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**INTERNATIONAL TRADE AND COCHIN PORT  
A HISTORICAL AND STATISTICAL ANALYSIS  
1881 - 1980**

*THESIS SUBMITTED TO THE UNIVERSITY OF COCHIN  
BY*

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## C E R T I F I C A T E

This is to certify that the dissertation  
"International Trade and Cochin Port: A Historical and  
Statistical Analysis - 1881-1980" is a record of  
research work done by Thomas K.A., a full-time student  
of M.Phil. in the Department of Applied Economics,  
University of Cochin, during the period of his study  
in the year 1980-81.

The dissertation is the outcome of  
personal inquiry and research done by the candidate  
under my overall guidance.

  
(Dr. K.C. Sankaranarayanan)

STATEMENT BY THE CANDIDATE

This is to certify that the dissertation  
"International Trade and Cochin Port: A Historical  
and Statistical Analysis 1881-1980" is a record of  
research work done by me, and that it has not  
previously formed the basis for the award of any  
degree, diploma or other similar title.

COCHIN-22  
15--2--1982.

  
(THOMAS K.A.)

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-THOMAS K.A.-

**I**

**INTRODUCTION, SCOPE AND METHODOLOGY**

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### Introduction:

The idea that international trade acts as an 'engine of growth' has been widely accepted in recent times. Consequently, international trade got added importance in any discussion on economic growth and development. It has even been suggested as a means to break the vicious circle of poverty.

From very ancient times India had flourishing trade relations with many of the countries of the world. But as time passed, India's position in the field of international trade was receded to the background.

Cochin Port attained the status of a major port in 1935. Today about 10% of India's total trade is carried through the Cochin Port - the 'Queen of the Arabian Sea'. Cochin is one of the finest natural harbours in the east. It has a vast hinterland rich in natural produce such as Pepper, Coffee, Tea, Rubber, Ginger, Turmeric etc.

### Scope of the Study:

The study covers a period of one hundred years (1881 - 1980). It is confined to the analysis of the trend of international trade through the Cochin Port during the

said period. Data on exports as well as imports are collected for the analysis. The reasons for selecting this period for the purpose of study are listed below:

- (1) As far as we know, no study has been undertaken in these lines till now.
- (2) It gives an opportunity to analyse the strengths and weaknesses of Cochin Port.

Methodology:

Data for the study are collected mainly from Cochin Chamber of Commerce and the Cochin Port Trust. The data collected were systematically arranged to undertake appropriate statistical analysis and projection of the trend. Twelve major commodities - ten with reference to exports and two with reference to imports - were selected for analysis. The commodities were selected on the basis of their value earnings. The commodities (exports) selected in their order of importance are: Cashew, Marine Products, Coir, Tea, Pepper, Coffee, Cardamom, Lemongrass oil, Ginger and Turmeric. The import items considered for analysis in the order of their importance are Oil (Petroleum products) and Metals.

**Limitations:**

Only twelve commodities were considered for the purpose of this study.

**Scheme of the Study:**

For the purpose of analysis and presentation the study is divided into ten chapters. The first chapter deals with the scope, methodology and limitations of the study. The second one is concerned with the role of international trade in the economic development of a country. The third chapter gives us some idea regarding the role of ports in trade. The fourth and fifth ones deal with the origin of Cochin Port and the genesis of trade from Cochin, respectively.

In the sixth chapter we will deal with the Kerala economy as a whole. Since the major portion of goods for trade through Cochin Port is coming from Kerala itself, it is desirable to know about the economy of Kerala in a nutshell.

The seventh chapter deals with the exports of ten major commodities from Cochin port to abroad. After presenting the data in tables we give graphs for the same in order to show the major fluctuations taking place in

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exports. This chapter gives us enough idea regarding the trend of exports from Cochin Port for the last one hundred years.

The eighth one deals with the imports into Cochin Port. Here we include the imports of Oil and Metals.

Chapter Nine is a forecast for exports from and imports into Cochin Port for a period of ten years, i.e. 1981 to 1990. This chapter gives some idea regarding the future of exports and imports and thereby the future of Cochin Port.

In the last chapter we deal with the major causes for fluctuations which took place both in exports and imports through Cochin Port during the period 1881 to 1980. Here we try to see to what extent the labour problems, increased port charges, shipping delays at the Port, increased taxes, avoidable administrative delays and other problems connected with the Port, have affected the trade through Cochin Port.

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**II**

**INTERNATIONAL TRADE  
AND  
ECONOMIC DEVELOPMENT**

There is a close relationship between the economic growth of a country and its foreign trade. "Economic development and rise in the national income influence the pattern and volume of foreign trade, while changes in the conditions of foreign trade directly affect the composition and level of national income".<sup>1</sup> A country which seeks development must be receptive to foreign influences if it is to grow. It needs foreign equipment, foreign capital, foreign ideas etc.

Foreign trade enabled underdeveloped countries to bring into use their great unexploited natural resources and freed them from the limitations of their own domestic markets. International trade exposes home industries to the challenge of foreign competitors. It facilitates borrowing of superior technology from abroad both by widening knowledge and by extending the market for the product. Thus the limitations of home market in a poor country may prevent the adoption of more advanced methods of production and an opening on the world market may make a decisive difference and so hasten the pace of economic development.

Nations maximise their incomes by specialising in production and exchanging their specialised products with one another. Owing to the unsatisfactory state of industrial development, underdeveloped countries can produce only very few capital goods at home. Its exports will determine the rate at which it can import them, and, therefore, the speed by which it can push ahead with industrial development.

The importance of foreign trade is particularly great in countries that lack basic engineering goods and are obliged to import all their machinery. The classical and neo-classical economists attached so much importance to international trade in a country's development that they considered it as an "engine of growth".

In order to increase an underdeveloped country's ability to import the capital goods needed for economic development, it should aim at selling abroad its export goods as much and as dearly as possible, while exerting itself at home to produce them at the lowest real costs. Trade opens up markets for a country's specialised production, increasing employment and raising profits. Without trade, the importation of capital goods so essential to a nation's growth, would be impossible.

According to a later view,<sup>2</sup> trade may even induce capital, enterprise, and labour to migrate to the site of natural resources, to develop a thriving export industry.

During the 19th and early 20th centuries, international trade functioned efficiently. Larger and growing markets in Britain and Europe led to the rapid expansion of the exports of the primary producing countries, principally the newer countries in the temperate zones, the U.S.A., Canada, Australia, New Zealand, Argentina, Uruguay and South Africa.

Foreign trade provides the urge to develop, the knowledge and experience that make development possible, and the means to accomplish it.

When a country specialises in the production of a few goods, due to international trade and division of labour, it exports those commodities, which it produces cheaper in exchange for what others can produce at a lower cost. It gains from trade and there is increase in national income which, in turn, raises the level of output and growth rate of the economy. Thus the higher level of output through trade tends to break the vicious circle of poverty and promotes economic development. By specialisation, underdeveloped countries can widen their export

markets, which, in turn lead to the employment of existing resources more productively and the resource allocation becomes more efficient with given production functions. The expansion of market leads to a number of external and internal economies and hence to reduction in cost of production. As pointed out by James Mill,<sup>3</sup> "by enlarging the size of the market and the scope of specialisation, international trade makes a greater use of machinery, encourages inventions and innovations, raises labour productivity, lower costs and economic development".

Foreign trade helps to exchange domestic goods having low growth potential for foreign goods with high growth potential. Being deficient in capital goods and materials, they are able to quicken the pace of development by importing them from developed countries, and establishing economic and social overheads and directly productive activities.

Foreign trade provides the basis for the importation of foreign capital in underdeveloped countries. If there were no foreign trade, foreign capital would not flow from the rich to the poor countries. The volume of capital depends, among other factors, upon the volume of trade. "The volume of external trade of a country

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increases with economic growth. The expansion of foreign trade is, in fact, an indicator of economic development. The economic history of nearly all countries shows that the growth of national product has taken place hand in hand with a simultaneous increase in the volume of foreign trade."<sup>4</sup>

Under conditions of free trade, an underdeveloped country benefits from its external trade in so far as it helps in augmenting capital formation. Since the level of production and per capita incomes are very low, it would not be possible in many of these countries to further depress the already low levels of consumption. It is obvious then that the vicious circle of low production and low savings can be broken only if external resources are made available.

Normally innovation is rare and difficult in underdeveloped countries. This problem can be solved if increased output resulting from the expansion of one or more industries is exported and disposed of in external markets. The development of an export-oriented major industry facilitates and encourages the development of other industries which help in general economic growth.

The growing technological gap between more developed and less developed countries means that the

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latter have today at least as much need to import capital goods from abroad as developed countries had in the past. The more populous of the underdeveloped regions are in need of importing food. Underdeveloped countries are not only short of capital. They have also a shortage of trained managers, technicians and leaders of business with high entrepreneurial ability. It is, therefore, necessary to obtain from more advanced countries supplies of capital as well as various kinds of skills.

The foreigner's presence would accelerate development only to the extent that he functions in such a way that the nationals of the host country are enabled to appropriate these skills and techniques as quickly as possible.

The economic history of Great Britain affords an excellent illustration of the manner in which a country is benefited by foreign trade in developing her industries. It also provides an example as to how an industrialised nation by means of its trade relations with primary producing countries can help in the industrialisation and economic development of the latter.

On the other hand, in the case of China, India and Malaya, the main reason why they did not benefit

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much from external trade was that foreign investments for developing export industries failed to get properly integrated in their economic structure. Investments were made by foreign investors and entrepreneurs in the production of food and raw materials with a view to get as large returns as possible.

"The import-saving economic development policy holds the view that the commodities in question can be imported cheaper than produced."<sup>5</sup> The sensitiveness of developing economies to foreign trade can be reduced by giving an outspoken import-saving character to the development of the industrialisation and to agricultural development. This step is logical since the intensity of sensitiveness to foreign trade depends on the magnitude of imports; it is this that determines the necessary volume of the exports too. In some cases, however, although import needs are high (because domestic industry is backward), the actual export is even greater than what would be needed in order to pay for the necessary imports (because agriculture produces mainly such commodities as cannot be marketed at home). Therefore, in the course of development, preference should be given to the manufacture of industrial articles and agricultural products that have an internal market.

Kindleberger<sup>6</sup> analyses the role of foreign trade in economic development in three different trade situations; (1) where trade is a leading sector, (2) where trade is a balancing sector and (3) where trade is a lagging sector. In the first case the stimulus to economic development comes from abroad and in the lagging model, the stimulus to development is internal and trade keeps pace with domestic transformation. In the balancing sector model, trade acts as a factor which fills the gap between production and consumption.

#### Terms of Trade and Economic Development:

Fair terms of trade are very important for the development of the underdeveloped countries particularly for the development of those economies in which international trade plays a considerable role. An improvement in a country's terms of trade enables it to import a larger quantity of goods for the same quantity of exports. This raises the national income of the country directly.

#### Export-led Growth:

Great Britain furnishes the prime example of export-led growth, both in the way that exports of first

textiles and then iron and coal stimulated the growth of income in Britain.

How does export-led demand work? First exports grow. This gives rise to new demands in the exporting country, both for imports to contribute to the physical expansion of production, and as a result of the increase in incomes of the factors of production. Where economies of scale result in a reduced price for the output, new production may be stimulated, at home or abroad, using the good as an input. Pressure on domestic capacity may stimulate technological change. Such pressure may also call the attention of entrepreneurs to investment opportunities, and stimulates growth by raising the level of investment. Expansion of exports can thus lead to growth through stimulating technical change and investment or by spilling demand over to other sectors.

Rowstow has suggested that growth process involves a leading sector which communicates its growth to the rest of the economy. In the export-led model, exports are a leading sector. The rapid expansion of a primary product export can lead to economic development, as Douglass North<sup>7</sup> has suggested.

Exports cannot always lead to growth. If they are to induce growth, there must be capital formation,

technical change and reallocation of resources. The larger the gains from trade, given these processes, the faster and more certainly will growth proceed.

Conclusion:

The preceding discussion leads to the ensuing main conclusions.

- (1) Underdeveloped countries are highly dependent on a very narrow range of exports. A large proportion of these exports consists of gifts of nature, petroleum, mineral ores, crude fertilisers, etc. The extent to which these countries can export these commodities abroad is limited.
- (2) The exports from underdeveloped countries are governed less closely by the level of world demand than is usually supposed. Where underdeveloped countries are in direct competition with the more advanced countries, the share of the market depends also on the terms on which they are able to compete.
- (3) Since agriculture is by far the most important activity and is usually more directed towards domestic than export markets, without a general improvement in agricultural production and incomes, the mass of the population will remain hungry and poor.

**III**  
**ROLE OF PORTS**  
**IN**  
**INTERNATIONAL TRADE**

Ports provide infra-structural facilities for a country's inland and foreign trade. They also act as inlets and outlets of socio-cultural intercourse with peoples of other countries.

In the modern times, international trade involves a lengthy procedure. So the extent of trade taking place through a port depends largely upon the facilities available in the port, avoidance of procedural delays and the sympathetic and positive attitude of the port authorities.

There is evidence to show that Kerala maintained good trade relations with foreign countries. Egyptians, Samerians, Portuguese, the Dutch and the English had flourishing trade relations with Kerala. The important ports of Kerala in those days were Cranganore and Calicut, and then after the Great Cochin Flood of 1341 Cochin took the place of Cranganore. Subsequently it became the leading port of Kerala.

But these ports are losing their importance in recent years because of several reasons. The centre

of trade also shifted from the shores of Kerala to areas such as Bombay, Calcutta and Madras.

The major ports in India today are:- Calcutta, Bombay, Madras, Cochin, Visakhapatnam, Kandla, Marmugao and Paradeep. The minor ports at Gopalpur, Kakinada, Cuddalore, Beypore, Karwar, Miriyabay and Porbunder have also been simultaneously developed. The new major ports of New Mangalore, and New Tuticorin also came into operation during 1974-75, then bringing the total number of major ports to ten.<sup>1</sup>

During 1974-75, the handling capacity in Madras, Visakhapatnam, and Marmugao, increased to accommodate bulk carriers of 80,000, 100,000 and 60,000 D.W.T. respectively. In 1973-74, the major ports handled a traffic of 63.97 million tonnes, an all-time high figure.<sup>2</sup>

India is the second largest ship-owning country in Asia and ranks sixteenth in the world. Indian ships operate on most of the sea routes on the world.

#### Major Ports:

Kandla: When India lost Karachi after partition, there was no major port to serve the 1000 mile coast line between Bombay and Karachi. Therefore, Kandla, in Gujarat, was declared a major port in 1955. The port was completed in 1957.

Bombay:- Situated almost midway, on the west coast of India, Bombay is a natural deep water harbour. The harbour covers some 75 sq.miles and provides a safe shelter for ships in all seasons. It is now the biggest port in India.

Marmagao:- It is one of the finest natural ports in India. Though a natural harbour, it is less spacious than Bombay.

Mangalore:- It is situated between Marmagao and Cochin. It is one of the major ports for the State of Karnataka. It has a vast hinterland of varied agricultural production and minerals.

Tuticorin:- lying almost at the tip of the Indian peninsula is the southern most port on the East coast.

Madras:- Situated on the East coast, Madras is the third biggest port in India. It is an artificial port and administered by the Madras Port Trust. It has an extensive hinterland, comprising, Tamil Nadu, Andhra Pradesh and parts of Kerala.

Visakhapatnam, on the East coast, lies between Madras and Calcutta. It is a land-locked port and is controlled by the Government of India. India's first ship-building yard was established here.



Paradeep, a newly opened port in Orissa on the East coast of India, was declared a major port in April 1966. A Port Trust has been set up at Paradeep from 1st November 1967.

Calcutta: It is the second biggest port in India and is situated on the Hooghly River, some 90 miles from the Bay of Bengal. On account of its location, in estuarine Hooghly, Calcutta is completely dependent on tides. Ships can enter and clear only at fixed hours according to the tides.

The Indian coast line is also served by a large number of intermediate and minor ports (about 225, of which 160 are working ports) which together handle a coastal and overseas traffic of about 90 lakhs tonnes per annum. The administration of these ports is the responsibility of the state governments.

Cochin: Cochin lies on the west coast in Kerala, some 200 miles north of Cape Comorin, the southernmost tip of India. Rightly called the "Queen of the Arabian sea", it is one of the finest natural harbours in the East. It covers an area of 130 sq. miles of sheltered backwater and provides a calm harbourage for all vessels even in the worst monsoon weather. The harbour is connected to the hinterland by numerous waterways, plenty of roads and two

railway lines running north and south. It has a hinterland rich in natural produce like pepper, cardamom, tea, coffee, ginger, lemongrass oil, turmeric, rubber etc. It is administered directly by the central government.

This port has a long history of trade with the European countries since, at least, from 1498 onwards, when Vasco de Gama arrived in Calicut. The seafaring adventurous peoples from abroad came to our country, attracted by our world famous spices, which had a long history of export from Cochin.

Being a natural harbour in the Arabian sea, Cochin harbour has its own natural advantages of easy accessibility of both large and small ships in any season of the year. The berthing facilities, the cranes at work, the speedy loading and unloading facilities, administrative efficiency etc. are of very great importance as far as Kerala's coastal and foreign trade are concerned.

The shipping trade of Cochin shows that in 1900 A.D., 1,459 vessels of different types came to the port both from abroad and inland and the total tonnage handled by the port was 487,130 as compared to 1,135 vessels carrying a total tonnage of 199,890 in 1880.<sup>3</sup> When the port was given serious attention by the Government of

India, the volume of traffic handled by it began to increase sharply. In 1936, this port was declared a major port and about 1,210 ships with a total tonnage of about 2,137,053 reported at the port.

In 1960, the total tonnage of cargo handled by our ships from and into Cochin Port was 4,105,561.<sup>4</sup> Placed in a proper coastal area, this port will enjoy the vast potential of our natural produce in Kerala and some parts of Tamil Nadu and Karnataka. A major portion of the trade taking place in this port is produced in Kerala. It has got a vast hinterland of almost all the categories of commodities for export.

Being a natural harbour, and with a vast potential of trade relations with foreign countries, Cochin Port has to play an important role in the shipping trade of India.

The role of ports in international trade will be clear from the total traffic handled by our ports in India. The bulk cargoes carried by our ships will give an idea about the role. Our major ports play in the country's international trade.

TABLE - 1MAJOR PORTS CAPACITIES AND TRAFFIC

(in lakh tonnes)

Ports	Capacity	Traffic		
		1977-78	1978-79	April to Dec. 1979
Bombay	6.00	7.05	7.63	6.33
Calcutta	4.46	2.97	3.14	2.30
Cochin	1.65	0.87	0.96	0.63
Kandla	1.15	0.35	0.71	0.78
Madras	2.40	1.76	2.33	1.91
Mormugao	0.35	0.33	0.73	0.67
Paradeep	0.35	0.53	0.43	0.48
Visakhapatnam	2.13	1.12	1.30	1.38
New Mangalore	0.55	0.17	0.51	0.48
Tuticorin	1.00	0.26	0.61	1.15

Source: Ministry of Shipping and Transport.<sup>5</sup>

It is clear from the table that only Bombay and Mormugao ports worked above their capacity during 1977-78 to 1978-79. By increasing the traffic, our ports can raise the level of imports and exports into and from the Indian ports to its maximum.

**IV**

**COCHIN PORT:**

**A HISTORICAL RETROSPECT**

Hailed as the "Venice of the East" and "Queen of the Arabian Sea" the Port of Cochin is reputed to be the finest deep water harbour on the Malabar coast. The numerous rivers flowing from the spine of the Western Ghats find their outflow to the Arabian sea at Cochin.

As early as the days of Solomon the ships of Tarshish used to come here for ivory, apes and peacocks. The fame of Kerala pepper brought Romans to its ports in A.D. 30. There is no record of individual Roman settling in Southern India, nor is there any Roman architecture. It is stated that a small temple was erected at Musiris to the memory of the great first emperor, Augustus, but there is no sign of it today.<sup>1</sup>

The Kerala coast used to be in the forefront of the oceanic commerce of India in ancient times. Her ships which were among the biggest and the best, ranged far and wide, from the middle east to the far east in extensive international trade.

The outside world also had direct contact with Kerala from time immemorial. Her fame as the land of spices attracted foreigners from the third millenium B.C.

and earlier. The Assyrians, the Babylonians, Egyptians, Arabs, Phoenicians, Greeks, Romans, the Chinese etc. were some among the ancient peoples who carried on extensive trade along the Kerala coast.

In a sense, "the history of Europe is the history of the Malabar Pepper Trade and the town of Cochin has played a significant part in it."<sup>2</sup>

Among the ancient sea coasts of the West coast, Musiris alone has been unanimously identified as the modern Cranganore. There is no unanimity of opinion among historians regarding the identity of other ports mentioned by foreign chroniclers like Pliny, viz. Tyndis, Barace, and Nelcynda. Following upon the successful establishment of regular coastal traffic from Aden, the rapid growth of Roman trade with Musiris in the first, second and third centuries A.D. led to the introduction of a direct route from Aden to Musiris.

Musiris,<sup>3</sup> now known as Cranganore, lies at or near the mouth of Periyar river some eighteen miles north of what is now Cochin. The famous backwaters, at the turn of the pre-Christian era, were still in the process of formation and limitation by the gradual advancement of two strips of land, one from the north and one from the

south. These strips were formed out of soil brought down by rivers and canals discharging into the backwaters and coming into contact with material driven on-shore by the ocean ground swell. This swell usually succeeds the rainy and windy period of the monsoon.

The two natural forces then slowly built a natural sandy break water to the lagoon system of backwater and at a varying distance west of the main land - as much as three miles or more in the Cochin area. Not only so, but from time immemorial, a particular feature of the littoral had played a great part in the commerce of south-west India with Europe. The effluent from the Periyar river and all other minor streams south of it contains a high suspension of laterite soil, a brick-like material, which yields a semi-liquid mud which is carried out to sea and along the coast line according to the resultant direction of tidal flow, littoral drifts, and wind forces. The mud banks do not always remain in the same place. Sometimes they will move along the coast line in one direction or another; sometimes they are driven inshore and thereby block up the landing jetties.<sup>4</sup>

Among the ports which came into prominence during the beginning of recent history were Quilon, Calicut and Cochin. Cochin was the last among these three and



it came first into commercial importance.

The European adventurers from the west came in quest of many precious products that were peculiar to Kerala and which were in great demand in most of the civilized centres of the world. Chief among them were, spices of numerous varieties such as cinnamon, cardamom, cloves, turmeric, nutmegs and pepper.

The Great Cochin Flood of 1341 A.D.<sup>5</sup> which broke through the shallow bar to the sea was the first watershed in the history of the Cochin harbour for, following this act of nature, Cranganore, then known as "Muziris", which was once the "chief emporium of India" began to silt up rapidly and the shipping activity drifted naturally to "Kochashi" or Cochin that is "The new or small harbour". The heavy floods in Periyar silted up the mouth of Cranganore harbour and the surging waters forced a channel passed the present Fort Cochin into sea.

Simultaneous with this tragedy perpetrated by Nature and in order to compensate for it, Nature again played one of its pranks by bursting through a narrow spot at the southern extremity of the sea board, near the place where the town of Cochin later arose, and thus created a gap of entrance from the sea in the west to the

backwater in the east and vice-versa.

The action of the tidal waves from the West and the onrush of torrential waters from the backwater in to the sea widened and deepened the newly formed gap. Soon country boats of moderate size used for fishing purposes and later seagoing vessels engaged in coastal traffic began to enter and leave the sheltered waters of the northernmost portion of the Vembanad lake. This portion thus became a harbour.

The new gap came to be popularly called Kochashi (small group of water). It was so called probably in contrast to the bigger gap (Valia ashi) that had existed at Cranganore. The place came to be known by the name Cochi (later Europeanised into Cochin). Thus did the harbour of Cochin, one of the finest natural harbours of the world and its port of Cochin destined to be one of the greatest sea ports of the east, arise on the ruins of the age-long famous sea port of Musiris.

With the disruption of Musiris harbour and the extinction of trade in that sea port, the trade which was going on there began to shift to the shores of the Cochin harbour.

At the time of the visit of Ma Huan in 1509,

and Nicolo Conti in 1440, Cochin had become a flourishing centre of trade in pepper and spices. The Chinese and the Arabs carried on a brisk trade at this port.<sup>6</sup> With the coming of the Portuguese towards the end of the 15th century, Cochin came into greater prominence and very soon it became the cockpit of conflict, initially between the Indian ships under the Zamorin and the Portuguese navy which had its headquarters at Cochin and later, between the Portuguese and other western nations fighting for trade and colonial monopoly interests in the country.

The series of naval engagements between the Zamorin's navy and the Portuguese navy continued right through the sixteenth century and into the next century by which time other western powers entered the arena and the conflict became a free for all in the thirst of the foreigners to establish trading and colonial rights.

#### Cochin under the Portuguese:

On Christmas eve in 1500, Cochin witnessed an unusual sight of a fleet of twelve strange looking ships anchoring safely in one of the finest harbours. In the ships were Portuguese sailors under Cabral who was sent by the King of Portugal to follow up the discoveries which Vasco de Gama had made two years before in 1498<sup>7</sup>.

The Portuguese came in search of trade. A boat was lowered and Friar Miguel, a former native of Cochin who was taken to Portugal by Gama and was admitted into the religious order of the Catholic faith, <sup>landed in Cochin.</sup> The ruler of Cochin invited Cabral to land and after exchange of gifts and within twenty days the ships sailed loaded with pepper and other precious cargo. This was the first merchandise to leave the shore of Cochin round the Cape to supply the needs of Europe. On his way to Europe, Cabral discovered Brazil and brought from there, seeds of many tropical fruits of South America like Custard apple, guava, the pine, papaya and cashew apple which some years ago bore the name of the feringhe or ship mango.

A few months after Cabral had sailed four ships arrived under the command of Juan de Nova Castilla. The next adventurer was no less a person than Vasco de Gama himself. He was sent under the express order of King Manuel of Portugal to punish the Zamorin of Calicut for his treachery and insolence. Gama performed the task with the utmost fidelity. Gama's first interview with the Rajah of Cochin was not successful as the Ruler promised only to consider his request to allow the Portuguese to construct stone houses and to fix a certain price for pepper. Gama left the presence of Rajah in anger. The

Cochin ruler in order to appease Gama's wrath followed him to his ship, acceded to all his demands in writing. Gama then presented him with a regal crown from Portugal and in return the Rajah gave Gama gold bracelets and valuable medicines.

The first European building in India was erected near Cochin in 1504. The Portuguese Admiral Almeida settled down in Cochin. Towards the end of 1524 Cochin was again visited by Vasco de Gama with Royal favours and this time he came to die.

The sudden and easy acquisition of wealth and power degenerated the Portuguese and consequently they began to indulge in vice and corruption. The Portuguese hastened their downfall when they began to interfere with the succession to the Cochin Throne. The Princess of Cochin sought the help of the Dutch; one of them sailed to Calombo to invite the Dutch to Cochin for driving away the Portuguese.

#### Cochin under the Dutch

The Dutch who were only waiting for an opportunity to get a footing in Cochin, appeared in the town in 1662 under the command of Van Goens by way of Vypeen. The Bishop's House was turned into Dutch Head-

quarters. A fort was constructed which was called Fort William. Leaving 800 men in the fort Van Goens with the rest of the army stormed Cochin from the south side. The palace of the Rance was attacked and she was taken prisoner by Henry Advian Van Rheede. In 1795, The British took over from the Dutch and the British dominion continued till India achieved her independence. The imprint of the colonisation and trading activities of these foreign nations are still vividly seen in Fort Cochin.<sup>8</sup>

Right through the incessant conflict for trade monopoly and sea power, the trade of the Malabar coast continued to flourish daily. The Zamorins of Calicut and Rajahs of Travancore and Cochin gave all encouragement to trade.

By the end of the 18th century all the Kerala ports were enjoying a boom and among them Cochin stood foremost as an International Port.

However, because of the rock-like sand bar at the mouth of the backwater outlet into the sea, Cochin used to be more or less a roadstead. This bar prevented entry into the harbour for steamers. Even big sailing vessels used to lie at anchor in the open sea, while country crafts swarming all over the extensive system of

backwaters to the North and South of the port brought merchandise to these bottoms from the hinterland and took in the imports from the foreign lands that traded so massively with this port.

The first steamship "Semiramis" an Indian Government paddle steamer, called at Cochin in April 1938. In December 1945, the first commercial steamer "Victoria" of the Bombay Steam Navigation Company arrived at Cochin. But these were exceptions and the trade continued to be confined to sailing vessels.<sup>9</sup>

The problem of opening up the bar to provide a navigable channel into the backwater shelter, for ocean-going ships cropped up in the beginning of the 19th century itself. The first chart for it was made as early as 1835. And, for more than eight decades it stayed put on a paper, as reports succeeded reports and years went by with the port none the better for all the wealth of words, including controversies. At long last in 1921, Lord Willingdon, the Governor of Madras ordered work on the programme which had all along remained academic and illusory at best.

### Location and Hinterland:

Cochin's location is the most ideal when compared to other ports of India, including Bombay. It is on the direct route between the main shipping highway from the West to Far East and Australia. In addition, it has natural advantages which provide ready-made attributes for fashioning it in to one of the finest natural harbours in the world. The narrow inlet from the sea broadens out in endless stretches of backwaters capable of providing absolute all-weather shelter to any number of ships.

Further, Cochin has the natural advantage of a vast system of inland water ways radiating from it to provide the port with a cheap and unfailing system of natural means of transport.

Added to this, Cochin is the centre of rail and road transport which branch off the North and South and help open up its rich hinterland to the port. There is the air terminal too and all these are situated in small proximity in one small area, the Willington Island, in the most unique manner possible.

Its hinterland is rich in spices, cashew, tea, coffee, coir and coir products and other cash crops with export potential to which have been added new items of



exports like seafoods etc. on account of the presence of the port. The potentialities of the port are immense on account of the great natural advantages possessed by it.

Pre-war Development:

The modern Cochin Port started developing from 1920 to 1940 in four stages. The first stage was the preliminary investigation work, after which the implementation of work started with the appointment of Mr. Robert Bristow, a young engineer of the British Admiralty, as the Harbour Chief Engineer. A more fortunate development could not have befallen Cochin. For, Bristow was a man of rare vision and indomitable courage and dedication to duty and under his active guidance the port, as we know it today, began to take shape.

The second stage consisted of foreshore protection work, part of reclamation work and experimental dredging inside and outside. In May 1926, the Section Cutter Dredger "Lord Willington" was commissioned and this vessel with its pipelines, made global history in harbour dredging by cutting the rock-like sand bar on the sea bed and making a channel under sea, 450 feet wide and three and a half miles in length. This operation carried out against powerful elemental forces was an epic fight in which the

spirit of Bristow came out victorious. Within a record time this stupendous task was accomplished and the deep shipping lane into the sheltered harbour became a reality on the 30th March 1928, when the major leg of the work was completed. And by 1929 the approach channel from the deep sea in to harbour was fully ready.

The third stage consisted mainly of the major dredging operations inside and outside, the reclamation of a large land area and a dock. The 900 acres of reclaimed island was named Willingdon Island and this became the nerve centre of the port.

In April 1928, the steamer, "Padma" entered the channel and by August 1928 "Corxteth Hall", the first ocean-going steamer, called at the inner harbour. In 1930-1931, the port was formally thrown open for vessels of upto 30 feet draught.<sup>10</sup>

Modern wharf facilities were planned and built up on Willingdon Island on a phased scheme during the fourth stage. These included the provision of bridges, wharf, quay, berths, cranes, warehouses and transit sheds, offices, a reserve light and power plant, roads, residences, port railway, water supply and ancillary works.

Cochin was declared a major port in 1935 and with the provision of modern facilities the first ocean-going ship "Braunfels" came alongside the new wharf on Mattancherry on June 2, 1939. The harbour administration was set up by Government of India and Sir Robert Bristow, the man whose courage and vision brought into being this major port, was appointed the first administrative officer in 1940. Rightly, he is known as the 'father of the Cochin Port', being its architect and builder too.<sup>11</sup>

#### Development During the Post Independence Era<sup>12</sup>

Under the Five Year Plans, the Port acquired more facilities. These include the South Coal Berth, made ready in August 1953, the North Tanker Jetty, in December 1955, the South Tanker Jetty in February 1956 and the North Coal Berth in November 1959, during the first and second Five Year Plans.

The expansion during the Third Plan consisted of the construction of four additional wharf berths at Ernakulam and their inauguration in May 1964. Along with this, ancillary facilities like cranes, railway lines, transit sheds, warehouses and handling equipments were also provided.

The modern port at Millington Island then provided facility of deep draft (32<sup>m</sup>) wharf berths at Mattancherry, the 12 stream berths in Mattancherry channel, the Boat Train Pier with storage tanks and pipelines to handle liquid and special cargo. The port was equipped with modern facilities of electric wharf cranes, warehouses and transit sheds and transportation network of railway lines.

Thus the Mattancherry and Ernakulam channels in the backwaters behind the Cochin port form the main port area. An approach channel 18,000 ft. long and 450 ft. wide is maintained to a depth of 32 ft. below low water.<sup>13</sup>

Fourth Five Year Plan: The North Tanker Jetty was remodelled with pipelines for the import of crude in tankers for the Cochin Refineries Ltd. at an estimated cost of Rs.5.5 lakhs and was commissioned in 1966. Works relating to the construction of the Open Berth at an estimated cost of Rs.58.68 lakhs in Ernakulam channel was in progress in the same period. The construction of a Super Tanker Berth is also under consideration of the Port Authorities.

Both in the Fifth and Sixth Plans, enough importance was given to the development of Cochin Port. In the Sixth Plan a total outlay of Rs.3,128.13 lakhs<sup>14</sup>

was approved by the Ministry. The Plans include:

- (1) Hopper Grab Dredger 'Bolghatty',
- (2) Hopper Suction Dredger to replace 'Lord Willingdon',
- (3) Providing facilities for handling container traffic at Quay,
- (4) Improvements to workshop and workshop machinery,
- (5) Construction of workshop jetty, and
- (6) Reclamation at the South of Willingdon Island.

The New Schemes in the Sixth Plan include:

- (1) High Power tug to replace S.T. 'Ernakulam'
- (2) Acquisition of a dredger in replacement of B.D. 'Lady Willingdon'
- (3) Extension to Mattancherry Wharf,
- (4) Improvement to B.T.P. Jetty,
- (5) Housing for Port Staff,
- (6) Purchase of 2Nos. top lift trucks with spreaders,
- (7) Acquisition of container handling equipments.

With the implementation of all these schemes, Cochin Port will develop faster than any other port in India.

**v**

**GENESIS OF TRADE FROM COCHIN**

No part of India is so widely known as Kerala. The fame of Kerala pepper brought the Romans to its ports in A.D.30. In the middle ages Kerala was the entrepot of the trade between the East and the West. With the coming of the Portuguese Captains, Vasco de Gama, to Kozhikode in 1498 began a struggle for Kerala pepper among the nations of Europe.

Historians are generally agreed that as far back as the third millenium B.C. there were numerous ports on the Kerala coast. In to these ancient ports, some large and some small, there flocked, from far and near, merchants and ships. They included the phoenicians, the earliest mariners known to history, the Hebrews from the days of Kings David and Solomon and perhaps of even of Moses, who built the famous "Tabernaacle" about the year 1500 B.C., followed by the Arabs from the shores of the Persian Gulf, Egyptians during the times of Ptolemies, Syrians and Chaldeans and Armenians from the West and Central Asia and the Greeks and Romans, besides the Chinese from the Far East.<sup>1</sup> These people came by trade route to India over land and sea, making voyages, lasting several months each

time, and facing the inconveniences of journey and dangers from robbers and pirates.

These brave adventurers came in quest of many precious products that were peculiar to Kerala and which were in great demand in most of the civilized centres of the world. Chief among them were, spices of numerous varieties such as cinnamon, cardamom, cloves, turmeric, nutmegs, aromatic oils, frankincense, myrrh, flower juices, ginger, pepper (in large quantities), spikenard, besides woods like cedar and sandalwood, ebony and teak wood, ivory, silver and gold. In addition to these internal products there were other articles, brought from places outside Kerala for export to Western countries, especially the great centres of The Roman Empire. These included muslins, costly silks, pearls, precious stones etc.

From among the sea ports of Kerala, there arose one that became the largest and most famous in the early centuries of the pre-Christian era. This sea port was Cranganore situated at the mouth of the Periyar, which discharged its waters into the Arabian sea at Cranganore. There was then formed a natural harbour, due to which Cranganore became a great sea port. To the outside world, the sea port of Cranganore was known by the name Musiris.



Among the ports of Kerala Muziris had undoubtedly the place of pride. Travellers from foreign countries, like Pliny, Ptolemy etc. have written about it in glowing terms, as a vast emporium of trade and as one of the greatest sea ports of the East.<sup>2</sup>

Ma Huan who visited Cochin in 1409 gives an account of Cochin, in which he says that "the merchants of Cochin carry on their business as peddlars do in China". "The soil is unproductive; pepper, however, grows on the hills and is extensively cultivated."<sup>3</sup>

"All the trading transactions are carried on by the chillis; who buy the pepper from the farmers when it is ripe, and sell it to foreign ships that pass by. They also buy and collect precious stones and other costly wares. Coral is sold by the catti; inferior pieces of coral are cut into beads and polished by skilled workmen; these are also sold by weight. The coinage of the country is a gold piece, called fanam. There are no asses or geese in this country, and there is neither wheat nor barley; rice, maize, hemp, and millet abound. Articles of tribute are sent to China by our ships on their return voyage".<sup>4</sup>

The Italian traveller Nicolo Conti (1440) was the next to mention Cochin. To him "China was a good

place to make money in and Cochin to spend it at".<sup>5</sup>

The Portuguese came in search of trade in 1500 A.D. As already stated, the ruler of Cochin invited the Portuguese adventurers under the leadership of Cabral to land after exchange of gifts and, within twenty days the ships sailed loaded with pepper and other precious cargo. This was the first merchandise to leave the shore of Cochin round the cape to supply the needs of Europe.

#### Commercial Rivalry:

When the Portuguese came to India in search of Kerala's spices, some European countries came to know about Kerala and its precious spices. In that age of adventure, pepper ranked with precious stones and "men risked the perils of the deep and fought and died for pepper".<sup>6</sup> Among them were the traders of Venice and Genoa, no less than the financiers of Amsterdam.

#### A Century of Naval Battles:

The 16th century was a 100 years of naval war fought between India and Portugal following Vasco de Gama's visit to Calicut. This war was principally a war for the freedom of the seas and free trade. From 1498

to 1630, the Malabar coast witnessed a series of naval actions fought mainly off Cochin Harbour in which our seamen fought valiantly for the freedom of the seas and free trade till the Portuguese lost their maritime prestige and monopoly in the East-West trade.

In 1663 Cochin passed from the Portuguese to the Dutch and in 1795 British took it over from the Dutch. Under the efficient administration of the Dutch and the encouragement given by the Zamorin and the Rajah of Travancore, the trade of Kerala grew by leaps and bounds. Kerala's export products grew especially due to the fillip given by the Dutch to grow coconuts, indigo and to the salt-farming industry. The ports all over the Kerala coast witnessed signs of prosperity and "Cochin especially was until the end of the 18th century a very important port with its harbour filled with ships, streets crowded with merchants and warehouses filled with goods from every part of Asia and Europe indicating the industry, the commerce and wealth of the people".<sup>7</sup> It is not quite the aesthetic beauty that attracted the seafaring nations of Arabia, Portugal, Holland and Britain but this rich and graceful natural harbour in Asia through which they could feed their Empires as well as trade and revel in oriental luxuries.

With its strategic location on the South-West coast of India and a commanding position on the cross roads of the East-West ocean trade, the port is at present the natural gateway for the vast potential of industrial complex and the growing produce markets of South West India.

#### Trade Pattern of the the Port:

The industrial complex that is gradually taking shape along with the extensive produce markets that are developing in this area are firm indications of this undeniable fact of rising tempo of trade that passes through this port. Cochin is well known as the centre of flourishing coastal as well as foreign trade, earning valuable foreign exchange for the country.

#### Composition of Trade:

The exports of the region include many items which are marketed at competitive rates in the hard currency areas such as coir produce, cashew kernels, tea rubber, coconuts, coconut oil, copra, pepper, cashew shell liquid, prawns, cement, cardamom, ginger, lemongrass oil, turmeric and other marine products. The major items of imports include coal, food grain, oil, cashew nuts, fertilisers, machinery and hardware.

After the implementation of the harbour development schemes the trade of Cochin began to expand. The total volume of cargo handled at Cochin was only 3.17 lakhs tonnes in 1920 when Sir Robert Bristow arrived. The trade rose to 1.26 million tonnes in 1930 after the second stage work was over and to 2.14 million tonnes in 1936 when Cochin was declared a major port. The volume of trade handled during 1980-81 was of the order of 52.66 million tonnes.

#### Industrial Growth in the Hinterland:

A number of important industrial complexes have taken place near Cochin area. The major schemes include the Cochin Shipyard, the Cochin Refineries Ltd., the Thermal Power Station, the F.A.C.T., the Travancore Cochin Chemicals and the Indian Aluminium Company at Alwaye.

The commercial importance of Kerala and its natural harbour of Cochin will be a great asset to the industrial development of Kerala. The construction of the Super Tanker berth at Cochin will lead to the tremendous increase of oil imports into the port. Most of the factories now working in this area which depend heavily on imported goods will get flourished if the facilities will be increased considerably.

Formerly, the Cochin port was mainly an export-oriented one. Now it has become an import-oriented one owing to the huge import of oil and other crude oil products. Even though there is a tendency for decline in the traditional items of exports, some new items of export, especially marine products gives enough scope for well-flourishing export goods industries.

**VI**

**KERALA ECONOMY: A REVIEW**

Since a major portion of the commodities exported from Cochin Port is growing in Kerala, it is profitable to have some understanding of Kerala's economy.

Kerala is a small State, situated in the south-west corner of India, having an area of 38,864 sq. Km. which represents only 1.03% of the total land area of the country. But it supports a population of about 3.9% of the total population of the country and this disproportionality between its area and population is reflected in the density - which in 1971 was 549 persons to the square kilometre. This is the highest density among the states of the union.

### Physiocracy:

Kerala may be divided into three geographical regions:

- (1) Highlands, which slopes down from the Western Ghats, where the major plantations like tea, coffee, rubber, cardamom and other spices are grown;



- (2) The Midlands, lying between the mountains and the low lands is made up of undulating hills and villages, where intensive cultivation of coconuts, arecanuts, tapioca, bananas, rice, ginger, pepper, sugar-cane and vegetable of different varieties is carried on;
- (3) The Low lands or the coastal area, which is made up of the river deltas, backwaters and the shore of the Arabian Sea is essentially a land of coconuts and rice. Fisheries and coir industry constitute the major industries of this area.

#### Rivers and Backwaters

Kerala is the land of rivers and backwaters. More than fifty rivers cut across with their innumerable tributaries and branches. The backwaters form a specially attractive and economically valuable feature of Kerala. They include lakes and ocean inlets which stretch irregularly along the coast. The biggest backwater is the Vembanad lake, which opens out into the Arabian sea at Cochin Port. The deltas of the rivers interlink the backwaters and provide excellent water communication in the low lands of Kerala.

**Agriculture:**

Owing to historical and climatic reasons, the state has developed commercial crops more than food crops.

Kerala accounts for 90% of India's rubber, 60% of cardamom, 70% of coconut, 60% of arecanut, 70% of pepper, 80% of tapioca and almost 100% of lemongrass oil. Kerala produces a lot of other crops like bananas, ginger, turmeric and cashew nuts, besides tea and coffee in abundance. Plantation crops registered the lay out increase of about 15 points during the year 1977-78. The prices of most plantation crops like pepper rose.<sup>1</sup>

**Fisheries:**

With about 7% of the continental shelf of the country, Kerala is the leading maritime state of the Union, accounting for over 35% of the marine fish production and 58% of the foreign exchange earnings of the country from marine products. The aggregate fish production of the state moved up from 3.55 lakh tonnes in 1976-77 to 3.69 lakh tonnes during 1977-78. The export earnings during the period was 77.45 crores.<sup>2</sup>

**Forests:**

Forests extending over 9.40 lakhs hectares constituted 24% of the geographical area of the state in 1970. The currently exploitable forest area is estimated to be 76.6% as against 63.5% for all India. The contribution of forests to the state exchequer was Rs.31.86 crores in 1977-78.

**Plantation Crops:**

The chief plantation crops of Kerala are tea, coffee, rubber and cardamom. They together account for about 12% of the total cropped area and 7% of the gross value of the agricultural produce of the state.

**Rubber:-** The area under rubber in India at the end of 1978-79 was 250,000 ha. out of which 91% was accounted for by the Kerala State. The number of rubber units (estates) at the end of 1978-79 was 156,000. Rubber plantation industry recorded commendable progress in the post-independence era. Production of natural rubber increased from 15,000 tonnes in 1947-48 to 148,500 tonnes in 1979-80, recording a ten-fold increase. As a result, India became the fourth largest natural rubber producer and 7th largest consumer of natural rubber in the world.

**Cardamom:-** Cardamom cultivation in India is concentrated in the southern states of Kerala, Karnataka and Tamil Nadu. Among these, Kerala accounts for the major share. The estimated area under cardamom in India is 91476 ha. out of which 55188 ha. (60%) is in Kerala. The production of cardamom during 1979-80 was 4,500 tonnes as against 4000 tonnes in the previous year.<sup>3</sup>

**Tea :-** Kerala accounts for about 10% of the area under tea. Contrary to the upward trend of increasing area at the national level, the crop area in Kerala has been revealing a declining trend. During 1974-76 the area under the crop declined from 36,907 ha. to 36,327 ha. in Kerala. The area under this crop was 36,150 ha. in 1977-78. Tea production of the state recorded a steady increase from 43,215 tonnes in 1975 to 57,663 tonnes in 1977 and again to 58,225 tonnes in 1979.<sup>4</sup>

**Coffee:-** Coffee cultivation in India is mainly confined to three southern states, viz., Kerala, Karnataka and Tamil Nadu. Karnataka accounts for 54.4%, Kerala 26.9% and Tamil Nadu 17.1%. The total area under coffee in India, according to the Coffee Board is 1.92 lakh hectares.

Coffee plantations registered an all-time high production of 1.48 lakh tonnes at the national level

during 1979-80. The production in that year in Kerala was 36,475 tonnes against 22,975 tonnes during the previous year. The total area under this crop during this period was 51,708 hectares.<sup>5</sup>

Minerals:- The state's mineral wealth consists mainly of beach minerals like ilmenite, rutile, monazite, zircon and sillimanite as also clays, quartz, sand lime shell etc.

Power:- Though the rivers of Kerala are very small, they offer great scope for hydroelectric projects. It is estimated that about 6% of India's total hydroelectric potential is in this state. The five year plans of Kerala have involved substantial investment in the power sector.

Industry: The state has several factors favourable for rapid industrialisation. The main thrust of the state's industrial development policy during the year under review consisted in giving encouragement to the growth of new industries through a new package of assistance to large and medium scale units and a concerted effort at improving the performance of the units in the private sector. The package of assistance announced by the State government consisted of measures such as giving developed lands, state investment subsidy, contribution to the cost of preparation of feasibility, interest free sales tax loan and exemption from payment of electricity duty.

### Traditional Industries:

Among the traditional industries of Kerala, the most important are coir, handloom, cashew and handicrafts.

Handloom industry provides employment to nearly one and a half lakhs of people in the State. A survey conducted in May 1973 revealed that there were 75,057 handlooms, in the State (20,637 looms in the Co-operative sector and 54,420 looms in the private sector).

Cashew Industry is one of the most labour absorbing industries of the State giving employment to about 1,25 lakh people. 90% of the workers are women. There are 258 cashew factories in the State. The formation of 'Cashew Corporation of India' and 'Kerala Cashew Development Corporation' helped to lessen the constant labour troubles.

Coir industry is one of the oldest cottage industries of Kerala. British businessmen who came to Kerala converted it into a thriving export industry. Kerala for long has held a monopoly of coir products in the international market. The mechanisation of coir industry in Europe made it difficult for Kerala coir products to compete in the export market. The mechanised goods were much better finished and cost less.<sup>6</sup>

**Communications:**

**Roads:-** Total length of roads in the State increased from 85,873 Kms. in 1978 to 90,440 Kms. in 1980.

**Inland Waterways:-** The total length of navigable waterways in the State is about 1,900 Kms.

**Railways:-** Kerala has at present 773.6Kms. of broad guage lines and 112.71 Kms. metre guage lines.

**Air Transport:-** Air transport is operated at present from two air ports at Trivandrum and Cochin.

**Ports:-** Ports in Kerala have an important role in Kerala's transport system. In addition to the major port at Cochin, Kerala has three intermediate ports at Alleppey, Neendakara and Calicut and ten minor ports.

**Tourism:-** Kerala offers a variety of tourist attractions like beach resorts, hill stations, monuments, wild-life sanctuaries and pilgrim centres.

The above given things will give some idea about the Kerala's economic conditions on which the exports and imports of Cochin port is highly dependent. The strategic role of Cochin port in the international trade may be analysed later on.

**VII**

**MAJOR COMMODITIES OF EXPORTS**

**FROM**

**COCHIN PORT:**



- (i) Cashew Kernels
- (ii) Marine Products
- (iii) Coir
- (iv) Pepper
- (v) Tea
- (vi) Coffee
- (vii) Cardamom
- (viii) Lemongrass Oil
- (ix) Turmeric
- (x) Ginger

## CASHEW KERNELS

Exports of Cashew Kernels in bulk from Cochin Port started in 1923. Then India had a monopoly in Cashew kernel exports. India's share in the world market was as high as 90%. But a particular point to be noted here is that India produced only a minor percentage of the total kernels that were exported. We were importing raw cashew from foreign countries especially, the East African countries and these imported cashew were processed and reexported to the U.S.A., Canada, the U.K., East Germany, Japan, Holland, Australia and the U.S.S.R. Hence our export of cashew kernels largely depends on our cashew imports.

Data regarding the exports of cashew kernels from Cochin port are available from 1935 onwards, and this data, for analytical purpose, is divided into two phases and presented in Tables 2 and 3. Table-2 gives the figures for both value and volume of cashew kernel exports from Cochin port to foreign countries during 1935 - 1950.

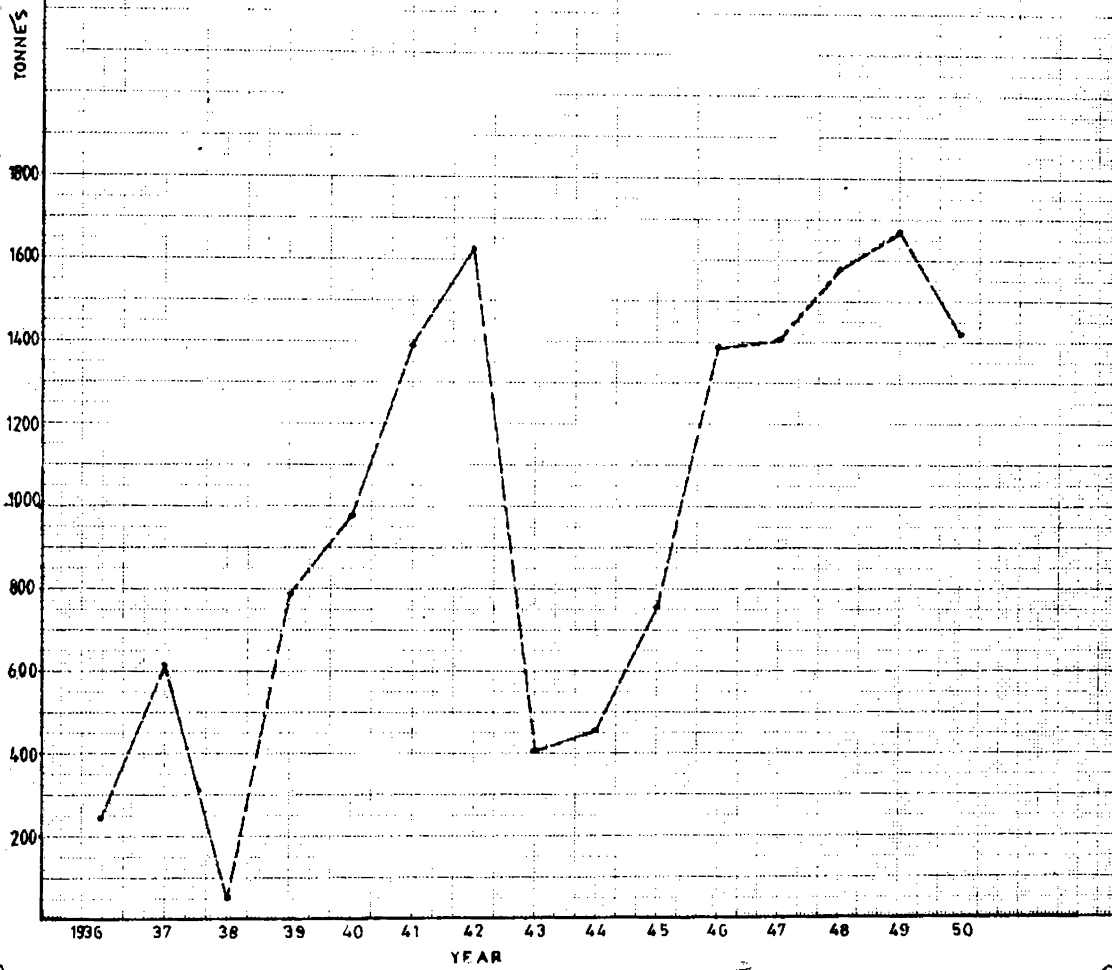
TABLE - 2CASHEW KERNEL EXPORTS FROM COCHIN PORT DURING1935 - 1950

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1934-1935	2,745	35
1936	2,496	47
1937	6,141	70
1938	507	4.5
1939	7,862	72
1940	9,776	97
1941	13,919	140
1942	16,223	181
1943	4,074	60
1944	4,575	136
1945	7,587	332
1946	1,346	628
1947	14,097	473
1948	15,735	399
1949	16,762	646
1950	14,183	425

Source: Cochin Chamber of Commerce & Industry (C.C.C.I.)

Fig No 1

EXPORT OF CASHEW KERNELS DURING 1936-50  
scale: 1cm=100 Tonnes



From Table-2 we can see that export of cashew kernels from this Port were subjected to wild fluctuations.

In the year 1934-35, the total cashew kernel exports amounted to 2,745 tonnes and the value realised accounted to Rs.35 lakhs. The quantum of exports went up and reached the maximum in 1949. The volume exported in that year amounted to 16,762 tonnes and the value realised accounted to Rs.646 lakhs. In between these, there were wide fluctuations both in the quantity and value. The quantity varied from 507 tonnes in 1938 to 16,223 tonnes in 1942 and the value realised fluctuated in between Rs.4.5 lakhs and Rs.628 lakhs in 1938 and 1946 respectively. These fluctuations in cashew kernel exports from Cochin port during 1935 - 1950 can be seen from Fig.No.1.

Besides cashew kernels, we export cashew shell liquid also. India started large scale exporting of cashew shell liquid from 1951 onwards. Though cashew shell liquid is not an important item of export as far as value earnings are concerned, the fluctuations which take place in the exports of the same will be of very much economic significance.

In 1951, the total export of cashew shell liquid amounted to 3,625 tonnes. It increased to 5,294

EXPORTS OF CASHEW SHELL LIQUID  
DURING 1951-80  
scale: 1cm = 400 Tonnes

TONNES

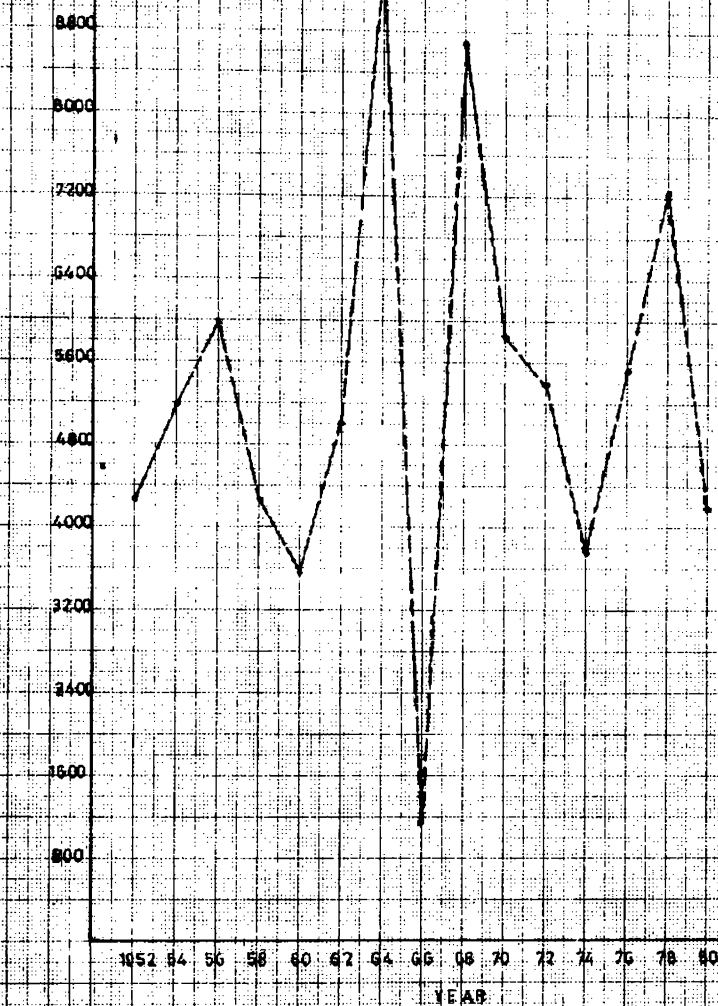


Fig No 2

tonnes in 1955. The next six years showed only less exports compared to 1955. In 1962 the cashew kernel exports reached 5,358 tonnes. The increasing trend of exports continued without any major fluctuations upto 1966. Compared to 1966, the next eleven years showed only less exports. In 1978, the quantum exported from Cochin reached 11,303 tonnes and in 1980 a very low export is recorded with 2,300 tonnes at a value of Rs.1.25 crores. The major trends in cashew shell liquid exports during 1951 - 1980 is depicted in Fig.No.2.

#### Cashew Kernel Exports During 1951 - 1980:

Cashew kernel exports in 1951 amounted to 21,675 tonnes with a value of Rs.750 lakhs. The quantity exported decreased to 19,938 tonnes in 1952, but owing to the price increase, the total value increased to Rs.865 lakhs. Even though the exports increased to 23,607 tonnes in 1953 at a value of Rs.1,057 lakhs, in the next year both value and volume of exports decreased.

Compared to the last four and following three years, 1955 was the best year of exports. In the same year, a total of 29,393 tonnes of cashew kernels were exported to abroad. Though the quantum exported was very high, the total value earned did not show any increase.

**TABLE - 3**  
**CASHEW KERNEL EXPORTS DURING 1951 - 1980**

Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1950-51	21,675	750
1952	19,938	865
1953	23,607	1,057
1954	21,185	810
1955	29,393	941
1956	25,933	1,091
1957	22,441	1,045
1958	27,821	1,103
1959	31,453	1,232
1960	35,558	1,541
1961	29,887	1,450
1962	36,394	1,515
1963	N.A.	N.A.
1964	41,802	1,845
1965	49,352	2,705
1966	45,189	N.A.
1967	45,485	4,014
1968	49,341	4,364
1969	56,865	5,365
1970	52,858	5,094
1971	46,251	4,738
1972	63,005	6,407
1973	57,345	6,104
1974	54,728	8,944
1975	56,797	10,580
1976	55,804	10,180
1977	45,002	11,626
1978	28,310	10,586
1979	30,438	8,806
1980	31,293	10,277

Source: C.C.C.I.



It was only Rs.941 lakhs. Both 1959 and 1960 were good years for cashew exports and the figure reached 36,394 tonnes at a value of Rs.1,515 lakhs in 1962. Table-3 shows the cashew kernel exports during 1951-1980.

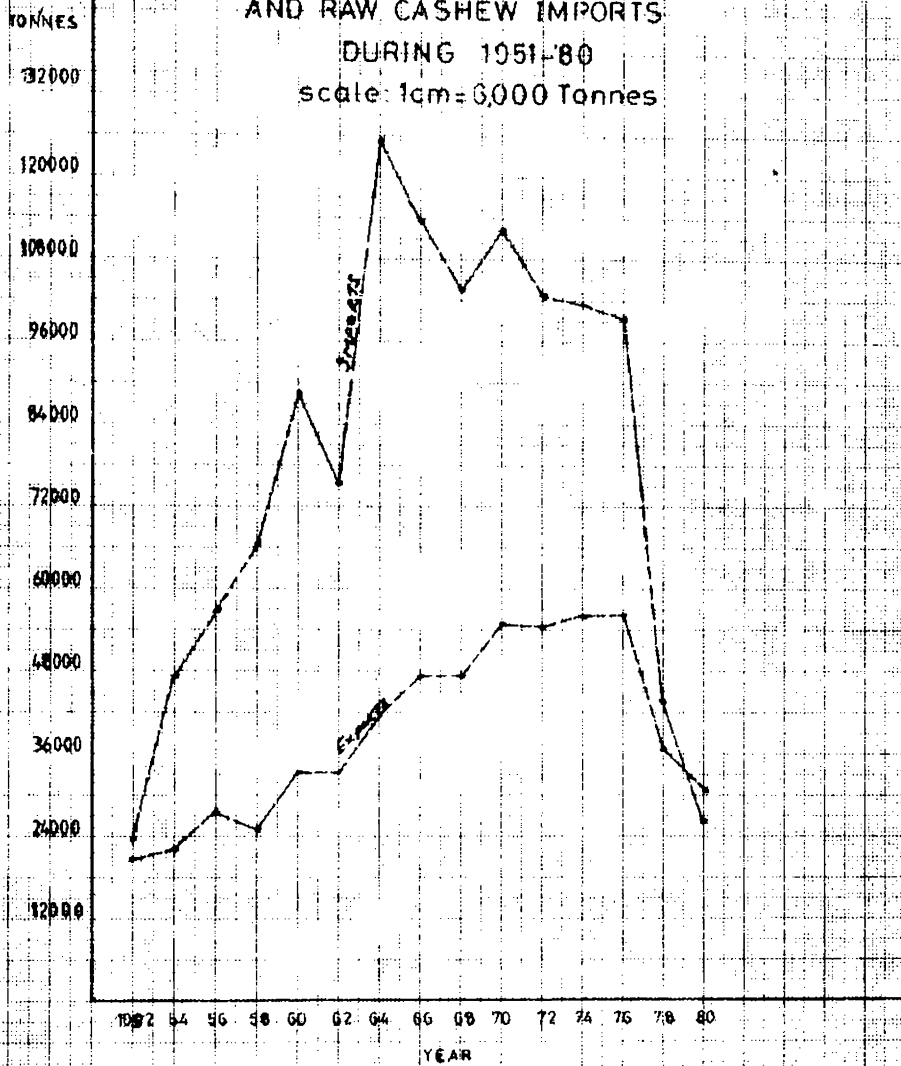
Then followed a tendency for cashew kernel exports to increase. The total volume of cashew exported in 1965 and 1972 amounted to 49,352 tonnes and 63,005 tonnes respectively. The corresponding values earned were Rs.2,705 lakhs and Rs.6,407 lakhs. The year 1972 recorded the highest figure in the cashew exports history of Cochin port. Though the quantity exported declined in the latter years, the total value earned showed increasing trend. This was due to the price increases of our cashew products.

If we analyse the data, both for exports and of cashew kernels from and imports of raw cashew into Cochin we can see a close dependency of the two. The figures show that whenever there is an increase in raw cashew imports, our exports also will increase, and vice versa.

Both the trends in raw cashew imports and cashew kernel exports during 1951 - 1980 can be seen from Fig. No.3.

CASHEW KERNEL EXPORTS  
AND RAW CASHEW IMPORTS  
DURING 1951-80  
scale: 1cm = 6,000 Tonnes

Fig No 3



In 1957, the import of raw cashew was only 49,382 tonnes, which increased to 143,217 tonnes in 1964. Though this high level of imports could not be maintained equally well in the next few years, there occurred a sudden decline and imports fell to 75,270 tonnes in 1971. The variations in the supply of raw cashew from East Africa had its own effect on the exports of cashew kernels from Cochin port. Fig.No.3 which indicates cashew kernel exports and raw cashew imports reveals the influence of imports on our exports.

After 1972, there was a gradual decline in our exports. The import of raw cashew from abroad in 1972 was 130,502 tonnes valued at Rs.21.49crores and the corresponding cashew kernel export was 63,006 tonnes. 1973 and 1974 recorded low imports and these low imports is also reflected in our low exports. When the imports declined by 35,914 tonnes in 1973, the exports also decreased by 5,660 tonnes. When imports declined to 69,114 tonnes in 1977, the exports also showed a decline to 45,002 tonnes. The decline in imports of raw cashew after 1975 was also reflected in our exports. The exports also recorded sharp decline during the same year. This indicates the strong relationship between imports and exports. In other words, raw cashew imports is the

determining factor of our exports in the recent years, and the only solution to this situation is to increase our domestic production on a larger scale.

#### The Causes for Fluctuations in Cashew Kernel Exports:

The cashew industry occupies an important place in the trading pattern of India. India had been enjoying the monopoly in the cashew kernel exports in the world market. The entry of China and other countries posed a serious threat to our industry. In 1968, out of 299,000 tonnes of world cashew production, India accounted for only 71,000 tonnes. The remaining raw cashew needed for processing is imported from abroad and after processing here we reexport it to our main customers such as the U.S.A., the U.S.S.R. and so on. Our main source of import is East Africa.

Being the chief customer of our cashew product, U.S.A's demand is a major factor which determines our export earnings. In the year 1953, there was a reduction in crop from Malabar area but increased imports from East African countries compensated for this reduction. In 1953-54, the cashew industry was passing through a crisis owing to the fall in the availability

of raw nuts from Mozambique and Tanganyika and the emergence of processing units in Africa.

The failure of the almond crop in the U.S.A. led to increased demand for cashew kernels and the price which stood at 39 cents per pound on February 1955 rose to 46 cents in April and the current rate was 52 cent per pound in 1955.

During 1955-56 the market for cashew kernels had been steadier than in the few previous years, basic prices remaining within the limits of 47 cents and 50 cents per pound. In October 1955, the Travancore-Cochin Government appointed a Cashew Board to handle problems relating to the cashew industry in the State. The main problems arose through the state having declared the industry a non-seasonal one, whereas the raw nuts available from indigenous sources supplemented by imports from Africa were insufficient to enable all existing factories to work throughout the year. The only satisfactory solution was to increase the supply of raw nuts by extensive cultivation of cashew in India.

During 1956-57, the inadequacy of wagon supplies for the movement of goods to and from Cochin Harbour Terminus had put traders to great inconvenience and caused some diversion of trade to Madras. There had

been a wave of labour unrest throughout India and it was probably attributable primarily to a rise in the cost of living and higher food prices in particular.

The 1963-64 State budget had some encouraging features such as the exemption of inter-corporate dividends from Super tax, removal of the Super profit Tax and so on. The introduction of 'Tax Credit Certificate Scheme' had some encouraging effects. But in 1965-66, the 22-day war with Pakistan and failure of monsoon accentuated the inflationary process. The Indo-Pak War had adversely affected our foreign trade in many ways.

The setting up of cashew factories in East Africa, on which India depends for supplies of raw nuts, poses a serious challenge to India's virtual monopoly of exports in cashew kernels. The one favourable factor which helped our exports to increase was the increasing domestic production. The steady rise in the consumption of raw nuts in the cashew processing factories in East Africa had emphasised the paramount importance of strengthening and developing the raw material sources of the industry.

Though Cochin Port has played an outstanding role in the commercial development of the south-western regions, with a vast hinterland far beyond the boundaries of Kerala State, the development of Mangalore and

Tuticorin Ports have serious effects on the exports from Cochin. Heavy increases in port charges have been imposed recently with the ostensible object of achieving a fair return on port investments. This excessive charges have resulted in cargo flight to other ports.

East Africa is emerging as a serious competitor in world markets for processed kernels. The fall in our exports is almost entirely due to the fall in import of raw cashew nuts. The starting of airways from Cochin, high incidence of port charges, lack of adequate shipping facilities, the Iran-Iraq war, the labour strikes at the port, migration of cashew industry from Kerala to neighbouring States, high labour charges etc. are some of the causes which lead to increased diversion of cashew kernel exports from Cochin.

## MARINE PRODUCTS

Marine products exports constitute a major portion of our total exports. Year after year the importance of marine products in our exports is increasing. In 1980, a total quantity of 24,801 tonnes of marine products were exported from Cochin Port. The total value earned during the same period was Rs.84.89 crores and that of 1979 amounted to Rs.97.45 crores. It accounted for 21% of the total income earned by the Cochin port from exports in the same year.

Kerala produces about 40 to 50% of India's total marine products. Frog legs, prawns and shark are some of the marine products which are exported from Cochin. About 80% of the total value of marine products comes from the exports of prawns alone. These marine products are exported in canned and frozen forms. The U.K., the U.S.A., Japan, France, Canada, Holland, Italy, Greece, Germany and some twenty other countries have trade relations with Cochin in the case of marine products. It is one of the largest exporting items of Kerala and the share of these marine products in our total exports comes to about 21%.



Our exports of marine products started at a moderate rate in 1935. At that time Ceylon was the sole customer of our marine products.

Marine Products Exports During 1935 - 1950:

Kerala produces about 50% of the total marine produce in India. In 1972, the share of Kerala in the Indian exports of marine products came to 60%. Out of the total value of Rs.44.55 lakhs which India earned from its exports, Kerala's share amounted to Rs.33.69 crores. Though the share of Kerala in the quantity exported was only 60%, the share in total income accounted to 75%.

During the period 1935 - 1950, marine product exports were subjected to wild fluctuations both in price and volume. In 1935, 13.4 tonnes of marine products were exported at a price of Rs.4,465. The price per tonne then was Rs.333. In the next year the quantity exported declined sharply. It amounted to 3.3 tonnes only and the total income earned from this export was Rs.1,090. The decline in exports continued upto 1943.

A noticeable change occurred in the marine products exports from 1944 onwards. In that year the exports increased to 81 tonnes and the value to Rs.22,477. Thereafter, the marine products exports were increasing

every year and it reached 2,008 tonnes in 1948. The total income earned from this exports was valued at Rs.41.74 lakhs.

The next two years were comparatively bad years as far as marine exports were concerned. The exports declined to 1,247 and 1,000 tonnes in 1949 and 1950 respectively. The income earned thereby was only Rs.23.69 lakhs and Rs.17.27 lakhs respectively.

#### Marine Products Exports During 1951 - 1960:

This is a period of tremendous increase in marine products exports. This period is subjected to upward trend in exports. In 1951, the volume exported amounted to 1,014 tonnes valued at Rs.19.80 lakhs. The year 1953 witnessed a three-fold increase in the volume of marine products exports in relation to the previous year. The quantity increased from 1,910 tonnes in 1952 to 5,449 tonnes in 1953. The increasing trend continued in 1954 and the total value of our marine products exports during the same year amounted to Rs.103 lakhs. The next seven years were rather bad for marine exports and the volume exported sharply declined to 2,148 tonnes in 1956 and 3,781 tonnes in 1960.

**TABLE - 4**  
**MARINE PRODUCTS EXPORTS FROM 1951 TO 1980**

Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1950-51	1,014	19.8
1952	1,910	46.75
1953	5,499	100.80
1954	6,368	102.70
1955	5,038	78.80
1956	2,148	31.02
1957	4,667	124.14
1958	6,000	149.3
1959	4,324	147.3
1960	3,781	120.6
1961	5,402	177.4
1962	6,630	246
1963	N.A.	N.A.
1964	7,878	363
1965	9,263	492
1966	10,016	N.A.
1967	12,431	1,464
1968	14,390	1,559
1969	18,769	2,109
1970	20,160	2,467
1971	22,694	2,567
1972	23,272	3,871
1973	23,805	3,957
1974	29,777	5,691
1975	26,209	4,126
1976	28,668	7,268
1977	28,237	8,128
1978	30,925	8,093
1979	29,495	9,745
1980	24,801	8,489

Source: C.C.C.I.

Table-4 shows the trend of the exports during 1951 - 1980. 1962 was exceptionally a good year of exports. In the same year, our exports amounted to 6,630 tonnes and realised a total income of Rs.245 lakhs. From thereafter, our exports earnings were increasing at a greater speed. And in 1968, the volume exported increased to 14,390 tonnes and earned an income of Rs.15.59 crores.

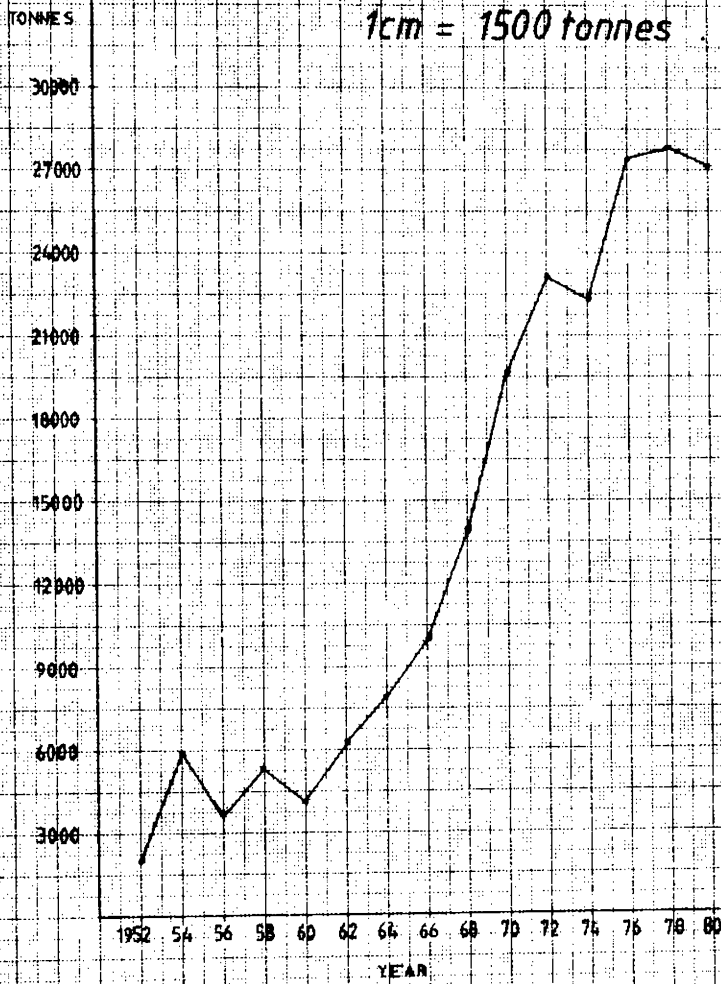
Year after year the total income earned from marine exports went on increasing. In 1973, the volume of marine products exported amounted to 23,805 tonnes, valued at Rs.39.57 crores. Except for the year 1975, both volume and income were increasing every year. It reached 30,925 tonnes in 1978 and the total value earned from exports came upto Rs.80.93 crores.

The year 1979 was the record year in terms of value realised from marine products exports. The value reached Rs.97.45 crores in the same year. The next year was not a good one as far as both value and income realised were concerned. The volume of exports in 1980 was 24,801 tonnes and the value realised was Rs.84.89 crores only. Figure No.4 clearly gives an idea about the growth of marine products exports from Cochin.

Fig No 3.

### MARINE PRODUCTS EXPORTS DURING FIVE YEAR PLANS

1cm = 1500 tonnes



Recently, Japan has become the main customer of our fish products. The increased prawns cultivation in the U.S.A. is one reason for the low demand for prawns and other marine products exported from Cochin. In future also, marine products exports will continue to be one of the major items of exports from Cochin.

The introduction of machine boats for fishing helped to increase our fish production considerably. The new techniques adopted for fishing, the increased facilities for freezing, canning etc. helped to maintain the quality of products.

The 'prawn love' of Japanese and U.S. people is a welcome sign of increasing our exports to these countries. If the increased demand from foreign countries continues, we can expect a very good future for our marine products exports.

## **COIR**

Kerala is the leading producer of coir products in India. About 95% of the coir products come from Kerala. The first coir factory was established in Alleppey in 1859 by James Dara, an Irish National. Besides coir yarn, we also export coir fibre, coir mats and mattings, rugs, carpets etc.

Coir products occupy an important place in Kerala's exports. The share of coir products in the total revenue earned by exports from Cochin Port in 1980 was about 10%.

Coir exports from Cochin started some hundred years ago in large quantities. The bulk cargo began to move from Cochin to Europe and America from very old days. Here we propose to analyse the exports of coir goods of all types including coir fibre, yarn, mats, mattings and so on from 1887 to 1980.

In 1887, the volume of coir goods exported from Cochin amounted to 14,919 tonnes and a value of Rs.2,93,677. In 1889 the volume of coir goods exports

increased to 16,032 tonnes at a value of Rs.3,15,875. Thereafter our exports increased year by year and coir goods exports reached 12,493 tonnes in 1896 and the total income realised from exports went upto Rs.24.2 lakhs. Though the next year recorded a shortfall in exports, the quantity increased to 19,548 tonnes in 1900, thereby earning an income of Rs.37.01 lakhs.

The three years following 1900 witnessed decline in coir exports. But in 1904, exports increased to 23,917 tonnes, valued at Rs.48.82 lakhs. Thereafter coir exports began to show gradual increase year after year and exports reached 28,808 tonnes in 1910, and the total value of exports amounted to Rs.63.92 lakhs. The next year witnessed a sharp decline in exports. For some years after 1910, there were no major fluctuations in trade until 1918, when the exports of coir declined to 4,589 tonnes.

Even though there were fluctuations in coir exports during 1918 - 1925, the exports remained more or less steady. Upto 1937, the coir exports from Cochin remained more or less around 20,000 tonnes per year. In 1938, there was an increase in exports to 30,973 tonnes, valued at Rs.94.8 lakhs. This year was exceptionally a good one and the following war years could not maintain the same level of exports.



FIG. No 5

COIR EXPORTS DURING 1901-'50  
scale: 1cm = 2,000 Tonnes

TONNES

46 000

42 000

38 000

34 000

30 000

26 000

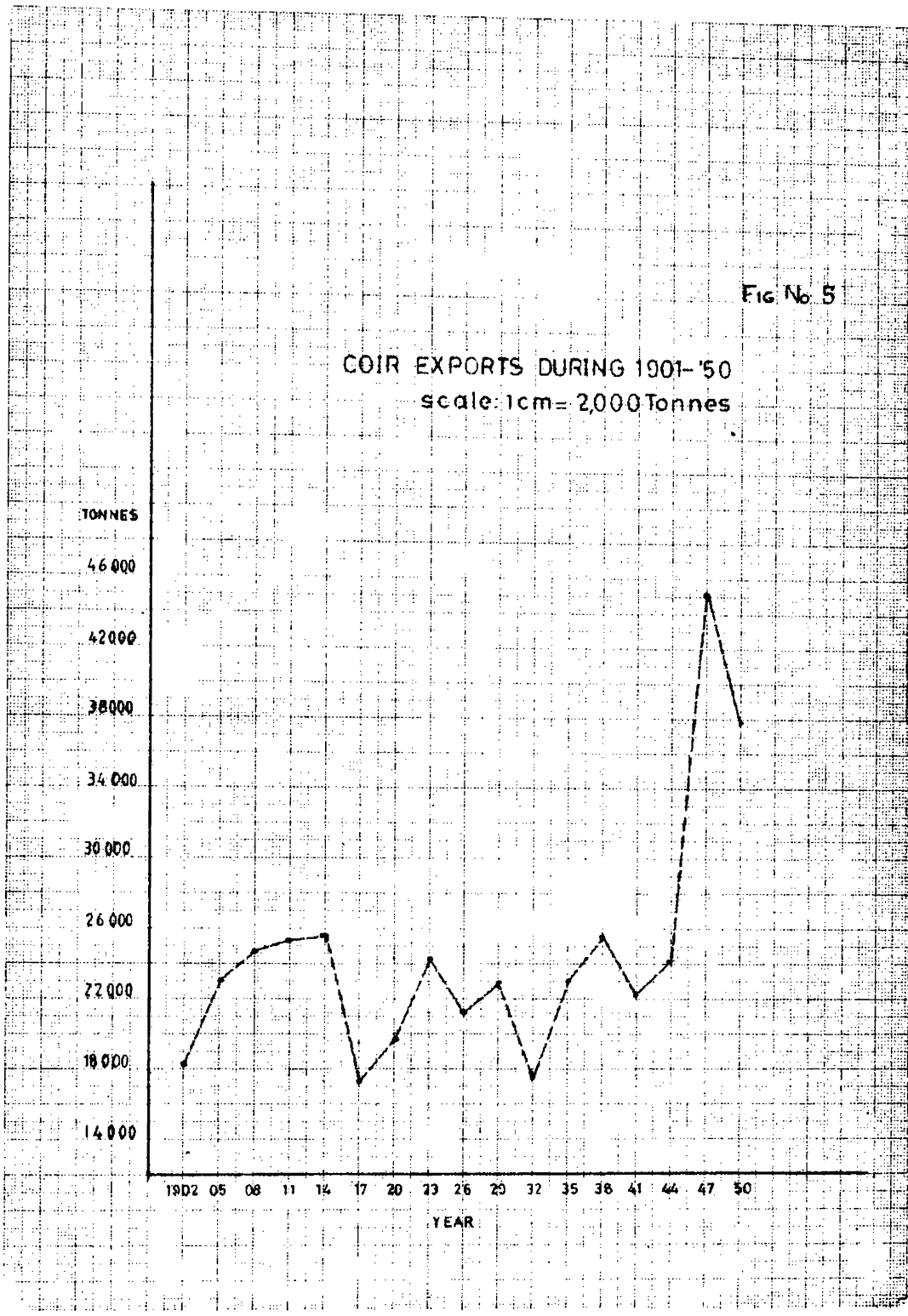
22 000

18 000

14 000

19 02 05 08 11 14 17 20 23 26 29 32 35 38 41 44 47 50

YEAR



Analysing the period between 1887 and 1938, we can see some major fluctuations around the years 1912 to 1919. This decline is represented in Fig. No.5, drawn for export during 1901 to 1950. After a small decline in export in the initial six years, the coir exports began to show steep increases upto 1910. Then followed a depression in coir exports from 1911 to 1919.

If we exclude this wide fluctuation in coir exports during 1911 to 1919, the remaining period shows a tendency to increase. Among the coir products exported from Cochin Port, coir yarn had a larger share.

#### Exports During 1939 - 1950:

As far as coir exports were concerned, the period between 1939 to 1950 also showed severe fluctuations. In 1939, the coir exports amounted to Rs.42.3 lakhs and a quantity of 21,267 tonnes. Compared to the previous years, this year was a dull one. The coir exports again declined in the following year to 22,009 tonnes with a value of Rs.38.96 lakhs. This was the least recorded export during the period 1939 - 1950. Table-5 shows coir exports during 1939 - 1950.

TABLE - 5  
COIR EXPORTS DURING 1939 - 1950

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1938-39	21,269	42.3
1940	18,676	38.0
1941	11,953	20.2
1942	22,005	39.0
1943	10,759	22.3
1944	19,251	73.2
1945	17,868	84.3
1946	21,981	123
1947	31,261	252
1948	32,222	282
1949	24,822	212
1950	32,027	273

Source: C.C.C.I.

In 1946, the exports reached a figure of 21,981 tonnes of coir, manufactured and unmanufactured, and the income earned accounted to Rs.123.13 lakhs. There was a sudden increase in our exports in the next year and the volume of coir exported reached a figure of 31,261 tonnes, at a value of Rs.251.6 lakhs. The next

year also was a favourable one for coir exports. But, after reaching a good figure at 32,222 tonnes in 1948, with a value of Rs.211.8 lakhs in 1949 the exports declined to 24,822 tonnes.

In 1950, the total earnings from coir exports was Rs.272.9 lakhs with a volume of 32,026 tonnes.

The analysis of coir exports during 1939-1950 shows that there were some major fluctuations, which can be seen from Fig.No.5. European countries were our main customer of coir products. They had a share of 80% in our coir exports.

#### Coir Exports During 1951 - 1980

The coir exports during 1951 - 1980 gives us a declining trend. During this period, wide-range fluctuations had taken place in coir exports. Our coir industry now-a-days is suffering from severe competition from synthetic materials in the world market. The mechanised coir products coming from outside the state has competed away our coir products considerably.

In 1951, the coir exports amounted to 54,746 tonnes, thereby earning a value of Rs.771 lakhs. In 1952, the exports declined considerably and the volume of coir

**TABLE - 6**  
**COIR EXPORTS DURING 1951 - 1980**

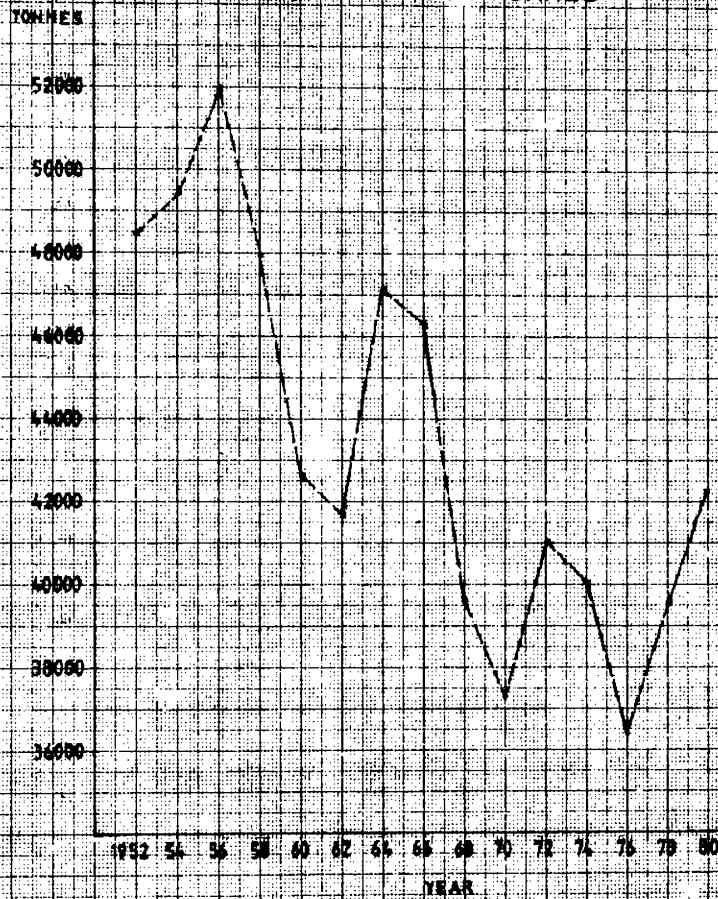
Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1950-51	54,746	771
1952	42,130	658
1953	47,322	498
1954	51,502	555
1955	55,119	577
1956	52,800	611
1957	53,864	634
1958	42,148	469
1959	41,903	481
1960	43,394	511
1961	40,127	518
1962	43,253	689
1963	45,936	878
1964	48,387	1,143
1965	46,669	726
1966	45,899	N.A.
1967	39,983	949
1968	39,334	933
1969	35,821	878
1970	38,788	1,001
1971	42,941	1,138
1972	39,133	1,161
1973	38,950	1,203
1974	42,408	1,525
1975	37,374	1,711
1976	35,505	1,906
1977	44,679	2,357
1978	34,471	2,028
1979	41,489	2,639
1980	43,000	3,551

Source: C.C.C.I.

Fig. No. 6

### EXPORTS OF COIR PRODUCTS DURING 1951 - 80

1cm = 1000 tonnes



exported declined to 42,130 tonnes, and value to Rs.658 lakhs. Then the exports began to increase gradually and in 1954, the figure reached 51,502 tonnes. The next three years were also favourable to coir exports and the volume of exports was 53,864 tonnes in 1957. The total amount collected from coir exports amounted to Rs.634 lakhs. In the history of coir exports from Cochin this was a very good year.

Table-6 represents the coir exports during 1951 - 1980. It can be seen from the table that the trend of coir exports from Cochin Port was not steady. The exports fluctuated from 54,746 tonnes in 1951 to 34,471 tonnes in 1979. The value realised from coir exports also fluctuated considerably. It varied from Rs.469 lakhs in 1958 to Rs.3,551 lakhs in 1980. These fluctuations can be seen from Fig. No.6.

One factor to be noted in particular with reference to the value realised from coir exports is that even though the quantity exported fluctuated, there is a steady and positive increase in the value earned from coir exports since 1969. The normal trend of coir exports during 1951 - 1980 was a decreasing one.

## PEPPER

Pepper is known as the "King of Spices". Kerala tops in the production of pepper. The Portuguese and the Dutch had spread the pepper cultivation to Java, Sumatra, Borneo, Sarawak, Malaysia, Philippines and West Indies.

The export of pepper started from Cochin from a very early period. In 1891, Rs.2,83,375 worth of pepper was exported from Cochin. The years 1883, 1885, 1887, 1889, 1897, 1902, 1906 and 1913 were exceptionally good years of pepper export, during the period 1881 to 1913. The corresponding export during this period varied between 936 tonne in 1902 to 1230 tonnes in 1883. The least export during this period was recorded in the year 1894 with a total of 41 tonnes.

### Pepper Exports During World War I:

During this period, the quantity exported varied between 213 tonnes with a value of Rs.2 lakhs in 1918 and 2,885 tonnes with a value of Rs.17 lakhs in 1915. In terms of value 1917 was the best year with Rs.22.85 lakhs. This period was one of great fluctuations in pepper exports.

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**Pepper Exports During 1919 - 1938:**

This period witnessed wide fluctuations both in value and quantity exported. 1919, 1921, 1922 and 1928 were the years with high exports. The export of pepper varied between 1,505 tonnes in 1918, 1919 and 1,037 tonnes in 1928. The remaining years showed very great fluctuations and the least export was recorded in 1924 and 1938 with 147 tonnes each. In the case of value earned also 1928 was the record year with a value of Rs.19.1 lakhs. The severe fluctuations in export during 1901 to 1950 can be seen from Fig.No.7.

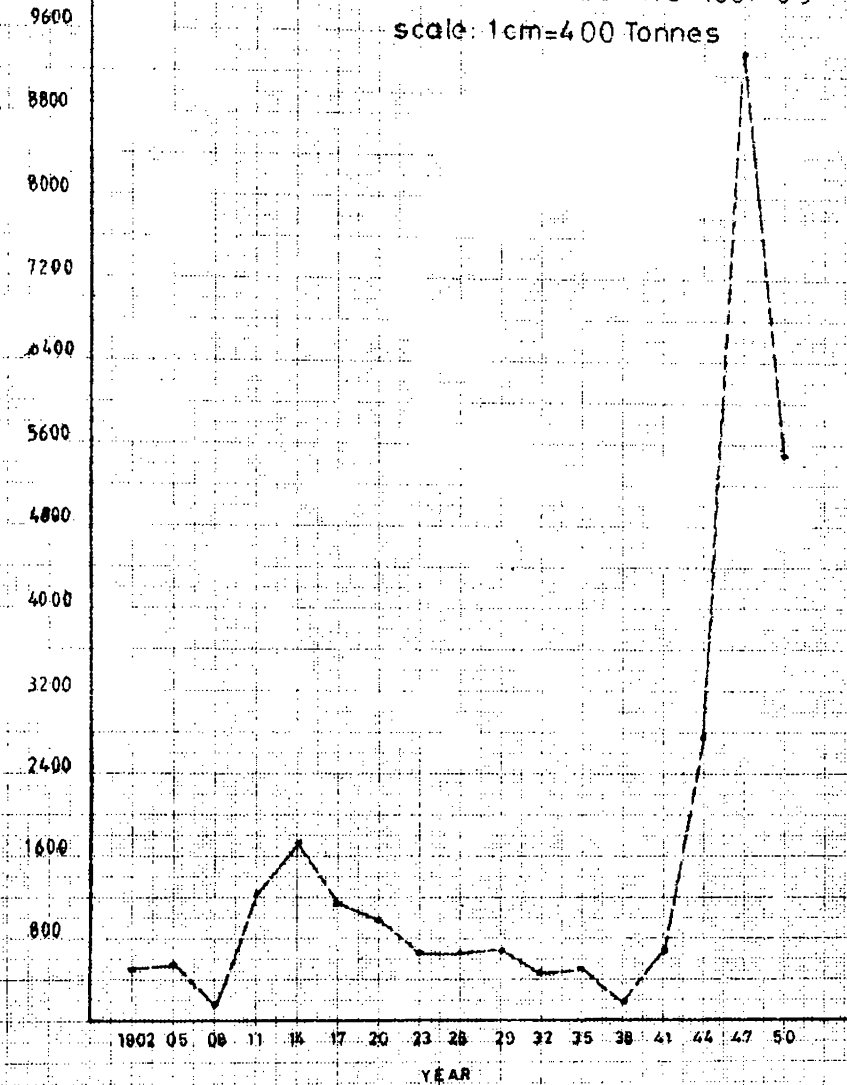
**Pepper Export During 1939 - 1950:**

During this period, the export varied between 78.9 tonnes in 1938-39 with a value of Rs.30,946 and 10,469 tonnes with a value of Rs.209.12 lakhs in 1949. With reference to value 1950 was the record year, with Rs.591.68 lakhs with a quantum of 6,140 tonnes of export. The notable feature of this period is that the price of pepper increased steeply during the latter years. Even though there was a sharp decline in the quantity exported after 1947, that was compensated by the steep rise in prices.

Fig. No. 7

TONNES

PEPPER EXPORTS DURING 1901-50  
scale: 1cm=400 Tonnes



**Export of Pepper During Five Year Plans:**

Table-7 gives the figures for total volume and value of exports during 1951 - 1980.

The general tendency for pepper exports during this period was to increase. From 1951 to 1966, three years were exceptionally good as far as pepper trade was concerned. In 1952, the total value of 10,925 tonnes of pepper exported to foreign countries was Rs.16.05 crores. After 1953, there was a decline in price of pepper and the price per tonne was Rs.14,060 in 1953. The price decreased to Rs.8,282 in 1954.

In 1960, a high volume of 15,426 tonnes were exported at a price of Rs.4,255 per tonne. The wild price fluctuations of pepper was a severe blow to our pepper industry. In 1968, 23,622 tonnes of pepper was exported with a total value of Rs.12.29 crores. The figure for 1975 was 24,420 tonnes at a total value of Rs.32.70 crores. In terms of value an all-time high figure was recorded in the year 1976, and the export was 23,820 tonnes, with a total value of Rs.47.43 crores. In 1980, the total volume of export of pepper was 23,478 tonnes and the value Rs.36.64 crores. The fall in exports during 1969-71 can be seen from Fig.No.8. The

**TABLE - 7****EXPORT OF PEPPER DURING 1951 - 1980**

Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1950-51	9,885	1,270
1952	10,925	1,606
1953	9,730	1,283
1954	9,122	756
1955	10,354	470
1956	8,788	305
1957	12,702	297
1958	8,985	186
1959	8,101	174
1960	15,425	656
1961	12,189	556
1962	12,440	456
1963	N.A.	N.A.
1964	12,524	402
1965	16,241	665
1966	20,382	N.A.
1967	17,741	994
1968	23,622	1,229
1969	16,374	860
1970	18,180	1,412
1971	16,262	1,403
1972	20,781	1,569
1973	19,814	1,453
1974	27,683	2,881
1975	24,420	3,270
1976	20,728	3,007
1977	23,820	4,743
1978	19,002	3,718
1979	17,600	3,119
1980	23,478	3,664

**Source:** C.C.C.I.

FIG. No. 8

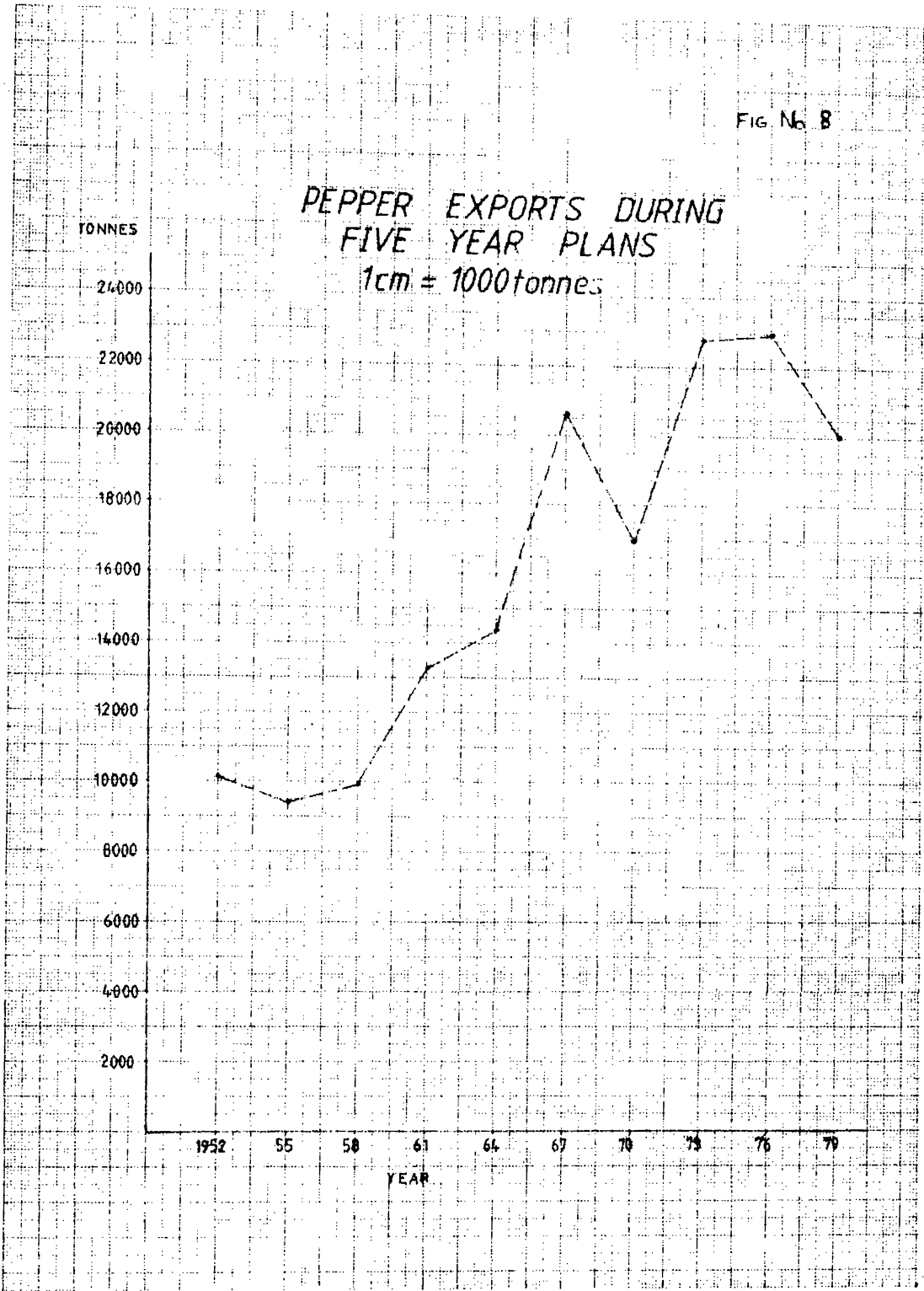
PEPPER EXPORTS DURING  
FIVE YEAR PLANS  
1cm = 1000tonnes

TONNES

24000  
22000  
20000  
18000  
16000  
14000  
12000  
10000  
8000  
6000  
4000  
2000

1952 55 58 61 64 67 70 73 76 79

YEAR



last three years were comparatively dull years for pepper exports and this declining tendency is also evident from the graphical representation.

Major Causes for Fluctuations:

Over and above the general causes for fluctuations in the total trade of Cochin, pepper has its own problems in exports from Cochin and these causes will be dealt with in the following paragraphs.

1. In 1927, there was only a small crop. There was a world's shortage resulting in very high prices which led to a falling-off in Indian consumption which enabled exporters to procure their requirements to a considerable extent.

2. The disastrous collapse of the Bull Ring formed by a group of London speculators to support the price of white pepper resulted in a sharp falling-off in exports during 1935 to 1938.

3. During 1944-45, all pepper for export had been purchased by Government of India for account of the U.K. Ministry of Food. There had been no trading restrictions in pepper for Indian consumption. At the end of the season, Government withdrew from the market and prices fell. Liberation of Sumatra had led to large supplies of

Lamong Pepper from that country.

4. Pepper showed a phenomenal rise in price after the export control was lifted in October 1947, and reached the level of over Rs.4,250/- per tonne. The high prices continued for some more years in view of high world demand for pepper exceeding supplies. But the government again imposed export control, in order to secure hard currency like Dollars, since U.S.A. was one of the main buyers of our pepper.

5. Pepper prices had soared to high levels and the price in 1948 was Rs.9,800/- per tonne, which was a record. Until Indonesia came back with substantial supplies of pepper this situation continued.

6. In the absence of substantial supplies from Indonesia, Malabar pepper continued to command high prices and a new record was reached in March 1950 when it fetched Rs.12,000/- per tonne.

7. In 1950, pepper was subjected to an export duty of 30% advalorem based on a tariff value of Rs.200/- per Cwt.

8. The pepper market was again subjected to heavy fluctuations. During 1952, large quantities of pepper had been detained in the U.S.A. by the Food and Drug Administration owing to the presence of insects in consignments reaching that country. This had adversely affected the demand for Indian pepper in America.

9. In 1953, the pepper market was subjected to heavy price fluctuations. The increased production in Sarawak had seriously undermined during the middle of the year, the position of Malabar pepper in foreign markets. There was severe competition from Sarawak and Indonesia to the Malabar pepper.

10. The increased world production of pepper had the inevitable effect of bringing prices down further. Pepper showed a phenomenal rise in price after the export control was lifted in October 1947.

11. In 1962-63, the pepper shipments had been poor due to (1) the poor crop and (2) the much cheaper offers being made in the main centres by Singapore exporters.

The above mentioned causes were particular to our pepper exports, which affected favourably and unfavourably to a great extent.

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## **T E A**

According to an ancient Chinese legend, tea was discovered by the Chinese emperor Shen Nung in 2737 B.C.

For centuries, China was the only source of tea. In the 19th century A.D., Japan began to grow tea from plants imported from China.

In 1823, tea was found growing wild in India by a British army major named Robert Bruce. In the next few years many tea plantations were established in India. In 1839, eight chests of tea, the first ever to come from India were auctioned in London.

Today tea is grown and exported principally by India, Ceylon and the Central and East African countries. Smaller quantities are produced in Indonesia, Formosa, Brazil and Argentina. The cultivation of tea started in Assam and South India in 1836.

Today India is the largest producer of tea in the world. Out of the total tea produced in India, Kerala has a major share. The other tea producing states in India are Assam, West Bengal and Tamil Nadu. The share of Kerala in the production of India was 11% in 1973.

India has a predominant place in the export of tea. In 1951, the share of India in the total exports of tea in the world market was 45%. But it declined to 35% in 1963. It was due to the many taxes imposed on tea, and the ever-increasing wages which had no comparison with the increase in production. The second cause was the stiff competition from Ceylon, Malaysia, Kenya, Tanganyika and Indonesia.

A large share of India's tea export taken place through the Cochin Port. Data for tea exports from Cochin Port are available from 1891 onwards.

#### Tea Export from 1891 to 1950

In 1891, 73.4 tonnes of tea was exported from Cochin Port at a value of Rs.90,601. Thereafter, the tea exports began to increase every year without fluctuations and it reached 1033 tonnes in 1900 with a value of Rs.13.03 lakhs. The next three years showed comparatively less exports. Though there were minor fluctuations in exports in the next many years, these fluctuations were not significant and the tea trade continued its rising process and reached 3,341 tonnes in 1919 with a value of Rs.52.19 lakhs. Tea exports was one of the items of exports from Cochin Port which showed less fluctuation.

Fig. No. 9

TEA EXPORTS DURING 1901-50  
Scale: 1 cm = 2,000 Tonnes

TONNES

30000

28000

24000

20000

16000

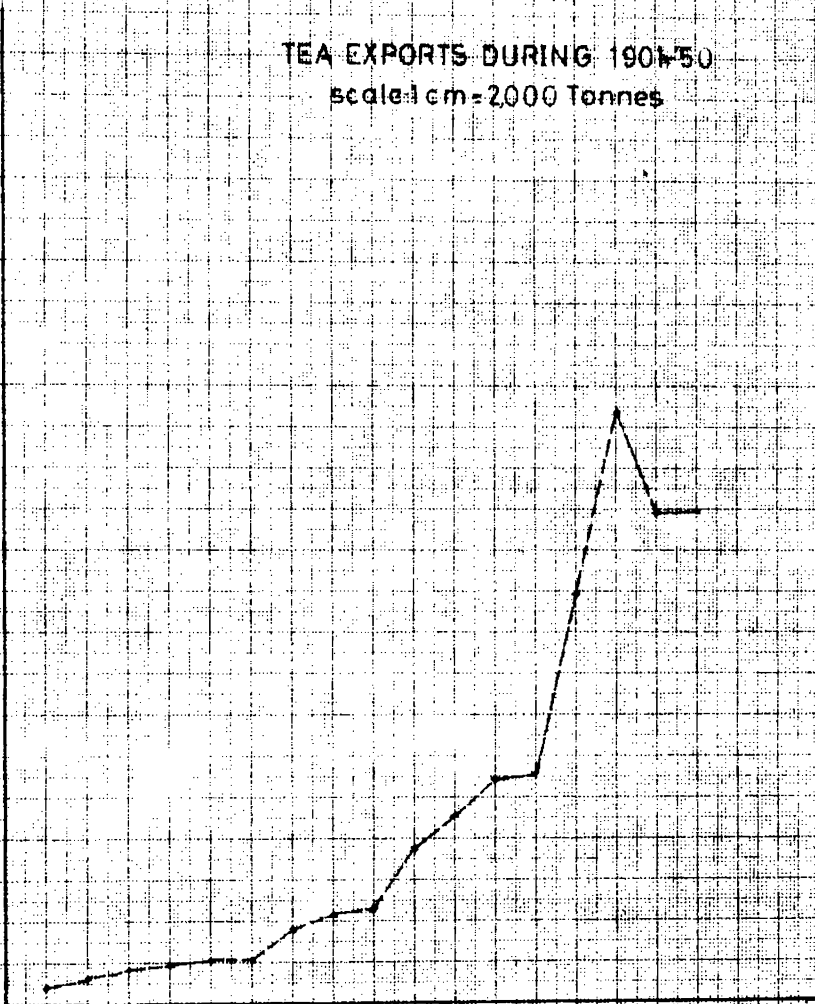
12000

8000

4000

100 2 05 08 11 14 17 20 23 26 29 32 35 38 41 44 47 50

YEAR



In 1920, 4,034 tonnes of tea was exported at a value of Rs.62.3 lakhs. Though the next three years were not so good as compared to 1920, exports reached 5127 tonnes in 1924. 1925, 1926 and 1927 were not good years as far as tea exports were concerned. There were some shortfalls in exports during this period. After 1927, the exports of tea was increasing year by year at a greater speed and in 1944, the total quantum of tea exported was 30,722 tonnes, valued at Rs.673 lakhs. During the period 1933-1950, the tea exports varied between 30,722 tonnes in 1944 with a value of Rs.672 lakhs and 9674 tonnes in 1934.

After attaining a high figure of exports in 1944, our tea exports gradually declined and in 1950 it was amounted to 25,283 tonnes at a value of Rs.912 lakhs.

The noticeable feature with regard to tea exports during this period is that there were no major fluctuations in exports and the normal tendency of tea exports was to increase very steeply. Fig No.9 shows the trend of tea exports from Cochin Port during 1901 - 1950.

#### Tea Exports During Five Year Plans: 1951 - 1980

During five year plans, there were some major fluctuations in tea export. The causes for these fluctuations will be discussed later. The general tendency for

tea exports from Cochin during this period was to increase. The fluctuations which took place during this period can be seen from the table No.8.

In 1951, the volume of tea exports to foreign countries was 27,112 tonnes which realised a value of Rs.1,180 lakhs. The increasing trend of tea exports continued upto 1954 and the total volume exported was 33,740 tonnes. The total value of which amounted to Rs.1,796 lakhs. Table No.8 shows the total volume and value of tea exported from Cochin Port during 1951 - 1980.

Though the volume of tea exports during 1954-55 declined to 30,765 tonnes, the value of total trade increased due to the price increase of tea. Even though the next year showed a little increase in exports, in 1957 the trade again declined. Upto 1962, the export of tea from Cochin Port followed a more or less steady path. There was no significant fluctuations in <sup>tea</sup> exports. The price of tea declined very much and it was Rs.0.56 per Kg. in 1960. This price decline adversely affected our tea exports in terms of value, even though there were no significant diminution in quantity exported.

In 1966, the volume exported from Cochin showed an increase of 9,000 tonnes and it reached 49,778 tonnes

**TABLE - 8**  
**TEA EXPORTS DURING FIVE YEAR PLANS**

Year	Quantity (Tonnes)	Value (Rs. in lakh)
1950-51	27,112	1,180
52	31,308	1,490
53	30,090	1,395
54	33,740	1,796
55	30,765	2,086
56	32,494	1,900
57	31,520	1,937
58	38,740	2,141
59	34,365	1,948
60	35,111	1,980
61	35,641	2,021
62	34,568	1,908
63	N.A.	N.A.
64	39,763	2,096
65	40,767	2,135
66	45,778	N.A.
67	39,096	2,905
68	47,728	3,405
69	41,575	2,807
70	41,397	2,602
71	40,317	2,805
72	46,068	3,163
73	41,565	2,799
74	46,837	3,330
75	43,065	4,235
76	37,228	3,984
77	56,793	9,702
78	49,120	10,126
79	41,302	6,370
80	51,499	7,982

in the same year. The next year represented only a small export, i.e., there was a decline of quantity exported to 10,700 tonnes in 1967. These large fluctuations can be seen from the Fig.No.10. The year 1968 again recorded an increase of some 8,000 tonnes, compared to the previous year. From 1969 onwards tea export from Cochin showed a gradual increase excluding 1971, 1976 and 1978. After reaching an all-time high figure of 56,793 tonnes in 1976-77, the volume exported declined in 1978 and 1979. The total value of exports during 1977 was Rs.9,702 lakhs and Rs. 10,126 lakhs in 1978. It declined to Rs.6,370 lakhs in 1979 and increased to Rs.7,982 lakhs in 1980.

The last few years were very dull as far as tea exports from Cochin were concerned. The decrease in exports after reaching a high figure of 56,793 tonnes in 1977, showed wild fluctuation in the next three years. This fluctuation can be seen from figure number 10. Fig.No.10 shows a sharp decline after 1967 upto 1970. After 1970 the exports began to grow at a steeper rate and reached a maximum in 1973 and thereafter there were some minor fluctuation which is evident from fig.No.10.

#### The Causes for Major Fluctuations in Tea Trade:

As a foreign exchange earner to the country, tea trade is of very much significance to India. A good portion

Fig No. 10

TEA TRADE DURING FIVE YEAR PLANS: 1951-'80  
scale: 1cm=1,000 Tonnes

TONNES

480,000

460,000

440,000

420,000

400,000

380,000

360,000

340,000

320,000

300,000

280,000

1952

55

58

61

64

67

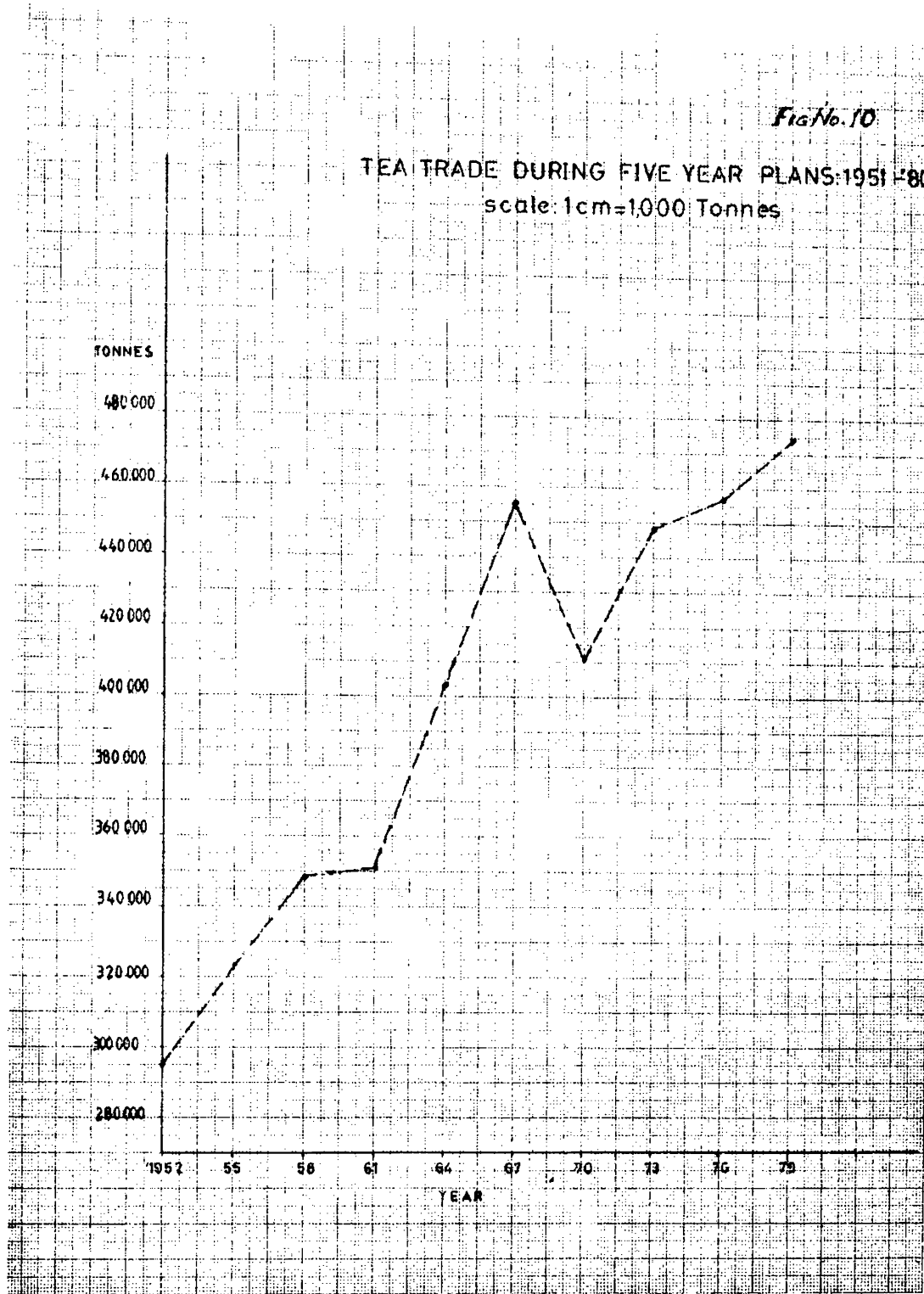
70

73

76

79

YEAR





of the tea produced in India is exported through the Cochin Port. The main producers of tea in India are Kerala, Assam, West Bengal and Tamil Nadu. The share of value earned by tea exports from Cochin Port in the total trade in 1978 was 21%. So the tea trade has an important role to play in the economy of Kerala.

The 1927 monsoon which was very favourable for estate produce resulted in good crops and thereby export of tea increased by 39%. The exchange freight rate remained steady during the same period. During 1929-30 Cochin, along with the rest of the world, was passing through the biggest trade depression, which was accented by political troubles in India. Business in Cochin and the whole of India was affected by threatened depreciation in the value of the rupee.

The reopening of the London Tea Market in April, 1952 was favourable to tea exports from Cochin. The reopening of the London Auction Market and the cessation of bulk buying by the U.K. Ministry of Food led to the expansion of the Cochin Auction Market which was established in 1947, and in the first half of 1951, approximately twice as much as tea had been offered in auction. The interest of buyers in direct purchases from south India

had been well-maintained, and very careful support had been afforded to the market by internal distribution.

In 1951-52, the prices for tea declined very sharply and by the end of 1952 many gardens in other parts of the country were selling below their cost of production. But fortunately gardens in South India were not affected much by the depression because here the emphasis was always on producing high grade teas. Crop prospects in South India were good and the quantities offered at Cochin auction showed a steady increase which pointed out to a healthy expansion of the market.

The inadequacy of wagon supplies for the movement of goods to and from Cochin Harbour Terminus had put traders to great inconvenience and caused more diversion of trade to Madras. Many a time large quantities of tea, some for sale in Cochin auction, and some for export had been held up for weeks at various upcountry rail-points awaiting wagons and this led to the deterioration of equality and consequent fall in value.

The 1956-57 decline in tea production in the state was due to the disturbances in Kerala tea planting districts resulting in complete stoppage of production for a long period in some areas.

The introduction of an additional levy at the rate of Rs.8/- per yielding acre on the plantations in Kerala, in addition to the basic tax of Rs.2/- was a serious blow to the plantations in the state which affected production. The sales tax imposed on tea retarded our tea exports atleast marginally.

In 1963, the rate of central sales tax was increased from 1% to 2%. There were certain encouraging features in 1963-64 Budget such as exemption of inter-corporate dividends from super tax, removal of the super profit tax and so on. As a means of export promotion, Tax credit certificate scheme had been introduced for various commodities like tea, coir, cashew and so on. A 5% sales tax on tea sold in Cochin auction had acted as a heavy drag on Export Promotion effort from Cochin.

The tea trade was very much affected by increased competition from foreign countries. The frequent changes in the policies and procedures governing excise rebate on exports of tea had been a source of considerable hardship to the trade. The proclamation of emergency in 1975 helped to increase production in all sectors of the economy. In 1975, the total production of tea in Kerala was 49,000 tonnes.

The movement of general cargo through Cochin Port had been affected by a combination of factors such as high incidence of port charges, uncertainty caused by lack of sailing opportunities especially to West Asian Ports and increasing diversion of coffee and cashew to Mangalore.

The tea exports suffered gravely after the imposition of an ill-advised export duty in 1977. The new supplies from the developing countries have emerged and in view of relative advantage they enjoy in respect of raw material availability and labour cost, our competitive position in export market has weakened. Added to this, the interference of state government through avoidable physical controls and regulations on the distribution of raw materials had resulted in distortion and inefficiencies in export production.

The strikes in Cochin Port (one lasting for 29 days and another lasting forty days) have created a very bad image among the shipping companies as well as the shippers. This resulted in diversion of ships from Cochin to other ports and consequently, the cargo handled from Cochin Port was reduced considerably. The 21% reduction in the quantity of cargo handled by the port during April-september in 1979-80 validates our opinion.

As a result of the undependability of Cochin for commerce and exports, attraction of Coimbatore as an ocean outlet for the sale of 40 million Kgs. of tea produced in Tamil Nadu and now being sold through the Cochin auction have come to the forefront. It is inevitable that some of the teas produced in Kerala as well as Karnataka will also find their way to Coimbatore.

Due to unfavourable weather conditions, the production in South India is down by 12 million kilograms including a shortfall of 4.2 million kilograms in Kerala. The massive increase in production in South India has increased over all supplies and pushed down auction prices here. Increased cost of fertilisers, transport packing materials, and the recent wage increases will raise the cost of production of tea by about Rs.3/- per kilogram.

The exorbitant rate of taxes and the huge wage increases without taking into account the production have resulted in the decline of our tea production and exports. The severe competition from abroad especially Ceylon, Malaysia, Kenya, Tanganyika, Indonesia etc. is yet another cause for the low demand of our tea in the world market.

The above mentioned factors are the main causes leading to greater fluctuations in our foreign trade of tea from Cochin Port.

## C O F F E E

No one knows exactly how coffee was discovered. The first coffee plant probably grew in Kaffa, a province of South West Ethopia. This province may have given its name. Before A.D.575, the Persian armies knew about the effect of coffee seeds into a drink to make to give them taste better. Soon the beverage spread to Turkey and Europe.

Brazil took over the leading position in coffee growing and has held it for many decades. Columbia and other South and central American countries and West Indies also produce large quantities of coffee. India produces only 1 to 2% of the total world production. The high rate of import duty in European market is the main difficulty with our coffee exports. Kerala, Karnataka and Tamil Nadu are the main producers of coffee in India.

The Cochin Port was exporting coffee to abroad for the last hundred years or more. Statistics are available from 1881 onwards. The coffee trade from Cochin Port shows more or less a constant rate of increase.

**Coffee Exports During 1881 - 1913:**

We are having statistics for coffee exports from 1881 onwards. In 1881 we exported Rs.2,16,205 worth of coffee of about 1,030 tonnes. It was a record export compared to the following years. The significant point to be noted in the case of coffee exports during this period is that after exporting a high volume of 1,029 tonnes of coffee in 1881, our exports declined sharply. In 1890, the total volume of coffee exported was 74 tonnes valued at Rs.39,507.

During the period 1881 to 1913, the record year of income collected from export was 1882, i.e., Rs.3.57 lakhs. The least export was recorded in the year 1906 with 1 quintal of coffee. Taking coffee exports during 1901-1913, we can see wide fluctuations. These fluctuations can be seen from the graph drawn for coffee export from Cochin Port during 1901 to 1950.

**Coffee Export During 1914 - 1938:**

Coffee exports during this period also is subjected to severe fluctuations. In 1914, total coffee exported was 24 tonnes and in the next years it began to rise gradually and reached 291 tonnes in 1921, valued at Rs. 3,93,154. Then followed a sharp decline in coffee exports and in

1925 the coffee exported amounted to 1.3 tonnes only. This was the least year of coffee exports during this period. In 1924, there was some improvement in our coffee exports and the total coffee export was 143 tonnes. Then again, there was sharp decline and in 1932 only 5.3 tonnes of coffee was exported. The later years during this period showed improvement in coffee export in 1936, the amount of coffee exported was 314 tonnes, in 1933, 278 tonnes and in 1938, 206 tonnes.

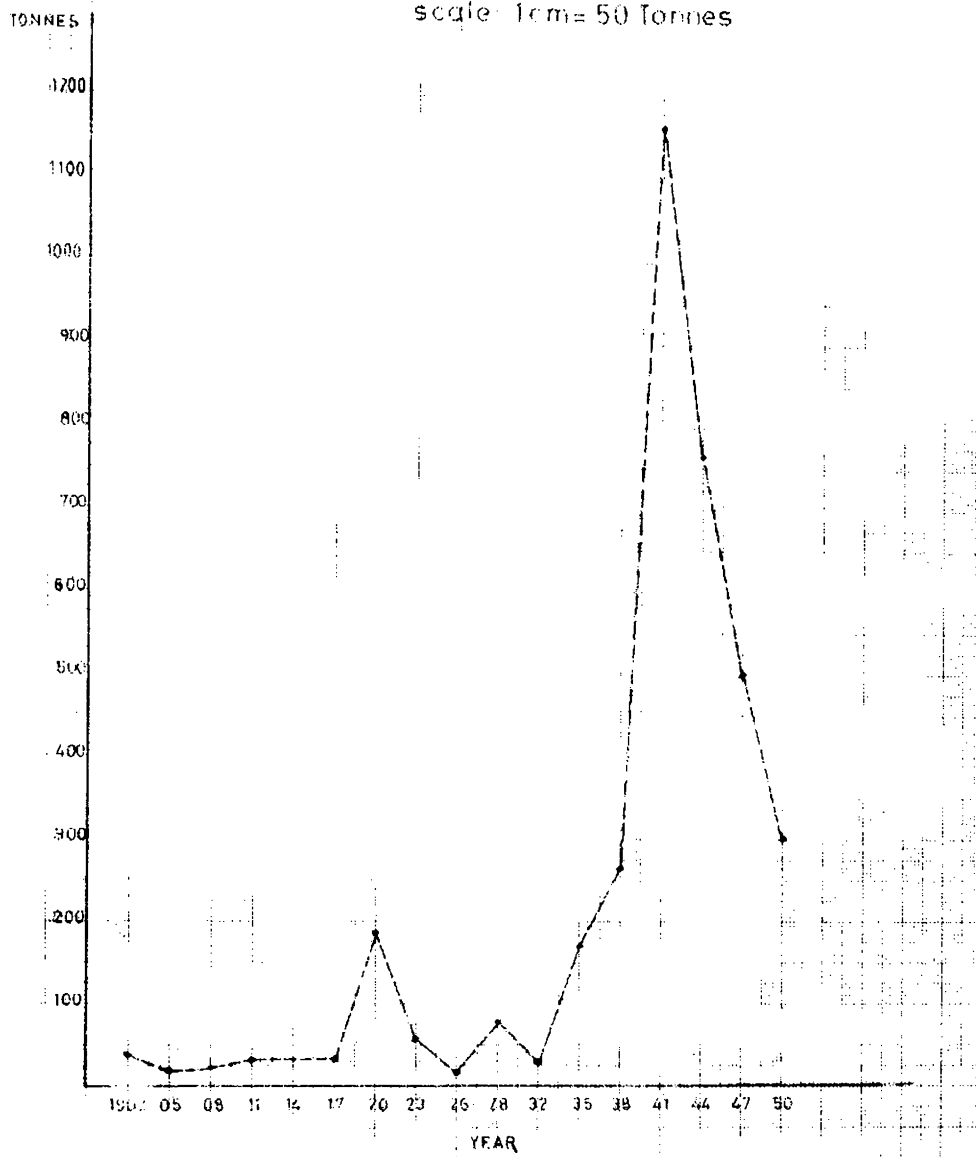
The coffee export during this period was subjected to some fluctuations and the causes for these fluctuations are described later on. These fluctuations can also be seen from fig.No.11.

#### Coffee Exports During 1939 - 1950

The coffee exports which was 313 tonnes valued at Rs.2.94 lakhs in 1939 began to increase in the next few years and it touched 1598 tonnes in 1942, at a value of Rs.14.80 lakhs. 1943 recorded only a small export compared to both the previous and the next year, i.e., 1945. After reaching a record level of export in 1944, the coffee export declined sharply to 580 tonnes. And the high level of exports, i.e., 1199 tonnes in 1944, valued at Rs.19.08 lakhs could not be maintained in the succeeding years. The



COFFEE EXPORTS DURING 1901-50  
scale 1cm = 50 Tonnes



pathetic decline in our coffee exports took place in the year 1949 and the total coffee export was only 1.1 tonnes in the same year.

The peculiarity of coffee export during this period was that frequent ups and downs in export took place in almost all years. These fluctuations in coffee exports are shown in Fig. No.11.

The peculiar feature of coffee exports during this period were: (1) America began to buy a considerable portion of our tea exports and the share of Europe began to decline considerably. The period 1881 - 1950 was subjected to severe fluctuations of the very high and very low exports of coffee.

Coffee Exports from Cochin Port During Five Year Plan periods  
1951 - 1980:

The period between 1951 and 1980 shows the tremendous increase in our coffee export upto 1974. From 1974 onwards, a gradual decline took place in the coffee exports. The general tendency for export was to rise and only after 1974, there took place some significant fluctuation

**TABLE - 9**  
**COFFEE EXPORTS DURING 1951 - 1980**

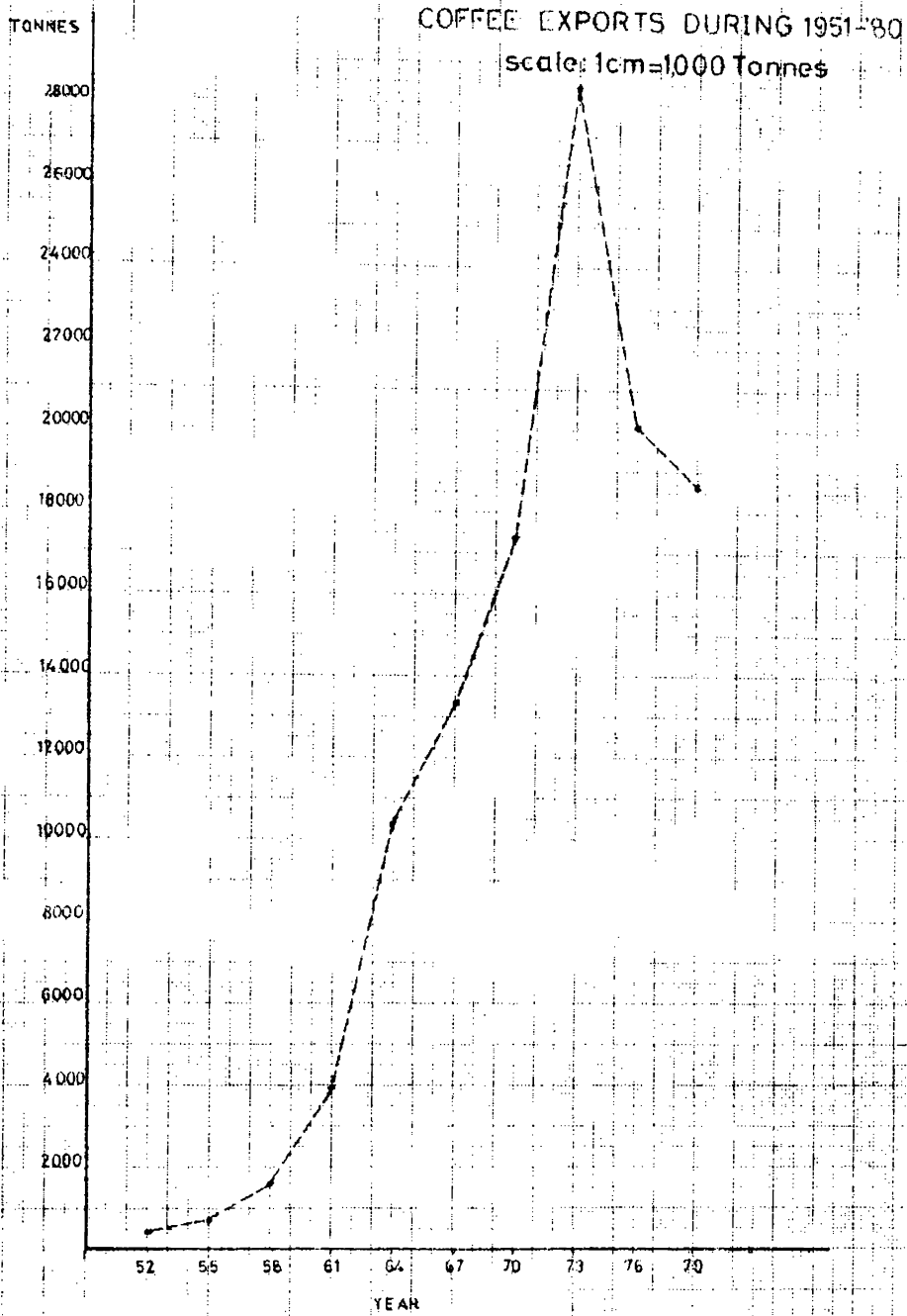
Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1950-51	897	42.73
1952	393	26.25
1953	166	96.51
1954	181	13.14
1955	855	52.13
1956	1,166	83.70
1957	915	57.65
1958	903	13.8
1959	3,112	146
1960	3,590	156
1961	4,120	142
1962	4,172	107
1963	N.A.	N.A.
1964	10,436	383
1965	10,358	434
1966	9,980	N.A.
1967	12,346	737
1968	17,589	1,024
1969	17,140	1,002
1970	16,067	964
1971	19,118	1,463
1972	18,941	1,160
1973	24,778	1,744
1974	41,643	4,032
1975	31,209	2,919
1976	16,190	2,494
1977	12,388	4,801
1978	14,342	4,540
1979	23,109	5,213
1980	18,664	5,822

Source: C.C.C.I.

Table-9 gives the volume of Coffee exported from Cochin to foreign countries and the corresponding value earned during Five Year Plans.

The quantum of exports in 1951 was 897 tonnes valued at Rs.42.73 lakhs, and it began to decline upto 1955. The 1954 figure for coffee exported from Cochin was 181 tonnes valued at Rs.13.14 lakhs. This was a steep decline and after 1954, the coffee trade from Cochin began to increase and it reached 10,436 tonnes in 1964 with a value of Rs.383 lakhs.

Though the next year showed a decline in quantity exported, the total value was increasing. In 1969 we exported coffee worth Rs.10 crores from Cochin. After 1969 the quantity exported was increasing upto 1974. Thereafter, though the value increased each year, except for 1975, the tendency on the part of the volume exported was to decrease. The total value of our exports were not affected by decrease in exports, since the coffee price rose very steeply. In 1976, the value of total exports was Rs.24.94 crores and the volume exported was 16,190 tonnes. The price of coffee per tonne was Rs.15,400. The price was increased to Rs.38,750 per tonne in international market. This steep price increase



of coffee resulted in huge revenue to the State even though the exported quantity was less.

In 1980 the total value for coffee exported to foreign countries was Rs.58.22 crores and the quantity exported in the corresponding year was 18,644 tonnes. The price per tonne of coffee was Rs.31,200 per tonne. The share of coffee exports in the total export from Cochin Port was 9.2% in value terms in 1980.

The production of coffee in Kerala in 1975 was 16,000 tonnes, in 1976 - 18,000 tonnes, in 1977 - 15,000 tonnes and in 1978 - 28,000 tonnes. Taking the total export as a percentage of the total production of coffee in India, we exported 30.2% in 1977 and 35% in 1978. Fig.No.12 gives the trend of coffee exports during 1951 - 1980 and shows major fluctuations.

#### Causes for Major Fluctuation in Coffee Exports from Cochin:

Coffee exports from Cochin were subjected to severe fluctuations. Though normal fluctuations are a regular feature of trade, the fluctuations which we observe in the case of coffee exports deserve special mention. The causes are given below:

(1) Production Fluctuations:-

Since the Coffee exported from Cochin Port is largely grown in Kerala itself, a decline in production affects our exports.

(2) Fluctuations in Foreign Demand Due to Competition in the World Market:

Since Coffee exported from Cochin have to face severe competition from the main coffee producers in the world, we have to try a lot to get adequate demand for our coffee products. Brazil is the chief competitor for Indian coffee. One of our large customers, the U.S.A., now finds it profitable to import coffee from their next door neighbour, Brazil, than from India. The severe price fluctuations and labour problems also affect production and export of coffee from Kerala. The average productivity of our coffee fields are very low compared to many other countries. Over and above, the Cochin Port poses some difficulties on our exports by unnecessary delay in shipping, labour troubles and so on.

The problems with regard to government policies and the Cochin Port are analysed below:

The 1930's depression had its own effect on coffee exports from Cochin also. Cochin was passing

through the biggest trade depression within the memory of man during the 1930's. In India this depression had been accentuated by political troubles. The opening of the Ernakulam Venduruthy road bridge, increased mooring facilities alongside the wharf, the condition of labour consequent upon the depression in the coir industry, the second world war, etc. had various impacts on Cochin trade.

The expansion of war industries during World War II, heavy shortages of shipping in Cochin, the intensification of exchange control and a tightening of import and export restrictions etc. had adversely affected coffee trade of the Port.

The 1944's good crop in coffee was favourable to our exports. In 1954-55, the export duty on coffee was reduced from Rs.62 per Cwt. to Rs.21/- per Cwt. The introduction of an additional levy at the rate of Rs.8/- per yield acre on the plantations in Kerala, in addition to the basic tax of Rs.2/- was a serious blow to the plantations.

In 1975-76, there was a sudden decline in the volume of coffee exported by 49%, compared to the



previous year. This was due to the fact that increasing quantities of coffee were moving through the Mangalore Port which were formerly passing through the Cochin Port.

To sum up, the increasing competition from foreign countries, the decline in domestic production, worsening labour troubles, shortage of wagons, shortage of shipping, diversion of coffee to nearby ports in large quantities etc. are the main causes for fluctuations in coffee exports from Cochin.

## CARDAMOM

Known as the 'Queen of spices', cardamom is a very old crop of India. The foreigners who came to this country in the 15th century were attracted by our spices, especially cardamom and pepper. India is the largest producer of cardamom in the world. About 55 to 60% of the Indian cardamom production is in Kerala. Karnataka and Tamil Nadu are the other major producers of cardamom in India. A major portion of India's cardamom exports goes to the U.S.A., Saudi Arabia, the U.S.S.R., Sweden, Denmark, Norway, Aden, Finland, Belgium and Kuwait are the other major customers of our cardamom.

A major share of the cardamom produced in South India is exported through the Cochin port. In 1975, the annual production of cardamom in Kerala was 2,000 tonnes, cultivated in a total land area of 47,000 ha. The cultivation was extended to 4,000 ha. more in 1978 and the total production in 1978 was 2,900 tonnes in Kerala.

About 80% of the total world production is coming from India. The Cochin port has started cardamom exports from very early times. We have data for the

exports of cardamom from 1881 onwards. But data regarding cardamom exports during 1903 to 1928 are not available.

Though the exports of cardamom was not of very much significance as far as Cochin port was concerned, the data given below will give some idea about the major trends in cardamom exports.

In 1881, 24.3 tonnes of cardamom was exported for a value of Rs.48,640/-. The next three years' exports were not significant. Exports of cardamom from Cochin port began to increase thereafter and it reached 4.4 tonnes in 1885. 1893, again was a good year for cardamom exports and 84 tonnes of cardamom was exported during the same year at a value of Rs.1,27,323. This year represented the highest value of exports during the period 1881 - 1900.

During the period 1891 to 1900, compared to 1893, the remaining years were very dull as far as our cardamom exports were concerned.

In 1929 cardamom exports amounted to 1.9 tonnes fetching a total amount of Rs.3,790/- only. 1930 represented a rather good year of exports with 7.2 tonnes. 1934 was the best year of cardamom exports from Cochin port, which amounted to 14.3 tonnes valued at Rs.38,899.

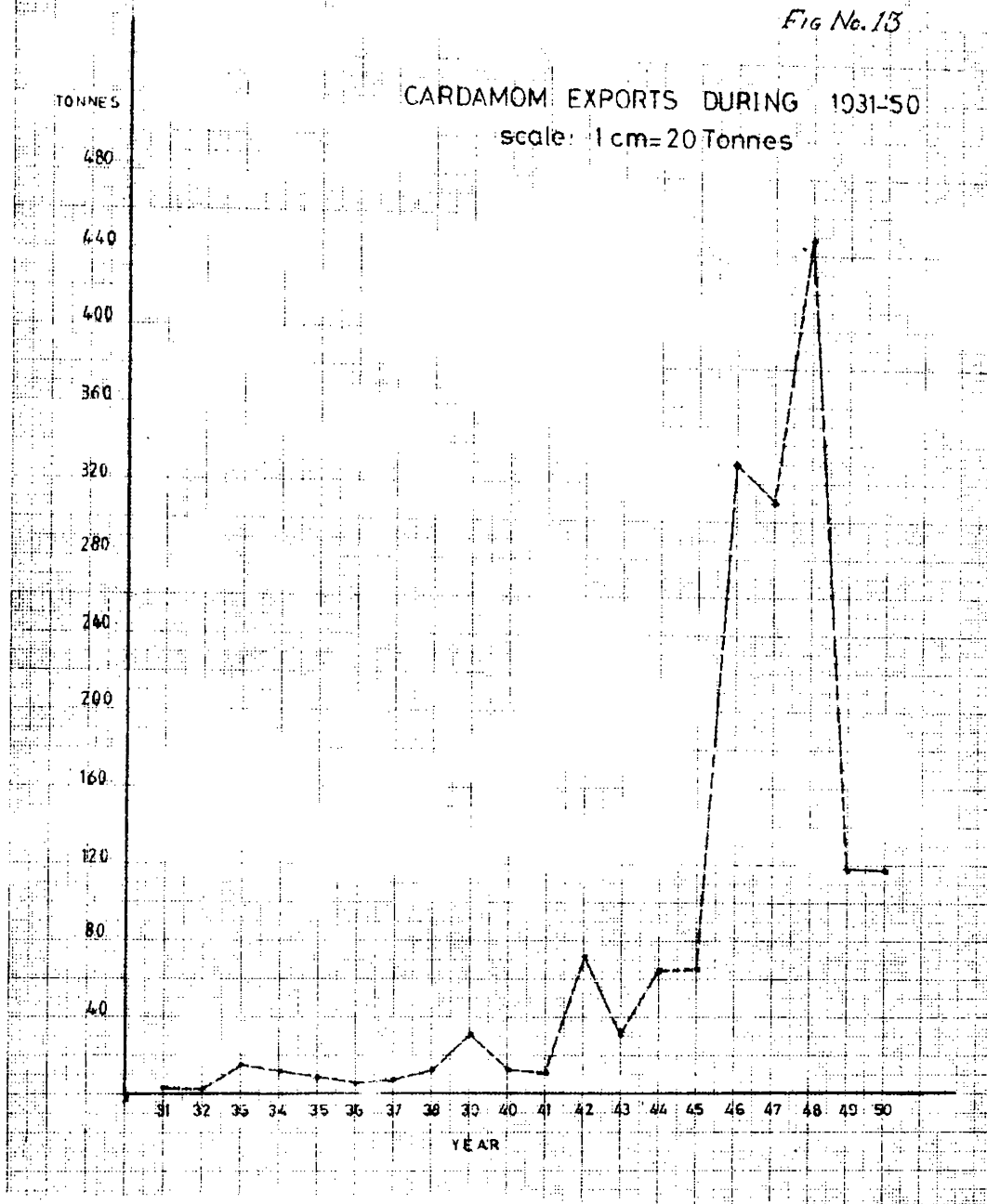
After reaching a high level of exports in 1935, the cardamom exports began to show a declining trend in volume exported.

Cardamom exports from Cochin port during 1939 to 1950 shows some major fluctuations. In 1939, the amount of cardamom exported was 13.1 tonnes at Rs.38,165.

The U.S.A. and Europe were the main customers of our cardamom especially exported from Cochin. In 1939, 95% of the total exports were accounted by the U.S.A. Though there was an increase in 1940 by about 59 tonnes, 1941 was again a dull year and the quantity exported was only 31.3 tonnes valued at Rs.2,17,641. Upto 1945, the cardamom exports were increasing at a moderate rate and there were no significant fluctuations which affected the trade. But the next three years witnessed tremendous increases in cardamom exports from Cochin port.

In 1945, the total volume of cardamom exports amounted to 333 tonnes valued at Rs.17.7 lakhs. This was a significant increase as far as the past years were concerned. Though there was a shortfall in 1947, that was an insignificant one. Again, in 1948, the cardamom exports reached an all-time high figure of 447 tonnes at a total value of Rs.36.01 lakhs. This was an exceptionally good year and 1949 and 1950 were very dull and the cardamom

Fig No. 15



exports were only 118 tonnes and 112 tonnes respectively. This was a steep decline compared to the previous years' exports.

All these fluctuations in cardamom exports can be seen from fig.No.13. As we have already pointed out, our main customers of cardamom were the U.S.A. and Europe. In 1942, U.S.A's share in our total exports was as high as 76% and that of Europe, 21%. In 1945, the share of America declined to 20% and that of Europe went up to 80%.

After world war II, we find a change in the direction of cardamom exports. Now Europe became the major customer of our cardamom. The share of Europe in our total exports of cardamom from Cochin port is given below:

TABLE - 10

Year	Percentage of Europe in the total trade from Cochin port
1946	88%
1947	95%
1948	97.6%
1949	78%
1950	91%

Thus the position of America as the largest customer of cardamom from 1941 to 1945 was taken away by Europe.

Cardamom Exports During 1951-1980:

The cardamom exports from Cochin port shows an increasing trend from 1981 upto 1973. This up rising can be seen from the fig. No.14.

The major customers of cardamom exported from Cochin are The U.K., Belgium, Finland, East Germany, West Germany, Holland, Norway, Sweden, the U.S.A., Aden, Japan, Kuwait and Saudi Arabia.

The following table gives the cardamom exports from 1951 to 1980:

TABLE - 11

CARDAMOM EXPORTS FROM COCHIN PORT DURING 1951 - 1980.

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1950-51	58.3	15.2
1952	74.8	20.2
1953	108	28.6
1954	110	20.6
1955	154	31
1956	208	45.4

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1957	241	53.5
1958	234	52.16
1959	259	57.4
1960	222	50.7
1961	357	74.7
1962	393	64.8
1963	—	—
1964	433	68.6
1965	227	45.6
1966	159	N.A.
1967	487	234
1968	541	249
1969	328	207
1970	499	411
1971	527	316
1972	583	193
1973	398	212
1974	526	334
1975	537	450
1976	439	411
1977	232	396
1978	294	440

contd....



Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1979	389	654
1980	495	756

Source: C.C.C.I.

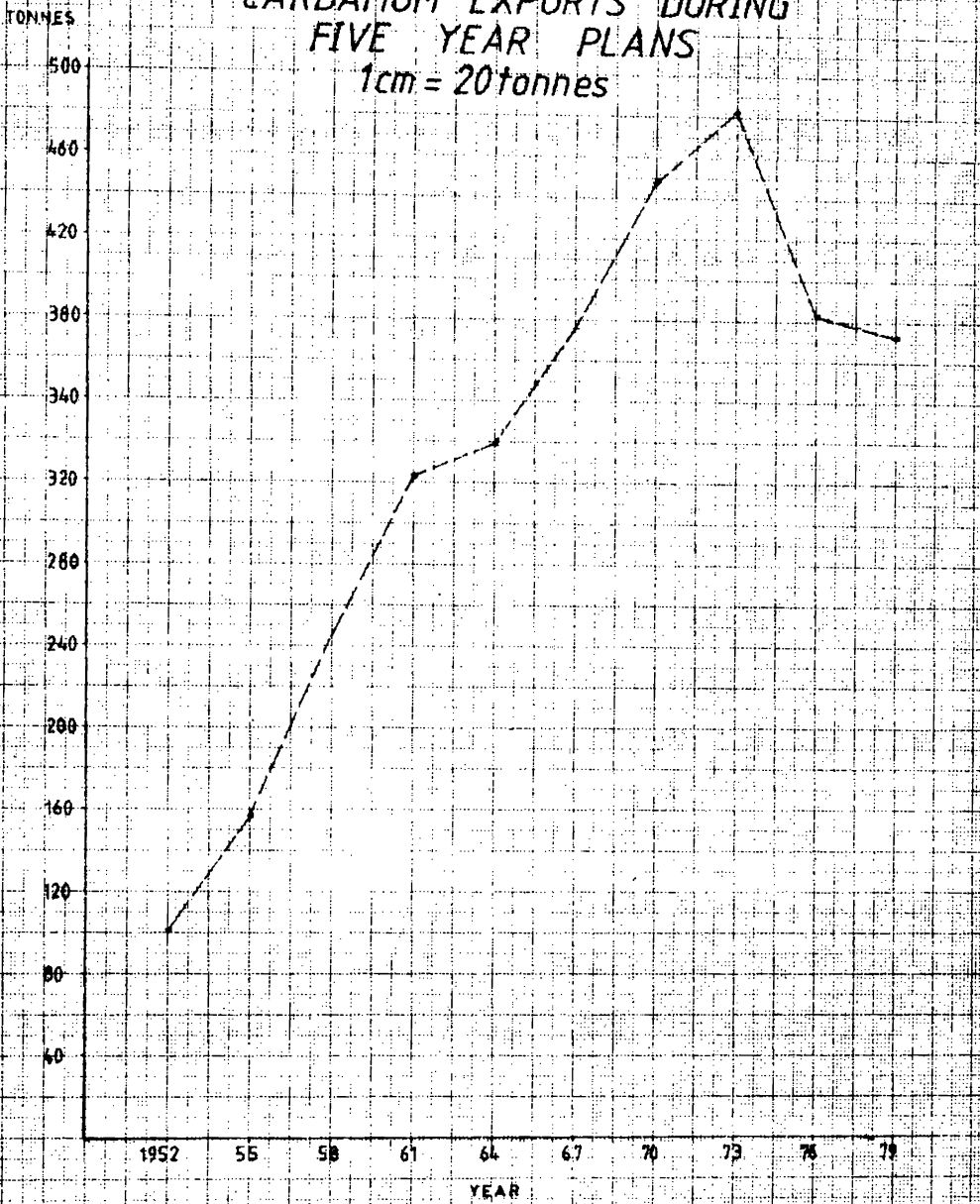
A thorough analysis of trade statistics of cardamom exports shows that upto 1975, the cardamom exports were increasing at a speed rate, year after year, though there were some minor fluctuations in some year.

From 1951 to 1953, the exports were increasing at an increasing rate and in 1953 the total export touched 168 tonnes and fetched a value of Rs.28.6 lakhs. The year 1954 showed a decline of about 60 tonnes. From 1954 onwards the export started to increase more or less at a steady rate. In 1964, the total amount of cardamom exported amounted to 433 tonnes and realized a value of Rs.234 lakhs. 1965 witnessed a decline in export. In 1970, the total value of cardamom export came to Rs.411 lakhs and the total value exported was 499 tonnes.

The year 1973 shows an all-time high export of 583 tonnes, valued at Rs.193 lakhs. Owing to the decline in the prices of cardamom, the value for the high

Fig No. 17

CARDAMOM EXPORTS DURING  
FIVE YEAR PLANS  
1cm = 20 tonnes



exports was not in any way near to the previous year's value. In 1980, the value realised from cardamom exports from Cochin port amounted to Rs.756 lakhs, though the quantity exported was only 495 tonnes. The increase in the price of cardamom was the major cause for the increased revenue from exports. The price of cardamom in 1970 was Rs.82,297 per tonne. The price increased to Rs.1,52,803 per tonne in 1980. Consequently, the decline in volume of cardamom exported was compensated by increase in value.

European countries as a whole were the principal customers of our cardamom. The share of Europe went up from 89% in 1951 to 95% in 1965. Taking countries individually, U.S.S.R. topped the list of customers of cardamom from Cochin in 1967. Her share was 21% in the same year.

Recently Saudi Arabia topped the list. She purchased 254 tonnes out of 5,369 tonnes exported, compared to 200 tonnes by the U.S.S.R. in 1975. From 1970 onwards Saudi Arabia topped the list upto 1978. Thereafter, U.S.S.R. came to the forefront in the next two years.

The last few years' trade fluctuations can be seen from fig.No.14. In the world market, our main competitor is Guatemala. The larger production in Guatemala will adversely affect our exports of cardamom from Cochin port.

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## LEMONGRASS OIL

The large-scale production and exports of lemongrass oil started after the second world war. A major share of the lemongrass oil is exported from Cochin port, which is produced in India. Kerala stands first in the production of lemongrass oil in India. In Karnataka also, the production of lemongrass oil is carried on to a certain extent.

The U.K., The U.S.S.R., The U.S.A. and Australia are the major customers of lemongrass oil exported from Cochin. Guatemala is the major competitor for India in the world market just as in the case of cardamom. The increasing production of lemongrass in Guatemala creates a threat to our exports. The main use of lemongrass oil is in the manufacturing of vitamin A.

The exports of lemongrass oil started from Cochin from very early days. Data is available from 1891 onwards. For the purpose of analysis, the period between 1891 to 1980 is divided into several phases. This is to find out the major trends in the export of lemongrass oil from Cochin.

Lemongrass Oil Exports During 1891 to 1913:

The first phase covers a period from 1891 to 1913. During this phase, the normal trend of lemongrass oil exports was to increase. Though some fluctuations are visible from the data for exports. These fluctuations were not very significant, since minor fluctuations are normal future of trade.

The export in 1891 was nine quintals only and it began to increase year after year upto 1896 and in the same year the total volume exported touched 29.2 tonnes. This increase in exports was an exceptional one and there was a sudden decline after that till 1906. In 1906, the volume exported from Cochin was only 8 tonnes at a value of Rs.1,13,731. In the next year the exports increased to 51.3 tonnes and the value to 4.66 lakhs.

This increase in exports could not be maintained for a long period and for the next three years there were only less exports, compared to the year 1907. 1913 was the best year of lemongrass oil exports during the period 1891-1913 and in the same year the volume of exports increased to 149 tonnes at a total value of Rs.8.13 lakhs.

**Exports During World War II:**

The exports figure of 1913 again increased in the next year to 189 tonnes at a value of Rs.9.78 lakhs. In 1915, the volume exported amounted to 125 tonnes and the value realised was Rs.5.74 lakhs. The peculiarity of this period is that it shows fluctuating trend in both quantity as well as value of exports of lemongrass oil. The quantity exported declined from 189 tonnes in 1914 to 78 tonnes in 1918 and value declined from Rs.9.78 lakhs in 1914 to Rs.2.64 lakhs in 1918. In between, the volume exported varied from 125 tonnes in 1915 to 138 tonnes in 1916 and value from Rs.4.3 lakhs in 1917 to Rs.5.74 in 1915.

**Lemongrass Oil Exports During 1919 - 1938:**

In 1919, the volume exported from Cochin amounted to 68 tonnes only and the total value earned thereby was Rs.3.29 lakhs. Thereafter, the exports began to increase and upto 1924 this increasing trend continued. In 1924, the quantity exported increased to 264 tonnes and realised a value of Rs.10.7 lakhs. It was a good year of exports. Compared to the previous years, 1931, 1932 and 1933 were very bad years for exports.

From the export figures for 1919 to 1938 it is noticed that this period shows highly fluctuating trend. The exports varied from 68 tonnes in 1918-1919 to 418 tonnes in 1938. Value realised from exports is also subjected to fluctuations. It varied from Rs.3.29 lakhs in 1918-1919 to Rs.14.3 lakhs in 1928. The year 1936 tops the list with reference to quantity exported and the year 1928 with reference to value realised. Exports as well as value realised decreased in the years 1937 and 1938.

#### Exports During World War II:

The significant thing to be noted during this period is that of price fluctuations. In 1939, i.e., the first year of the World War II, we exported 596 tonnes of lemongrass oil valued at Rs.6.50 lakhs. Then the price per tonne was Rs.1,092/-. Though the 1940 exports declined to 346 tonnes, the total value had gone up to Rs.8.78 lakhs. This was due to the price increase of lemongrass oil. In 1941, the total volume exported was 363 tonnes at a total value of Rs.13.3 lakhs.

In the last year of the world war II, our exports increased to 597 tonnes with a value of Rs.47.95 lakhs. The price in 1945 was Rs.8,032/-. In 1945,

Fig No. 15

LEMONGRASS OIL EXPORTS, DURING 1901-50  
scale: 1 cm = 30 Tonnes

TONNES

600

540

480

420

360

300

240

180

120

60

1902 05 08 11 14 17 20 23 26 29 32 35 38 41 44 47 50

YEAR





America was the major customer of our lemongrass oil. The fluctuations in lemongrass oil exports during 1901 - 1950 can be seen from Fig. No.15.

Lemongrass oil exports during 1946 - 1950 shows that, compared to 1945, there was a decline in exports in 1946. This decline in 1946 was compensated by steep increase in 1947. Exports jumped to 1,053 tonnes in 1947 and realised a value of Rs.112 lakhs compared to the previous year it accounted more than two-fold increase in quantity. Thereafter the volume exported and value realised began to decline year after year upto 1950. In 1950 the quantity declined to 325 tonnes and value to Rs.47.9 lakhs.

#### Lemongrass oil Exports During 1951 - 1980:

The analysis of exports during 1951 - 1980 shows that upto 1966, the exports maintained steady growth, though with minor fluctuations in some years. But after 1966 exports began to fall sharply and touched the lowest level in 1978. The following table gives the total quantity and value of lemongrass oil exports during 1951 - 1980.

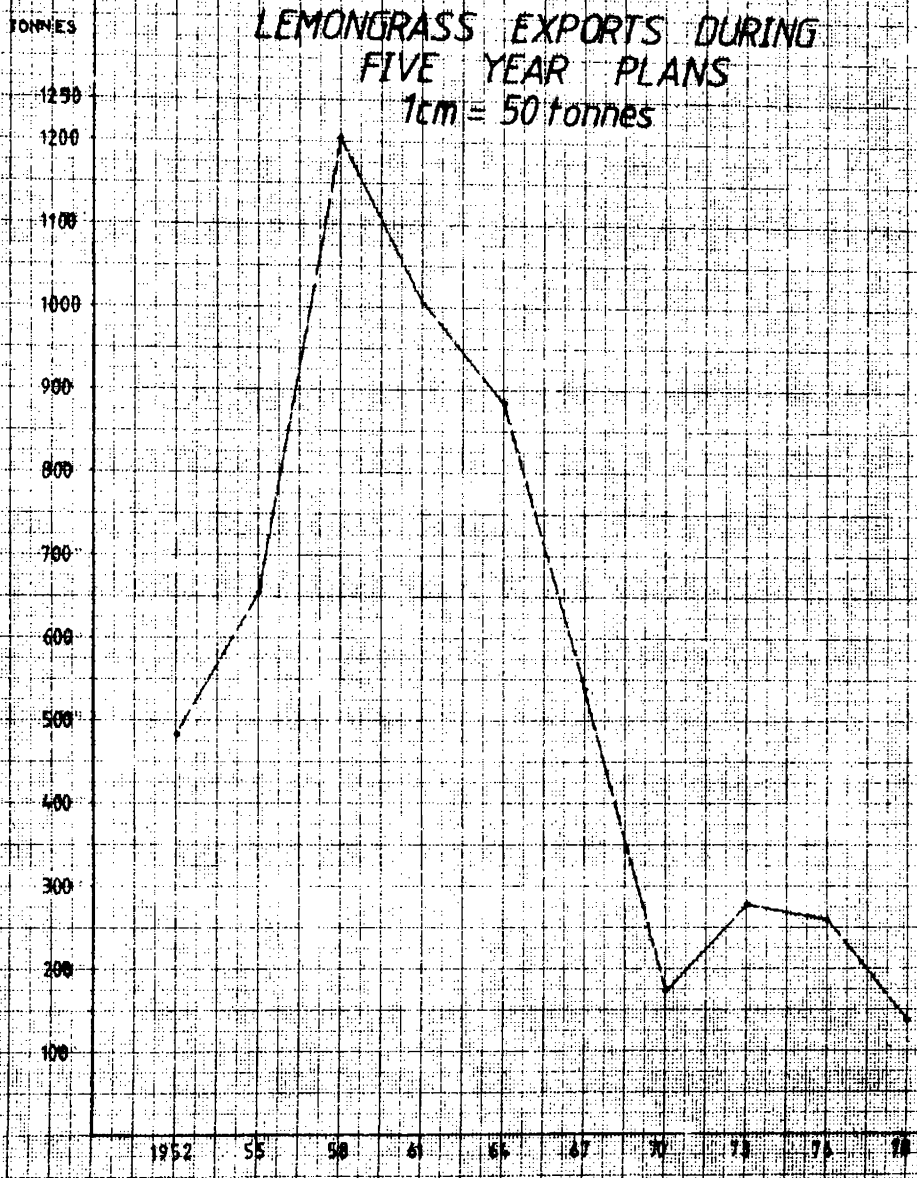
**TABLE - 12****LEMONGRASS OIL EXPORTS DURING 1951 - 1980**

<b>Year</b>	<b>Quantity (Tonnes)</b>	<b>Value (Rs. in lakhs)</b>
1950-51	541	152
1952	495	128
1953	414	39.5
1954	669	72.6
1955	582	104.7
1956	791	130.6
1957	1,092	147
1958	1,313	138
1959	1,214	93
1960	1,075	141
1961	1,030	201
1962	914	276
1963	N.A.	N.A.
1964	778	129
1965	993	134
1966	1,024	N.A.
1967	308	78.7
1968	274	73
1969	106	52
1970	220	110
1971	194	83
1972	219	73
1973	263	96
1974	360	208
1975	244	155
1976	265	142
1977	273	155
1978	56	36
1979	77	56
1980	270	185

**SOURCE: C.C.C.I.**

UNIVERSITY OF COCHIN

Fig. No. 16



From table-12 we can see that the quantity exported was maximum in the year 1958 and the value realised in 1962. In 1958 the quantity exported touched an all-time record of 1,313 tonnes. Value realised from exports in 1962 amounted to Rs.276.4 lakhs. In between, the quantity varied from 56 tonnes in 1978 to 1,214 tonnes in 1959 and the value from Rs.35.84 lakhs in 1978 to Rs.200 lakhs in 1961.

No other commodity exported from Cochin port, which we have analysed here, shows such a sharp decline in exports as lemongrass oil had. In 1978, the volume exported was only 56 tonnes at a value of Rs.35.84 lakhs. The graph drawn for the export of lemongrass oil during 1951 - 1980 will clearly show the severe fluctuation in the exports of the same from Cochin port. The general trend for lemon grass oil exports during 1951-1980 was to decline every year.

The lemongrass oil exports from Cochin port is in the brink of a collapse. If this trend continues for the next few years our lemongrass exports will be nil and which will lead to the complete collapse of the industry, unless internal uses are not increased.

## TURMERIC

Though the turmeric exports from Cochin port started some hundred years back, here we deal with the exports starting only from 1901 onwards.

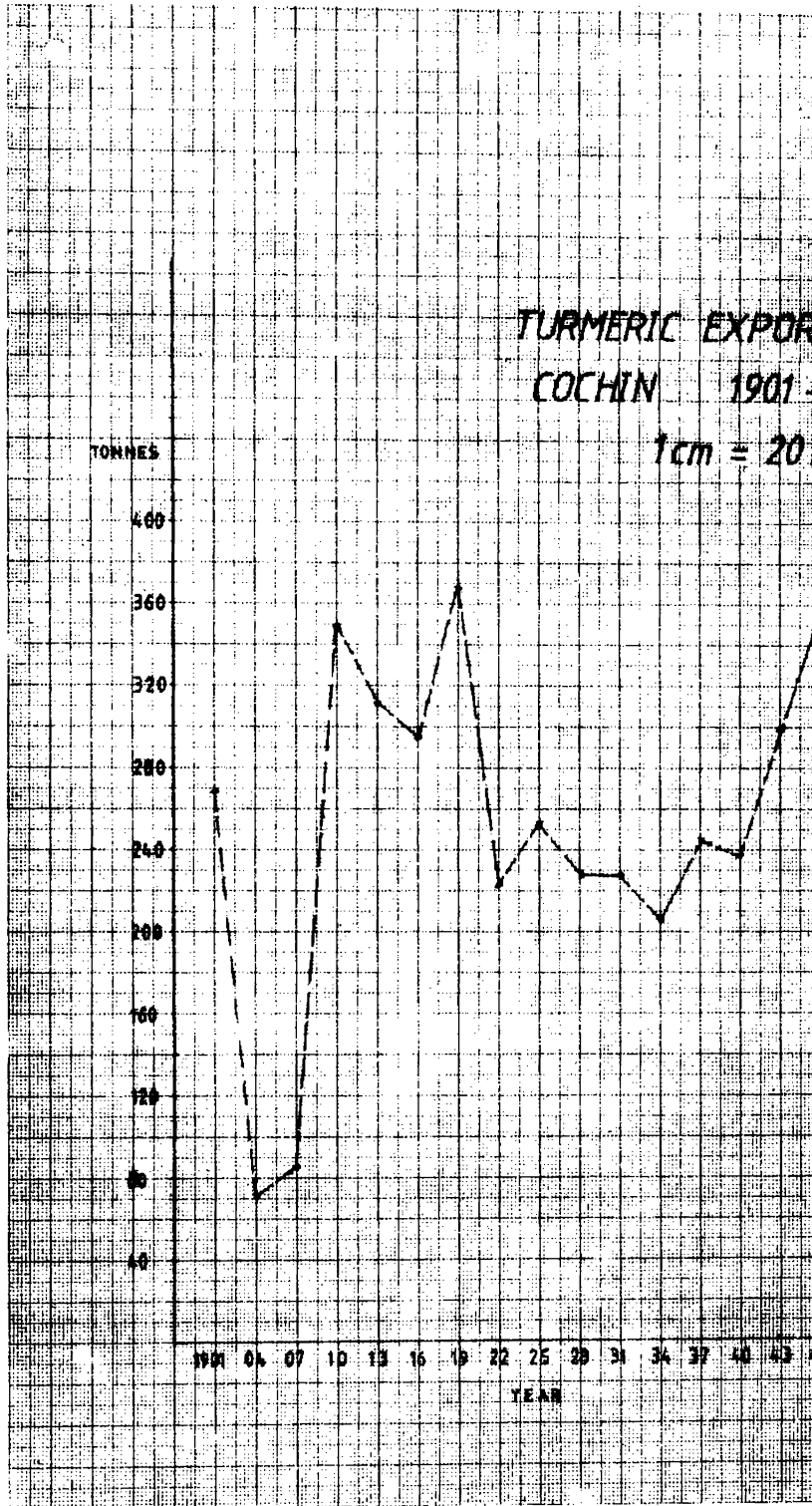
### Turmeric Exports During 1901 - 1950:

The trend of turmeric exports during this period shows severe fluctuations. In 1901, the total volume of turmeric exported from Cochin port amounted to 95 tonnes only. In the next year the volume exported increased to 315 tonnes. From 1902 onwards, there was a severe depression in the turmeric exports upto 1908. In the same year, the quantity exported touched 59 tonnes. In 1909, a tremendous increase in turmeric export took place and the quantity amounted to 359 tonnes, at a value of Rs.63,493. In 1910, the value of exports from Cochin showed a rise to Rs.75,346 with a quantity of 419 tonnes.

The year 1915 was a dull year of exports with 51 tonnes. The exports reached 726 tonnes in 1916, valued at Rs.2.2 lakhs. A notable feature with regard to turmeric exports during 1901 to 1950 is that in every two or three

TURMERIC EXPORT  
COCHIN 1901 -

1cm = 20



years there are wide-range fluctuations. Some years account high exports and some only less exports.

Upto 1919, starting from 1901, though there were severe fluctuations in some years, the tendency for exports was to increase. After reaching a high level of exports in 1920, the turmeric exports began to show a declining tendency. And, in 1922, it declined to very low levels, and for the next 20 years there was a more or less steady exports.

Though turmeric exports do not constitute a significant share in our foreign exports, the frequent fluctuations taking place in trade is a point to be noted. In the graph we have taken three-year averages and then plotted them in the middle year. The effect of this is that some of the minor fluctuations get normalised and only major fluctuations get projected. From fig.No.17 we can see the major fluctuations in turmeric exports from Cochin port during 1901 - 1950. Table-13 represents the turmeric exports during 1951 - 1980.

**TABLE - 13**  
**TURMERIC EXPORTS FROM COCHIN**

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1951	601	9.53
1952	390	2.80
1953	432	5.01
1954	446	7.39
1955	503	11.8
1956	532	8.8
1957	377	2.5
1958	515	4.3
1959	611	6.0
1960	498	6.66
1961	533	7.31
1962	700	11.1
1963	539	11.9
1964	716	14.1
1965	470	6.97
1966	993	N.A.
1967	565	9.55
1968	766	21.62
1969	841	43.2
1970	1,035	66.7
1971	1,171	32.8
1972	1,826	51.1
1973	1,341	38.96
1974	2,156	99.1
1975	1,401	63.1
1976	1,810	77.54
1977	1,544	82.3
1978	2,665	24.9
1979	3,273	31.9
1980	2,137	14.1

Source: C.C.C.I.

UNIVERSITY OF COCHIN



The bulk purchasers of our Turmeric exports from Cochin are the U.S.A. and Aden. The table given above shows the level of turmeric exports from 1951 to 1980. The table given above is converted into fig.No.18.

From Table-13 it can be seen that the volume of turmeric exported was the minimum in 1957 and maximum in 1979. The quantity exported in these years amounted to 377 and 3,273 tonnes respectively. The quantity varied between 390 tonnes in 1952 to 2,665 tonnes in 1978.

Another feature that can be noticed from the diagram is that from 1968 onwards, the exports began to show an increasing trend. This increase continued till 1979 when the exports touched an all-time record of 3,273 tonnes valued at Rs.319 lakhs.

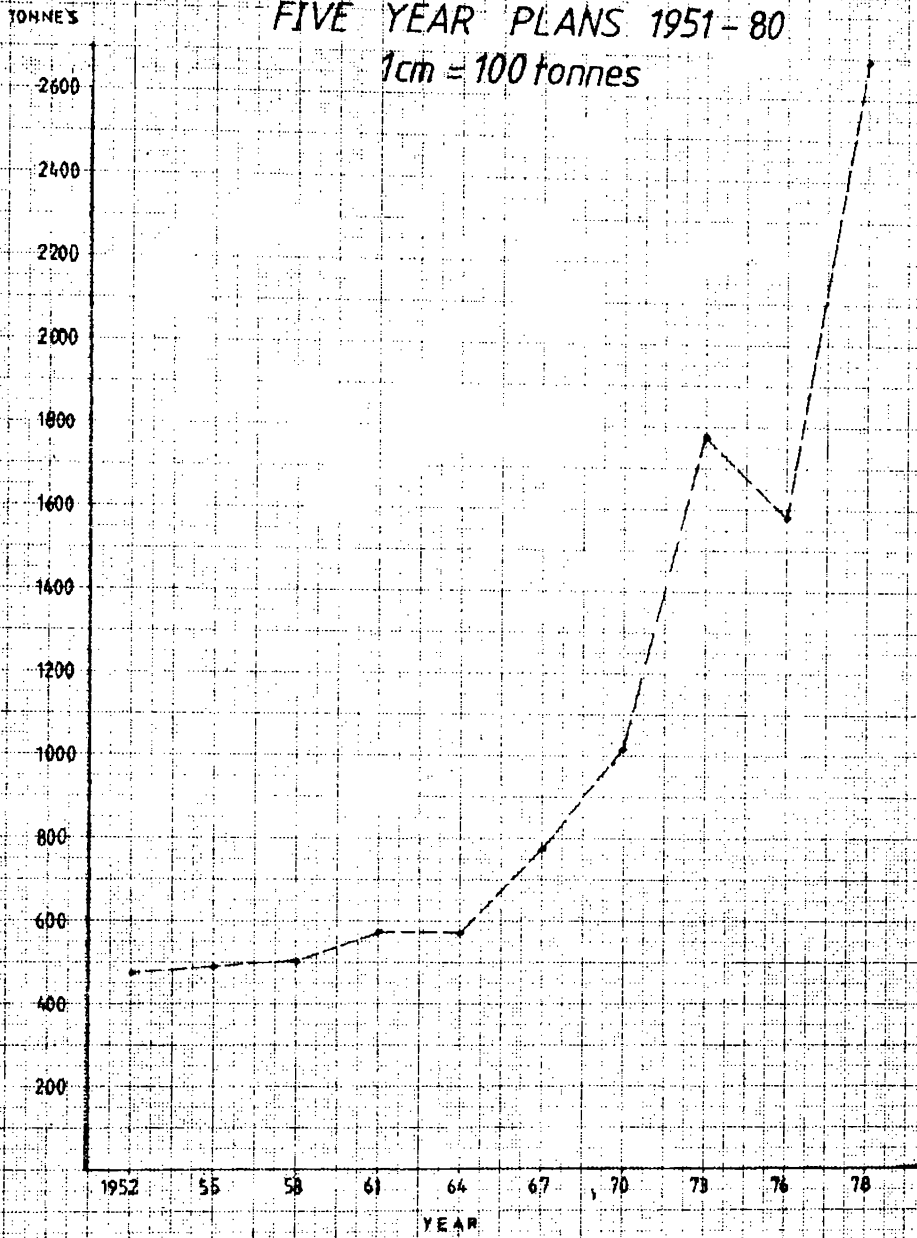
The U.S.A. has been enjoying a supremacy over all other countries with regard to the import of turmeric from Cochin. Its share in total exports of turmeric from Cochin varied between 75 and 55% during 1951 - 1980. The corresponding share of Aden varied between 10 and 32% during the same period.

The direction of trade shows that the U.S.A's share as the largest customer of turmeric from Cochin

Fig No. 13

### TURMERIC EXPORTS DURING FIVE YEAR PLANS 1951-80

1cm = 100 tonnes



began to decline and Aden have come to the field in recent years. But even now U.S.A. retains the position as the largest purchasers of our turmeric, even though the share is decreasing in recent years.

## GINGER

Kerala stands first in the production of ginger in India, whose share is 50% of the world production. Kerala contributes 75% to the total ginger export earnings of India. Aden, Saudi Arabia, West Indies, Egypt, Iran, the U.S.A., the U.S.S.R., Australia and the U.K. are the main buyers of ginger from Cochin.

In 1881, the total value of Ginger exports from Cochin amounted to Rs.89,604/-. The value of exports increased gradually and it reached Rs.2.46 lakhs in 1887. The ginger exports from Cochin is subjected to interminate fluctuations. The volume of ginger exported in the year 1887 was 798 tonnes. For the next several years ginger exports from Cochin showed a declining trend. But by 1912, the exports pictured up again and touched 1,732 tonnes and realised a total value of Rs.100,650.

The price of ginger per tonne was Rs.58 in 1912. In the next year, the quantity exported declined to 587 tonnes. Even though the quantity declined so much, the value earned compared favourably with that of 1912.

This was due to a sharp increase in prices and the per tonne price of ginger had gone up from Rs.58 in 1912 to Rs.352 in 1913. It was a tremendous increase and this was probably due to the bulk demand from Europe, America and Ceylon.

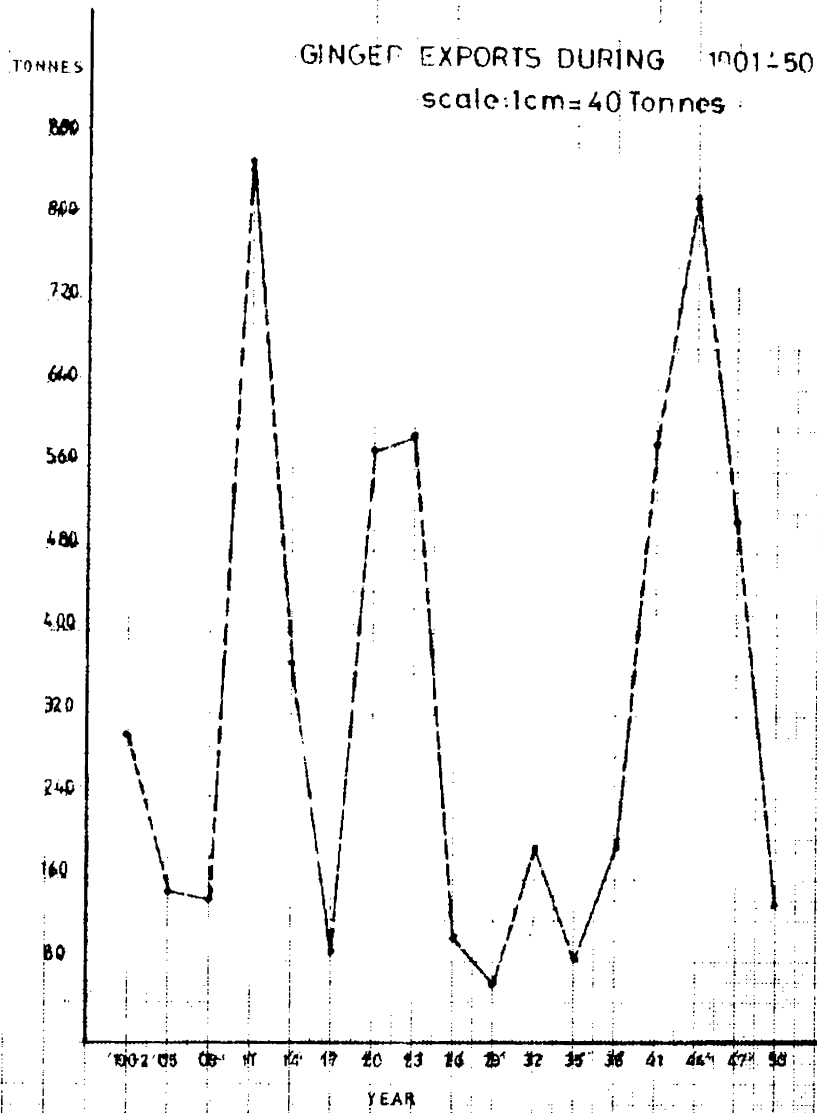
After 1912, the quantity exported gradually declined and it touched a low level of 75 tonnes in 1919 at a value of Rs.42,908. The next three years showed increases in exports and in 1922, the volume exported had risen to 939 tonnes, valued at Rs.4.96 lakhs. The next 19 years were very dull and in some years the ginger exports were very negligible as far as the total trade of Cochin Port was concerned.

In 1942, the volume of ginger exported from Cochin reached a high figure of Rs.10.85 lakhs. The next two years' ginger exports from Cochin declined sharply. But there was a spurt in exports during 1945 and exports went upto 1638 tonnes, valued at Rs.15.63 lakhs.

The next five years witnessed sharp decline in quantity exported and the value realised.

During 1881 - 1950, ginger exports from Cochin were subjected to wide seasonal and irregular

Fig. No. 19



fluctuations. This is quite evident from Fig.No.19. The history of seventy years of ginger exports shows that the period upto 1890 was good . After 1890, ginger exports declined except in the years 1912, 1922, 1942, 1945 and 1948.

#### Ginger Exports During 1951 - 1980

During the period of the Five Year Plans, ginger exports from Cochin began to show some positive changes. The volume exported began to increase year after year. The total value earned also began to show an increasing trend. Though minor fluctuations were frequently noticed, it positively showed an increasing trend.

In 1951, the quantity of ginger exports amounted to 584 tonnes, valued at Rs.23.57 lakhs. In 1952, there was a sudden increase in the volume exported. It reached 899 tonnes in the same year. Though the volume exported increased by about 300 tonnes, the value realised did not reach the previous year's level. This was due to a fall in the prices of ginger. The price of ginger in 1951 was Rs.4,056 per tonne whereas it fell down to Rs.2,322 per tonne in 1952.

The following table gives the total ginger exports from Cochin Port during the years 1951 - 1980:

TABLE - 14

GINGER EXPORTS DURING 1951 - 1980

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1950-51	584	23.57
1952	899	20.88
1953	507	7.64
1954	613	10.59
1955	761	19.38
1956	1,243	33.00
1957	3,498	55.62
1958	1,399	13.1
1959	1,665	17.7
1960	1,265	20.9
1961	2,799	41.2
1962	3,325	53.4
1963	N.A.	N.A.
1964	1,881	55.9
1965	1,684	59.2
1966	1,985	N.A.
1967	2,080	65.9
1968	1,637	55.7
1969	797	47
1970	883	95
1971	1,868	129
1972	4,520	163
1973	4,089	151
1974	3,606	206
1975	3,181	242
1976	2,604	223
1977	1,667	238
1978	6,805	953
1979	9,719	897
1980	6,392	358

Source: Cochin Port Annual.



From Table-14 it can be seen that ginger exports reached a record level of 9,719 tonnes in 1979 and the value realised reached the record level of Rs.953 lakhs in 1978. In between 1950-51 to 1979-80, there were wide fluctuations in the quantity exported as well as the value realised. In 1953 the quantity exported amounted to only 507 tonnes and the value realised stood at Rs.7.64 lakhs. The year 1980 deserves special attention. This year, though realised substantial exports in terms of quantity, realised only very little in the form of value. In other words, even though we exported 6,392 tonnes of ginger in 1980 we earned only Rs.358 lakhs. This accounts only 37.56% of the value realised in 1978. The decline in the realisation of value was mainly due to the steep fall in the price of ginger, from Rs.13,998 per tonne in 1978 to Rs.5,600 per tonne in 1980. The fluctuations which took place in the exports of ginger from 1951 to 1980 can be seen from Fig.No.20.

European countries and the U.S.A. are our main purchasers of ginger from Cochin. In 1926, Europe purchased 100% of our ginger. From 1936 onwards, other foreign countries other than Europe and the U.S.A. came to the field of ginger trade.

Fig No. 20

### GINGER EXPORTS DURING FIVE YEAR PLANS

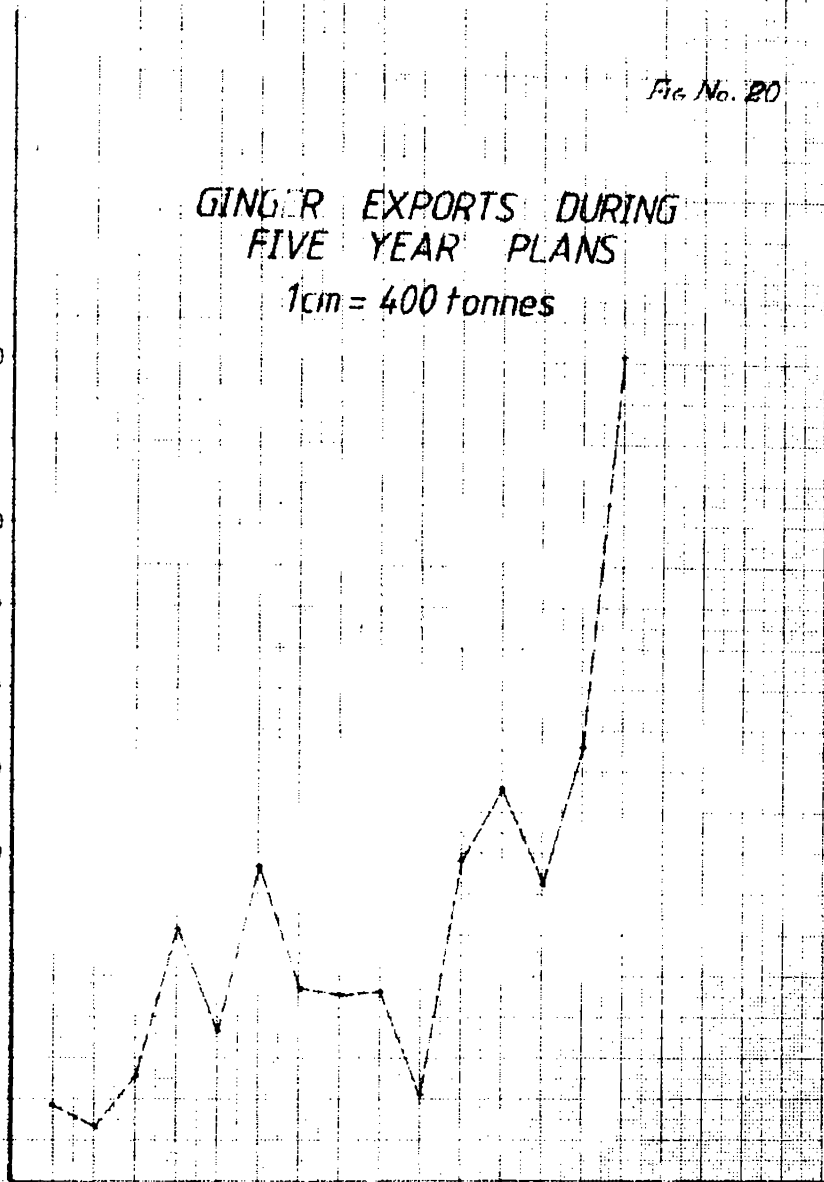
1cm = 400 tonnes

TONNES

8000  
7200  
6400  
5600  
4800  
4000  
3200  
2400  
1600  
800

52 54 56 58 60 62 64 66 68 70 72 74 76 78 80

YEAR



Today our major ginger customers are the U.K., Czechoslovakia, East Germany, the U.S.S.R., the U.S.A., Sudan, Aden, Saudi Arabia and North and South Yeman. We are having trade relations with 38 countries in the world. Now Saudi Arabia is one of our major customers.

India is now facing severe competition from Nigeria, Jamaica and China from where cheap ginger of good quality is coming to the world market. Jamaica produces ginger of good quality which costs 25% less than that of our ginger. The severe competition from abroad will adversely affect our ginger exports in the coming years.

VIII

MAJOR COMMODITIES OF IMPORTS

INTO

COCHIN PORT:

- (i) Oil
- (ii) Metals

## O I L

In this section of our analysis, we include all other oils except vegetable oils. Lubricating oils, crude oil, kerosene oil and other motor oils which we import from abroad are treated here. The main imports of crude oil is from Iran and Iraq.

Statistics of oil imports from abroad in to Cochin port is available from 1893 onwards. But upto 1919 data is available only in terms of value. Though it fails to give correct idea regarding the trend of imports, it still gives some indication of the trend of prices during these years.

The petroleum products which are imported from foreign countries is of very great economic importance as far as Cochin port is concerned. It is the major item in our imports. The port which was mainly an export-oriented port formerly, has now turned to an import-prominent port. This has seriously affected the pattern of trade through Cochin Port.

In 1893, we imported Rs.30,895 worth of petroleum products. In the next nine years the imports

declined very sharply. In 1896 and 1900 imports accounted for Rs.114 and Rs.583 respectively. In 1904, the value of imports rose to Rs.1,73,087. Oil imports were increasing year after year and it reached Rs.9.56 lakhs in 1911. The main countries from which our oil imports came were the U.S.A. and Europe. Among these two, America was the main country which exported large scale volume of oil to Cochin during 1893-1919.

TABLE - 15OIL IMPORTS DURING 1920 - 1950

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1920	1,828	4.7
1921	7,786	14.3
1922	5,927	10.9
1923	9,075	19.4
1924	7,808	14.3
1925	9,614	17.6
1926	12,043	25.0
1927	9,280	19.5
1928	12,848	18.5
1929	10,029	12.3
1930	11,845	15.0

Contd....

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1931	16,508	25.2
1932	17,663	21.6
1933	11,939	14.6
1934	498	0.78
1935	616	0.81
1936	25,982	26.9
1937	38,543	29.1
1938	54,312	41.5
1939	39,748	24.6
1940	60,691	43.01
1941	79,157	87.6
1942	100,133	116.7
1943	134,534	179.8
1944	189,407	259.4
1945	224,059	277.2
1946	115,192	160.0
1947	133,154	158.5
1948	281,933	303.1
1949	75,280	152.6
1950	296,193	464.6

SOURCE: C.C.C.I.

Generally, the imports during 1921 - 1950 shows an increasing trend. The imports amounted to 7,786 tonnes with a total value of Rs.14.3 lakhs in 1921. Though there were some fluctuations in the next few years, in 1926 about 12,043 tonnes of oil were imported into Cochin at a value of Rs.24.96 lakhs. Though the imports declined to 9,260 tonnes in 1927, and the value to Rs.103 lakhs, the following six years showed an increasing tendency in our imports and the total amount of import during 1931-32 amounted to 17,663 tonnes which accounted to a value of Rs.21.6 lakhs.

Compared to the previous year and the next several years, the years 1933, 1934 and 1935 were very bad and imports decreased to 498 tonnes in 1934, and the value of imports accounted for only Rs.78,134. After 1935, our oil imports were increasing at an accelerated rate and it reached 224,059 tonnes in 1945 with a value of Rs.277.2 lakhs. In comparison with the past many years, this year showed a surprising increase in imports. Both 1946 and 1947 were not good years as far as oil imports were concerned. It declined to 133,154 tonnes in 1947 at a value of Rs.158.5 lakhs.

1950 was the best year of oil imports during the period 1920 - 1950. In that year imports reached a



level of 296,193 tonnes at a value of Rs.464.6 lakhs.

During this period also, we can see some steep increases and some sharp declines in imports of oil into Cochin Port.

Oil Imports During 1951 - 1980:

Table-16 presents the total volume of imports of oil into Cochin Port during 1951 - 1980.

TABLE - 16

OIL IMPORTS DURING 1951 - 1980

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1950-51	164,571	263
1952	390,338	965
1953	391,830	899
1954	414,460	812
1955	405,593	811
1956	296,164	323
1957	225,077	377
1958	228,481	456
1959	52,155	100
1960	226,940	425
1961	310,839	517

Year	Quantity (Tonnes)	Value (Rupees in lakhs)
1962	358,683	649
1963	N.A.	N.A.
1964	323,518	474
1965	341,489	467
1966	N.A.	N.A.
1967	1,665,616	1,449
1968	2,776,900	2,320
1969	2,702,076	2,277
1970	2,693,287	2,270
1971	2,627,967	2,123
1972	2,597,280	2,714
1973	2,206,709	2,676
1974	2,467,208	10,007
1975	2,601,707	17,283
1976	2,268,347	N.A.
1977	2,694,000	N.A.
1978	2,703,508	N.A.
1979	2,673,631	N.A.
1980	2,738,338	N.A.

Source: Cochin Port Annual (1980).

The oil imports during 1951 - 1980 indicates a rising trend. Though there are certain minor fluctuations in some years, they are not quite significant. Fig. No.21 projects the trend of our oil imports during 1951 to 1980. The graph is drawn by taking the average of every three years and plotted on the middle year.

1954 recorded a tremendous increase in our oil imports. That year accounted an import of 414,460 tonnes of oil worth Rs.811 lakhs. These followed a slackening in imports in the next five years. The most severe decline during 1951 - 1980 was reported in the year 1960 when imports accounted for only 52,155 tonnes.

Then, upto 1962 imports were increasing every year and it reached 358,683 tonnes in 1962. Though the volume of imports increased to 341,485 tonnes in 1965, the next several years witnessed only less imports compared to 1965. Upto 1973, the price of oil remained more or less steady. In 1974, the total volume of oil imported into Cochin Port increased to 24,67,208 tonnes and the total value accounted to Rs.100.1 crores. There was a sudden increase in the value of petroleum products in 1974.

OIL IMPORT FROM 1951 TO '80  
scale 1cm=10,00,000Qntls

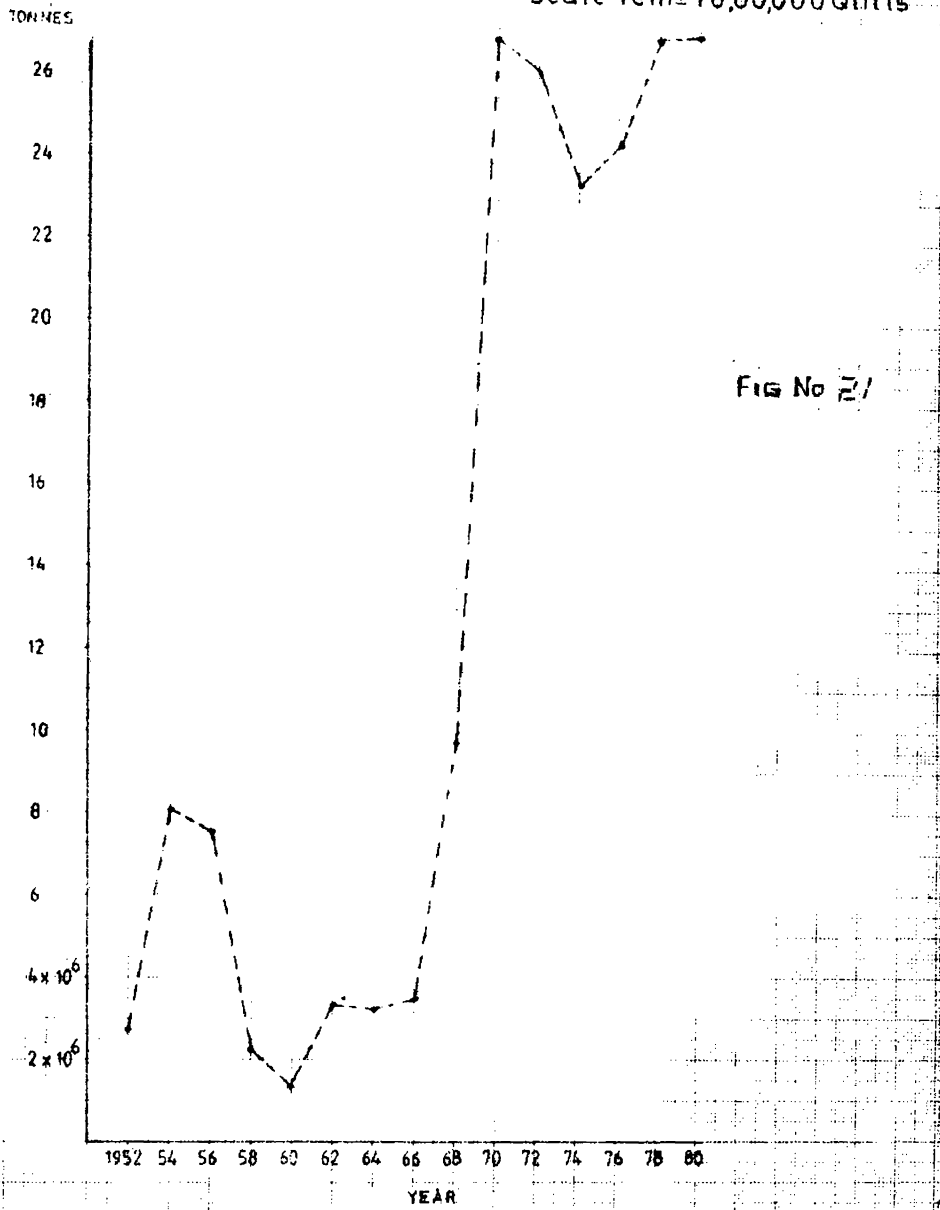


FIG No 21

In 1973, the price per tonne of oil was Rs.121. It increased to Rs.405 in 1974. Again, in 1975, the price increased to Rs.664. Though the volume imported remained more or less steady during the later years, there was an increasing tendency throughout the period upto 1980. The increased demand for oil products, tanker-berth facilities in the Cochin port etc. had helped the imports to increase. Graph No.21 shows the steep rising trend of our oil imports from 1951 to 1980. As far as the general trend is concerned, the minor fluctuations were only less significant.

The largest share of our oil imports come from Arabian countries. Since they are the major producers of oil, their decisions to increase the prices of the same affects our balance of payments very seriously.

Cochin Port was maintaining a favourable balance of trade upto 1979. But due to the increased volume of oil imports and the huge price increases of the same, the balance of trade position of the Port became very unfavourable. The installation of Tanker Berth and the Oil Refinery at Cochin have resulted in the increase of oil imports into Cochin.

## M E T A L S

Among the industrial raw materials, non-ferrous metals such as copper, zinc and lead, are as much important as the ferrous materials such as iron and steel. In order to achieve industrial development, we have to import a large quantity of metals. India's requirements of non-ferrous metals have risen steadily over the past decade.

Cochin port has trade relations with many foreign countries in metals. The imports of metals at Cochin had influenced very much the pattern of trade in Cochin port. Data is available only with reference to values of metals imported into Cochin port. The values are available from 1893 onwards.

Even though value is not a correct representative of the pattern of trade and fluctuations taking place in imports and exports, from 1893 to 1919, we analyse the values of imports year by year. Since the role played by metals in our economic life is of very much importance, the analysis will give us some idea about the trend of metal imports from abroad in to Cochin port.

In 1893, the value of metals imported amounted to Rs.69,140/-. This amount was gradually increasing and in

1896, the total value of import of metals touched Rs.1,34,147/-. The next year showed a decline at Rs.83,098/-.

TABLE - 17METAL IMPORTS INTO COCHIN PORT

Year	Value (Rs. lakhs)
1892-93	0.69
1894	0.74
1895	1.28
1896	1.34
1897	0.83
1898	N.A.
1899	N.A.
1900	1.84
1901	2.23
1902	3.04
1903	1.60
1904	2.21
1905	2.38
1906	2.21
1907	2.44
1908	2.56
1909	4.36
1910	4.00
1911	4.80
1912	4.25
1913	8.49
1914	10.12
1915	6.23
1916	4.67

contd....

Year	Value (Rs. lakhs)
1917	5.46
1918	1.00
1919	1.73

Source: C.C.C.I.

The above figure shows the trend of metal imports through Cochin.

From 1900 onwards the export values began to increase. It reached Rs.3.04 lakhs in 1902. The next six years recorded only smaller imports compared to 1902. Again, in 1903, the figures reached Rs.4.36 lakhs. Upto 1914, the imports increased in value. In 1914 a high figure was recorded at Rs.10.12 lakhs. This was the best year of metal imports during 1893-1919 period.

The normal tendency of metal imports during this period was to increase. A major share of the metals was imported from the European countries.

#### Metal Imports During 1921 to 1950:

This was a period of wide-range fluctuations in metal imports. Fig. No.22 gives the fluctuations in imports of metals during 1921 to 1950.



In 1921, the total value of imports amounted to Rs.18.3 lakhs. The volume imported was 2,666 tonnes. The figure for 1922 was 1916 tonnes. In 1925 an amount of Rs.9.86 lakhs was spent on 3,053 tonnes of metals imported. The next year accounted for 3,342 tonnes of metal imports. This has increased to 3,907 tonnes in 1930. The following year showed only lesser amount of imports.

In 1948, the total imports of metals amounted to 4,114 tonnes valued at Rs.31.43 lakhs. This had increased to Rs.47.8 lakhs with a quantity of 6,907 tonnes and then declined to 3,932 tonnes at a value of Rs.29.4 lakhs in 1950.

In 1942, the import figure reached 2,979 tonnes with a value of Rs.7.7 lakhs. After reaching a high figure in 1942, suddenly the imports declined to half, in the case of quantity imported, to 1,432 tonnes in 1943. Again, in the next year the volume had shown an increase of 600 tonnes and the figure reached 2,015 tonnes. Again, 1945 was a bad year as far as imports were concerned. There was a sharp decline and imports fell to 203 tonnes. The next four years showed increases and in 1950, the volume of imports amounted to 3,932 tonnes with a value of Rs.29.43 lakhs.

Fig No 28

IMPORTS OF METALS FROM 1921 TO '50  
Scale 1cm = 2000 QnTis

TONNES

36000  
32000  
28000  
24000  
20000  
18000  
16000  
14000  
12000  
10000  
8000  
6000  
4000  
2000

1922 24 26 28 30 32 34 36 38 40 42 44 46 48 50

YEAR

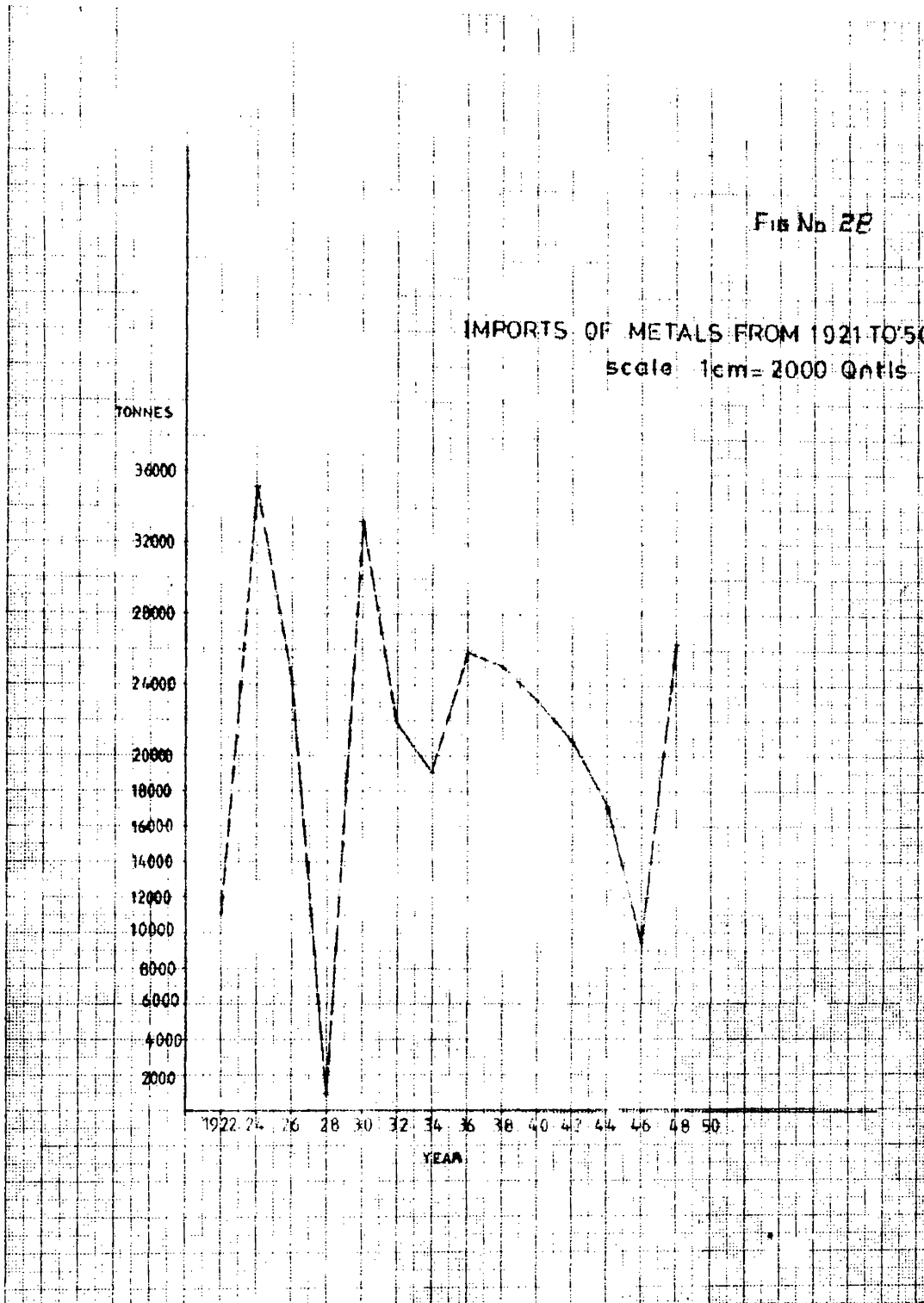


TABLE - 18METAL IMPORTS DURING 1951-1980

Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1951	5,379	55
1952	6,308	105
1953	7,002	146
1954	7,174	134
1955	15,059	219
1956	25,187	259
1957	22,636	358
1958	20,855	339
1959	23,220	308
1960	24,620	282
1961	36,077	377
1962	27,241	336
1963	N.A.	N.A.
1964	20,452	262
1965	48,837	432
1966	N.A.	N.A.
1967	33,302	559
1968	35,206	582
1969	44,847	537
1970	59,349	655
1971	20,530	473
1972	36,875	616
1973	36,567	688
1974	21,592	554
1975	4,956	255
1976	12,922	416
1977	8,652	318

contd...

Year	Quantity (Tonnes)	Value (Rs. in lakhs)
1978	13,988	557
1979	10,770	768
1980	68,590	2,471

SOURCE C.C.C.I.

In 1951, 5,379 tonnes of metals were imported at a cost of Rs.54.72 lakhs. In the next year this has increased to 6,308 tonnes with a value of Rs.104.65 lakhs. Year after year, the imports were increasing and it reached 25,187 tonnes with a value of Rs.258.7 lakhs in 1956. The next four years showed a decline in imports and the total volume imported in 1960 declined to 24,620 tonnes at a value of Rs.282.4 lakhs.

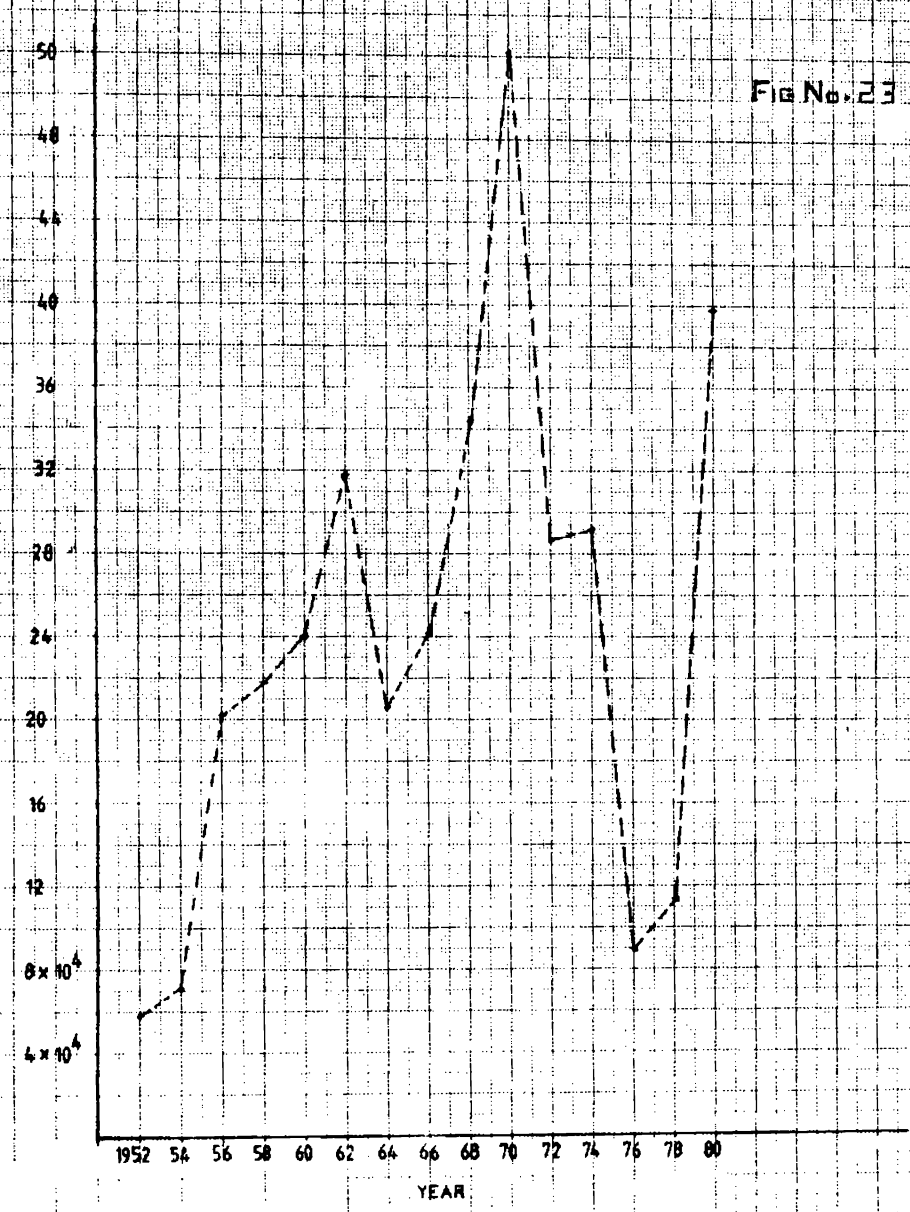
Even though the 1961 imports was 36,077 tonnes, the next two years witnessed only low imports. In 1970, imports reached an all-time high figure of 59,345 tonnes valued at Rs.654.8 lakhs. The remaining nine years were very dull years compared to 1970. In 1975 the imports declined to 4,986 tonnes, compared to 21,592 tonnes in 1974.

In 1980, the total value of imports reached 68,590 tonnes, which was an all-time high figure with a value of Rs.2,471 lakhs.

METAL IMPORTS FROM 1951 TO 1980  
Scale 1cm=20 000 Ontls

TONNES

Fig No. 23



The metal imports during 1951-80 also was subjected to severe fluctuations. After reaching a high level of imports in some years, the imports showed a tendency to decline in the next few years.

These severe fluctuations in trade are reflected in Fig.No.23 given for imports during 1951-1980. The increasing use of ores and metals for industries leads to the high imports and in 1980. The imports reached the record level.

**IX**

**COCHIN EXPORTS AND IMPORTS IN THE 1990'S:**

**A FORECAST**

In this section of our analysis, we go a little ahead to see what will be the future pattern of exports with reference to the commodities studied from and imports into Cochin Port during 1981 - 1990. Based on the data for both exports and imports during the past thirty years, i.e. 1951 to 1980, we fit a trend line of the form  $Y_o = a + bx$ , by using the 'least square regression' method. The line obtained by this method is known as 'the line of best fit'.

As we have already seen the straight line trend is represented by the equation

$$Y_o = a + bx.$$

Where,  $Y_o$  is used to designate the trend values to distinguish them from the actual  $Y$  values, i.e. data for exports or imports, 'a' is the  $Y$  intercept or the computed trend figure of the  $Y$  variable when  $X = 0$ . 'b' represents the slope of the trend line or the amount of change in  $Y$  variable that is associated with a change of one unit in  $X$  variable. The  $X$  variable in this Time Series Analysis represents years.



In order to determine the values of the constants 'a' and 'b' the following two normal equations are solved:

$$\sum Y = Na + b \sum x \quad \dots(1)$$

$$\sum XY = a \sum x + b \sum x^2 \quad \dots(2)$$

where N represents number of years for which data are given.

The constant 'a' is simply equal to the mean of Y value, (here exports or imports) and the constant 'b' gives the rate of change.

After finding out the values of 'a' and 'b' the trend line is fitted. The Micro Computer-28 is used to do the exercise. BASIC language is used for the programming. Except for Oil Imports, the trend is based on the thirty years of exports or imports. In the case of oil we have taken only import figures from 1967 to 1980. Since the thirty years' data failed to show the trend values correctly because of the eight-fold increase in oil imports and the continued increase of the same after 1966, the trend value remained rather low compared to the prevailing imports. In order to avoid that difficulty, we have taken the import data only from 1967 onwards.

In the following paragraphs, we present the computer print-outs in the form of tables for each and every commodity we have already dealt with.

### TEA EXPORTS

Though we have trend values for 1951 to 1990, here we give the same only for a period of ten years, i.e. from 1981 to 1990. According to the trend value fitted by  $Y_0 = 39,230 + 667x$ , the exports of tea will be 52,570 tonnes in 1985 and 55,905 tonnes in 1990. Fig.No.24 gives the trend of tea exports during 1970 and 1990. The same figures calculated by the Computer is given in Table-19.

TABLE - 19

```

0010 REM PGM BY THOMAS K.A. DEPT OF APPLIED ECONOMICS
UNIVERSITY OF COCHIN
0020 REM TREND LINE FOR TEA EXPORTS FROM COCHIN IN TONNES
0030 PRINT 'YEAR', 'X', 'Yo'
0040 LET R=1951
0050 LET X=-14
0060 LET A=39230
0070 LET B=667
0080 FOR I=1 TO 40
0090 LET Yo=A+B*I
0100 PRINT R,X,Yo
0110 LET R=R+1
0120 LET X=X+1
0130 NEXT I
0140 END
READY
RUN

```

contd.....

Year	X	Y <sub>0</sub>
1981	16	49,901.99
1982	17	50,568.99
1983	18	51,235.99
1984	19	51,902.99
1985	20	52,569.99
1986	21	53,236.98
1987	22	53,903.99
1988	23	54,570.99
1989	24	55,237.99
1990	25	55,905.00

STOP AT LINE 0140

In the case of tea exports, the trend line shows a moderate rate of increase in every year. It increases by 667 tonnes each year and the forecasted volume value for 1990 is 55,905.00 tonnes of tea.

#### Cashew Kernel Exports:

The trend of cashew kernel exports also shows a moderate rate of increase in every year. The trend fitted is  $Y_0 = 38,650 + 957x$ . The trend values are given in Table-20.

**TABLE - 20**  
**TREND VALUE FOR CASHEW KERNEL EXPORTS FROM COCHIN**  
**IN TONNES**

Year	X	Y <sub>o</sub>
1981	16	53,961.98
1982	17	54,918.99
1983	18	55,875.99
1984	19	56,832.99
1985	20	57,789.99
1986	21	58,746.99
1987	22	59,703.98
1988	23	60,660.99
1989	24	61,617.98
1990	25	62,575.00

The same trend line is depicted in Fig.No.24. As per the trend line fitted for 1981 to 1990, the cashew kernel exports grow at a rate of 957 tonnes each year. The trend value for 1990 will be 62,575 tonnes, compared to 57,790 tonnes for 1985.

**Marine Products:**

The trend line fitted for marine products export is  $Y_o = 13,280 + 1,098x$ . It shows a tremendous potential for exports to increase. Table-21 shows the trend value for 1981 to 1990.

TABLE - 21TREND VALUE FOR MARINE PRODUCTS EXPORTS IN TONNES

Year	X	Yo
1981	16	30,847.99
1982	17	31,945.99
1983	18	33,043.99
1984	19	34,141.99
1985	20	35,240.00
1986	21	36,337.99
1987	22	37,435.99
1988	23	38,533.99
1989	24	39,631.99
1990	25	40,729.99

As per the trend line fitted, our marine products exports grow at a rate of 1,098 tonnes per year. Compared to both tea and cashew, it shows a better future for exports. The trend of exports can be seen from Fig.No.24. The total exports of marine products is estimated to be 40,730 tonnes in 1990.

Coir Exports:

Contrary to the increasing trend shown by the other commodities mentioned above, coir exports show a declining trend. It shows a dismal picture which can be

seen from Fig.No.24. The trend line fitted is  $Y_0=43800+$   
 $(-600x)$ . Every year our coir exports is expected to  
 decline by 600 tonnes. Our coir industry is going to  
 face a very serious crisis in the next decade.

TABLE - 22

TREND VALUE FOR COIR EXPORTS FROM COCHIN PORT  
IN TONNES

Year	X	$Y_0$
1981	16	34,199.99
1982	17	33,600.00
1983	18	33,000.00
1984	19	32,400.00
1985	20	31,800.00
1986	21	31,200.00
1987	22	30,600.00
1988	23	30,000.00
1989	24	29,399.99
1990	25	28,800.00

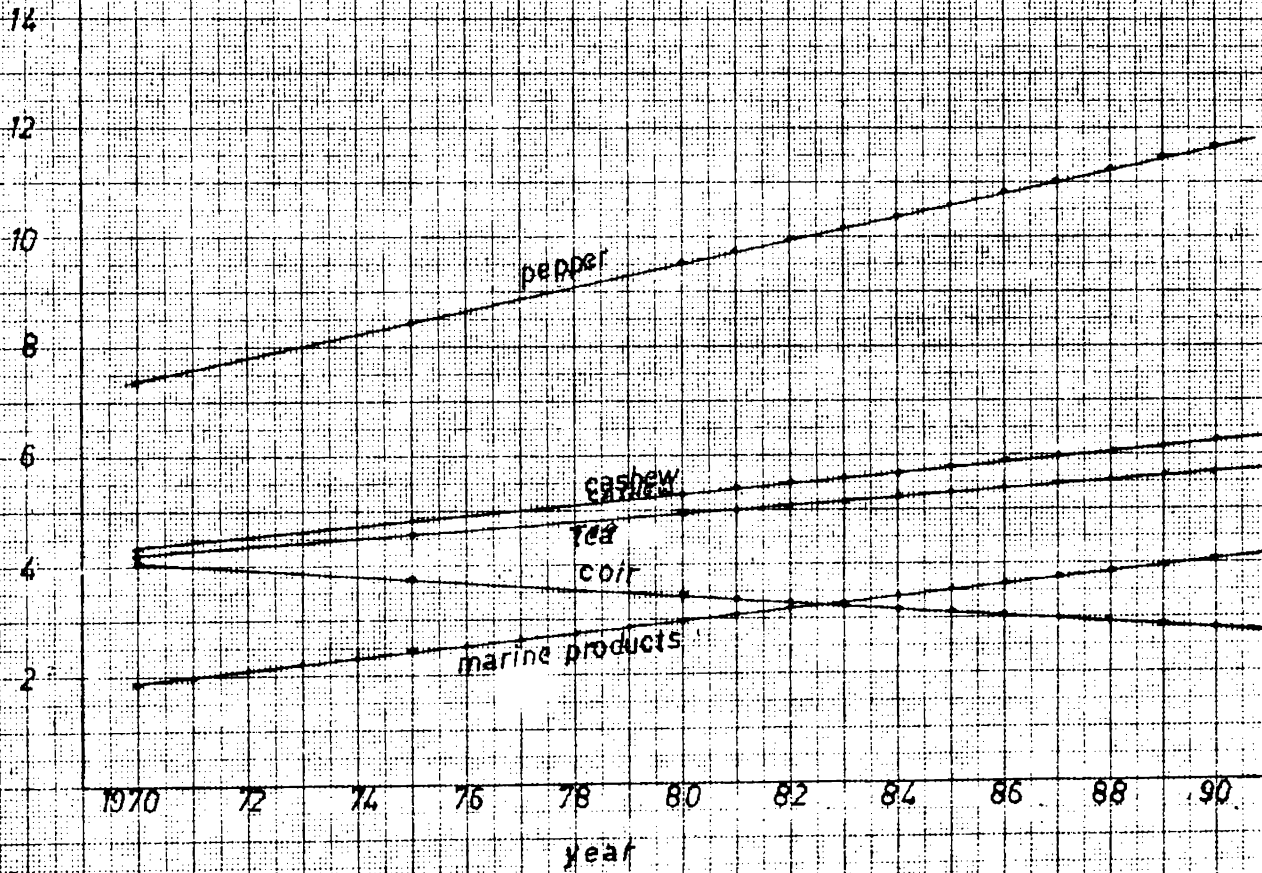
From Table-22 we can see the trend values for exports of coir goods during 1981 - 1990. The exports of coir is expected to be 28,800 tonnes in 1990, compared to 34,800 tonnes in 1980. If this trend continues for some more years our coir industry will wither away unless domestic demand increases at a high rate. So something serious must be done to rejuvenate this decaying industry.

FIG No 24

TREND VALUES FOR EXPORTS

SCALE

Cashew	1 cm = 10000 t
Marine products	1 cm = 10 000 t
Coir	1 cm = 10000 t
Pepper	1 cm = 2500 t
Tea	1 cm = 10000 t



Pepper Exports

The trend line fitted for pepper exports is of the form  $Y_0 = 15,730 + 535x$ . As we have already said, though we have the computed trend values for 1951 to 1990, here we present the trend values only from 1981 to 1990. Table-23 shows the trend values for pepper exports.

TABLE - 23TREND VALUE FOR PEPPER EXPORTS FROM COCHIN PORT IN TONNES

Year	X	Y <sub>0</sub>
1981	16	24,290.00
1982	17	24,825.00
1983	18	25,359.99
1984	19	25,894.99
1985	20	26,430.00
1986	21	26,964.99
1987	22	27,500.00
1988	23	28,034.99
1989	24	28,569.99
1990	25	29,104.99

The pepper exports show an increasing trend with a growth rate of 535 tonnes every year. Among the five trend lines



shown in Fig.No.24, pepper shows the brightest future for exports. It increases a bit steeper than all other commodities mentioned above. The pepper exports is expected to touch 29,105 tonnes in 1990, compared to 24,290 tonnes in 1981.

### Coffee Exports:

Table-24 represents the trend values for coffee exports during 1981 - 1990. The trend line is fitted by the equation

$$Y_0 = 10900 + 972 x.$$

Coffee exports also show a somewhat good increase in exports each year.

TABLE - 24

TREND VALUE FOR COFFEE EXPORTS FROM COCHIN PORT IN  
TONNE

Year	X	Y <sub>0</sub>
1981	16	26,451.99
1982	17	27,423.99
1983	18	28,396.00
1984	19	29,367.99
1985	20	30,339.99
1986	21	31,311.99
1987	22	32,283.99
1988	23	33,255.99
1989	24	34,227.99
1990	25	35,199.99

As per the Table-24, the export is expected to increase by 972 tonnes every year. The increasing trend of coffee exports give a bright future for the same. The computed value for 1990 is 35,200 tonnes, compared to 31,312 tonnes for 1986. The trend line is fitted on Fig.No.25.

#### Cardamom Exports:

The trend fitted is  $Y_0 = 324.7 + 13.2x$ . This trend also shows a bright future for cardamom exports. Table-25 gives the trend values for cardamom exports during 1981 to 1990.

TABLE - 25

TREND LINE FOR CARDAMOM EXPORTS FROM COCHIN PORT IN  
TONNES

Year	X	Y <sub>0</sub>
1981	16	535.8999
1982	17	549.0999
1983	18	562.2999
1984	19	575.4999
1985	20	588.6999
1986	21	601.8999
1987	22	615.0999
1988	23	628.2999
1989	24	641.4999
1990	25	654.6999

The above trend values are depicted in Fig.No25 also. The forecast values of cardamom exports in 1983, 1988 and 1990 are 562, 628 and 655 tonnes respectively, which shows an annual increase of 13.2 tonnes.

#### Lemongrass Oil Exports:

The trend line fitted is of the form

$$Y_0 = 571.5 + (-19.65x)$$

Just like coir, lemongrass oil exports also show a declining trend. It decreases by 19.65 tonnes every year. Compared to coir export it slopes downward very steeper. Table-26 shows the trend values for lemongrass oil exports, which is also represented in Fig.No.25.

TABLE - 26

TREND VALUE FOR LEMONGRASS OIL EXPORTS FROM COCHIN  
PORT IN TONNES

Year	X	Y <sub>0</sub>
1981	16	257.0999
1982	17	237.4499
1983	18	217.8000
1984	19	198.15
1985	20	178.5
1986	21	158.85
1987	22	139.20
1988	23	119.55
1989	24	99.9
1990	25	80.25

Out of the ten items of export which we deal in this analysis of trade, only two commodities, coir and lemongrass oil exports show declining trend. Policy makers must take note of this disturbing trend and take early measures to get rid of this decline.

#### Turmeric Exports:

Table-27 shows the trend values for turmeric exports fitted by the equation  $Y_0 = 1011 + 71 x$ .

TABLE - 27

TREND VALUE FOR TURMERIC EXPORT FROM COCHIN PORT IN

<u>TONNES</u>		
Year	X	Y <sub>0</sub>
1981	16	2,146.999
1982	17	2,218
1983	18	2,289
1984	19	2,360
1985	20	2,431
1986	21	2,502
1987	22	2,572.999
1988	23	2,644
1989	24	2,715
1990	25	2,785.999

Turmeric exports also show increasing trend, and can be seen from Fig.No.25. It grows by 71 tonnes every year.

### Ginger Exports:

The exports of Ginger also show a good increase compared to all other commodities mentioned above. The slope of the curve is more steeper than that of turmeric exports. The trend values are shown in Table-28, fitted by the equation  $Y_0 = 2479.7 + 157.9 x$ .

TABLE - 28

TREND VALUE FOR GINGER EXPORTS FROM COCHIN PORT IN TONNES

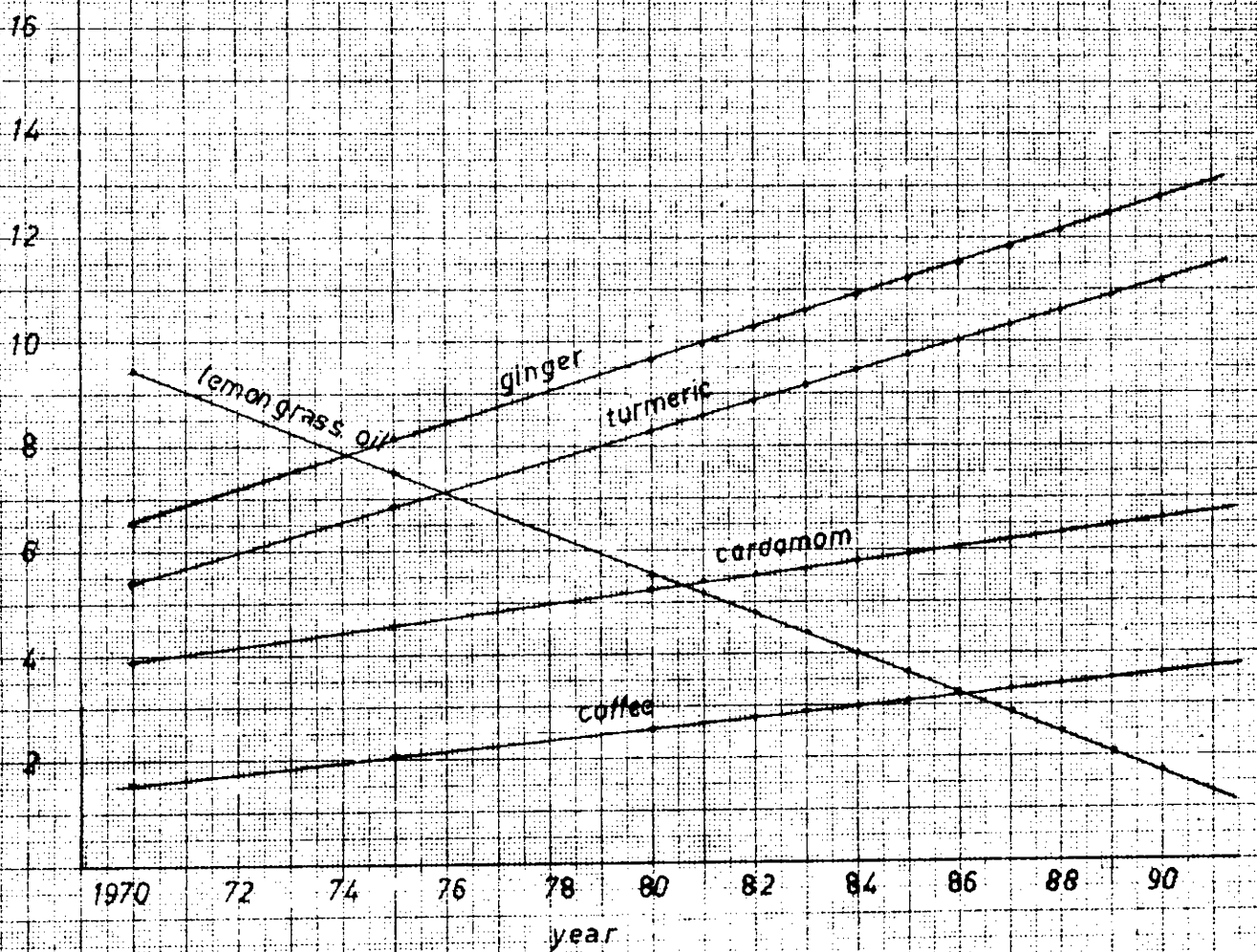
Year	X	Y <sub>0</sub>
1981	16	5006.099
1982	17	5163.999
1983	18	5321.899
1984	19	5479.799
1985	20	5637.699
1986	21	5795.599
1987	22	5953.499
1988	23	6117.399
1989	24	6269.299
1990	25	6427.199

FIG No. 25

TREND VALUES FOR EXPORTS

SCALE

Cardamom	1 cm = 100 Tonnes
Coffee	1 cm = 10,000 Tonnes
Lemongrass oil	1 cm = 50 Tonnes
Ginger	1 cm = 500 Tonnes
Turmeric	1 cm = 250 Tonnes



As per trend values calculated, in 1990 the exports of Ginger is expected to be 6,427 tonnes.

Trend Values for Imports:

Here we are going to fit trend lines for imports of oil (Petroleum products, crude oil, lubricating oil, kerosene oil etc.), and metals. For fitting trend values for metal imports, we have taken thirty years of import data from 1951 onwards. And a trend line is fitted by the linear equation  $Y = a + bx$ .

But in the case of oil imports, we have taken the imports data from 1967 onwards only. In the year 1967, there was a tremendous increase, in the quantity of oil imported into Cochin Port, compared to the previous many years. In 1967, the oil imported showed a more or less five-fold increase compared to 1965. Again, the increase was eight-fold in 1969, compared to 1965. And this increased oil imports remained more or less steady in the succeeding years. So, fitting the trend line by using thirty years imports data will not give us the future trend correctly. In order to avoid that difficulty, we have taken the imports figures of oil only from 1967 onwards.

Oil Imports:

Fig. No.26 shows the trend line fitted for oil imports by the formula  $Y_0 = 2340900 + 143800 x$ . Every year our oil imports is expected to increase by 143,800 tonnes. It shows a tremendous increase in imports. Table-29 shows the trend value for oil imports from 1981 onwards.

TABLE - 29TREND VALUE FOR OIL IMPORTS INTO COCHIN PORT IN TONNES

Year	X	Y <sub>0</sub>
1981	8	3,491,300
1982	9	3,635,100
1983	10	3,778,900
1984	11	3,922,700
1985	12	4,066,500
1986	13	4,210,300
1987	14	4,354,100
1988	15	4,497,900
1989	16	4,641,700
1990	17	4,785,500

From Table-29, it is clear that our oil imports is expected to touch 4,785,500 tonnes in 1990, compared to 3,347,500 tonnes in 1980.



Metal Imports:

Table-30 indicates the trend values for metal imports during 1981-1990. Every year our metal imports is expected to increase by 547.5 tonnes. The increasing trend can be seen from Fig.No.26. The trend values follow the form

$$Y_0 = 23783 + 547.5 x.$$

TABLE - 30TREND VALUE FOR METAL IMPORTS INTO COCHIN PORT IN TONNES

Year	X	Y <sub>0</sub>
1981	16	32542.99
1982	17	33090.50
1983	18	33637.99
1984	19	34185.49
1985	20	34732.99
1986	21	35280.49
1987	22	35827.99
1988	23	36375.49
1989	24	36922.99
1990	25	37490.49

The expected import of metals into Cochin Port in 1990 is 37,490 tonnes.

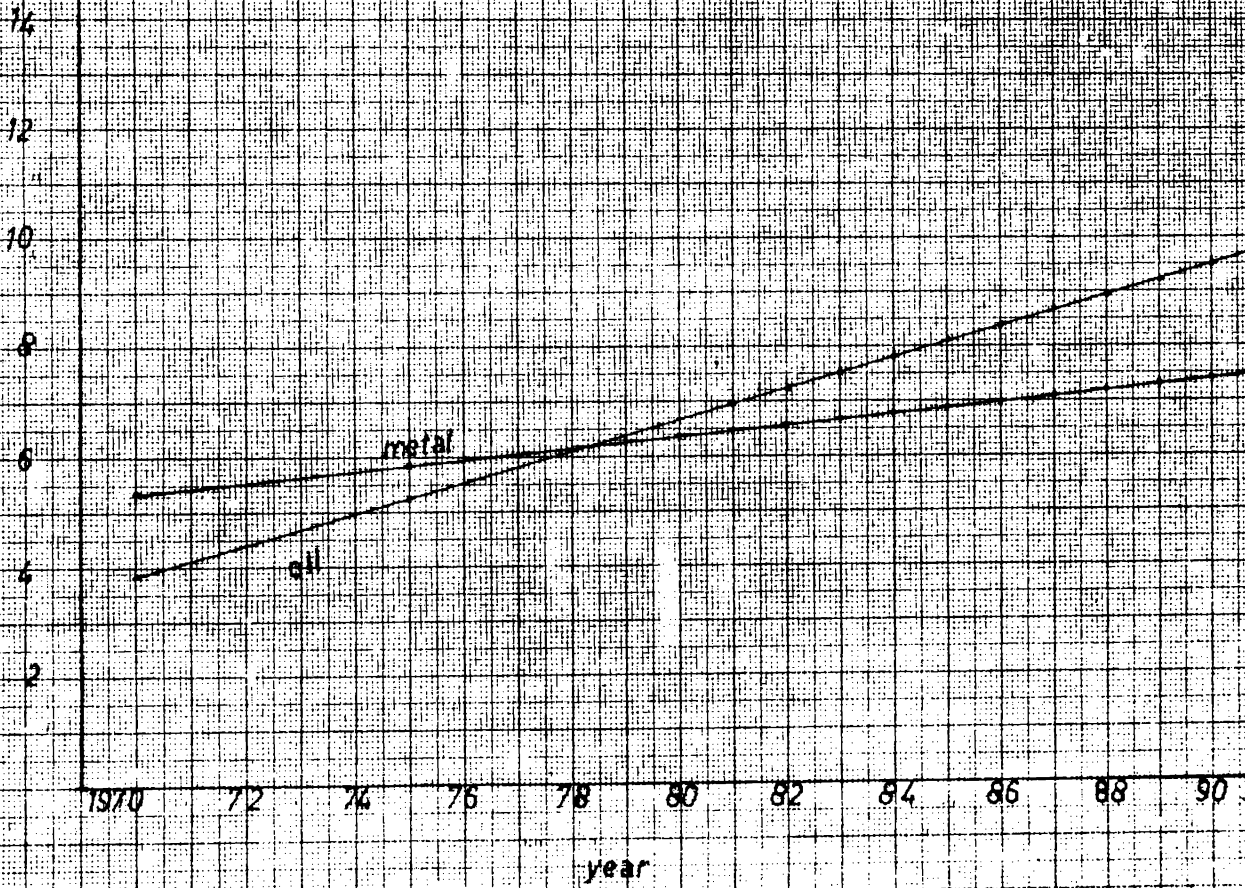
From the above trend lines fitted, we can see that except coir and lemongrass oil, all other commodities show increasing trend. If the declining trend values for coir and lemongrass oil exports continue in the next few years, Cochin Port will witness a time when no quantity of both of the same will be exported from Cochin to abroad.

FIG No 25

TREND VALUES FOR IMPORTS

SCALE

Oil 1 cm = 5,00,000 t  
Metal 1 cm = 5,000 t



**x**

**SUMMARY AND CONCLUSIONS**

**Summary and Conclusions:**

We have been analysing the trend of exports and imports through Cochin Port during the course of the last hundred years. This analysis has brought to light some very pertinent facts which, in our opinion, deserve serious consideration of the policy makers, the parties involved in trade and those who are interested in the development of the Cochin Port.

Our study is restricted to twelve commodities - ten commodities of exports and two commodities of imports. The conclusions drawn from this study will have its own limitations. The commodities are selected on the basis of their earnings.

The study reveals: (I) that the commodities that were exported from Cochin are subjected to fluctuations - some mild and others wild. The reasons for these fluctuations are many and varied. The most important among them are listed below:

- (i) Fluctuations in internal production
- (ii) Fluctuations in demand
- (iii) Developments in Europe and America

- (iv) The World Wars and the great depression
- (v) Rise in freight charges
- (vi) Import and Export duties
- (vii) Export control
- (viii) Korean War
- (ix) Arab-Israel Conflict
- (x) Closing of Suez Canal
- (xi) Competition from other countries
- (xii) Sales tax
- (xiii) Lack of wagon facilities
- (xiv) Rise in prices and the consequent consumer resistance
- (xv) Lack of infra-structural facilities
- (xvi) Recalcitrant nature of the Port labour
- (xvii) Lack of imaginative and positive attitude of the Port administration
- (xviii) Availability of better services at a lower cost in the nearby ports, and
- (xix) Migration of industries from Kerala to neighbouring States.

II The future is bright for all but two commodities considered. The two commodities whose future seems rather dismal are coir and lemongrass oil. Unless some very positive steps are taken with reference to these two commodities those who are involved in the production and trading of these commodities will be in trouble in the next decade.

- III** Though future presents a bright picture in the case of other commodities we should not remain complacent. The projections only indicate the potential and unless we are very cautious the chance will be taken away by our competitors. In other words, the existence of a market or market potential is not a guarantee that we will get it.
- IV** Imports through Cochin Port shows an increasing trend. In the case of Oil this is mainly because of the Oil Refinery established in Cochin. And this imports are expected to continue until we find enough oil resources internally.
- V** Imports of metals also have gone up. The forecast for the next ten years also indicate the same trend. The major cause for the imports of metals is the starting of a number of factories in the hinterland of Cochin.
- VI** Though not directly related to our analysis but is of interest to the Policy makers and the parties involved in trade in the consideration of the establishment of consortia in the case of spices and tea on the lines of the oil exporting countries.

This will enhance the bargaining power of India as well as the other countries who are involved in the production of these commodities. Since the number of producers are limited it may not be very difficult to establish such consortia.

VII With reference to coir, the picture is quite bleak. This is because of competition from synthetic fibre and our inability to successfully compete in the international market because of high cost and low efficiency of our products. The industry can be salvaged only by allowing the introduction of sophisticated machinery for the production of quality products.

VIII With reference to the development of the Port in particular and the States' economy in general we would like to make a suggestion. This suggestion relates to declaring Cochin as a free port. This will go a long way in the development of the Port and the State's economy. The sooner it is done, the better for the Port and the State.

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