Chapter 1
INTRODUCTION

Mother Nature has blessed mankind with so many plants, out of which man has exploited some for his benefit to make his life enjoyable. Among them spices have made our life happier, though required in small quantities, with manifold properties and beneficial uses. The ancient Egyptians, Romans, Greeks, Indians and Chinese all held ‘spices’ in great esteem not only for flavouring food and making medicine, but even to perfume the air. Food habits all over the world are undergoing a sea change and thereby more spicy food has become the order of the day in most developed and developing countries. Hence the world demand for spices is now on the increase. India is the home to a number of spices. It may be said that there is no Indian cuisine without the addition of one or more spices. In recent years stiff competition has emerged between the spice producing countries. Developed countries have now put strict quality specifications on the import of spices. Though superior in quality, Indian spices are quoted at high prices in international markets because of the high cost of production and low productivity. India’s prime position in the production and export of black pepper and cardamom has now been usurped by Vietnam and Guatemala respectively.

However trade liberalization has posed unprecedented challenges to Indian spices in terms of price volatility. It is widely reported that after the trade liberalization the domestic prices of major Indian spices have come down drastically. In the midst of high international and the domestic price volatility, farmers are left with no other option than to ride the wave of price instability.

Within India, Kerala is the spice garden. Black pepper popularly called the ‘King of spices’ enjoyed a pride of place among all spices produced.
Cardamom renowned as the ‘Queen of spices’ is a tiny spice that attracted the consumers in the Orient and the Occident. More than 80 per cent of the production of these two spices in the country is restricted to Kerala. But the spices trade in Kerala is now handicapped by a number of problems. Black pepper has now a very dubious distinction, as the yield of this crop has declined mainly due to senile plantations and minimum input use, on account of declining market price and declining profit margin. The growers of cardamom are also facing declining profit margins due to price pressure. As spices cultivation is the means of living for a large number of agricultural households in Kerala, spices trade is of crucial significance to their earnings, well-being and living standards. Therefore, it is time for all those concerned with Indian spice industry to make earnest efforts to overcome the problems faced by the spices sector, or else our dominant position in the global spice market may be further relegated to the background.

1.1 Review of Literature

Spices and spices trade have been fascinating subjects for many authors, researchers and analysts from very early times and a large number of books have been written, researches made and articles published. A number of committees have been appointed by governments and various associations to study and report on the problems of spices industry. Similarly a number of seminars, workshops and meetings have been organized to discuss the various facets of the spices industry. A review of research studies and committee reports covering the areas of the present study viz. history and development of spices trade, problems and prospects of spices trade and impact of the World Trade Organisation Agreements (WTO) and Free Trade Agreements (FTAs) on the spices industry is attempted here.

1.1.1 History and Development of Spices Trade

Kusuman (1976) studied the development of trade and commerce (particularly that of spices trade) in Travancore between 1600 – 1805 with the
arrival of the Portuguese, Dutch and English in Kerala. He ascertained that (i) it was the queen of Quilon, who took the initiative to extend a friendly hand to Vascode Gama while he was staying at Cochin; (ii) that it was because of their meddling with the internal politics of Travancore that they did not succeed in their pursuits of spices trade and (iii) that it was king Marthandavarma who organized a pepper trade monopoly in Travancore.

Sreekantan Thampy (2000) examined (i) the volume and direction of international trade in spices and emerging markets (ii) the Indian share in world markets and the scope of different spices and (iii) the nature and extent of different promotional strategies. He found that the Indian spices trade’s fortune is depended on the rise and fall of the four major spices, viz. pepper, chillies, ginger and turmeric. Productivity needs to be raised to bring down costs and to become globally competitive. Indian pepper exports warms up when global supplies fall.

Mary (1996) studied the development and trends in the pepper production in Kerala and also examined the cost and profitability of pepper cultivation with special reference to Idukki district of Kerala. The study revealed that many importing countries have reported that Indian pepper is sometimes contaminated with foreign matters like rodents and bird excreta, hairs of animals, cowdung bamboo splits, etc. and this has created a lot of problems for the Indian pepper trade.

Cherian (1991) analysed the performance of India’s export trade in spices. He found that India’s competitive position in the world market for pepper remained weak, owing to its higher prices and that to improve India’s export performance in spices, measures have to be taken to increase production, productivity and to reduce export prices, by reducing cost of production.
Aiyadurai (1989) of the Indian Central Spices and Cashewnut Committee reviewed the search work on 14 spices. He made suggestions and recommendations before the Central Spices Committee to obtain an overall picture of the progress of research on 14 spices in the country and the importance of setting up a central research institute for spices and cashew nut to co-ordinate the future development of these crops.

Peter (1994) analysed the investment on spices production under the central sector scheme and found that it was only Rs. 5.74 crore in 1991-92 and it increased to Rs. 150 crore during the Eighth plan period i.e. 1992-97.

Edison (1995) found that even from the export of just 5 per cent of the spices production substantial foreign exchange is earned. There has been an overall growth rate of 8% of spices as envisaged during the Eighth plan. This is due a 4 per cent growth rate in global trade, which was mainly due to the population growth and the growth in the per capita income.

Sujitha Satish (2004) examined the production trend of vanilla and analysed the present scenario of vanilla as an export crop during 1997-2002. She found that during this period, the Indian spice growers were increasingly turning to vanilla cultivation as the prices of traditional crop like rubber, coffee, tea, pepper, cardamom, etc. continued to decline. The Spices Board of India has been encouraging farmers to take advantage of the growing demand for vanilla since the early 1990’s. The efforts to propagate vanilla cultivation in India resulted in a large number of farmers taking up vanilla cultivation, particularly in Kerala, Karnataka and Tamil Nadu.

Biny Joseph (2003) analysed the trends in the area under cultivation and productivity of ginger in Kerala and also studied the trends in the export earnings from ginger. The analysis revealed that even though the yield is less compared to many other producing states, there is scope for increasing it.
Technological upgradation of processing is very much essential to improve the quality of dry ginger. Also, there is a lot of potential for the export of value added products like ginger oil and oleoresins, especially to the developed countries.

Jose Kurien (2005) found that since 1999, when the pepper prices sourced to an all time high of Rs. 270 per kg, there has been a steady dip in prices; also that pepper production has been registering a diminishing trend. According to him, an agro based industry and farmers marketing network are essential for the revival of the sector.

Ramana, Johny.A. Kallupurackal and Shiva (2004) ascertained that our country is blessed with varied agro climatic conditions suitable to grow almost all spices from the tropical black pepper to temperate saffron. About 60 spices are grown in India out of the 109 spices listed by International Spices Organization (ISO). In every crop the key factor which decides production has been the variety. As on today more than 225 varieties of various spice crops including chillies have been released by the State Agricultural Universities and Central Research Institutes.

Hugh and Collen Gantzer (2005) found that spices are the flavour of the festive season, particularly of an Anglo-Indian one. Before the discovery of refrigeration, spices were used in Europe to preserve food through the long winter months. A good Christmas cake was matured for a long time drenched with doses of brandy, and could then last for at least three months. He concluded that even if the Indian palates had not been evolved the West’s festive fare would still have brought spices to the celebratory tables.

Thomas and Kuruvilla (2004) examined the history and development of the applications of the ayurvedic and magical properties of spices. According to them the magical properties of selected spices were used in mantras to drive
away evil spirits. Rakshognra was simply the mustard and Naktanjata was nothing but turmeric. The magical powers of these spices were due to its medicinal properties. Mustard is proved to be a good microbicidal and turmeric is an antiseptic blood purifier besides being a carminative. They concluded that spices are not just that flavours, but are integral part of quality diet that sustains a healthy living.

1.1.2 Problems and Prospects of Spices Trade

Leena George (1996) examined the problems and prospects of the ginger cultivation in Kerala. She found that Kerala is the leading ginger producing state in the country, accounting for about 25 per cent of area, followed by Orissa, Best Bengal and Meghalaya. According to her the growth performance of ginger varied from state to state; there is a lot of potential for the export of value added products like ginger oil and oleoresin to the developed countries; Adequate international marketing information system should be developed so as to help to formulate suitable strategy to develop exports.

Somashekaran Nair (2003) conducted a study on the problems and prospects of the cut flower industry of Kerala. It is found that cultivation of vanilla - being a spice as well as an orchid should be maximum propagated as a remedy to the problems of the cut flower growers in Kerala.

Kumar (2003) estimated that during 1995-96, India exported more than 27000 tonnes of turmeric valued at Rs. 46.07 crore as against 9.2 thousand tonnes valued at Rs. 4.1 crore in 1974-75. According to him the prospect of increased trade in turmeric in future appears good in view of high demand for turmeric powder in spice importing countries.

Rangaswami (1998) estimated that turmeric export from India out of the total spices export was 26675 million tones, which constitute 14.06 per cent of
the spices export. Although India is leading in turmeric production average productivity and quality are not satisfactory and these limit our export to about 19 per cent to 15 per cent of our production only.

John (2003) found that although Indian spices exports have been increasing in quantity and value and cover a large number of countries, future prospects depend on exporter’s ability to meet quality standards set by importing countries. Various programmes initiated to ensure the export of clean and hygienic spices should go hand in hand with marketing and export development strategies.

Nimmy Mohan (2004) examined the problems faced by the producers and exporters of turmeric. She stated that even though the quantity share of turmeric exports is increasing the value share is not increasing due to fall in the unit value of exported turmeric. In order to promote exports first of all there is the need to increase both productivity and production domestically which calls for long term strategy of crop management.

Divya (2001) analysed the export performance of cardamom, pepper ginger and turmeric and their competitive share in the total export of spices from India. Tha analyses revealed that the Indian spices are overpriced in the international markets compared to that of the competitors; the study also ascertained that the land under cultivation of ginger in Kerala is very low compared to pepper and cardamom, but the yield in Kerala is slightly better than the other states in India.

Pratheeksha (2000) studied the role of Spices Board in the promotion of export of spices and analysed the importance of spices as a foreign exchange earner and the trend in the export of spices from India. She found that timely collection and dissemination of data relating to world production and demand
of spices is very important for the development of spices trade and for this the market intelligence wing of Spices Board should be strengthened.

Jisha Kuriakose (1998) analysed the marketing practice of Synthite Industries, Kolenchery, and the problems faced in the export of value added spices; and found that the fiscal controls, restrictions and levies not only in the importing country but also in India are the major constraints in the export marketing of value added spice products. She recommended undertaking research to develop new applications of spices by giving thrust on value addition.

Shyam Prasanth (2003) analysed the trends in area, production and productivity of cardamom and also studied the general problems of cardamom industry in Kerala and the operation of the cardamom auction system and its impact on cardamom sales. According to him cardamom growers should get their fixed price within the stipulated days and the auctioneer must not take more than 500 grms as samples.

Nicey (2003) made an economic analysis of the pepper industry in Kerala – its production, productivity and export and also analysed the problems faced by the pepper industry and the causes for its declining trends in exports. She pointed out that the absence of an integrated approach to boost exports and the lack of a co-ordinated publicity programmes also affect the pepper export from Kerala.

Andrews Salim (1990) is of the opinion that the availability of exportable variety of ginger has always been a problem; on the other hand domestic consumption is rising because of its popularity in culinary preparation and increased applications in medicine, confectionaries and non-alcoholic beverages.
Neethu James (2004) analysed the trends in area, production and productivity, the trends in the export of chillies and the problems and prospects of chilly cultivation and exports from India. She found that India is the largest exporter of chillies contributing about 70 per cent of the total world trade in chillies. The major problem faced by this industry includes lack of agricultural research, financial problems of farmers, geographical problems and the problems of quality.

George (1988) examined the proposition that increased labour cost is responsible for decreased profitability of agriculture in Kerala. The findings revealed that the percentage increase in labour cost per hectare in 1984-85 over the 1980 – 81 cost is less than the percentage increase in output value per hectare during the same period for paddy, coconut, tapioca, areca nut and ginger.

Lalitha Iyer (2005) analysed the reasons for the sudden fall in the prices of chillies and consequent panic selling by the farmers and the financial loss caused to the farmers and the state marketing federations especially in Andrapradesh, which contributes 46 per cent of India’s chilli crop. She observed that the presence of a toxic dye, called Sudan – 1 in certain consignments sent to the European Union (EU) was the reason for the ban by the EU on the import of chilli and chilli products from countries including India.

Jose (2004) examined the vanilla crisis. According to him, the present natural vanilla production does not meet even one per cent of the total world demand for natural vanilla. The unprecedented price rise for vanilla in the world market to more than US $ 500 per kg for cured beans and to about Rs 4000 per kg for green beans in India during 2004 was due to an acute shortage in the vanilla production in Madagascar. The Spices Board had warned the farmers that such high prices will not last long. The study observed that, still
there would be no difficulty in marketing any additional production at the 2000–01 average price of US $31 per kg for cured beans which corresponds to a price less than Rs 300 per kg for green beans, and for this the farmers must take up vanilla cultivation as a low cost and low risk enterprise and as an inter crop only.

Daisy George (1994) studied the problems and prospects of cardamom cultivation in Idukki district of Kerala. She pointed out that increasing productivity; reducing cost of production and improving labour relations are necessary for the cardamom industry of Kerala to become competitive in the world spices market.

Kannan (2005) analysed the steps to be taken for the aggressive marketing of cardamom. He suggested that the practice of stocking and carrying one season’s crop to the next season by the growers and traders for action may be discontinued and an electronic auction system with adequate provision for bidding by traders and exporters without disclosing the identity of the bidder may be introduced.

Mathew (2005) ascertained that spices cultivation in modern times are throwing up new challenges. Aided by several chemical fertilizers and pest–controlling chemicals and new improved ways of intensive production techniques have been seen as the need of the hour for surviving in the competitive world. Today we have ways of accurately assessing the quality and nature of soil, assessing the possible rainfall that is likely to be obtained and make available more effective agricultural practices. But with these expensive inputs that are necessary the cost of production is also mounting. All these call for value addition in crops.

Sasikumar (2005) found that ginger and turmeric are the two important spices of our country and that India is the leading producer and exporter of
these two spices in the world. Again, there are about 50 cultivars of ginger in the country, but the improved verities are only seven. There are about 20 improved turmeric varieties in the country in addition to as many as 50 other cultivars. He also found that turmeric can be grown as an inter crop in coconut and arecanut plantations. It can also be raised as a mixed crop with chillies colocasias, onion, brinjal and cereals like maize, ragi etc.

Thankamani, Kandiannan and Sheriff (2005) ascertained that the diverse agro climatic conditions prevailing in different parts of our country offers a great scope for cultivation of a variety of spices. Each state has one or other spices. Chillies originated in Mexico, and it belongs to the family solanaceal. Chillies are the most widely consumed spice in the world. Indian spices are well known for their flavoring compounds responsible for the medicinal properties and their use in medical sciences of important three spices chillies, ginger and turmeric are discussed. It is essential to understand the medicinal properties of these spices for improving our health.

Ravindran and Indira Balachandran (2004) examined the aspects of underutilised medicinal spices. According to them spices and herbs are useful because of the chemical constituents contained in the form of essential oil, oleoresin, oleo gum and resins which import flavour pungency and colour to prepared dishes. All the spices are also medicinal plants. The major spices like pepper, ginger, turmeric, etc. have been used in the Indian medicines and form part of very many medicinal combinations. But there are many spices like Indian long pepper, Ajowan, sweet flag, Greater galangal, etc. that are underutilised but having tremendous application in health care.

Krishnamoorthy, Rema and Mathew (2004) studied the medicinal and commercial importance of curry leaf. According to them, curry leaf a common tree spice, grown in back yards, with its magic leaves have been found to have immense potentialities in the treatment of diabetes. Curry leaf trees are grown
in homesteads as in Kerala or on big farms as in Tamil Nadu, Karnataka, Andhra Pradesh and Orissa. Curry leaf is a small deciduous tree. A very profitable spice with least expense this crop has the brightest future in the spices world at global level. Creating awareness of these things among the farmers, traders, industrialists and policymakers is therefore of utmost importance.

Thomas and Kuruvilla (2004) examined the traditional medicinal uses of spices and the association of spices with Indian culture. In the ancient Indian literature like the Vedas, there is the mentioning about the magical powers of spices and how they are to be used in our daily life. Spices are not just that flavours but are integral part of quality diet that sustains and regulate healthy living. They revealed that “You are, what you eat” and hence we have to spice up our food for a spicy living.

John Zachariach (2005) examined the possible value added products from black pepper. He found that black pepper, which accounts for over 35 per cent export earnings among all the spices is rich in its medicinal properties. It is possible to develop a large number of value added products from pepper such as black pepper, white pepper, black pepper sauce, ground black pepper, frozen pepper, green pepper sauce, ground black pepper, ground white pepper, pepper beacurd, pepper cookies, pepper in brine – cane bottle, bulk pepper oil, pepper perfume, pepper sweet, pepper tea, pepper yoghuri. Value addition involves not only new products, but also new uses of the products. Like some of the other pepper growing countries, India can also develop pepper based recipes, which will help in improving the consumption world over.

Sumina Mary John (2001) studied the importance of spice oils and oleoresins as a foreign exchange earner and analysed the current market condition of Indian spice oils and oleoresins. She ascertained that United States
of America (USA) is the largest market for the oleoresin products and that among the various spice oils exported to USA, pepper oil stands first.

Khan (1990) analysed the major factors responsible for erratic trends in the production and productivity of major spices. He found that, though India occupies a very prominent place in the production of spices in the world, still there are a number of problems, which should be tackled at the government level and producer’s level. Once these constraints and problems are solved, a new era may emerge to attain all round prosperity and growth in the production and productivity of spices in the country.

Sudarshan and Sreekumar (2007) examined the Guatemalayan way of cardamom growing. They found that the cost of production of cardamom in Guatemala is very low compared to that in India. There are no specific subsidies for cardamom growing there. However, as the government is subsidising planting of pine and other fine timber woods like teak and mahogany, planting of pine saplings along with cardamom is a common sight there.

Sharma (2006) examined the prospects of India’s pepper trade regaining its past glory. He found that India had the prominent place in the pepper trade, but its position declined in the recent years and at present vietnan tops in pepper production. He analysed the reasons for this and concluded that it is possible for India to regain its part glory in black pepper, if all the concerned agencies put in a strong front with combined efforts and practical strategies to revive black pepper. For this farmers will need guidance from organization like Spices Board, Agricultural Universities and even NGO’s.

Jayashree (2005) examined the most essential operations to be followed to get a value added product and the primary level for some of the major spices like black pepper, cardamom, turmeric, ginger, chillies, nutmeg, mace, clove,
cinnamon, vanilla and tamarind. The study revealed that there is a great demand for ‘clean spices’ rather than ‘cleaned spices’. The clean spice is obtained after a series of post harvest operations at farm and in the processing factory like washing, thrashing, drying, bleaching, conditioning, grading, packaging etc. Such post harvest handling should ensure proper conservation of the basic qualities like aroma, flavour, pungency, colour, etc. Each of these operations enhance the quality of the produce and hence the value of the spice.

Suresh (1983) studied the economics of cardamom plantations in Kerala. He found that low productivity, plant diseases and drought conditions are the maladies affecting the cardamom plantations in Kerala.

Joseph George (2000) analysed the rate of growth in the export of spices with special reference to pepper and the problems faced in the export of spices. The study observed that even though ‘the Integrated Programme for Development of Spices (IPDS) has implemented many schemes, they are not at all known to the small scale farmers.

Elizabeth Thomas (2002) made a study on the futures trading in pepper and examined the relationship between future prices to spot prices and the volume and prices of different futures. The study revealed that pepper futures are interdependent and the volume of futures is not dependent on prices.

Prakash (2008) studied the farm crisis in Idukki district and found that labour shortage, fall in the prices of pepper; cocoa, coconut and other spices have triggered the farm crisis. He recommened that the Union Commerce Ministry should form a price control cell to regulate the prices of spices, coffee, tea rubber and coconut and curb imports.
1.1.3 Impact of WTO Agreements and Free Trade Agreements

Srinivasan (2006) examined the reasons for the collapse of the multilateral trade talks among the member countries of WTO and the growing popularity of Free Trade Agreements (FTA’s) and Regional Trade Agreements (RTA’s). He found that the aggressive push for preferential trade agreements by rich countries will only attenuate the rule-based multilateral system and the limited development gains scored by the WTO till now.

Madan Lal (2004) assessed the impact of Sanitary and Phytosanitary (SPS) measures on Agro-products. He observed that among the various WTO agreements SPS agreement is meant to protect the legitimate rights of importing countries with respect to national health and safety without providing a loophole for countries to avoid other trade liberalizing disciplines of the Uruguay Round Agreements. The SPS agreement outlines the disciplines and limits on measures to be taken to protect human and animal life and health from foreign pests, diseases and contaminants.

Bhallal (2002) examined the role of WTO agreements and the new rule based trading system, in pushing up international trade and investment. It revealed that divisiveness and dissent within the WTO will inhibit progress on further liberalisation of trade and investment.

Sraman (2002) examined the EXIM policy of India (2002 – 07), in the light of the WTO agreements. The study revealed, though all these agreements have a direct impact on the export – import policy of India, some of these have a greater impact than others. Thus, the Agreement on Import Licensing Procedure requires that the member countries publish sufficient information for traders to know the basis on which licenses are granted.

Anil K. Kanungo (2006) examined the key issues on which it is difficult to reach a consensus at the multilateral trade negotiations of WTO. He found
that such issues are agriculture, Non Agricultural Market (NAMA), Trade Related Intellectual Property Rights (TRIPS) and Non-tariff barriers. Among them agriculture is the most important and contentious issue; among the agricultural issues, export subsidies and domestic support may be seen as the make or break of WTO negotiations, but equally important is the issue of market access.

Subramanian (2007) analysed the merits of the Generalized System of Preferences (GSP’s), under which the industrialized countries would grant trade preferences to developing countries. He found that far from being general or systematic, the GSP has remained unilateral, non-reciprocal and discretionary on the part of the preference granting countries. Multilateral Trade Negotiations and their implications on Indian agriculture. According to him in any multilateral agreement there has always to be some ‘give take’.

Gupta (1998) critically analysed the results of the Uruguay Round of and every country has to undertake some obligations to take benefit of the obligations taken by others. The consequences of staying out of the multilateral system would be simply disastrous for India. To take full benefit of the multilateral system, India should take vigorous measure to upgrade technology and modernise both industry and agriculture so as to increase its competitive strength in the world market.

Sunnykutty Thomas (1998) examined the effect of WTO’s Agreement On Agriculture (AOA) and found that the provisions of ‘market access and reduction of domestic subsidies’ will prevent the Indian agro products from being competitive in the global market. The developing countries must initiate steps for a suitable redrafting of the AOA in their favour.

Alok Ray (2004) analysed the virtues of free trade in the light of WTO agreements. When economists sing the virtues of free trade, they mean free trade according to the long run or dynamic comparative advantage. Free trade
based on the long run comparative advantage can potentially bring enormous gains to every one; but it needs to be accompanied by a suitable compensation and re-distribution mechanism to ensure that every one ends up being better off.

Jose Joseph (2001) examined the various aspects of agreement on agriculture (AOA) and certain aspects of SPS and their far-reaching effects on Indian agriculture. The study observed that once the AOA is implemented, the developed countries would reduce the agricultural subsidies and open up their markets for the agro-products of the developing nations, and thereby the Indian agro-products would be able to enter the foreign markets with competitive advantage. But the experience so far has been that, the developed countries still continue the agricultural subsidies on a massive scale through indirect methods. Again, the SPS measures are a big barrier to the export of agricultural products from the developing nations.

Jose Aanithottam (2002) studied the impact of WTO agreements on agricultural subsidies. The study disclosed that, the international and domestic prices of agricultural products are determined and controlled by the quantum of subsidies. While the developed nations, where only 2 to 3 per cent of the population subsist on agriculture, give a daily agricultural subsidy of about US$ 100 crores in India where 70 per cent of the population subsist on agriculture, the quantum of agricultural subsidy per year is only 100 crores. It also revealed that there are many Regional Trade Agreements (RTA’s), which can even nullify the effect of World Trade Agreements (WTA’s).

Chandrasekhar and Jayanti Ghosh (2004) examined the outcome of the WTO general council meeting at Geneva during July – August 2004. They found that the framework agreement reached there does not reflect any substantial advance for the interests of the developing countries; the two major advances being in the areas of agriculture and the so called Singapore issues.
The conference witnessed the emergence of the Five Interested Parties (FIPs) ie. US, EU, Australia, Brazil and India. The developing countries have however moved one step forward from Cancun, but it is not yet the time, for the developing countries to be jubilant.

Babu Joseph (2003) examined the challenges and opportunities for Indian and Kerala agriculture in the light of the WTO agreements. He also analysed the relevance of Swaminathan Commission’s report on the Kerala’s agriculture. He revealed that India joined the WTO on the belief that due to the liberalisation of trade and transparency in laws and dealings, the volume of the world trade would tremendously increase and a portion of its benefit would be available to India also. However, our experience during the past nine years is that, we have not prepared ourselves to take advantage of the challenges created by the WTO. We will be able to face the global competition in agro-products, only if we identify our areas of strengths and also develop our strengths and opportunities, so as to face the global changes.

T.C. Mathew (2004) examined ‘The Survival Tactics’ the Kerala farmers can adopt to survive the global competition in the light of the framework understanding reached at the Geneva Ministerial Conference of WTO in August2004. According to him, the Geneva understanding only aims at pushing ahead the Doha Development Agenda (DDA). These understandings may not help Kerala’s major agricultural crops like coconut, rubber, tea, coffee, pepper, cardamom, etc. But, benefits can be availed in respect of milk products, etc. He urges the government / government agencies to evolve a proper information dissemination system relating to all aspects of agriculture. He also suggested that control farming should be adopted wherever possible. Again, in future, our success would lie in the continuous improvement of our competitive strengths and in the updation of our technology.
Bharat Jhunjhunwala (2006) examined the theory of free trade in the light of the WTO agreements. The study revealed that mainstream economists may see free trade as a solution, but there are certain problems with it, such as movement of natural persons, lower wages and national security. Therefore, the only option seems to be protection with good governance.

Suryanarayana (2006) examined the progress and achievements made during the first year of the Indo – Singapore CECA. He found that even though the volume of trade between India and Singapore has increased India has not been able to finalise some of the intended CECA follow up measures.

Thomas Varghese (2006) examined the damagers caused by the various FTA’s signed by India. He found that the SAFTA and the ISLFTA have already resulted in the unrestricted in flow of various agro-products into India. The prescribed ‘Rules of origin’ are generally not observed by the exporting country. The signing of the proposed Indo-ASEAN agreement will further cause a surge of imports of various agro products resulting in a further fall in their domestic prices.

Majumder (2008) examined whether FTA is a boon or bane for India. He observed that a strong rupee appreciation has lowered the effective rate of customs duties, which benefited the FTA partner countries. Though the primary objective of FTA, which is the overall expansion of trade, might have been fulfilled, the advantages of FTAs often accrued more to the FTA partner countries.

Swaminathan Commission (2002) enquired into the problems of the agricultural sector in Kerala in the light of the WTO agreements. Its report recommended that:

i) We must explore the possibilities of taking maximum benefits out of organic farming.
ii) We must try to develop our agro-products market into a national agricultural market and then expand the market to the neighbouring countries.

iii) The governments should stop the practice of giving nominal subsidies to different agricultural crops, which will greatly help the agricultural in the long run, and must instead invest such amount on the development of infrastructure in agricultural areas.

iv) The government of India should try to organize a forum of developing countries and urge the developed nations to reduce their agricultural subsides.

On the basis of the review, it can be deduced that, most of the studies dealt with the conventional issues affecting the spices trade like high cost of production, low productivity, plant diseases, etc. The recent problems affecting the spices industry such as those arising out of the surging import of leading spices to India due to India’s FTA’s, the challenges and opportunities created by the WTO agreements, scarcity of agricultural labourers in the spices producing areas, etc. have not been enquired into by any of the studies. Again, most of the studies were undertaken in a restricted sense, without a scientific design and proper opinion surveys among the spices growers and traders. Most of the findings were just in the form of generalized observations, made without examining the statistical significance. Hence, there is need for more methodological studies using structured interview schedules and appropriate statistical tools, so that the problems and prospects of spices trade in Kerala could be understood in a more effective way in the context of WTO and Free Trade agreements and also the changing global market for spices. This can thus become the basis of designing interventions to address this problem.

1.2 Statement of the Problem

India, which is called the land of spices, once had almost exclusive monopoly in the global spices trade. But its dominant position is recently being
challenged by the entry of new spice producing and exporting countries. During the post – WTO period, due to the emergence of the global market for spices, competition has become fierce and Indian spice industry is losing ground on various fronts. Even though India still tops in area under cultivation, its productivity is almost static and is the lowest in the world (Sharma Y.R. 2006). Though there is an increase in output in some cases; such increase sporadically comes from larger acreage. As a result, India at global level gets relegated to further lower levels and thus losing our big heritage.

In India, Kerala is the leading producer of black pepper and cardamom. Because of their lucrative prices, black pepper was once called ‘black gold’ and cardamom, the ‘green gold’, was once called ‘the grains of paradise’. Owning black pepper and cardamom plantations, once a sign of economic prosperity of the agricultural families, have now ceased to be so. During the last decade the economics of spices cultivation totally changed. Under the current price situation the black pepper and cardamom cultivation is neither attractive nor remunerative. Many spices growers are either neglecting or abandoning the pepper and cardamom plants or at least restricting further investment. In most cases new planting is almost ruled out by spices growers. The living conditions of a large number of small and medium spice growers in Kerala are linked to the rise and fall in the prices of black pepper and cardamom. The black pepper and cardamom cultivation which were the means of living for the spices growers in Kerala have failed to be so. Being unable to make both ends meet and to pay off their agricultural debts, many spices growers in Kerala particularly in Wynad and Idukki districts even committed suicide. The present challenges before the spices industry of Kerala include: the productivity challenge, the equity challenge, the quality challenge, the value addition challenge and a recently emerged crucial issue i.e. labour scarcity. Added to these are the problems arising out of the WTO Agreements and India’s Free Trade Agreements. Thus, the spices trade in Kerala is under a crisis.
Though a large number of studies have been made by individual researchers, institutions and study groups, a methodological study covering all the aspects of the problems and prospects of spices trade in Kerala and also the latest challenges in this sector due to the introduction of WTO Agreements and India’s Free Trade Agreements have not been attempted in its entirety. It is in this context that the present study has been undertaken.

1.3 Scope of the Study

The present study has been undertaken to examine the problems and prospects of spices trade in Kerala. The study also intends to examine the impact of WTO Agreements and India’s Free Trade Agreements on the spices trade in Kerala. The assessment has been made by considering the perception of spices cultivators and traders and also relevant statistics published in the area. The study is mainly confined to the three leading spices growing districts of Kerala viz. Wynad, Idukki and Kollam. The main items of spices under study are black pepper and cardamom, which are the leading spices in Kerala, and in the cultivation of which Kerala leads all other states. As regards cardamom, the study covers small cardamom only (i.e. elettaria cardamom maton) and does not cover large cardamom (i.e. amomum subalatum Roxb) which is not cultivated in Kerala. However, the study also covers at appropriate places the problems and prospects of some other spices like vanilla, nutmeg, turmeric, ginger, all spices and curry leaves.

1.4 Spices Under Study

a) Black Pepper

Black pepper (piper nigram) is popularly called “the king of spices”. It is the most prominent spice in the spice economy of India. Black pepper originated in the Western Ghats of India, but its cultivation has now spread to many parts of the world through primary and secondary introductions.
i) Varieties

There are many varieties of black pepper known in spices trade. They take their names from the localities where they are grown or from the ports through which they are exported i.e Tellicherry, Malabar, Alleppey, Lamporg, Saigon, penang and Singapore. The common varieties cultivated in Kerala are – Karimunda, panniyur-1, Kuthiravalli, Neelamundi, Geerakkamundi, Narayakodi, Balankotta, Arakkulammunda, Cheriakody, Kalluvally, Uthirankotta, Karinkotta, Veluthamban, Chola, Chumala, Cherriyakanikkadan, Kumbhakodi, and Kothanadan. Most of the pepper growers in Kerala grow different varieties in the same plantation. Karimunda and Pamiyur-1 are the preferred varieties in Kerala because of their higher yield. These pepper differ slightly in their physical and chemical characteristics, colour, size, shape, flavour and bite. Tellichery and Alleppey peppers are large, attractive, dark, reddish and brown to black. Very aromatic and one of the best varieties is the ‘Malabar Garbled (MGI) which alone accounts for nearly 90 per cent of the total exports from India.(Pruthi J.S, 1976).

ii) Places of cultivation

Besides India, black pepper is grown in the other five IPC (ie International Pepper Community) countries viz: Brazil, Indonesia, Malaysia, Thailand and Srilanka, and in three non-IPC countries viz: Vietnam, China and Medagascar. More than 95 per cent of the global output in black pepper is confined to six tropical nations, viz. India, Vietnam, Indonesia, Brazil, Malaysia and Thailand.

In India, pepper is cultivated mainly in Kerala, certain parts of Karnataka, Tamilnadu and in the union territory of Pondicherry. On a limited scale, it is also grown in Maharashtra, Andra Pradesh and Andaman Nicobar islands. In India, Kerala is the major pepper producing state which accounts for 90 per cent of the total area under cultivation and 95per cent of output. Karnataka is the second largest producing state with a share of about 2 percent
in the total output. The rest is contributed by Tamilnadu, Pondicherry and other producing areas.

In Kerala, black pepper is cultivated mainly in Idukki and Wynad districts. It is also cultivated in the districts Kollam, Pathanamthitta, Kannur, Kozhikode, Kottayam, Ernakulam and Trivandrum on a limited scale. Almost every homestead in Kerala grows black pepper along with mango, jackfruit, coconut or arecanut. Pepper cultivation is also being tried in the North-Eastern region.

iii) Uses

As a medicine, pepper is used for a variety of purposes. The ancient Aryans considered it as a powerful remedy for various disorders of the anatomical system and prescribed it as an effective cure for dyspepsia, malaria, delirium, tremors, hemorrhoids, etc. The Egyptians used it for embalming. The Asians are said to have used it as an aphrodisiac.

As a food flavourant, oil of pepper is a valuable adjunct in the flavouring of sausages, canned meats, soups, table sauces and certain beverages and liquors. It is used in perfumery, particularly in bouquets of the oriental type to which it imparts spicy notes difficult to identify. The oil is also used in carnation compound for soaps.

iv) Commercial Importance

Black pepper is the most important spice in the international spices trade. Indian pepper is of the best quality in the world. The demand for it has been increasing considerably in all the consuming countries. After meeting the domestic requirements, substantial quantities of black pepper are exported from India. During the year 2006-07, export of pepper from India amounted to 28750 metric tones valued at Rs 30620 lakhs, which accounted for 8.56 per cent in value and 7.69 per cent in quantity of all spice exports from the country.
USA is the leading importer of black pepper from India followed by Germany, Canada, Japan, Saudi Arabia, Sweden, Australia, France, Italy, Russia, and Netherlands.

b) Cardamom

Small cardamom (elettaria cardamom maton) popularly called as “queen of spices”, is the second important ‘National Spice’ of India. Cardamom (small) also known as ‘Malabar Cardamom’ is a native of India and belongs to the botanical family- Zingiberaceae. This spice has been known from ancient times and its aroma has been praised in India Literature by Kalidas. Cardamom found a place on Queen Sheba’s gift box to King Solomon. This richly fragrant spice was known as “grains of paradise” in medieval Europe. Introduced to South East Asia more than a thousand years ago, plants have been found growing in the ruins of ancient Khamar trading posts.(Wendy Hutton, 1998).

i) Varieties

There are two varieties of cardamom viz. cardamom (small) and cardamom (large). Cardamom (small) is the common brand of cardamom cultivated in Kerala. Large or greater cardamom is an important spice of India and is a native to Eastern Himalayan region. It is also known as Nepal cardamom. Sikkim is a leading state in area and production, followed by Darjeeling Hills of West Bengal. Its cultivation also has extended to other north-eastern states of India on small scale. The bulk of this is consumed in the country and a limited quantity of about 200 to 400 MT is exported outside India to Singapore, U.K. and Pakistan. Bhutan and Nepal are the other major producers of large cardamom. As large cardamom is not being cultivated and traded in Kerala, this study does not cover the production and trade of large
cardamom. Therefore the term cardamom wherever used in this study, refers to cardamom (small) only.

**ii) Places of Cultivation**

Cardamom cultivation is confined to a very limited tract of the tropical world. It is grown either as a pure plantation crop nor as a subsidiary to coffee and arecanut at high elevations in the hilly forest regions of the entire Western Ghat. India, Guatemala, Tanzania, Sri Lanka and Thailand are the major producers of cardamom in the world. It is also produced in Laos, Vietnam, Costarica, and Elsavador on a limited scale.

**iii) Commercial Importance**

Cardamom and cinnamon were the first to enter the spice market of the West and now it is also one of the important spices as far as international trade is concerned.

Till 1980’s India was the world’s largest producer and exporter of cardamom; but now Guatemala has become the leading producer and exporter. India now meets only 3 per cent of the world’s demand through the export of small cardamom to more than 50 countries. In India, Kerala is the leading state in area and production of cardamom, contributing 77 percent of the production in the country, followed by Karnataka and Tamilnadu for the rest. During the year 2006-07 export of cardamom (small) from India was of 650 tonnes valued at Rs 2236 lakhs which amounted to 1.10 percent in value and 0.58 percent in quantity of the total spice exports from the country.

**iv) Uses**

As a medicine, small cardamom is used as a powerful aromatic stimulant, carminative, stomachic and diuretic. Seeds are chewed to prevent bad breath, indigestion, nausea and vomiting. Pharyngitis, sorethroat and flue are cured by gargling with an infusion of cardamom and cinnamon. Powdered
seeds of small cardamom boiled with tea water is used as medicine for scanty urination, diarrhoea, disentry, palpitation of the heart, exhaustion due to over work, depression etc. Use of small cardamom with honey is reported to improve eye-sight and strengthen the nervous system. As a flavourant of foodstuff, it is used in flavouring curries, cakes, pickles and beverages. It is also used in the manufacture of perfumes. Again, it is a favourite masticatory in India.

1.5 Relevance of the Study

Spice consumption in the developed world, and parts of the developing world is increasing with the hot spice segment growing more rapidly than other segments. As the food processing and food services industries are growing rapidly in both developed and developing countries, and given the anticipated continuing expansion of the food industry, the spice business will have abundant prospects of growth across the globe. While agriculture is regarded as the backbone of Indian economy, spices share six to seven per cent of India’s total agricultural exports (Spices Export Review 2006-07).

In Kerala, black pepper and cardamom are the two leading spices and are cultivated mainly in Idukki and Wynad districts, followed by some small quantities of production in other districts. The living conditions of a large number of a small and medium spices cultivators, spices traders and exporters in Kerala are linked to the price movements of pepper and cardamom. One out of the Ten Commandments given by A.P.J. Abdul Kalam, former president of India, for taking Kerala to the pinnacle of prosperity is, “value addition to tea, coffee, spices, coconuts and fruits” (Speech of A.P.J. Abdul Kalam 2005).

As spices is an important foreign exchange earner for the country, besides being the source of living and employment for a large section of rural masses especially the rural women and traders, and as Kerala is famous for the cultivation of black pepper and cardamom it is relevant to go in depth to the
problems and prospects of spices trade in Kerala. A study of the challenges and opportunities posed before the spices industry of Kerala by the WTO Agreements and India’s Free trade Agreements are also of utmost importance.

As this study examines how we can regain our past glory in the spices sector particularly in the black pepper and cardamom, the study will be of great use to spices growers, spices traders and exporters, business enterprises, governments, Spices Board and other institutions concerned with spice industry.

1.6 Objectives of the Study

The study aims at the following objectives in view:

1. To trace the origin and growth of spices trade in India and Kerala.
2. To assess the performance of spices trade in India and Kerala.
3. To study the problems and prospects of spices trade in Kerala.
4. To assess the impact of World Trade Organisation Agreements on spices trade in Kerala.
5. To assess the impact of Free Trade Agreements on spices trade in Kerala.

1.7 Hypotheses

In line with the objectives, the following hypotheses were framed.

1. Labour problem is a crucial problem affecting the spices trade in Kerala.
2. No significant improvements have been made in the quality and standard of spice produces from Kerala even after the World Trade Organisation Agreements.
3. Indo Sri Lanka Free Trade Agreement has adversely affected the spices trade in Kerala.
1.8 Selection of Sample

The respondents of the study consist of spices cultivators and traders. The details of spices cultivators and traders have been collected from the database maintained by the Spices Board, Kochi, Wynad Social Service Society (WSS), Manandhavadi and Cardamom Growers Association, Vandanmedu. The sample respondents for the intensive study were selected from the three leading pepper and cardamom growing districts of Kerala viz. Wynad, Idukki and Kollam, representing north, central and south regions of Kerala respectively. There were in all 2080 registered spices cultivators and 36 registered spices traders in Wynad, 1920 spices cultivators and 52 spices traders in Idukki and 800 spices cultivators and 16 spices traders in Kollam as on 31.03.2006. Five per cent of the spices cultivators and 50 per cent of the spices traders were selected at random. Thus, the total number of spices cultivators and traders selected as sample has come to 240 (104 for wynad, 96 for Idukki and 40 for Kollam) and 52 (18 for Wynad, 26 for Idukki and 8 for Kollam) respectively (Table 1.1).

Table 1.1: Selection of Sample for the Study

<table>
<thead>
<tr>
<th>Districts</th>
<th>Spices Cultivators</th>
<th>Spices Traders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total no. of</td>
<td>Total no. of</td>
</tr>
<tr>
<td></td>
<td>cultivators(as on</td>
<td>traders(As on</td>
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<td></td>
<td>31-03-2006)</td>
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<tr>
<td></td>
<td>No. of</td>
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<td>cultivators</td>
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<td>selected as sample</td>
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<td></td>
<td></td>
<td>sample</td>
</tr>
<tr>
<td>Wynad (North)</td>
<td>2080</td>
<td>36</td>
</tr>
<tr>
<td>Idukki (Central)</td>
<td>1920</td>
<td>52</td>
</tr>
<tr>
<td>Kollam (South)</td>
<td>800</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>4800</td>
<td>104</td>
</tr>
</tbody>
</table>


1.9 Collection of Data

The present study is analytical and descriptive in nature. Both primary and secondary data were used for the study. The primary data were collected from the respondents based on structured interview schedule (given in Annexure I and II). Discussions were also held with the high level officials of Spices Board, IPSTA, scientists in spices research centers, leading traders and exporters of spices, officials of spice oils and oleoresin industries, trade union leaders in spices industry, office bearers of cardamom growers associations and cardamom auction centres. The secondary data were collected from the publications of Spices Board, RBI Hand Book on All India Statistics, statistics of DGFT, monthly statistics of the Foreign Trade of India by the Director General of Commercial Intelligence and Statistics, Calcutta, statistics from the Directorate of Cocoa, Areca nut and Spices, Calicut, Annual Reports of the Cochin Chamber of Commerce and Industry, Trade Year Book by the Food and Agricultural Organization, International Trade Statistics Year Book by UNO, Statistical Year Book by IPC – Jakarta, UNCTAD Publications and other reports, books and periodicals.

1.10 Tools of Analysis

The data collected were suitably classified and analysed keeping in view the objectives of the study. For the purpose of analysis, statistical tools such as average, percentage, trend analysis, weighted mean, chi-square test and Friedman’s Repeated Measures Analysis of Variance (F-Test) were used. The weighted mean was used to assess the order of preference associated with the selected variables, while the chi-square test was applied to examine the significance of variation in the opinion among the respondents.

1.11 Period of the Study

The study covers a period of ten consecutive years from 1997-98 to 2006-07. It was during this period that the prices of leading spices touched all time highs and started to decline sharply, resulting in a spices trade crisis. Also,
the various World Trade Organisation Agreements and most of India’s Free Trade Agreements came into effect during this period. The survey for collecting primary data was conducted during the period from March to December 2007.

1.12 Variables Used for the Study

I. To Assess the Performance of Spices Trade in India and Kerala
   1. Total export of spices
   2. Export of major spices
   3. Area under cultivation of pepper
   4. Productivity of pepper
   5. Export of pepper
   6. Domestic prices of pepper
   7. Pepper prices in international market
   8. Area under cultivation of cardamom
   9. Production of cardamom
   10. Productivity of cardamom
   11. Export of cardamom
   12. Average annual auction prices of cardamom
   13. Area under cultivation, production and export of nutmeg

II. To Examine the Problems and Prospects of Spices Trade in Kerala.
   1. Spices trade crisis
   2. Production problems
   3. Trade problems
   4. Labour problems
   5. Manifestations of crisis
   6. Prospects of spices trade

III To Assess the Impact of WTO Agreements on Spices Trade in Kerala
   1. Awareness of WTO agreements
2. Sources of awareness of WTO agreements
3. Impact of AOA
4. Impact of agreement on TRIPS
5. Impact of agreement on SPS
6. Impact of agreement on SCM
7. Impact of agreement on TBT
8. Measures to protect the spices trade
9. Steps taken by government of Kerala
10. Steps taken by Spices Board

IV To Assess the Impact of Free Trade Agreements (FTAs) on Spices Trade
1. Awareness of FTAs
2. Sources of awareness of FTAs
3. Over all effect of FTAs on spices trade
4. Indo-SriLanka FTA
5. Indo-Singapore CECA
6. Indo-Thailand FTA
7. Indo-Nepal Treaty of Trade and Transit
8. South Asian FTA
9. Rules of origin
10. Negative list of imports
11. Quantitative restrictions
12. Port restrictions
13. Impact of Indo-SriLanka FTA
14. Threats posed by FTAs to Spices trade

1.13 Limitations of the Study

Even though the study is extensive, innovative, unique and pioneering, it suffers from the following limitations:
1. The co-operation of respondents is very much required for the success of a survey-based research. But, the co-operation of a few respondents did not come up to expectations.

2. Certain WTO jargons, appearing in the study, were not understandable to a few respondents and had to be explained to them in simple language; but the understanding was still limited in some cases.

3. The differences in the definition of the term ‘spices’ create some ambiguity in the interpretation of the figures. For instance while many markets such as those in the USA, Europe and Japan regard mustard seeds and sesame seeds as spices, many developing countries treat them as oilseeds.

4. International statistics do not often reflect imports of spice oils and oleoresins; given these constraints, any analysis of the global trade in spices can only be considered indicative.

5. In some cases, there were differences in the statistical data obtained from authoritative sources like Spices Board and those provided by Spices Traders and Spices Growers Associations.

In spite of the above limitations, maximum care has been taken to make the study accurate and useful.

1.14 Presentation of the Study

The study report is presented in seven chapters as follows:

Chapter I : Introduction
Chapter II : Origin and growth of spices trade in India and Kerala
Chapter III : Performance of spices trade in India and Kerala
Chapter IV : Problems and prospects of spices trade in Kerala
Chapter V : Impact of World Trade Organization Agreements on spices trade in Kerala
Chapter VI : Impact of Free Trade Agreements on spices trade in Kerala
Chapter VII: Summary of findings and recommendations