption of vanaspati in India varied between 7.7 to 11.6 percent during the period of 6 years. It was maximum in 1987-88 (11.6) and lowest in 1993-94 (7.7). Similarly, the percentage share of Haryana in the total consumption of vanaspati in India varies between 4.5 to 5.2 percent during a period of 8 years. This share was maximum in 1985-86 (5.2%) and minimum in 1993-94 (4.5). The total consumption of vanaspati in Punjab is very high as compared with other states of India, as it ranks second and some times third in the vanaspati consumption in the country.

Table 3.11 (Appendix-I) depicts, the trend in the consumption of HVOC vanaspati in the states of Punjab and Haryana. The table shows that the HVOC vanaspati consumption witnessed a big fall in the year 1991-92 in the state of Punjab and in the year 1992-93 in the state of Haryana with a growth rate of -49% and -61% respectively. There were only two years, when the growth rate of vanaspati consumption of HVOC in Punjab was positive i.e. 1989-90 and 1993-94. Similarly, there were also only two years when the growth rate of HVOC vanaspati consumption in Haryana was positive i.e. 1990-91 and 1993-94. The overall growth of HVOC vanaspati consumption is not satisfactory because, it has been decreasing every year rapidly in both the states. In absolute terms, the consumption of vanaspati decreased from a level of 16202 MTs in 1989-90 to 5853 MTs in 1993-94 in the state of Punjab and from 838 MTs to 239 MTs in the state of Haryana during 1988-89 to 1993-94.

From Table 3.11 (Appendix-I), it is identified that the percentage share of HVOC vanaspati in Punjab and Haryana decreased from 19.4% to
8.05% (from 1989-90 to 1994-95) and from 2.02% to only 0.6% (from 1990-91 to 1993-94) in the states of Punjab and Haryana respectively.

The percentage share of MARKFED vanaspati consumption has been much better than HVOC in these two states. As in the case of MARKFED vanaspati, the year 1992-93 witnessed a spectacular jump in vanaspati consumption, having a growth rate of 53.3% in Punjab and 45.6% in Haryana. In the state of Punjab, except two years i.e. 1988-89 and 1992-93, the rate of growth of vanaspati consumption has been negative. But, the over all growth of Markfed vanaspati consumption in the state of Punjab is not good. Specially, in the state of Punjab, there has been a fall of 46.5% in 7 years (from 1988-89 to 1994-95). But, from Table 3.12 (Appendix-I), it is identified that the share of MARKFED vanaspati in the total vanaspati consumption in Punjab increased from 10.7% in 1987-88 to 14.7% in 1993-94. But, it is also seen that its share has decreased from 17.9% to 14.7% from 1989-90 to 1993-94. More or less, it can be concluded that Markfed vanaspati consumption came to occupy a dominant place in the territory of Punjab.

In the state of Haryana, the growth rate of Markfed vanaspati, has been very uneven. Some times, it has been positive and spectacular, some times it is negative and meager: and some times it is spectacularly negative. From Table 3.12 (Appendix-I), it is clear that the growth rate of vanaspati consumption in the state of Haryana in 1988-89 was 63% over the previous year which was maximum over the period of 8 years (from 1987-88 to 1994-95). From 1987-88 to 1992-93, the growth rate was found negative only once i.e. in 1991-92. After 1988-89, the maximum growth rate was during 1992-
93, which witnessed a milestone in its (MARKFED) distribution to Haryana. But, in 1994-95, there was a rapid fall in the MARKFED vanaspati consumption in the state of Haryana, to the tune of 40.8% over the previous year.

The share of MARKFED vanaspati consumption has been increasing every year in the state of Haryana. The share of MARKFED vanaspati in the state of Haryana has increased from 1.3% in 1987-88 to 4.9% in 1993-94 as shown by Table 3.12 (Appendix-I). From the table, it is identified that the share of Markfed vanaspati consumption has been increasing constantly in the state of Haryana without any brake or snag.

ABC, is a leading vanaspati supplier in the states of Punjab and Haryana, Table 3.13 (Appendix-I) depicts the progress of ABC vanaspati in these two states. In the case of 'ABC' vanaspati, the year 1992-93, witnessed a spectacular jump in vanaspati consumption, having a growth rate of 21.2% in Punjab and 24.5% in Haryana. Table 3.13 (Appendix-I) shows that except last two years i.e. 1992-93 and 1993-94, the growth rate of ABC vanaspati consumption has been continuously negative from 1988-89 to 1991-92 in both the states. From 1988-89 to 1991-92, the ABC vanaspati consumption has been falling with the higher rate ever before this year in both the states. But it is found from table 3.13 (Appendix-I) that the company has been making efforts for maintaining its market share in both the states.

From table 3.13 (Appendix-I), it is further identified that the states of Punjab and Haryana are the major marketing territories of ABC. The company contributed about 22.4% in Punjab and 22.2% in Haryana in the total consumption of vanaspati in these states in 1993-94. But, in case of
Punjab, its share has decreased from 23.6% in 1989-90 to 22.4% in 1993-94. In absolute terms, the consumption of vanaspati increased from a level of 7971 MTs in 1988-89 to 9328 MTs in 1993-94 in the state of Haryana and decreased from a level of 21003 MTs in 1988-89 to 16306 MTs in 1993-94 in the state of Punjab. Thus, in Punjab, its position has not been fully satisfactory because its total share of consumption has been falling despite a major increase in the number of consumers.

The graph 3.6 (Appendix-II) shows, the trend in consumption growth of HVOC, MARKFED and ABC in the states of Punjab and Haryana from 1988-89 to 1993-94.

E. Distribution of Vanaspati

Distribution is one of the important marketing functions of an organization. The success of a marketing organization depends mainly on how promptly it delivers its product to the customers. Thus, effective and efficient system of distribution is much more essential in case of vanaspati distribution due to a tough competition prevailing in the market and many of the manufacturers have been trying to build their brand image. Under the prevailing circumstances, a little slackness or fault in the distribution system can cause a tremendous loss to the organization. Keeping in view all these factors, an ideal distribution system, which ensures smooth flow of vanaspati from the place of production to the place of consumption involving as little material handling, transportation and storage as possible and at the least possible cost and time.

Being an essential and consumer product of every household, vanaspati's quality of production and prices are controlled by the government.
of India. However, the distribution policies are made and controlled by the concerned company. There is no control of the government, upon the vanaspati distribution, but the government in different states, which vary from time to time with government's conception, charges different rates of sales tax. However, the distribution policies must be constantly modified to formulate rationalized distribution plan.

**Distribution Strategies of the Selected Companies**

All the three selected companies under the present study distribute their product on the basis of distribution policies framed by them on their own from time to time. The government has nothing to do with that.

The starting point of an effective planning of distribution strategy is the determination of company's objectives and the clear-cut demarcation of marketing territories, which are to be reached by the companies. ABC and MARKFED have developed their distribution strategy in context of some constraints stemming from the customers, intermediaries, competitors etc. But, HVOC does not have any clear-cut distribution policy.

The distribution strategies of all the selected companies are aimed at the following objectives:

(i) To supply the product at the right time, right place, to the right person, and at minimum cost.

(ii) To make the product available at the doorsteps of customers and in the interiors of the market.

(iii) To satisfy the customers, dealers through the quality of distribution and products.
(iv) Market coverage i.e. to maintain the existing market, and penetrate into the new market segment.

(v) To reduce the transportation cost, to the minimum level by avoiding criss-cross movement.

(vi) To satisfy the dealers, depot-holders/CFA through justified dealers margins patronage rebate, quantity rebate, cash discount etc.

(vii) To maintain the company's image and profitability

This chapter thus, concludes that as a result of continued expansion, India today ranks as the third largest producer and consumer of synthetic fats in the world. The ever-expanding Indian vanaspati industry produces, a number of cooking medium, but the major part of Indian cooking medium requirement is met by vanaspati. Vanaspati is most extensively produced and consumed cooking medium in India. HVOC is producing "No.1" and "Champion", where as MARKFED produces "Sohna" and ABC is manufacturing "Gagan" and "Amrit" vanaspati.

The poor capacity utilization has been a perennial problem with the vanaspati industry in India leading to a variable production pattern. The capacity utilization of the industry, which touched a peak at 74.5% in 1945, 69% in 1965 and 67.8% in 1984-85, dropped to 35.8% in 1993-94. The main reason for this fall is, the installation of a number of vanaspati units during the last couple of years due to the state government's policy of granting sales tax incentive. The existing state-wise capacities are more than enough to meet the current demand and even the increased demand for the next decade or more. Since 1987-88, industry's performance is showing a discouraging trend in capacity utilization but, production trend in absolute
terms has started increasing from 1991-92. The comparative study of different trade sectors shows that, production in all the three sectors i.e. public, co-operative and private sector are falling from 1989-90 to 1991-92. The capacity utilization in all the three trade sectors has also been falling continuously. Out of the three selected companies, ABC and MARKFED seems to have made good use of their production capacities in terms of vanaspati. But, in case of HVOC, capacity utilization has been falling at a rapid rate every year. It is also seen that, capacity utilization in MARKFED dropped in 1993-94. But the situation improved again in 1994-95. In case of MARKFED, the situation of capacity utilization is not satisfactory. In 1993-94, the position of capacity utilization of ABC and MARKFED was higher than the capacity utilization at industry level but capacity utilization of HVOC was very lower than that at national level. The Markfed has improved its position in 1994-95 during which year HVOC performed the worst.

It is also observed that though India is amongst the largest vanaspati producers of the world, still it had the lowest per capita vanaspati consumption say; 1 kg only in 1993-94. Further, the per capita consumption of vanaspati, and vanaspati consumption in absolute terms vary from state to state. Consumption trend of vanaspati produced by HVOC, MARKFED and ABC exhibits that, during some years the growth has been high, in others moderate, in some years negative and in some others years it is spectacularly negative. But, one thing to be observed is that the growth rate of HVOC has been spectacularly negative. 'ABC' is a leading supplier as far as the states of Punjab (biggest supplier to the state of Punjab) and Haryana are concerned,
with an approximate share of 18-24 percent in vanaspati consumption. MARKFED is having a small share (second largest supplier to Punjab) of about 7% to 13% of the total vanaspati supplied to the state of Punjab, and HVOC has a meager share of only 5-13% of the total vanaspati supplied in these two states from 1987-88 to 1993-94.

In spite of the fact that, the per capita consumption is lowest in India, vanaspati is also exported from India. The export of vanaspati is very nominal say 369 MTs. in 1993-94. However, export is hardly taken care of while planning for production and consumption pattern. Therefore, all these aspects i.e. production, consumption and export require a proper planning and control. A casual approach has adversely affected the viability and profitability of the Indian vanaspati industry.

Effective marketing of vanaspati is not less important, than its production and procurement, because of stiff competition in the vanaspati market in India. Any projection of vanaspati production, export and consumption must, therefore, be backed by an integrated plan of distribution. Under the present circumstances, a little slackness or fault in the distribution system can cause a tremendous loss to the organization. The vanaspati manufacturer mainly controls the distribution of vanaspati, and the government is not making any sort of interference in the distribution process. The distribution of vanaspati is guided by the management policies of the concerned organization. The companies selected for the present study are also distributing their products according to their managerial policies in different states.