CHAPTER VI

SPICES

HISTORICAL BACKGROUND

The spices trade in Kerala has a long history of more than 3,500 years. Congenial agro-climatic conditions prevailing in the country made Kerala the natural home of a variety of spices: black pepper, cardamom, ginger, turmeric, clove, nutmeg, mace, cinnamon etc.

Spices have had a profound influence on the course of history and civilization. It was the lure of the spices which attracted explorers and invaders to this country in the ancient past. Ancient Kerala was known as the 'land of spices'. The pre-eminent position of the state in the history of spices trade has been examined in detail under Chapter-I. Pepper was the most important spice produced in the state and hence the Kerala coast was known as the 'pepper coast'.

PRESENT POSITION

Kerala today occupies the foremost position in India's spices export. The important spices produced and exported from the state are (1) pepper, (2) cardamom, (3) ginger, and (4) turmeric.
Table 6.1 shows the estimated area and production of the important spice crops in the state during 1982-83.

### Estimated Area and Production of Important Spice Crops in Kerala during 1982-83

<table>
<thead>
<tr>
<th>Name of crop</th>
<th>Area in '000 hectares</th>
<th>Production in '000 tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pepper</td>
<td>107.74</td>
<td>27.78</td>
</tr>
<tr>
<td>Cardamom</td>
<td>54.0</td>
<td>3.10</td>
</tr>
<tr>
<td>Ginger</td>
<td>12.36</td>
<td>30.48</td>
</tr>
<tr>
<td>Turmeric</td>
<td>3.2</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Source: Directorate of Cocoa, Areca Nut and Spices Development.

The unique agro-climatic and eco-geographical conditions of the state have helped Kerala to gain the pre-eminent position in spices production and exports of the country.

### REVIEW OF SPICES EXPORTS FROM INDIA

Table 6.2 shows export of spices from India along with annual growth rate from 1970-71 to 1982-83. It could be observed from the data that while the value of exports continuously went up after 1972-73 upto 1979-80 the quantities exported during the period showed an unsteady pattern, except from 1976-77 to 1979-80. After 1979-80 the exports started declining both in quantum and value. But the year 1982-83 showed a trend of recovery from the previous year’s level.
Table - 6.2
Export of Spices (excluding cardamom small) from India

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (Metric tonnes)</th>
<th>Annual variation (percentage)</th>
<th>Value (Rs. crores)</th>
<th>Annual variation (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-71</td>
<td>46,201</td>
<td>-</td>
<td>27.60</td>
<td>-</td>
</tr>
<tr>
<td>1971-72</td>
<td>65,720</td>
<td>+42</td>
<td>30.57</td>
<td>+3.8</td>
</tr>
<tr>
<td>1972-73</td>
<td>50,278</td>
<td>-23.8</td>
<td>23.71</td>
<td>-17</td>
</tr>
<tr>
<td>1973-74</td>
<td>60,980</td>
<td>+21</td>
<td>44.05</td>
<td>+66</td>
</tr>
<tr>
<td>1974-75</td>
<td>52,980</td>
<td>-13</td>
<td>49.27</td>
<td>+12</td>
</tr>
<tr>
<td>1975-76</td>
<td>60,011</td>
<td>+13</td>
<td>53.34</td>
<td>+8</td>
</tr>
<tr>
<td>1976-77</td>
<td>60,113</td>
<td>+0.2</td>
<td>63.07</td>
<td>+18</td>
</tr>
<tr>
<td>1977-78</td>
<td>178,492</td>
<td>+31</td>
<td>96.38</td>
<td>+53</td>
</tr>
<tr>
<td>1978-79</td>
<td>101,983</td>
<td>+30</td>
<td>99.46</td>
<td>+3</td>
</tr>
<tr>
<td>1979-80</td>
<td>112,322</td>
<td>+10</td>
<td>107.02</td>
<td>+7.6</td>
</tr>
<tr>
<td>1980-81</td>
<td>90,164</td>
<td>-19.7</td>
<td>82.01</td>
<td>-23.4</td>
</tr>
<tr>
<td>1981-82</td>
<td>65,995</td>
<td>-26.8</td>
<td>62.14</td>
<td>24.2</td>
</tr>
<tr>
<td>1982-83</td>
<td>74,012</td>
<td>+12.1</td>
<td>76.29</td>
<td>+22.8</td>
</tr>
</tbody>
</table>

Source: Spices Export Promotion Council, Cochin.

The erratic trend observed in the quantum of exports during the period from 1970-71 to 1982-83 could be attributed to various factors like weather conditions, incidence of pests and diseases and fluctuation in prices. A high degree of year-to-year variability in the prices of a commodity has a direct impact on the producers' income. One of the leading characteristics of exports of primary produce has been their persistent tendency to
undergo large fluctuations both in value and volume. It has been observed that a high degree of variation in the prices of agricultural crops would bring an element of risk to the producer upsetting the pattern of consistent growth in the production of the crop.¹

A major constraint in planning the production of spices in the country is the absence of reliable data on area, production and productivity of the different spice crops in the country. This makes it difficult to prepare correct and realistic projections on a long term basis. The Spices Export Promotion Council and the Directorate of Cocos, Areca nut & Spices Development are considerably handicapped due to the non-availability of a reliable data base on the production, area under cultivation, productivity and domestic consumption of individual spices.

Wide fluctuations in the prices are especially noticed in annual crops like ginger, turmeric and most other minor spices. The reasons for such fluctuations could be identified as

1) crop failure due to weather conditions,
2) cyclical fluctuations on account of good demand in previous season and consequent over production leading to lesser demand and lower prices.²

By and large, India has been able to maintain its position in international spices market despite unfavourable

conditions. However, the fierce competition from other producing countries in respect of certain spices has posed serious threat to our position. The internal demand for spices in India has also grown considerably during the past years. In the absence of adequate exportable surplus the trade would find it difficult to enter into export commitments. The prices in such situations tend to increase much against our advantage in the export market.

DETAILED STUDY OF IMPORTANT SPICES PRODUCED IN KERALA

1. PEPPER

Pepper is the most important spice crop grown in Kerala. An estimated area of 107,740 hectares is under pepper cultivation in the state with an annual production of 27,780 metric tonnes. Kerala accounts for 95 per cent of the estimated total area under pepper cultivation in India and about 95 per cent of the total production of pepper in the country. It is remarkable that Kerala has been maintaining its leading position in pepper production for several centuries now.

Exports

The trend of exports of pepper from India during the last six years has been unsteady as revealed by table 6.3.

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Table 6.3
Exports of Pepper from India

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (Metric tonnes)</th>
<th>Value (Rs. '000)</th>
<th>Price value (Rs. per Kg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>24,677.5</td>
<td>4,95,080.00</td>
<td>20.06</td>
</tr>
<tr>
<td>1978-79</td>
<td>18,719.58</td>
<td>2,91,772.26</td>
<td>16.06</td>
</tr>
<tr>
<td>1979-80</td>
<td>20,690.45</td>
<td>3,55,224.80</td>
<td>16.00</td>
</tr>
<tr>
<td>1980-81</td>
<td>26,383.74</td>
<td>3,69,487.43</td>
<td>14.77</td>
</tr>
<tr>
<td>1981-82</td>
<td>20,607.90</td>
<td>2,79,837.03</td>
<td>13.59</td>
</tr>
<tr>
<td>1982-83</td>
<td>22,591.77</td>
<td>2,93,870.40</td>
<td>13.01</td>
</tr>
</tbody>
</table>

Source: Spices Export Promotion Council, Cochin.

While the decrease in the quantity of pepper exported during the period from 1977-78 to 1982-83 was not much significant, the decline in the value of exports during the period was markedly conspicuous. This was caused by the reduction in unit value of exports from Rs. 20.06 per Kg. in 1977-78 to Rs. 13.01 per Kg. in 1982-83.

World trade in pepper during the last five years has shown an upward trend. But India's share declined steeply from 23.3 per cent in 1977 to 14 per cent in 1981. The Food and Agriculture Organisation in its Commodity Review for 1981-82 has analysed the trends in world production and prices of pepper. Though world pepper production and trade expanded substantially in 1981-82 (170,000 metric tonnes), export
earnings increased only marginally as the benefit of higher volume was nearly offset by lower export unit value. The increase in world pepper production was mainly due to the bumper crop in Brazil which amounted to 62,000 metric tonnes—an increase of 25 per cent over the previous year's production. Indonesian pepper production also recovered during the period while production in India and Malaysia fell slightly below the output of 1979-80. Food and Agriculture Organisation (FAO) estimates do not foresee any significant change in the demand and supply situation in the immediate future.

**Pepper production in India:**

According to the study conducted by the International Pepper Community, India's pepper crop has the lowest yield per hectare after Sri Lanka. Table 6.4 shows the relative position of the pepper producing countries in the world, with respect to area under cultivation, production and yield rate.

Though India has the largest share—55 per cent—of the worked area under pepper this advantage is offset by low productivity levels. While India had a yield rate of 210Kg./hectare in 1977 Brazil recorded the highest yield rate in the world by producing 3,068 Kg./hectare. It clearly showed the immense scope and the urgent need to increase the production

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4 Commodity Review and Outlook—1981-82, Food and Agriculture Organisation, Rome, pp.33-34.
Table 6.4
World Pepper Production (Countrywise data) 1977

<table>
<thead>
<tr>
<th>Country</th>
<th>Area (1000 hectares)</th>
<th>Percentage of total world area</th>
<th>Production (1000 tonnes)</th>
<th>Percentage of total world production</th>
<th>Yield (Kg/hectare)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>111.97</td>
<td>55.8</td>
<td>25.62</td>
<td>20.5</td>
<td>230</td>
</tr>
<tr>
<td>Indonesia</td>
<td>55.50</td>
<td>27.4</td>
<td>29.70</td>
<td>22.7</td>
<td>535</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10.57</td>
<td>5.2</td>
<td>28.02</td>
<td>22.4</td>
<td>2651</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>6.50</td>
<td>3.2</td>
<td>1.0</td>
<td>0.8</td>
<td>184</td>
</tr>
<tr>
<td>Madagascar</td>
<td>5.50</td>
<td>2.7</td>
<td>5.10</td>
<td>4.0</td>
<td>927</td>
</tr>
<tr>
<td>Brazil</td>
<td>11.70</td>
<td>5.9</td>
<td>35.90</td>
<td>28.6</td>
<td>3068</td>
</tr>
<tr>
<td>Total</td>
<td>201.74</td>
<td>100.0</td>
<td>125.34</td>
<td>100.0</td>
<td>621</td>
</tr>
</tbody>
</table>

**Source:** International Pepper Community quoted in Pepper Statistics published by the Spices Export Promotion Council, Cochin.

Levels of pepper in India. It is distressing to note that the yield rate of pepper in India went down further since 1977.

Table 6.5 gives the data on production and area of the crop in India from 1977-78 to 1982-83.

It could be seen from table 6.5 that there has been no significant change in the area under the crop during the period, production declined from 34,010 metric tonnes in 1977-78 to 28,520 metric tonnes in 1982-83. The shortfall in production was attributed to factors like crop failure due to weather changes, incidence of pests and diseases and absence of scientific agronomic practices.
Table 6.5

Area and Production of Pepper in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Area in '000 hectares</th>
<th>Production (in '000 metric tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>111.97</td>
<td>34.01</td>
</tr>
<tr>
<td>1978-79</td>
<td>84.57</td>
<td>21.50</td>
</tr>
<tr>
<td>1979-80</td>
<td>110.72</td>
<td>27.70</td>
</tr>
<tr>
<td>1980-81</td>
<td>109.29</td>
<td>27.49</td>
</tr>
<tr>
<td>1981-82</td>
<td>111.02</td>
<td>29.23</td>
</tr>
<tr>
<td>1982-83</td>
<td>110.85</td>
<td>28.52</td>
</tr>
</tbody>
</table>

* 93% of the area is in Kerala.

Source: Pepper Statistics (1984), Spices Export Promotion Council, Cochin.

Direction of exports:

At present East European countries are the biggest market for Indian pepper. In 1978-79 out of the total exports of 15,719 metric tonnes from India, a quantity of 12,108 metric tonnes was exported to these countries equivalent to 75.9 per cent of the total exports of pepper from the country. In the subsequent two years, their share decreased marginally but again in 1981-82 it went up to 78.1 per cent. Further, in 1982-83 the offtake of East European countries was equivalent to 64.8 per cent of the total exports of pepper from the country.

U.S.S.R. is the most important single buyer in the East European zone.

5 Mathur, H.G., et al., "Production
The directional pattern of pepper exports from India during the first half of 1950's was entirely different from the present. U.S.A., U.S.S.R., Italy, Canada, Czechoslovakia, Yugoslavia and Poland were the major markets. The exports to U.S.A. accounted for 53 per cent of our total exports of pepper. However, during the latter half of the fifties the U.S. offtake from India started declining and exports to East European zone including U.S.S.R. increased to 39 per cent of total exports. During the 1960's the American zone had an average annual offtake of 24 per cent of our total exports of pepper while the average share of East European countries during the period went upto 53.3 per cent. During the decade of 1970's our exports to East European countries further improved and that to the American zone stagnated India's share in the world market also declined during the past decades. In 1981 India accounted for only 14 per cent of the world trade in pepper.

We were not in a position to regain the market in the American zone as new producing countries especially Brazil could establish very well in the region who had the advantage of competitive prices. They could outprice Indian pepper in the U.S. market. It is a distressing fact that India heavily depends upon East European market which has its inherent instability. As the exports to these countries take place on rupee payment bilateral agreements we realise higher prices than from exports

to general currency areas. This factor has very much limited our prospects of developing a multi-directional pattern of exports for pepper. Another reason for the dwindling exports to U.S.A. is the regulations imposed by the Food and Drug Administration which banned the import of pepper treated with mineral oil. The negotiations between representatives of Indian pepper trade and U.S. importers on this question has not helped reach an accord. The alternative to mineral oil treatment (refined white oil) of the berries suggested by the American Spices Trade Association has not been found acceptable to the Indian exporters and a stalemate has now developed resulting in the stoppage of export to U.S.

The question of developing a suitable substitute to white oil had been engaging the attention of the industry for quite some time. White oil cleaning is done to give a glossy appearance to the berries and also prevent mold growth. It is a major lapse that we did not evolve a suitable alternative method in place of white oil treatment when the Food and Drug Administration imposed a ban on it for reasons of health hazard.

STATUS AND PROSPECTS OF IMPORTANT EXPORT MARKETS FOR PEPPER

The major markets for pepper, in their order of importance, are U.S.A., U.S.S.R., France, Federal Republic of Germany, Saudi Arabia, Japan, United Kingdom, Italy, Morocco and

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Canada. Singapore which is an entrepot centre, trades in a substantial quantity of pepper and a major portion is re-exported to other countries.

U.S.A.

The U.S.A. which is the world’s largest consumer of black pepper imported a quantity of 32,849 metric tonnes in 1980, which was equivalent to 40 per cent of the total imports of spices into that country. Indonesia, Brazil, Malaysia and India are the main sources of supply of pepper into the United States. LAMPSNO variety from Indonesia and Indian Malabar variety are preferred by the meat processing industry. However, Brazilian pepper in recent times gained much favour because of its ready availability and competent prices.

The market survey of spices conducted by the International Trade Centre (ITC) Geneva in 1982 revealed that consumption of ground and unground pepper in the U.S. appeared to be static. The reason for the stagnation has been identified as the increasing use of pepper oleoresins in the food processing industry. Another important factor which affects the consumption of pepper is price. It is observed that if prices go beyond a certain limit consumption is affected. It is because of the uncompetitive prices India lost its once dominant position in the U.S. market to other producing countries.

The market for green pepper in the U.S. has been estimated at 30-40 metric tonnes per annum. Madagascar and Brazil are the main suppliers. Brazilian green pepper is imported in the freeze-dried form. India has also started supplying green pepper products to the U.S. It is felt that the demand for green pepper may steadily grow over the years.

The survey conducted by the International Trade Centre, Geneva, in 1982 has estimated an annual consumption of 230-250 metric tonnes of pepper oleoresins in the U.S. The meat industry is the principal end-user of oleoresins and now renewed interest is evident among convenience and fast food industry. The market for oleoresins is expected to grow further in the coming years by 10-15 per cent annually.9

An important aspect to be observed is the stringent application of United States Food and Drug Administration regulations. Hence, market prospects for producing and exporting countries will depend heavily on the quality of their spice exports. The American Spice Trade Association (ASTA) has reported that the consumption of spices in the country was continuing to increase faster than the growth rate of population. While the increased use of spice oleoresins reflected an expansion of the spice and flavour business they were not being used as substitutes for ground and whole spices as it was previously believed.

9 Ibid., pp.28-29.
Japan

Japan is the world's third largest importer of spices. About 30 per cent of the total annual imports of spices consist of pepper. In 1980 the country imported a quantity of 4,630 metric tonnes of pepper. Malaysia is the most important supplier of pepper to Japan followed by Indonesia and India.

There have been significant changes in the food habits of Japanese consumers after the second world war. Despite a high growth rate in imports during the last decade, the per capita consumption of spices in Japan is still low compared to other spice importing countries which offers opportunity for further expansion of market.

The estimated apparent consumption of oleoresins is 30-40 metric tonnes annually and almost the entire quantity is imported. It is unlikely that Japan will try to produce oleoresins and essential oils in the country from imported raw materials as the cost of handling and processing have become prohibitively high. The main suppliers of oleoresins are U.S.A., followed by Singapore, the Netherlands, the United Kingdom and India. The principal end-users of oleoresins in Japan are the food processing and manufacturing industry. Japan also imports large quantities of spice essential oils.10 The growth potential for oleoresins appears to be large. India can make use of the opportunity by adopting appropriate promotional strategies.

10 Ibid., p.100.
However, the most important factor which would help to penetrate the market is the supply of products conforming strictly to the Japanese specifications and import regulations.

Canada

Canada is a sizeable and growing market for spices since domestic production is limited, requirements are mostly met from imports. In terms of both volume and value pepper is the most important spice imported. The average imports of pepper during the period 1976-80 were about 2,300 metric tonnes with a share of 26 per cent of the volume of total spice imports. A distinct preference for the Indian Malabar varieties (Zallicherry and Cochin) has been observed. India has a good share of the Canadian pepper market.11

Until recently most of the Canadian requirements for oils and oleoresins were met by local production, but the development of extraction plants in spices producing countries like India has changed the situation. The high cost of labour in Canada and the high incidence of freight on raw materials would render the expansion of oleoresins/spice oils extraction industry in the country very difficult.

Singapore, U.S.A. and India are the main sources of external supply of oleoresins to Canada. Pepper oleoresins account for about 50 per cent of the total quantity consumed. Oleoresins are increasingly being used in the food processing and in the fast food industry for reasons of convenience and easiness for hygienic handling.

11 Ibid., p.61.
In view of the large immigrant population in Canada and the increasing trend towards specialised and exotic foods, the growth in consumption of spices would apparently continue. A rapid growth in consumption of oleoresins is expected. To penetrate the Canadian market, India should explore the possibility of establishing joint marketing and technical collaboration arrangements with existing Canadian manufacturers. This situation opens up considerable scope for us to plan our strategies for export of pepper and oleoresins to Canada.

The Middle East

Saudi Arabia, Iran and Kuwait are the important markets for pepper in the Middle East.

Imports of pepper averaged 3,205 metric tonnes per annum during 1976-80. The rising consumption in pepper could be attributed to the general increase in the consumption of spices consequent on the improvement in the standard of living and the increasing immigrant population and the buoyancy in the economy. Singapore and India supply pepper to Saudi Arabia. The demand for pepper along with other spices would increase in Saudi Arabia which is the key market in the Middle East. Indian exporters should plan an appropriate marketing strategy for the whole gulf region and offer a wide range of spices to fully exploit the potential growth in demand.12

12 Ibid, pp.143-150.
Major part of the imports of pepper to Iran is from Singapore (Garawak pepper). India is the next important supplier. The average annual imports of pepper during 1975-80 was 1,094 metric tonnes.

Kuwait is an important market for spices in the Middle East. Though the imports of black pepper into Kuwait has not reached significant levels there is good scope for growth in trade as the country is an important entrepot centre in the Middle East with wide trade connections in the region. In view of the rapid development of co-operatives and super-markets opportunities for selling spices in consumer packs are bright. Exporters from India can make use of the situation by taking up selective promotional programmes.

PROBLEMS OF PEPPER EXPORTS

Declining share of India in the world market:

During the last decade world trade in pepper recorded impressive growth. But India was not able to take any benefit out of the expanding trade in pepper. Brazil, a new entrant into the field of pepper production and also Malaysia could make effective use of the opportunity. Indonesia also could derive benefit from the increased world trade as pepper production in the country recovered from the earlier set back.13

Area under pepper cultivation in India has remained more or less static with stagnant yield rates. Because of low productivity Indian pepper increasingly become uncompetitive in the world market. Consequently India's export to the traditionally established markets like the U.S.A, declined steeply and Brasil and Malaysia captured India's share of these markets. India was thus forced to heavily depend bilateral trade to East European countries. There is an imperative need for India to recapture its lost market share in the general currency areas by maintaining price competitiveness and adopting appropriate marketing strategies. This can only be achieved by stepping up pepper production to significant levels. It will not be feasible to make any further increase in the area under pepper cultivation in Kerala which accounts for 95 per cent of the area under the crop in the country. Pepper production can be increased considerably by improving the current yield rates which is one of the lowest in the world. If the productivity of the pepper plantations in Kerala is doubled from the present level of 230 Kq. per hectare Indian pepper production would reach an appreciable level of 50,000 metric tonnes annually which would take care of the increasing domestic consumption and generate sufficient exportable surplus. If Brasil could succeed in increasing its production levels creating a world record, India should also be able to achieve it by adopting suitable agro-techniques and propagating high yielding varieties.
Limited Direction of Exports:

There are now about 35 countries importing pepper with varying shares of the total world trade in the commodity. Of these 12 countries import substantial quantities while the others have lower levels of off-take. During the last decade India’s export of pepper have shown a reduced range of direction while other producing countries were able to develop multidirectional trade. The factors responsible for this trend have been explained in detail under 'Direction of exports'.

During the period from 1978-79 to 1982-83 75% of India’s exports of pepper went to East European countries with which bilateral trade agreements existed. Though conscious of the inherent risk of over dependence on a particular group of countries, India could not succeed in making significant exports to other destinations. This was mainly due to the fact that prices in the General Currency areas were often lower than those offered by the East European countries. 14

It is worth recalling that cashew exports from Kerala suffered a setback due to over dependence on the U.S.S.R. market. When Russia stopped importing cashew kernel from India in the year 1983 it created a grave crisis threatening the survival of the industry. However, the situation could be overcome with the support of a well developed internal market for

14 Commodity Notes, Spices Export Promotion Council, Cochin, 1984, p.21.
cahew kernels and also through the successful efforts in reactivating the U.S. market.

A similar situation could develop in the field of pepper exports from Kerala with serious consequences. As a long term strategy concerted efforts have to be made to expand the directional spectrum of our pepper exports to obviate possible demand crisis.

Fluctuation in prices:

Majority of the pepper growers in Kerala are small and marginal farmers for whom better prices are the best incentive. Hence when prices become attractive production levels improve. On the other hand, unremitting prices lead to fall in production. The farmers always want to realise higher unit value for their produce to compensate for the low level of productivity. Any shortfall in production results in higher internal market prices as about 15,000 tonnes of pepper are consumed within the country. As the internal and export prices are inter-related and influence each other, a rise in domestic prices for pepper makes the commodity uncompetitive in the world market when the exporter’s parity price and the farmer’s parity price are at divergent points.

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The only way to ensure remunerative prices to the farmer while keeping export prices competitive is to increase the yield rates of the crop. But this could be achieved over a period of time through appropriate production plans and agrotechniques. During the interim period till our productivity reaches desired levels the government would have to extend fiscal support to the farmers through subsidies and suitable price support schemes. Once increased productivity levels are achieved, prices will tend to become stable ensuring adequate return on investment to the farmers.

The International Pepper Community, Bangkok while considering the issues in regional co-operation for pepper have outlined the adverse impact of price fluctuation on pepper production.\textsuperscript{16} Pepper economy is often subject to the influences of price fluctuations, speculative practices, low yields, plant diseases and other problems of cultivations. The government policies in the producing countries certainly affect production to a considerable extent. The pepper community has, after a critical evaluation of the various aspects of pepper production and marketing, observed that if adequate incentives are provided to the farmers by way of technical assistance and other inputs for production along with concessional credit facility, the productivity and production of pepper could be increased. Some of

\textsuperscript{16} Commodity Notes, Spices Export Promotion Council, Cochin, 1984, pp.23-27.
the member countries of the Pepper Community including India have initiated action on these lines through institutional framework.

The commodity review made by the Food and Agriculture Organisation, Rome has commanded the remarkable recovery in pepper production made by Indonesia after the devastation of their pepper crop due to diseases.17

A further impetus to production could arise if the proposal of the pepper community to introduce minimum export prices for pepper is ratified by member governments. The proposed prices are U.S. cents 70 per pound for Black ABTA for Brasil and Malaysia and 72 cents per pound for India and Indonesia. If the proposal is implemented India would considerably benefit from it as it will avoid unhealthy competition in the world market.

Absence of Co-ordination in Production and Marketing:

At present multiple agencies are looking after the various aspects of production, marketing, research, export promotion etc. of pepper. The absence of a unified agency and an integrated approach has proved to be a major constraint in maximising the efforts on development of production and exports of pepper.

The Directorate of Cocoa, Areca nut and Spices Development attend to the development programmes for pepper, while the Kerala Agricultural University undertake research on the various

17 Speech delivered by the Chairman, Spices Export Development Council, Cochin at the 31st Annual General meeting on 1981.
aspects of the crop. The Spices Export Promotion Council are responsible for promotion of exports of pepper and look after the interests of the pepper export trade. Besides, research on product development and processing technology is being undertaken by the Central Food Technological Research Institute and the Regional Research Laboratory. Research on developing new strains with high yield and disease-resistance and the various agronomic aspects of the crop is also being conducted at the Central Plantation Crops Research Institute. Such multiplicity of agencies would create much confusion as their areas of operation after overlap. It is also not possible to have effective co-ordination between them as they are under the administrative control of different ministries and institutions.

Rubber Board is an outstanding example of how development and research efforts could be successfully co-ordinated under an integrated programme. The proposal to set up a Spices Board on the pattern of Rubber Board is a welcome step which will help remove the present disorganised situation in the field of pepper development.

Restrictive effect of Taxes Imposed by the State Government:

As outlined earlier Indian pepper suffers from the disadvantage of uncompetitive prices in the world market. However, the Kerala State Government has imposed sales/purchase tax on pepper to the extent of 7 per cent. While the Government of India have amended the Central Sales Tax Act to exempt agricultural
commodities for export from the levy of sales tax as a measure to improve their competitiveness in the world market, the imposition of sales tax by the State Government nullified the benefit. Thus the sales tax element which is reflected in the prices quoted by the exporters of pepper from the state makes our prices uncompetitive compared to other producing countries like Malaysia, Indonesia and Brazil.\footnote{Speech Delivered by the Chairman, Spices Export Promotion Council, Cochin, 21st Annual General Meeting, 1981.}

The Spices Export Promotion Council have taken up the matter with the State Government authorities on several occasions. However, no positive step has so far been taken by the government to drop the sales tax on pepper. A similar situation was observed in tea exports from Kerala where the differential in sales tax levied by Tamil Nadu and Kerala proved disadvantageous to the State as a good portion of the tea auctions shifted to Coimbatore to take advantage of the situation. The pepper export trade has identified the imposition of sales tax as one of the reasons for the decline in the export of pepper.\footnote{Ibid.}

The State Government has to review the position and drop the levy of sales tax as a measure to improve the competitiveness of the commodity in the world market.

Absence of Comprehensive Publicity Programmes

At present promotional efforts for pepper undertaken by the Spices Export Promotion Council confine to participation...
in international trade fairs and publicity through literature. As pepper production in the country during the last decade was erratic, the need for organised systematic promotional programme was not consciously felt by the trade. Besides, as bulk of the exports of pepper limit to East European Countries which purchases are made through government import organisations on bilateral trade terms the question of any market promotion in these countries did not arise.

With the recognition of the need to develop new markets, receptive old markets and expand the existing ones it has now become more apparent that comprehensive promotion programmes will have to be organised systematically. It is more relevant in the context of increasing world production of pepper and a rapidly shrinking market share for India.

It has been recognised that one of the main objectives of the International Pepper Community would be to develop programmes for increasing consumption in traditional and new markets. Joint efforts by producing countries for generic promotion of pepper would help increase the per capita consumption of pepper in the importing countries and also create new markets for the product. India's own efforts for promotion of pepper has to be effectively linked up with international programmes.20

As product diversification in pepper has been largely successful, market studies may have to be taken up to identify

consumer preferences and assess the demand potential. New products like canned green pepper, dehydrated green pepper, white pepper, pepper powder, pepper oil and oleoresins etc. need carefully planned strategies to develop markets. In the absence of comprehensive programmes for publicity desired results are seldom achieved.

2. CARDAMOM

Historical background

Cardamom which is known as the 'Queen of Spices' has been occupying a place of eminence right from the days of the earliest trade contacts which Kerala had with the countries of the world. Historical references about cardamom have been given in detail under Chapter-X (Foreign Trade of Kerala: Historical background).

Cardamom cultivation in India has been concentrated mainly in those regions which form the natural habitat of the species. The eco-geographical conditions of the Western Ghats north of Thamraparni river especially in the Cardamom Hills of Travancore are ideally suited for smaller type cardamom.21

Right from the ancient past, Kerala has been maintaining the monopoly position in the production of small cardamom which is considered as the most superior variety.

21 **South Indian Cardamom and their Agricultural Value, Bulletin No.79, Indian Council of Agricultural Research, New Delhi, 1958, p.1.**
Present position

In 1982-83 Kerala had a total registered area of 54,388 hectares under cardamom equivalent 63 per cent of the total area in the country under the crop. The state accounted for 65.52 per cent of the total production of cardamom in India (vide Table 6.6). 22

Table 6.6
State-wise Area and Production of Cardamom (1982-83)

<table>
<thead>
<tr>
<th>State</th>
<th>Total registered area (hectares)</th>
<th>%</th>
<th>Total production (metric tonnes)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerala</td>
<td>54,388</td>
<td>63</td>
<td>1,500</td>
<td>65.52</td>
</tr>
<tr>
<td>Karnataka</td>
<td>24,977</td>
<td>29</td>
<td>800</td>
<td>27.39</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>7,086</td>
<td>8</td>
<td>200</td>
<td>6.89</td>
</tr>
<tr>
<td>Total</td>
<td>86,451</td>
<td>100</td>
<td>2,900</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Cardamom Board, Cochin.

Production of cardamom is subject to wide annual fluctuations on account of vagaries of monsoon, cyclical phenomenon, incidence of drought and diseases and pests. A review of the production of the crop over the past one decade indicates erratic trends in production due to various external factors which are beyond the control of the growers of the crop. The unpredictable production levels result in violent variations in the market prices of cardamom.

A review of the production of cardamom in India during the period from 1970-71 to 1982-83 has shown that the share of Kerala ranged from 74 to 62 per cent. The highest level was recorded in 1977-78 and the lowest in 1976-77.24 A cyclical pattern of production could be observed from the trends during the last one decade.

Review of exports

India occupied the position as the largest cardamom producing and exporting country in the world until 1982-83 when Guatemala emerged as a powerful rival pushing us to the second position.25 This was caused by the increased output in Guatemala which synchronised with India's short-fall in production. However, the situation might change as a cumulative result of the expected recovery in our production performance and our accelerated efforts to increase output.

Table 6.7 shows quantity of cardamom exported, value of exports and unit export price for the period from 1970-71 to 1982-83. The table also gives the percentage of annual variation in quantity and value of exports during the period.

It could be seen from the table that the quantity and value of exports during the period were subject to wide fluctuations. A direct positive correlation existed between the total production of cardamom and the quantity exported until Guatemala achieved substantial levels of production in 1979-80 which created a situation of higher world supply. The unit value of cardamom exported also increased steadily from Rs.37.41/Kg. in 1971-72 to Rs.82.21/Kg. in 1982-83.
Table - 6.7

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
<th>Annual variation (percentage)</th>
<th>Value</th>
<th>Annual variation (%)</th>
<th>Average f.o.b export price Rs./Kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-71</td>
<td>1,705</td>
<td>—</td>
<td>11.2</td>
<td>—</td>
<td>65.78</td>
</tr>
<tr>
<td>1971-72</td>
<td>2,147</td>
<td>+25.9</td>
<td>9.0</td>
<td>-28.5</td>
<td>37.41</td>
</tr>
<tr>
<td>1972-73</td>
<td>1,384</td>
<td>-35.5</td>
<td>6.8</td>
<td>-15.0</td>
<td>49.43</td>
</tr>
<tr>
<td>1973-74</td>
<td>1,613</td>
<td>+31.0</td>
<td>11.5</td>
<td>+60.6</td>
<td>63.71</td>
</tr>
<tr>
<td>1974-75</td>
<td>1,626</td>
<td>-10.3</td>
<td>13.8</td>
<td>+15.5</td>
<td>81.92</td>
</tr>
<tr>
<td>1975-76</td>
<td>1,941</td>
<td>+19.4</td>
<td>19.6</td>
<td>+45.5</td>
<td>99.88</td>
</tr>
<tr>
<td>1976-77</td>
<td>893</td>
<td>-54.0</td>
<td>14.0</td>
<td>-27.6</td>
<td>157.17</td>
</tr>
<tr>
<td>1977-78</td>
<td>2,763</td>
<td>+209.4</td>
<td>48.4</td>
<td>+245.3</td>
<td>175.28</td>
</tr>
<tr>
<td>1978-79</td>
<td>2,076</td>
<td>+64.1</td>
<td>38.3</td>
<td>+20.5</td>
<td>202.92</td>
</tr>
<tr>
<td>1979-80</td>
<td>2,636</td>
<td>-8.3</td>
<td>48.6</td>
<td>-17.1</td>
<td>184.23</td>
</tr>
<tr>
<td>1980-81</td>
<td>2,345</td>
<td>-11.0</td>
<td>34.7</td>
<td>-25.2</td>
<td>148.18</td>
</tr>
<tr>
<td>1981-82</td>
<td>2,332</td>
<td>-0.9</td>
<td>30.2</td>
<td>-13.0</td>
<td>129.87</td>
</tr>
<tr>
<td>1982-83</td>
<td>1,032</td>
<td>-58.6</td>
<td>16.4</td>
<td>-45.7</td>
<td>158.60</td>
</tr>
</tbody>
</table>

Source: Cardamom Statistics 1981-82, Cardamom Board, Cochin.

1971-72 to Rs. 99.88 in 1975-76. There was a sudden spurt in the prices of cardamom in the subsequent year and the buoyant trend continued until 1979-80 when it got reversed. The declining trend continued until the export unit price reached Rs. 129.87/Kg. in 1981-82. Later in 1982-83 the prices, however, reached Rs. 158.60/Kg. registering an improvement as a result of the shortfall in production and the consequent increased demand in export.
Kerala's export performance in cardamom is evidently dependent upon two major factors.

1. The levels of production in the state which widely fluctuate due to drought and other vagaries of nature.

2. The increasing production levels in Guatemala.

Table 6.8 gives the data on production, exports and percentage of production exported for the period from 1970-71 to 1982-83. The growth indices for quantum and value of exports are also shown in the table. It could be seen that there was a sudden jump in the quantum and value of exports of cardamom in 1977-78. It was the cumulative result of a carefully planned production programme supported by a sound marketing strategy. Production and productivity could be improved and stabilised which corresponded with good export performance for the next three years. However, in 1981-82 the declining trend re-appeared affecting both production and exports. It was caused by the competition from Guatemalan cardamom which was conspicuously felt in the world market. In 1982-83 production of cardamom in Kerala fell further as a result of the cyclical phenomenon, lower than the base year level of 1,170 metric tonnes.

The unprecedented buoyancy in prices coupled with increased levels of production beginning from 1977-78 came to an abrupt end in 1981-82. It was a curious occurrence that a fall in production of cardamom in the country coincided with declining unit export value. This was caused by the substantial increase in production achieved by Guatemala who emerged as a forceful competitor to us.
Table - 6.8
Production and Exports of Cardamom (1970-71 to 1992-93)

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (tonnes)</th>
<th>Domestic Use (tonnes)</th>
<th>Value of Production (Rs.)</th>
<th>Value of Exports (Rs.)</th>
<th>Growth in quantity of exports (1970-71 = 100)</th>
<th>Growth in value of exports (1970-71 = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-71</td>
<td>2170</td>
<td>1705</td>
<td>53.79</td>
<td>11.2</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1971-72</td>
<td>3705</td>
<td>2147</td>
<td>56.7</td>
<td>8.0</td>
<td>128</td>
<td>71</td>
</tr>
<tr>
<td>1972-73</td>
<td>2670</td>
<td>1364</td>
<td>51.04</td>
<td>6.8</td>
<td>81</td>
<td>61</td>
</tr>
<tr>
<td>1973-74</td>
<td>2700</td>
<td>1813</td>
<td>65.21</td>
<td>11.5</td>
<td>106</td>
<td>103</td>
</tr>
<tr>
<td>1974-75</td>
<td>2900</td>
<td>1626</td>
<td>58.06</td>
<td>13.3</td>
<td>95</td>
<td>119</td>
</tr>
<tr>
<td>1975-76</td>
<td>3000</td>
<td>1941</td>
<td>64.7</td>
<td>19.4</td>
<td>114</td>
<td>173</td>
</tr>
<tr>
<td>1976-77</td>
<td>2400</td>
<td>893</td>
<td>37.2</td>
<td>14.0</td>
<td>52</td>
<td>125</td>
</tr>
<tr>
<td>1977-78</td>
<td>3900</td>
<td>2763</td>
<td>70.63</td>
<td>46.4</td>
<td>162</td>
<td>432</td>
</tr>
<tr>
<td>1978-79</td>
<td>4000</td>
<td>2076</td>
<td>71.9</td>
<td>59.3</td>
<td>169</td>
<td>520</td>
</tr>
<tr>
<td>1979-80</td>
<td>4500</td>
<td>2636</td>
<td>58.58</td>
<td>48.6</td>
<td>155</td>
<td>434</td>
</tr>
<tr>
<td>1980-81</td>
<td>4400</td>
<td>2345</td>
<td>53.3</td>
<td>34.7</td>
<td>138</td>
<td>310</td>
</tr>
<tr>
<td>1981-82</td>
<td>4100</td>
<td>2325</td>
<td>56.7</td>
<td>30.2</td>
<td>136</td>
<td>270</td>
</tr>
<tr>
<td>1982-83</td>
<td>2900</td>
<td>1032</td>
<td>25.59</td>
<td>16.4</td>
<td>60</td>
<td>166</td>
</tr>
</tbody>
</table>

**SOURCE:** Compiled from the data collected from Cardamom Board, Cochin. Indices of growth have been computed by the researcher.
A study of the trend of production and exports during the period under review reveals that an intricate relationship existed between production, productivity and unit export price. A record production of 4,500 metric tonnes was achieved in 1979-80. Better price proved to be the best incentive to the farmers. However, other variables like vagaries of monsoon, incidence of pests and diseases, cyclical fluctuations have an equally conspicuous influence on production levels. The decline in production in 1982-83 was caused by these factors. To stabilise production and productivity it is imperative to insulate the crop against the influence of these variables to the best possible extent.

Direction of exports

The Middle East countries comprising of Kuwait, Saudi Arabia, Qatar, United Arab Emirates, Oman, Bahrain, South Yemen, Iran, Iraq, Libya, Egypt etc. form the prime markets for cardamom. During the last five years Kuwait and Saudi Arabia had a share of 36 per cent and 30 per cent respectively of the total exports of cardamom from India.

The second level markets for cardamom from India are U.S.S.R., Japan, German Democratic Republic, Singapore and United Kingdom. The prime markets in the Middle East and the

second level markets in the non-Middle East countries together account for 99 per cent of the exports of Cardamom from the country.20

Table 6.9 shows percentage distribution of annual exports of Indian Cardamom to the different markets from 1970-'71 to 1982-'83.

Table 6.9
Exports of Cardamom (Regionwise Share in Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Middle-East Markets (Per cent)</th>
<th>Important non-Middle East Markets (Per cent)</th>
<th>Others (Per cent)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-'71</td>
<td>77</td>
<td>14</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>1971-'72</td>
<td>79</td>
<td>12</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>1972-'73</td>
<td>72</td>
<td>21</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>1973-'74</td>
<td>84</td>
<td>12</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>1974-'75</td>
<td>63</td>
<td>34</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>1975-'76</td>
<td>83</td>
<td>14</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>1976-'77</td>
<td>67</td>
<td>29</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>1977-'78</td>
<td>90</td>
<td>7</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>1978-'79</td>
<td>86</td>
<td>11</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>1979-'80</td>
<td>84</td>
<td>15</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>1980-'81</td>
<td>84</td>
<td>15</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>1981-'82</td>
<td>77</td>
<td>22</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>1982-'83</td>
<td>61</td>
<td>37</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Cardamom Statistics 1981-'82, Cardamom Board, Cochin.
Table 6.9 indicates that the Middle-East markets had an average of 75 per cent of the total exports of Cardamom from India during the period of 7 years from 1970-’71 to 1976-’77. During the subsequent 5 years the share went up to 84 per cent. However, after 1979-’80 the quantum and value of exports started declining as a consequence of the increased world supply of Cardamom.

Apart from the prime markets and the second level markets mentioned above, there are other markets to which Cardamom is exported from India in smaller quantities. These include U.S., A., Canada, Mozambique, Czechoslovakia, France, Italy etc.

The share of important non-Middle-East countries ranged from 7 to 37 per cent with an average of 18.6 per cent during the last 13 years. In view of the competition we have from Guatemala to organise effective market promotional programmes synchronising with our efforts to increase production of Cardamom in the country.

Status and Prospects of Export Markets

Kuwait

Kuwait and Saudi Arabia are the most important prime markets for Indian Cardamom. Though Saudi Arabia is the world’s largest consumer of Cardamom, Kuwait is the largest individual market for Indian Cardamom. It is the major trading centre in the Middle-East which re-exports Cardamom to other consuming countries in the neighbourhood.
During the 5 year period from 1978-79 to 1982-83
Kuwait had an annual average share of 35.6 per cent of the total
quantity of cardamom exports from India.

The convenient geographical location of Kuwait in
the Gulf region and its proximity to the Eastern part of Saudi
Arabia have made it an important trade centre in the Middle
East with considerable volume of re-exports of cardamom and
other commodities to neighbouring countries.

Cardamom is the most important spice consumed in
Kuwait. An estimated 80 per cent of the cardamom consumption
in the country is in the preparation of Gahwa — an infusion
of roasted ground coffee and lightly roasted ground cardamom
and hot water, prepared in a traditional tall narrow-waisted
metal pot. Gahwa is served very frequently in traditional
Arab households. Cardamom content of Gahwa coffee would vary
from 10 to 50 per cent by weight depending upon the method of
preparation. It is symbolic of Arab hospitality to offer Gahwa
to the visitors.

In retail outlets cardamom is usually sold loose in
polythene bags as the consumers generally would like to see
and touch cardamom before they buy it. While Guatemalan car-
damom is known for its parrot green colour and clean appearance,
the cardamom from Kerala is favoured in Kuwait for its flavour
and aroma.

29 Spices - A Survey of World Markets, International Trade
There are about 200 traditional retail outlets for cardamom in the country. However, a change in food retailing system has taken place in Kuwait with the emergence of supermarket complexes. A large number of the supermarkets are in the co-operative sector. The future pattern of retail marketing in the country will be increasingly centered around the co-operative stores.

Assuming no change in the present trading patterns, the anticipated growth in demand for cardamom in Kuwait will be around 5 to 10 per cent per annum on a base volume of 1,000 tonnes. This estimate is inclusive of the re-exports from Kuwait to Saudi Arabia and other neighbouring countries in the Middle-East.

Appropriate promotion strategies and price competitiveness are essential for sustaining and increasing the share of our cardamom in the growing market in Kuwait. The packing of cardamom in traditional 'Huda' gunny bags need be changed to attractive and convenient hard card board boxes as from Guatemala.31

**Saudi Arabia**

Saudi Arabia is the largest individual market for cardamom in the world. Demand from Saudi Arabia is considered to be the principal determinant factor on world prices for cardamom.

30 Market Survey of Cardamom in Selected Middle East and West European Markets, Cardamom Board, Cochin, 1985, p.34.
31 Sales-visit study delegation of Cardamom to Saudi Arabia, Kuwait and Dubai, Cardamom Board, Cochin, 1985, p.8.
During the period from 1978-79 to 1982-83 (five years) Saudi Arabia imported an average 723.4 metric tonnes of cardamom from India annually which accounted for 31.8 per cent of our annual average total exports. However, exports to Saudi Arabia which stood at 1,165 metric tonnes in 1978-79 steadily declined to 299 metric tonnes in 1982-83. The shortfall in exports was caused by decreased crop production in India which reduced the quantum of exportable surplus and the increased availability of Guatemalan cardamom in the world market.

The total imports of cardamom into Saudi Arabia comprises of direct imports from producing countries and re-exports from trading centres. Guatemala and India are the major producer countries which supply cardamom to Saudi Arabia. Substantial quantities of the commodity reach the country through re-exports from Kuwait, Bahrain and Jordan. However, no reliable data is available on the quantity of cardamom arriving the country by re-exports. The market survey conducted by the International Trade Centre, Geneva in 1962 had estimated that the annual consumption of cardamom in Saudi Arabia would range between 4,000 to 4,500 metric tonnes.32

The main usage of cardamom in Saudi Arabia is in the preparation of Gahwa — cardamom coffee. Consumption levels of cardamom coffee vary from place to place in Saudi Arabia. In the west region around Jeddah consumption of gahwa is lower.

but in places like Mecca and Medina where traditional altitudes dominate, consumption levels are high. It is highest in Eastern and central regions where some households use high cardamom concentration to make more than 90 per cent of the imported cardamom is used in gahwa preparation while the balance is consumed in culinary preparations.  

Demand for cardamom in Saudi Arabia has remained buoyant. In addition to domestic consumption there is considerable institutional demand from government departments, army and municipalities. Intake of cardamom coffee has become a ritualistic habit to the Arabian citizens. It is believed to cool the blood and aid digestion. Though consumption of gahwa is an year-round occurrence, the peak consumption levels are reached during holy month.  

The increasing consumption trend in volume is characterised by the demand for higher quality cardamom. There is conspicuous increase in demand for Alleppey Green Cardamom of grades AGBB and AGB. Price was not a barrier till recently when Guatemalan cardamom of comparable quality became available at lower prices. This has seriously affected our market share. During the last few years Guatemalan cardamom improved in colour and size while the prices remained lower than our  

33 Market Survey for Cardamom in Selected Middle East and  
34 Ibid, p.38.
supplies. Besides our cardamon exporters were not able to keep quality consistency which also prompted the Saudi Arabian importers to turn to Guatemala increasingly for supplies.35 While Guatemalan shipments arrive in attractive and strong cardboard boxes, our cardamom still reach them in the traditional 'Mada' packing in gunny bags which have now become outmoded.

To regain our position in Saudi Arabia we have to adopt suitable strategies to make cardamom competitive in prices and consistent in quality. It is imperative that we improve the packaging to make it attractive and functionally efficient. Publicity and promotional programmes have to be organized projecting the positive aspects of our cardamom as the threat from Guatemala has become strong and real penetrating into our share of the Saudi Arabian market.

OTHER MARKETS IN MIDDLE EAST

While Kuwait and Saudi Arabia are the most important prime markets for our cardamom in the Middle East the lesser markets in the region which comprises of Bahrain, United Arab Emirates, Qatar, Iran, Libya, Egypt and Jordan are significant by virtue of their growing levels of income and potential for increased per capita consumption of cardamom.

Bahrain is an important entrepot centre in the Gulf region. However, a good part of the cardamom imported into the country is used indigenously. The major use of
cardamom in Bahrain, like in other important Middle East countries, is for the preparation of Ghawa. Despite westernization, Bahrain retains its traditional customs which are an integral part of their social life.

Guatemala and India are the principal suppliers of cardamom to Bahrain. Traditionally we were the major suppliers. However, our market share was eroded when Guatemala emerged as an important supplier of cardamom. Bahrain market had in the past shown distinct preference for Alleppey Green Cardamom from Kerala. However, when Guatemala could supply material of comparable quality with price advantage it proved to be a very unfavourable market situation for us. Quality inconsistency of our cardamom has often been cited by the importers as a major factor against us.

Promotional strategies in Bahrain have to be planned to restore the reputation of our cardamom.

The seven states of the United Arab Emirates which comprise of Dubai, Abu Dhabi, Sharjah, Umm-al-Quwain, Ajman, Fujairah and Ras-al-Khaimah are a growing market for cardamom. Dubai and Abu Dhabi are the important importing centres for UAE.

Major use of the cardamom in UAE is in the preparation of Gahwa. However, the concentration of cardamom in gahwa is lower than in other Gulf countries. Hence this has led to an increased use of Guatemalan cardamom which is found to serve the purpose. Unless prices are kept competitive we will not be in a position to re-capture our market share in United Arab Emirates.

Qatar is the smallest of the prime cardamom markets in the Middle East importing on an average 60-70 metric tonnes of cardamom every year. It has a per capita consumption of 800 grams of cardamom which is the highest in the world. India is the major supplier of cardamom to Qatar and the balance of imports arrives from entrepot centres like Bahrain, Kuwait and Dubai through re-exports.37

Like in other Arab countries, the principal use of cardamom in Qatar is in the preparation of Gahwa. The bold Alleppey Green variety from Kerala had enjoyed a strong consumer preference until Guatemalan cardamom of comparable quality became available at competitive prices. The import trade in Qatar had also expressed concern about the inconsistency in the quality of cardamom imported from India affecting the image of the country as a reliable source of supply. To overcome such problems the Government of Qatar have plans to import their entire requirements of cardamom through a single source of supply.

37 Ibid., pp. 80-81.
Iran, primarily is a market for bleached cardamom which is used in the manufacture of confectionary and pastries. Industrial users and retail consumers prefer bleached cardamom. It is also an essential ingredient in the making of 'gash' - a white sweetmeat prepared from milk, sugar and cardamom. 38 A small quantity of cardamom is used in the preparation of beverages, home-produced confectionary etc. Consumption of cardamom has remained static over the years. Imports from India have decreased and the shortage is made up by re-exports from Dubai.

The main strategy of promotion which we have to adopt in Iran is to extend the use of cardamom into other non-conventional areas.

Libya, Egypt and Jordan are also growing markets for cardamom in the Middle East region. We export only small quantities of cardamom to Libya at a discontinuous frequency. The traditional cardamom coffee - gahwa - is prevalent in use in the country but the cardamom content of the coffee is much lower. The use of cardamom is expected to go up with the increasing purchasing power of the citizens. Only government agencies are authorised to purchase cardamom and distribute to supermarkets and retail stores. We should

plan strategies for market promotion of cardamom in Libya keeping in view the prospects for increased consumption.  

Despite of its large population the consumption of cardamom in Egypt has not reached significant levels. The use of cardamom is not expected to grow steadily as in other consuming countries. The main sources of supply are Sri Lanka, Tanzania, India and Singapore. The main use of cardamom is for the flavouring of meat preparations. Cardamom coffee is not popular and is limited to occasions like funeral. At present Egypt purchases only lower quality cardamom as the prices are lower for such varieties.  

Jordan is a potential market for cardamom. Imports for domestic consumption as well as for purposes of re-exports take place. Use of cardamom is well-known and a good part of the domestic consumption goes for the preparation of gahwa. Jordan has not been buying cardamom from us for several years now. As the importance of Jordan is increasing as an entrepot centre in the Middle East, efforts have to be made by us to penetrate the market. However, the most important criteria for successful marketing of Indian cardamom in Jordan would be quality consistency and price competitiveness.

40 Ibid., pp. 9-10  
41 Ibid., pp. 18-19.
Second Level Markets for Cardamom

Sweden, Finland, Norway, Denmark and Federal Republic of Germany constitute the main second level markets for Cardamom.

In these markets cardamom is consumed in bakery products mainly in ground form. Besides to a limited extent it is used in the processed food industry.

Sweden is the largest individual market for cardamom in Europe. The principal use of cardamom is in the bakery industry in the baking of 'coffee cake'. Cardamom is also consumed for domestic baking in households. Guatemala and Tanzania are the major source of supply followed by India. Our share in the Swedish market for cardamom has remained at an insignificant level for the last several years. Promotional strategy to regain the share of market has to aim at offering appropriate grades of cardamom of consistent quality at competitive prices.42

Finland is the second largest market for cardamom in Europe. Finland was an important market for our cardamom till 1965 when India accounted for 75.7 per cent of the total annual imports of cardamom into the country. However our share dropped to 6.7 per cent by 1974. Today Guatemala and

Tanzania are the important suppliers of cardamom to Finland. The main usage of cardamom in Finland is in the preparation of 'coffee cake'. Industrial usage is in the ground form while the domestic consumers buy cardamom preferably in the seed form to be ground for use at home. If we want to regain the lost market in Finland systematic efforts have to be made keeping in view the importance of conformity to accepted quality standard and shipping schedules.

Federal Republic of Germany is an important centre of international trading in cardamom. Importers in Federal Republic of Germany often supply cardamom to buyers in Saudi Arabia, Bahrain, Kuwait and to lesser markets in the Middle East. FRG is the only market in West Europe which has shown a growth trend for cardamom. At present the major sources supplying cardamom to FRG are Guatemala and Tanzania. Our market share reached negligible levels due to competition from these sources of supply.43

Efforts by our exporters to penetrate the West German market and re-capture the market share would depend upon how best they can refurbish the poor reputation for the supplies of inconsistent quality. The health authorities of FRG are now increasingly conscious about the harmful

43 Ibid., p. 123.
effects of the residual pesticides in the food products imported from India. These aspects have been taken into account while deciding strategies to regain the market.

Norway is a relatively small market for cardamom. The principal source of supply is Guatemala and the main usage is in the manufacture of 'coffee cakes'. The demand for cardamom in Norway is likely to remain static.

Our share of the Norwegian market declined from 24.3 per cent of imports in 1971 to 3.2 per cent in 1975, when Guatemala emerged as the major supplier. Our share further declined in the subsequent years. To re-capture the market share efforts will have to be made by our exporters to improve the reputation of our cardamom among the traders in Norway.

Cardamom Products

World production of cardamom which stood at stagnant levels some years ago has increased appreciably leading to a situation of abundant supply. In the coming years, the production of cardamom in the different producing countries would further go up as a result of improved agro-techniques and other development programmes being undertaken. Thus, availability of cardamom is likely to increase at an annual average rate of 11-12 per cent over the next three years.

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Ibid., p. 134.
while the market for cardamom is expected to grow at an annual rate of 4-5 per cent only. As a consequence, cardamom which has so far been in the sellers' market would be increasingly moving to the buyers' market. It is imperative in this context to develop new markets, increase share of the existing markets, find out new uses for cardamom and develop new products with market potential.

Cardamom oil and cardamom oleoresin are two important products from cardamom which are currently marketed by us in small quantities. Considering the export growth potential for these items we have to plan future strategies on appropriate lines.

We began to export cardamom oil in significant quantities from 1977-78 only. In the subsequent year we set a record by exporting a quantity of 1466 Kg. of cardamom oil realizing the highest unit value of ₹2354 for a kilogramme. However, the quantum of export of cardamom oil from the country declined steadily thereafter. Consequent to the rise in domestic prices of cardamom the cost of production of cardamom oil went up which made the prices of our cardamom oil uncompetitive in the world markets. Cardamom oil is also produced in Sri Lanka, Guatemala, U.K., France,

The major use of cardamom oil is in the flavour and fragrance industries. As part of the product diversification strategy to expand the market for cardamom we have to develop new markets for cardamom oil while keeping the prices competitive.

In 1983-84 India made a modest beginning in the export of cardamom oleoresin by exporting a quantity of 50Kg. of the product to Federal Republic of Germany. It has been estimated by the market survey conducted by the International Trade Centre, Geneva that oleoresins have tremendous growth potential in developed countries. Usage of oleoresins in the various food processing industries in the U.S.A., Canada, Japan, United Kingdom and other developed countries is steadily going up and is expected to grow at the rate of 10-15 per cent annually in major consuming countries like the U.S.A.47

Canada used to import raw spices for the extraction of oleoresins. As India and other spice producing countries started extraction of oleoresins the situation changed and Canada has increasingly switched over to import of oleoresins. The trade sources in Canada have indicated that the local oleoresin extraction industry would not be in a position to expand or sustain production on account of the high cost of labour and the increasing freight on raw materials. This opens up bright prospects for our exporters and manufacturers of

oleoresins, while the developed countries use a wide range of spice oleoresins, the share of cardamom oleoresin could definitely be increased through effective promotional programmes. Joint marketing and technical collaboration with existing Canadian manufacturers would considerably help us to penetrate into the market and capture a good share of it.

Japan has good growth potential for oleoresins as the current consumption levels are low. The major end-users of oleoresins are ham and sausage industry, canned food, frozen foods and other food processing industry besides pharmaceutical industry. The scope for increased usage of oleoresins is apparently bright. 48

Other cardamom products like ground cardamom, cardamom seed etc., could also be promoted in markets with latent and potential demand for the items.

3. GINGER

India is the largest producer of ginger in the world and Kerala accounts for about 60 per cent of the total production in the country. Almost the entire quantity of exportable dry ginger is produced in Kerala.

Present position:

Major portion of the ginger produced in India is consumed within the country itself. There is an increasing domestic 48 *Ref.* p.100.
demand for fresh ginger. Dry ginger consumption has also gone
up considerably. Production pattern of ginger in the country
is highly influenced by price trends, when there is good demand
prices go up leading to increased production in the subsequent
year. Over production causes price decline which in turn reduces
cultivation of the crop in the ensuing season. This low produc-
tion and high prices alternate with over production and low
prices creating an erratic pattern.

Review of exports:

Table 6.10 illustrates the quantity, value and unit
value of exports of ginger from India during the period from
1977-78 to 1982-83. The declining trend in the quantum and
value of exports was conspicuous until 1981-82. In the subse-
quent year the unit value increased to Rs.14.98 per Kg. as
against Rs.8.36 which prevailed in the previous year.49

China, Nigeria, Pakistan, Sierra Leone etc. are the
other countries exporting ginger. Besides, Brazil has also emer-
ged as an important producer of ginger.

The prices of Indian ginger are generally higher than
prevailing international prices. China has been supplying ginger
to the U.S. market at considerably lower prices.

China is the main competitor for Indian ginger and it
could be apparent that this position will continue. Our efforts
for developing exports of ginger have to be planned taking into
account the reality of the continuing competition from China.

49 Commodity Notes, Spices Export Promotion Council, Cochin, 1984, P.34.
Table - 6.10

Exports of Ginger from India

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (Metric tonnes)</th>
<th>Value (‘000 Rs.)</th>
<th>Unit price (Rs.) per Kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>9.761.8</td>
<td>1,36,898.7</td>
<td>14.02</td>
</tr>
<tr>
<td>1978-79</td>
<td>14.514.55</td>
<td>1,43,172.35</td>
<td>9.86</td>
</tr>
<tr>
<td>1979-80</td>
<td>11,485.98</td>
<td>71,696.09</td>
<td>6.33</td>
</tr>
<tr>
<td>1980-81</td>
<td>6,910.90</td>
<td>36,797.00</td>
<td>5.20</td>
</tr>
<tr>
<td>1981-82</td>
<td>4,717.80</td>
<td>39,532.70</td>
<td>8.30</td>
</tr>
<tr>
<td>1982-83</td>
<td>3,954.71</td>
<td>58,849.14</td>
<td>14.08</td>
</tr>
</tbody>
</table>

Source: Spices Export Promotion Council, Cochin.

The major markets for ginger are the U.S.A., U.K., Saudi Arabia, Japan, Federal Republic of Germany and the Netherlands.

STRATEGIES FOR DEVELOPING EXPORTS

Price competitiveness is a matter of prime importance while planning any strategy for the development of exports of ginger from our country. This could be achieved only through increased production and productivity. The phenomenon of cyclical increase and decrease in production should be overcome by corrective actions at government level.

The farmers should be assured of a remunerative price for their produce despite any fluctuation in the export market. This could be achieved through a system of minimum support price.
Any surplus production should be procured through government agencies and a buffer stock built up to be released for export or domestic consumption as required.

Crop productivity has to be increased through agro-techniques and better input utilisation.

There are quite a number of products which could be manufactured from ginger and marketed successfully both in the internal and export markets. Ginger oil, oleoresins and ginger essence have multiple applications in the food processing and pharmaceutical industries. Ginger is also being used in the preparation of beverages, ginger candy, lime-ginger pickles and in many other products which have latent growth potential. These uses of ginger could be further accelerated by effective promotional programmes. Confectionery and bakery industries in the developed countries would increase their consumption if market promotional efforts are made.

4. TURMERIC

India is the leading producer of turmeric in the world. Other important producers are China, Pakistan, Thailand, Taiwan and Burmah.

Present position

During the last five years annual turmeric production in the country ranged between 110,000 metric tonnes and 235,000 metric tonnes. About 90 per cent of the turmeric produced in
India is consumed within the country itself. This is because turmeric is a versatile product with multiple applications in our daily life. It has uses as a flavouring and colouring agent besides its preservative and medicinal properties which account for the substantial internal consumption.

Review of exports:

Table 6.11 gives data on exports of turmeric from India during the period from 1977-78 to 1982-83.

Table 6.11
Exports of Turmeric from India

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (metric tonnes)</th>
<th>Value ('000 Rs.)</th>
<th>Unit price (F.O.S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>11,251.00</td>
<td>82,994.2</td>
<td>7.36</td>
</tr>
<tr>
<td>1978-79</td>
<td>11,977.50</td>
<td>1,24,124.13</td>
<td>10.36</td>
</tr>
<tr>
<td>1979-80</td>
<td>26,909.64</td>
<td>1,98,061.03</td>
<td>7.44</td>
</tr>
<tr>
<td>1980-81</td>
<td>14,517.15</td>
<td>78,824.34</td>
<td>5.43</td>
</tr>
<tr>
<td>1981-82</td>
<td>11,985.51</td>
<td>51,742.87</td>
<td>4.32</td>
</tr>
<tr>
<td>1982-83</td>
<td>7,594.76</td>
<td>42,354.25</td>
<td>5.58</td>
</tr>
</tbody>
</table>

Source: Spices Export Promotion Council, Cochin.

50 Ibid., pp.39-40.
It could be seen from the table that while our exports of turmeric averaged 11,500 metric tonnes annually, the peak performance was in 1979-80 when the exports reached a quantity of 26,609.64 metric tonnes. The average unit export price of turmeric was subject to wide fluctuations during the period. The highest unit export price of Rs.10.36 was recorded in 1978-79 while the lowest price was Rs.4.32 during 1981-82.\(^{52}\)

The important buyers of turmeric in the world market are the U.S.A., Japan, Iran, United Kingdom, Saudi Arabia, Federal Republic of Germany, France, Canada and the United Arab Emirates.

Prices of our turmeric are often uncompetitive in the world market and other producing countries take benefit out of this situation and capture our share of the market. Production of turmeric in the country is subject to cyclical fluctuations on account of the low price - low production high price - large production phenomenon which alternates. This situation creates an erratic trend in quantum of production and prices. Exportable surplus could be generated only through increased production and productivity as internal demand for turmeric is highly dominant.

STRATEGIES FOR DEVELOPMENT OF EXPORTS

In view of the high levels of internal consumption, efforts to increase exports would bring in results only if

\(^{52}\)Commodity Notes, op. cit., pp.40-41.
If production is substantially increased, this could be achieved through extensive cultivation and simultaneous action to enhance the production from unit area under the crop.

Increased production and productivity would help to stabilise prices and make our turmeric prices competitive in world markets. Special efforts also have to be taken to improve production of varieties with specific export demand. Alleppey Turmeric produced in Kerala has a good demand in the U.S.A. as it contains higher percentage of curcumin.

The cyclical phenomenon of production is caused by fluctuation in prices. This could be avoided only by appropriate action at government level to stabilise prices while ensuring that such prices are remunerative to the farmers. This could be achieved through a system of minimum support price to the cultivators. Arrangements have also to be made to procure surplus production through government agencies and build a buffer stock to be released for export or domestic consumption as required.

In the major importing countries like the U.S.A. turmeric is mainly used as an ingredient in curry powder, pickles and spice mixes. In Japan turmeric is used as a colouring in a broad range of foods including curry powder, salad dressing, bakery products pickles, juices and beverages. The use of turmeric can be further popularised in the countries which currently import the product besides developing new markets.
At present turmeric is used in a variety of pharmaceutical, cosmetic and food preparations. Research on developing new products and new uses should be organised considering the versatile applications of turmeric. A long term strategy to export value-added products from turmeric has also be evolved.

5. MINOR SPICES

The congenial agro-climatic and eco-geographical conditions prevalent in Kerala make it ideally suited for the cultivation of a variety of minor spices of commercial importance. Cloves, nutmeg, cinnamon and cassia are now grown successfully in the state. Of these cloves and cinnamon were in existence in the Malabar coast for several centuries past. However, the commercial scale cultivation of these crops in the state was initiated by the British planters in 1767.

Today Kerala has the largest area in the country under cloves, cinnamon and nutmeg. The Directorate of Cocoa, Areca nut and spices development do not have up-to-date data on the area and production of these crops. The absence of a reliable database is a major constraint in planning the future production programmes for these crops.

The current production of cloves and cinnamon is hardly sufficient to meet the domestic demand for these spices. It is therefore, essential that the current production levels are
increased to meet the internal demand fully to avoid the imports of these spices into the country. The production levels could be steadily increased to generate sufficient surplus for exports also.

Vanilla is another spice crop which has considerable potential for development in the State. It is a tropical climbing orchid grown for its pleasant aromatic essence. Kerala has been identified as one of the states with potential for successful cultivation of vanilla.\(^53\) There has been no organised effort so far to grow vanilla on a commercial scale in the state. The current demand for vanilla in the country is met by synthetic substitutes and if vanilla production could be undertaken successfully the prospects of exporting vanilla after meeting the internal demand would become a reality. The state Department of Agriculture should organise a comprehensive programme with all necessary inputs for increasing the production of minor spices in the state considering the economic significance and future export potential.