Chapter - 1

INTRODUCTION
The word ‘Agriculture’ means production of crops of various types. The agriculture-allied activities encompass horticulture, sericulture plantation, dairy and dairy products, livestock, fishing and rearing of pigs. Both agriculture and its allied activities are in combination and not separable in rural life. Hence in general, the term ‘Agriculture’ connects all the above activities. With the influx of modern socio-economic changes, the village scenario is changing. The traditional caste bound occupations are changing and villages artisan castes have started owning lands and cultivating. They have taken to giving land and not to traditional cereal production. The modern ideas like irrigation, time cycle and productivity per hectare are sweeping the villages. Job mobility is on the increase. The main rural occupation is still agriculture and will continue to be so as agriculture provides basic food grains to the masses.

A concept of how and when agriculture organized is an interesting question. Man started as a hunter, then progressed to food gathering and thereafter became a cultivator. It has been slow evolutionary process. Man learnt the art of agriculture and developed it into a systematic science with his constant observation, trials and efforts. Agriculture is as old as humanity. It has been and even today, is the main source of livelihood of man.

Since the last five decades, there are perceptible changes in economics. The industry sector and the scenario has been contributing more and surging true remains, in view of the fact that for about half of the global population, agriculture and allied activities are main occupations. An eminent economist Dr. Gunnar said “It is in the agriculture sector that the battle for the long term economic development will be won or lost”. In the Asian context, development means rural development since most Asian communities live in villages. India lives in its villages where agriculture is the main occupation.
Hence, agriculture has become the backbone of the Indian economy (Badi, R.V. and N.V. Badi, 2004).

The importance of agriculture in the economic development of any country rich or poor, is borne out by the fact that it is the primary sector of economy, which provides basic ingredients necessary for the existence of mankind and also provides most of the raw materials, which when transformed into finished products serve as basic necessities of the human race. Since, farming is less a business than a tradition in India a flourishing agricultural sector is far more important for the development of Indian economy. After three and half a decade of the introduction of Green Revolution, India became self-sufficient in the production of food grains. The production of food grains in India was at a level of 51 million tonnes during 1950-51 and increased to 152.37 million tonnes during 1983-84. It remained at a level of 192.3 million tonnes in 1997-98, 203.6 million tonnes in 1998-99 and 209.8 million tonnes in 1999-2000, 196.8 million tonnes in 2000-01, 212.8 million tonnes in 2001-02, 174.8 million tonnes in 2002-03, 213.9 million tonnes in 2003-04, 198.4 million tonnes in 2004-05, 208.6 million tonnes in 2005-06 and 211.3 million tonnes in 2006-07.

It is needless to mention here that the other agricultural produce also increased significantly during the period though a lot is still to be achieved in this sector. After the continuous and substantial developments in agricultural sector, the agricultural economy of the country has become a market-oriented one (Sadhu and Singh, 1996).

Agriculture will continue to be the engine of the national growth and development. Despite its excellent performance, particularly during the Green Revolution Era (1965-02) Indian agriculture, today is not as productive, competitive, remunerative and sustainable as expected and desired. In the
recent years agricultural annual growth rate has decelerated to 20 per cent against around 3.25 per cent registered during the Green Revolution. In the 10\textsuperscript{th} plan it is required to achieve the projected 8 per cent G.D.P. growth rate. The all time high food grain buffer stock of about sixty million tonnes notwithstanding. India is home to one-fourth of the world’s hungry and poor, majority of whom live in rural areas. Alongside the swelling food grain stock has swollen the number of under nourished from 211 million to 225 million tonnes during the last decade.

The paradox is unique to India and must not be acceptable to any one by any reckoning. Incidentally, during the same period, China has reduced its number of under nourished by seventy-nine million from sixty-five million. This imbalance of total production, national food security, household food security, the urban rural divide and the economic access to food is a matter of great concern (Mukesh Pandey and Deepali Tiwari, 2004). Indian agriculture has made rapid strides in the past five decades, making the country self-sufficient in food production. The most important factor responsible for such an achievement is the widespread adoption of improved agricultural technologies (Sairam, C.V. \textit{et al.}, 2004).

Its prosperity hinges on the property of million of autonomous peasant farm units and the well being of the produce. But most of them are deprived of their due share of price paid by the consumers because of the prevalence of the chain of intermediaries who earn at the expense of producer as well as consumer so an efficient strategy of “marketing service” is the need of the hour (Reddy, C.R. and D.V. Suresh Kumar, 2001).

The Directorate of Marketing and Inspection has been in existence for fifty years now. Over these years it has established its roots in the field of agricultural marketing research and built up a sound structure of data and
research survey reports. It has a division of competent and experienced officers in the research wing. More than 150 marketing reports are produced out of systematic and in depth studies and to the credit of the Directorate apart from a host of other small publication (Bhatia, G.R., 1989).

Marketing is a new branch of science, but many economists and marketing specialists have developed much of their attention towards the study of production and marketing of various commodities. The commodities include both agricultural and industrial production. In the field of agricultural marketing little work has been done in the past, in comparison to the products of industrial origin. However, tremendous rise in the trend has been noticed in the recent years to study the problems and prospects of agricultural product in the market.

Generally, ‘Market’ is refer to a place where there are three elements buyers, sellers and a commodity. Any place where these three elements are available could be called a market. It may be a city, a house, a commercial enterprise, a train or any other place. In the subject of agricultural marketing the products by the farm sector and the inputs required for farm sector are purchased or sold. So many agricultural products are necessities of life. These commodities are consumed by every one throughout the world. The marketing of these products affects the producers as well as consumers (Chhina, S.S., 2002).

The agricultural marketing in India is basically in the clutches of middlemen and the peasants are in their octopus grip. The nature of these middlemen is often exploitative and the cultivators are always the worst sufferers. It is well acquainted that when there is a rise in the prices of the farmer’s producers they are the least to be benefited and when prices falls, they are the first to be affected. The cultivators of fruits and vegetables in particular are at the mercy of the middlemen more than the growers of other crops, because
of the highly perishable nature of the produce coupled with the imperfect market structure dominated by the unscrupulous intermediaries.

The effective and efficient system of marketing of agricultural produce is the need of the hour to protect the farmers from the middlemen. It plays a significant role not only in stimulating production, assuring remunerative process to the farmers and producing qualitative commodities to the consumers at reasonable rates, but also in accelerating the pace of economic development (Narasaiah and Balasubramaniyan, 2001).

An efficient system of marketing is a "sign-quo-on" in the economy of all the countries in general and of agricultural countries in particular. India is a developing country having vast potential in the agricultural sector. This sector provides livelihood for about 64 per cent of the labour force. It contributes nearly 26 per cent to G.D.P. and accounts for about 18 per cent share of the country's total exports, which needs effective functioning of marketing in a predominantly agricultural economy. The regulated markets are established as per the provisions of the "Marketing of Agricultural Produce Acts" of the State Government. The regulation of markets generally introduces a system of competitive buying which helps in eradicating trading malpractices, ensures the use of standardized weights and measures and evolves a suitable machinery for the settlement of disputes arising among producers, sellers and buyers of agricultural produce in the market (Senam Raju, N.S., 2002).

Definition of agricultural marketing is buying and selling of agricultural produce. In the olden days, when villagers were self-sufficient and contained the farmers used to barter or sell their produce in the village market. The above simple definition suits this types of village market. Today, the agricultural markets have evolved. These are stages of interdependence in the agricultural marketing activities.
The National Council for Agriculture definition gives an overall view of agricultural marketing and attaches due importance to promoting economic development. Marketing has become a tool and multiplier of economic development. If there are no reasonable returns, no farmer would be interested in increasing his production. The agricultural marketing is a process of sale and purchase of agricultural output (Bhatia, G.R., 1989; Badi, R.V. and N.V. Badi, 2004).

India is an agricultural country. It is the second largest country in respect of the size of population. Agriculture is the main profession of the people. Agriculture makes sizeable contribution and to the national income and is the major foreign exchange earners generates adequate revenue to the government: The marketing of agricultural products affects the agricultural activity as a whole, if the farmers are not getting reasonable price, only when he gets reasonable return on his output. Importance to the consumers: the farm products are consumed by every person. The consumer should pay the reasonable price. An efficient marketing can assure reasonable prices. Importance to the government: No government would like to be dependent on other countries for their agricultural products and particularly the food articles.

Importance in international trade: the export of farm products can fetch a lot of foreign exchange. On the other side, while importing the agricultural products the reasonable marketing cost should be ensured so as to provide these commodities at the most reasonable prices to the consumers. Importance to development: in the process of development, the country should be self sufficient in the production of food articles and the efforts should be made to export the farm products so as to earn the foreign exchange, required to be used for the import of capital goods for development. Best use of the available sources of the country should be used in the best possible way. It is possible only if the
producers are capable to sell their products in the reasonable period at reasonable prices.

Evolving proper plans and market methods for agricultural produce is necessary. It includes the sale and purchase of agricultural products and agricultural inputs. In this process the various market functions are performed by so many middlemen between the producer and consumers. These middlemen receive their rewards for performing their services. The various market functions like assembling, transportation, weighing, cleaning, grading, financing, wholesaling, retailing and risk bearing are included in the scope of agricultural marketing. Similarly, the market margins or rewards for the services of the various functionaries are also studied. The market fees, commission, brokerage, transport cost, cost of storage etc., are included in the scope of this subject. It also includes the market channels, marketable and marketed surplus, efficiency, and role of government in marketing, the training, research and statistics about marketing. All these functions, the change in the role of various middlemen, government and organizations are included in the scope of the subject of agricultural marketing. The different activities related to the process to move the commodity from producer to consumer and the agricultural input from the producer to the farmers are analyzed in this agricultural marketing. The subject is related to farm products only. Agricultural system is an efficient way by which the farmers can dispose their surplus produce at a fair and reasonable price, improvement in the condition of farmers and the extent on the elaborate arrangement of agricultural marketing in the country (Chhina, S.S., 2002).

Present state of agricultural marketing in India, different agricultural marketing are wide spread. First sale as villages the farmers in India are to all a way their surplus produce to the village moneylenders and trader and trader may buy independently or work as an agent of a bigger merchant of the nearby
Mandi. In India more than 50 per cent of the agricultural produce is sold in these village markets in the absence of organized markets.

Sale in markets: The second method of disposing surplus of the Indian farmers is to sell their produce in the weekly village markets popularly known as hat or in annual fairs sale in Mandis. The third form of agricultural marketing in India is to sell the surplus produce through Mandis located in various small and large towns. There are nearly 1700 Mandis viz., the cooperative marketing, where marketing societies are formed by farmers to sell the output collectively to take the advantage of collective bargaining for obtaining a better price. Conditions for satisfactory development of agricultural marketing in India. Eliminating middlemen in order to ensure a fair and satisfactory development of agricultural produce is very much required. Such middlemen between the farmers and the ultimate consumers usually disturbs the normal functioning of the market. Freedom from money lenders, easy finance facility should be developed so as to set free the farmers from the clutches of money lenders who often force them to go to other districts for sale of their output. Suitable agricultural marketing structure is based on improved and adequate storage capacity in the form of modern warehouses and cold storage. Such facilities can raise the holding capacity of farmers for getting a remunerative price for their product. Bargaining for getting price of these produce in the market, adequate transport facility for developing satisfactory agricultural marketing cheaper and adequate means of transport must be developed so that farmers can take their produce in urban markets or Mandi. Agricultural marketing societies should be formed throughout the country for developing a better marketing structure. Market intelligence, proper arrangement should be made through mass media coverage to pass correct and updated information to the farmers about ruling prices and marketing operations (Narasaiah and Balasubramaniyan, 2001).
Chapter 1

Introduction

An important problem of Indian agriculture concerned with the marketing of its produce is to ensure remunerative prices to the producer, to produce non-functional margins of traders and commission agents and also to promote movement of surplus, for economic development of properly structural market is an essential requisite.

As agriculture is the backbone of Indian economy and in order that agriculture plays a vital role in our economic development rise in agricultural production assumes importance. Hence, both production and marketing technology are essential for reinforcing each other for the development of agriculture. If marketing technology fails to keep pace with production technology, the farmer would tend to constrain the latter.

With the growth of commercialization and specialization in agriculture along with increasing trend of migration and concentration of population in urban areas, marketing has a distinct role to play. Further, the adoption of more scientific technologies, increased labour farm specialization and geographic separation of production and consumption for the continuous rise in population associated with changing food habits and purchasing power of people along with changing consumers mobility, an appropriate marketing technology and agricultural price policy assume crucial importance.

With the advance in intensive crop processing storage and marketing of agricultural produce are becoming more and more important. In the absence of sound market infrastructure, the farmers have to depend on local traders and middlemen for the disposal of the farm produce, which is sold sometimes at throw away price. In case of small and marginal farmers, marketing of produce is still critical. Since, the quality of produce they are able to sell is small and overhead expenditure on processing, transport and marketing of produce is heavy, the marketing of their produce is hardly remunerative if they do it on their
own. In the absence of an appropriate marketing technology, the producers fail to convert the production activities to profitable opportunities for which the nation is under utilized or misused. Thus, due to the lack of a sound price policy, the un-remunerative prices received by the growers not only discourage them from continuing farming but also result in a low level of agricultural production.

Thus, for the development of the agricultural sector, it is essential to develop agricultural marketing so as to match with production surplus resulting from the technological innovations and exploitation of the existing land and water resources. Apart from increasing production, marketing and distribution, significantly help in improving the availability of goods and services and also provide a stimulus to greater production.

In this respect agricultural development needs to be redefined as an increased flow of farm commodities and inputs efficiently circulating in the national economy. Thus, an efficient marketing system is essential as the composite alternative necessary for coordinating production and consumption at various levels. In the existing marketing scenario the whole picture of economic activities is a system and the interaction between marketing and production in particular is simply overlooked. Similarly, its importance for development in other economic sector is ignored. Marketing plays a crucial role in bringing synchronization between demand and supply forces. The delivery system in the marketing spectrum should serve the dual objectives of ensuring an appropriate price for the ultimate consumers and remunerative price for the producers. Thus, the agricultural production distribution system particularly in a developing country needs crucial importance.

Marketing of agricultural produce is in fact as important as the production itself. According to Maurice Dobb, “There is a reason to support that it will be the marketed surplus of agriculture which played a crucial role in the
underdeveloped country in setting the limits to the possible rate of industrialization. It is also possible for the agricultural sector to make large net transfers of resources to other sectors and if there transfer are used productivity”. The rate of economic growth can be accelerated to purchase consumer goods from other sectors or from abroad or to disperse off product in any way other than consumption within the sector. Agricultural marketing is a process which starts with a decision to produce a soluble form commodity and it involves all aspects of market structure or system, both functional and institutional based to technical and academic considerations and includes pre and post harvest operations, assembling, grading, storage, transportation and distribution. Thus in agricultural marketing we are concerned with demand and supply conditions and costs price fixation market structure conduct and performance and marketing efficiency (Mohd iqbal Ali and B. Dasharatan, 1998).

The adoption of marketing technologies of developed countries in developing countries is not realistic as there exists a great deal of disparity in their economic background. First of all, there exists a wide range of difference in the agricultural production system between these two sets of economies. In most of the Asian countries the number of marginal and small farmers is quite significant and they possess marginal surplus of their production after meeting their consumption needs. This necessitates a subsistence marketing structure different from the commercial farming-cum-modern marketing structure of the developed countries. For a pretty long time, Indian agriculture was basically meant for consumption in the farm itself and marketing of agricultural produce was quite insignificant. Marketing of agricultural produce became more and more important with the growth of agricultural production which provided a sizable marketable surplus, after meeting the requirements at farm front. Agricultural marketing is associated with growing specialization in production,
industrialization, migration and concentration of population in certain areas and around non-farming economic activities.

The main objectives of sound marketing structure are to deliver service to the ultimate consumer at reasonable price whatever and whenever he wants it along with protecting the interests of the producer. According to the National Commission of Agriculture, agricultural marketing is a process which starts with a decision to produce agricultural commodity and it involves all aspects of market system namely, functional and institutional, based on economic and technical considerations and includes pre and post harvest operations. But it is conventional and convenient to treat marketing from post harvesting point i.e., from the time agricultural product leaves the farmers and reaches the consumers. In the channel, the agricultural produce passes through different phases of operation such as assembling, processing, grading, storage, transportation and distributing before they reach the ultimate consumers. However, increasing efficiency in the marketing system implies lowering of marketing costs and margins and thereby providing the goods to the consumers at lower price. Marketing of different agricultural producers do not follow a uniform pattern. It is unique to the nature of product seasonality of production pattern, of demand and the stage of economic development of the concerned area.

Therefore, agricultural marketing deserves a critical analysis. According to America Marketing Association Committee, Marketing includes all activities having to do with effecting changes in the ownership and possession of goods and services. It is that part of economics, which deals with the creation of time, place and possession and that phase of business activity through which human wants are satisfied by the exchange of goods and services for some valuable consideration. In market economy with commercialized agriculture profitable
marketing is a prerequisite for higher profit from farm product (Badi, N.V. and R.V. Badi, 2004).

In the present context of inflation, low farm productivity, seasonality of production with storage facilities fluctuating supply due to unforeseen natural calamities like flood, cyclone drought and population explosion, marketing assumes crucial importance in the delivery system of the products. Marketing assumes greater importance specially when production is scattered and disorganized and is required to reach the consumers of small means spread over large areas. Sometimes, the interaction between producers and consumers is far from perfect in Marshallian sense. Within the large spectrum of agricultural system, coconut crop attracts special attention of the planners, researchers and agricultural economists of the present time. It has become a basic necessity of the present civilized society. A number of plans and programmes are implemented at different levels for integral development of this crop. In view of this, an investigation to the production and marketing system of coconut assumes crucial importance (Reddy, C.R. and T.V. Suresh Kumar, 2001).

Agricultural marketing system in Karnataka is one of the Mercurial reforms suggested to improper the economic conditions of the producer. The establishment of registered markets at appropriate places democratically managed by a committee consisting of all the market participants, producers, traders, commission agents warehousing and so on under a well defined act is foremost. Coupled with indigenous bye-laws to suit the local conditions so that the producers have a say in the process of the disposal of their produce under fair conditions. These had its roots in the report of the Royal Commission on agriculture, which was constituted in 1926 by the British regime and was submitted in 1928 which had made extensive survey of the affairs "State agricultural sector is renowned for its instability in production, contaminant with
all conceived practices. The country which has the privilege in the marketing regulation in as many as eighteen out of twenty eight states and a few union territories enjoys a network of near 4500 regulated markets. Most of them are awaiting organizational and functional reforms to improve operation and function.

It would be no exaggeration to state that Karnataka has taken a lead over the other states in present about market development. This was made possible by main loan assistance from the IDA 1973. The IDA project aid which was originally intended to cover thirty markets at an outlay of Rs. 9.484 crores was utilized to develop sixty-five markets. These markets handed over 70 per cent of total markets of total IDA project enabled to develop a massive marketing infrastructure wherein 648 infrastructural works were completed and as many as 990 shop cum-godown with a total capacity of 64.560 MTs were constructed at the market places included under the project.

Karnataka has the honour of the promulgation of the Marketing Regulations Act as early as 1939. This act was in tune with the Berar Act and the Cotton Market Act. The rules were formed under this act in 1947 – an inordinate delay due to inexplicable reasons which resulted in the establishment of a regulated market at Tiptur (which is now a taluk headquarters in the Tumkur district) in 1948. The regulated market at Tiptur had notified copra, coconut and other agricultural produce of local importance (Viswanath, N.S., 1985).

The growth of agricultural marketing in India has been checked due to some serious constraints. Most of these spring from the conditions of production and the nature of demand for agricultural products. Firstly, the units of production are much smaller and more scattered than in other industries which retards the efficiency of both production and marketing. Secondly, for most agricultural products the season and rate of production do not coincide with the
demand. As result of which the difference between agricultural and other products is not so marked in this respect as in the effect which this has due to the greater perishability of the farmer. *Thirdly*, the quantity and quality of agricultural production are relatively speaking beyond the control of the producers. First drought floods, plant diseases, a whole assay of insects and pests all conspire to wart off and on, the agricultural programmes in the economy. Supply and demand are frequently imbalanced to the determinant of both producers and consumers. Fourthly farm products are generally more perishable and bulky than others. This makes their marketing more difficult particularly in regard to transport and storage. But, there are variations between individual products (Dilip Kumar Mund, 1985).

Agricultural marketing in Karnataka even though regulated by the state, has a long way to go in its process of development as compared to the systems that exist in agriculturally forward states of Punjab, Haryana, Maharashtra, Andhra Pradesh and Tamil Nadu. The region of Karnataka is periodically not a grain marketing region. It is only recently that a sizable marketable surplus is finding its way to the formal marketing systems. Karnataka, as known, has specialized in the marketing of commercial crops and adequate provisions have been made to regulate and improve the marketing of these cash crops. In recent years, the increased production of food grains in the state has created a marketable surplus and the commercialization of these crops has been steered up. Hence, grain marketing remains only an emerging field and not a well developed one.

The procurement of food grains in Karnataka is also very low. There are only a few procurement agencies functioning in the state and these are confined to specific crops. The procurement of grains takes place only in the case of rice and that too through the processing mills. The commission agents do not operate
in the other well-developed areas like Haryana and Punjab where a farmer necessarily depends on the commission agent for the sale of his produce. In Karnataka, the situation is quite contrary as the commission agents operate at a very low key and they procure from the farmers directly from the fields. On the whole the marketing system in Karnataka is rudimentary and comprehensive policies have to be implemented to make it efficient and well developed.

Recently, again the debate came alive in the context of the process of liberalization, where it is argued that the role of the state should be minimized over time so as the market forces create a proper atmosphere for economic growth. It is currently believed rational and most desirable (Deshpande, R.S., 1985).

It is now on the verge of taking corrective measures to take realize the economic as well as social benefits. A marketing system which interests both producers and consumers have three essential characteristics. First, a suitable structure of support price for various agricultural commodities adjusted from time to time in the light of cost of production so as to ensure fair return to the farmers. Secondly, adequate arrangements for procurement of agricultural produce, in support prices if the prices fall below infrastructure of marketing which will ensure fair price to the producer in open market conditions and help eliminate non-functional market margins of intermediaries. Marketing system creates dynamics, which affect the overall economic development important marketing innovations of recent years. From the point of view of analytical innovations; study of agricultural production and marketing various econometric methods and techniques have been developed in the recent past. Based on these formulations quite a large number of researchers have undertaken research on production and marketing of agricultural products in the last two decades in India. Similar developments were also found in Karnataka and a good number of
market researchers stated conducting research on different agricultural and horticultural products (Viswanath, N.S., 1985).

The coconut palm (*Cosos nucifera* L.) has been variously described as “Console of the East”, “The Tree of Heaven”, “The Tree of Life” and “Kalpa Vruksha”. From its sap, leaves, fruit, stem and even from roots over hundred products of domestic, commercial, industrial and medicinal importance can be obtained directly or manufactured. It is uncertain if any other plant has this kind of utility. It has the unique feature of yielding nuts almost at monthly intervals throughout its life of about eighty to hundred years (Kumara, D.K., 2002).

Coconut crop assumes considerable significance in the national economy in view of rural employment and income generation. Major share of the coconut production is contributed by millions of small and marginal farmers who form the backbone of coconut culture in the country (Utpala Parthasarathy *et al.*, 2006). Coconut crop is important to the national economy from the point of generation of vast employment and income export earning and import substitution. Hence various aspects of economics of the coconut crop are needed for correct interpretation. This crop is perennial nature with a long gestation period with complex production, physiology and hence working out production. Economics is so essential (Mandal, R.C., 1985).

Coconut is unique in all respects among horticultural crops grown in the country as a source of food, drink, shelter and its raw materials are also used for industrial purposes. This crop assumes considerable importance in the national economy in view of the income and employment potential for rural population (Namashivayam, C.N. and V. Richard Paul, 2004).

Besides, this crop assumes considerable importance in the national economy in view of the income and employment potential for rural population.
Coconut is an important tree crop grown extensively in coastal areas providing livelihood to millions of people in cultivation, processing and related activities. The production of coconut is around 8.8 million tonnes and the coir obtained from processing coconut husk is also of high commercial value. Shell based products have gained entry into the national and international markets. India is one of the largest coconut producing countries in the world and it ranks third in both area and production. As per estimate of 2004-05 it has occupied an area of 2059.01 thousand hectares with an annual production of 15125.41 million nuts, the productivity of coconut per hectare in India is 6776 nuts. Coconut trees are cultivated in 93 countries across the globe, occupying over 550 billion hectares, providing 54129 nuts annually.

Coconut palm is one of the traditional tree crops grown in India, plays a vital role in the economic culture and social activities of the people, with an annual production of 12159.6 million nuts from a area of 1918.9 thousand hectares during 2002-03. Cultivation of coconut in India is concentrated in the west and east coasts of the country.

Area under production and productivity of coconut in India have exhibited a fluctuating trend during the period 1980-81 to 2002-03. Area under coconut increased very marginally from 10.76 lakh hectare to 19.48 lakh hectare in 1980-81 to 2002-03. In contrast the production of coconut in India increased significantly from 5829 million nuts in 1980-81 to 14342 million nuts in 2001-02 but the production of coconut decreased in the period of 2002-03, whereas the productivity of coconut declined marginally from 6709 nuts per hectare to 6337 nuts per hectare during the period of 2001-02 to 2002-03.

Karnataka is one of the coconut producing state. It is endowed with a diversity of soils and climate conditions that a wide variety of crops are grown in the state. Among these crops like coconuts, cashew nuts, arecanuts, chillies, rice
and their products have great potential for export. The potential of agricultural processing in Karnataka has special reference to the above crops with a view to promote their export possibilities. Coconut is an important food and oil crop grown in Karnataka. It is grown in 10.3 million hectares with an output of 1202 million tonnes. Different coconut products are copra, coconut oil, coconut milk, desiccated coconut and coconut shell (Devadattam, D.S.K., 1997).

Karnataka being a fore-runner in the stream of coconut development could establish an enviable position in the coconut map of India. Coconut has become the second largest important horticultural crop of the state, occupying 31 per cent of the total area under the horticultural crops (Thomas Mathew, M., 2000).

In Karnataka as well as in rest of the coconut growing states of south India, coconut is still cultivated in most unscientific and primitive ways. As a result, productivity of farm is alarmingly low. It is a common sight to see the neglected and untended gardens in all coconut growing areas, as most of the coconut growers are marginal and small holders. The low investment capacity of small and marginal farmers due to low saving potentiality has come in the way of introduction of new scientific techniques of production in coconut cultivation. Further, most of the coconut growing countries are under rain fed condition. Hence, the productivity of coconut plantation is far from satisfactory levels (Mangala Hegde, 2000).

The southern states of India like Kerala, Tamil Nadu, Karnataka and Andhra Pradesh contributes to nearly 90 per cent of the total area and production of coconut in India. Maharashtra, Goa, West Bengal, Assam, Bihar and Union Territories of Andaman and Nicobar Islands, Pondicherry and Lakshdweep also contribute a small portion of production. Cultivation of coconut in India is concentrated in the west and east coasts of the country. The state of Kerala which accounts for about one per cent of the total land area of India contributes to about
47.18 per cent of the area, 43.64 per cent of the production of coconut during period 2002-03. The contribution of Karnataka accounts for about 19.56 per cent of the area and 13.92 per cent of the production of coconut during 2002-03. Tamil Nadu accounts for 16.6 per cent area and 31.1 per cent production. In the case of productivity among the four southern states Andhra Pradesh tops with 11003 nuts per hectare followed by Tamil Nadu with 8270 nuts per hectare. The productivity in Kerala is only 5895 nuts while Karnataka has the lowest productivity of 4063 nuts per hectare. High productivity Andhra Pradesh and Tamil Nadu is attributed to the adoption improved cultivation and production technology (Singh, H.P., 1998).

Hence the present study undertakes areas in Karnataka where productivity of coconut is lowest to the productivity at national level (6337 nuts in national level 4063 nuts in Karnataka) and which falls in the middle of the productivity range experienced in major coconut producing states of India. As per the figures of 2000-01, the net sow area in the state Karnataka was 1,02,58,625 hectares, of which coconut was 54.6 per cent of the total geographical area. It was 1,02,58,605 hectares (53.9%) during 1999-2000. 376.4 thousand hectares of land is put under coconut plantation.

Coconut production in Karnataka increased from a 8899.59 lakh nuts in 1980-81 to 13641.46 lakh nuts in 1994-95. It increased from 15036 million nuts in 2001-02 to 15125.3 million nuts in 2002-03. On an average the production of coconut increased two decade whereas productivity decrease substantially from 4066 nuts / hectares to 4063 nuts / hectares during the period 2002-03 (Report on 2000-2001).

In Karnataka, the productivity per hectare has been relatively low during the fifties and sixties with a dip during 1965-66 and reached All India level during seventies and remained without much fluctuation. In Tamil Nadu the
productivity per hectare is always high, though fluctuating widely. The average productivity is almost double than that of Kerala. In Tamil Nadu coconut is predominantly an irrigated crop. Wherever un-irrigated crops are grown, the holdings are located near tanks and valleys, where copious ground water supply to coconut roots zone is available. It is interesting to note that the high average per hectare productivity in Tamil Nadu is also due to the high density of palms, which is about 319 palms per hectare. The corresponding figures for Kerala and Karnataka are 229 and 122 respectively.

Though the average per palm yield in Karnataka is 54 nuts, per hectare yield was low because of very low palm density, whereas in Tamil Nadu with a low average yield of 44 nuts per palm, the productivity was forced to be almost double than that of Kerala as well as the country as a whole (George, M.V. et al., 1991).

In Karnataka, the production increased upto 1980-81 and then there was declining trend till 1990-91. This can be attributed mainly to the spread of root disease. George estimated the loss in yield to be as high as 340 million nuts annually due to root and leaf diseases. Comprehensive survey conducted during 1999-2003 by Central Plantation Crop Research Institute in collaboration with the Department of Agriculture Coconut Development Board and five other agencies estimated a loss of 968 million nuts annually due to root disease. The production of coconut also. However, due to the concerned efforts of Coconut Development Board, Department of Agriculture and Central Plantation Crops Research Institute. The declining trend in production has been checked to some extent. As a result of well distributed rainfall from 2002-03 onwards the production of coconut in Andhra Pradesh, Tamil Nadu and Kerala increased considerably which boosted the all India production to the level of 12051.8 million in 2002-03.
Chapter 1

Introduction

Through the present productivity of the crop in major coconut growing belt is not considered satisfactory. It has potential for further increases through a well planned effort for production increased by expansion of area in the potential states and for productivity increase in the traditionally coconut belts. India could advance here position to the far world. Production and productivity increase assume special significance to the country. Though there was considerable expansion in area under coconut in almost all the coconut growing states and increase in production there is considerable scope for increasing the productivity levels (George, M.V. and K. Vijaya Kumar, 1991).

Coconut is an important horticultural crop in Karnataka. Hence, production and marketing of coconut assumes crucial importance in the existing system of delivery of agricultural output. However, coconut marketing in Karnataka is very critical. It needs a regulated market structure. The coconut growers of this state keep a certain portion of their produce for their personal use and the rest is being marketed through different marketing channels involving a number of middlemen.

The behaviour of coconut price in the state has been completely unsystematic and irregular during the period 1980-81 to 2002-03. Apart from inter-year variation, significant inter-month variation of coconut prices in Karnataka clearly reveals the inadequacy of market structure for coconut marketing in the state. However, it is observed that, after the establishment of regulated market in Karnataka prices of coconut are significantly higher than the previous records. Such rise in coconut prices encourages the coconut growers of the state to plant the coconut in large scale. But the coconut prices during the post harvest period came down sharply thereby depriving the coconut growers from getting a fair price for their produce. But, the price tends to rise significantly when the produce comes to the hands of the growers and traders.
The mode and cost of transportation are the major problems faced by the growers when they sell their produce. The existing inadequacy in market infrastructure such as storage, packing, transportation and other media constrain the growers in receiving a fair price for their product.

What is typical of this product is that coconut needs more space for storage particularly at growers, village trader and wholesaler level. That is why, it necessitates a quick transportation system. In Karnataka rail transport is quite inadequate and road transport which is costly doesn’t adequately cover the producing areas of the state. Wastage of the product is another handicap. There are hardly any facilities for packing. All these imperfections go against the interests of growers as well as consumers. The absence of economic and scientific storage and quick transportation system in the spectrum are partly responsible for exploiting situation. Therefore, traders slacken during their purchase, particularly during the post harvest period. This leads to sharp decline in prices in post harvest period and the small and marginal farmers whose who have marginal marketable surplus, sell their produce at a very low price. Therefore, the study of rural marketing system is crucial for improving the subsistence marketing system suitable for the small and marginal farmers.

It is a common fact that effective marketing needs a suitable market frame in the state. If the structure of marketing is suitable to the environment of its operation then it is quite possible for the adoption of the modern marketing techniques. If the market organizations is not effective then it is quite natural that there cannot be a competitive marketing system. This situation therefore leads to, exploitation of producers and consumers.

The intermediaries such as village trader, wholesaler and retailer take advantage at the cost of producers and consumers. Thus, emphasis should be given to market regulation storage and transportation. Gadgil, therefore,
emphasized that each state must have market regulations like Punjab and Haryana complex where regulations in marketing cover the entire area to safeguard the interests of the producers.

More Johl and Khusro have identified that about 6.66% of India's marketed food grains is lost in each year. They have further reported that most of the food grain losses occurred during storage particularly in village area. Though now such study has been conducted in Karnataka still losses are presumed to be more in view of production being scattered, environment being primitive and transport particularly being inadequate in village areas.

In order to transport to consuming areas and for ensuring a balance distribution over time, storage facility over space is crucial. Thus storage facility is essential for effective delivery of over time and space with a view to optimizing their return to producers and safeguard the interest of consumers, minimization of wastage and protection of quality of the product after harvest would be a major component of constant production. Lack of quick transportation system tends the produce to soil in transits resulting in heavy losses. Transportation system can go a long way in reducing the intra-seasonal spatial disparities in prices.

Scope of credit facilities to intermediaries as well as to producers involved in the process of marketing is also crucial in the interest of producers and consumers. In the absence of bank credit for marketing, the intermediaries as well as producers avail themselves of credit from the money lender at high rates of interest. This adds to marketing cost, reduces producer's net profit and ultimately also increases consumer's price.

The coconut marketing system in terms of marketing practices such as harvesting, grading, packaging, marketing channels and like. Further an attempt is made to study the marketing costs, margins, price spread, effects of variation

The farm economy has come increasingly under the influence of market forces of demand and supply, and hence price policy has to take its important role in order to sustain agricultural growth. A minimum price for coconut is to be ensured which not only covers all the input costs of production but ensures a fair margin of profit to cultivators. Therefore, M.S. Bhatia has rightly remarked that a sound price policy is one that ensure remunerative price to producer and reasonable price to consumers which reduces regional imbalances in agricultural income through maintaining parity between cost and prices of different commodities. It is therefore essential to examine the existing cost pattern and market prices of growing areas of Karnataka. A few years after the establishment of regulated markets in Karnataka farmers are ensured of a minimum price for their product. The marketing board constituted in the state has taken some initial initiatives in this regard. But, the marketing structure for coconut still remains unsystematic, unplanned and unorganized in the state. Till today, the growers do not enjoy the support price for considering the cost of production in this state. Therefore, the present study “The production and marketing of coconut in Karnataka aims to explore following areas;

**Objectives**

1. To study the trends in area under production and productivity of coconut in major producing states of India as well as the districts of Karnataka.

2. To analyze the factors like fertilizer, human labour, irrigation and planting materials and their relative contribution in the production of coconut.

3. To identify the agencies involved and the channels they form in the process of marketing of coconut in Karnataka.
4. To study the marketing costs, margins and price spread in the marketing of coconut in various marketing channels.

5. To study the structure of coconut prices in Karnataka markets.

6. To estimate the cost of production of coconut and to compare it with its market prices.

**Hypotheses**

On the basis of the objectives outlined in the study, the following hypotheses have been drawn up:

1. The area under production and productivity of coconut in Karnataka have an upward trend.

2. The factors like fertilizer, human, labour, irrigation and planting materials play a crucial role in increasing productivity of coconut.

3. There is a long chain of middlemen in the marketing channel of coconut.

4. Marketing costs and margins are unduly high due to participation of more middlemen in the market channel.

5. Coconut prices fluctuate very widely.

6. The existing market price of coconut is not favourable to growers.

**Limitations of the Study**

- The present study focuses on the agricultural economics. Agricultural economics is vast area for the study and it is shared by all the agricultural and horticultural crops. The study has not covered all the agricultural crops, it is confined to only one crop. The study analyzed the “economics of production and marketing of coconut in Karnataka”.

- The study includes primary and secondary data.
Only one district are selected for the study cost of cultivation and cost of production of coconut. Hence, results are largely applicable to those are as where similar conditions prevail.

The interview method of data collection requires the respondents to recall from their memory about previous agricultural operations and crop results. Hence, the findings may be subject to errors.

Very few studies have been carried out and published on the “Economics of production and marketing of coconut” in Karnataka. Hence, the study has been done on the basis of data, collected from primary and secondary source.

There are six sets of primary data on the cost of marketing, margin and price spread between different agencies involved in coconut marketing of Karnataka.

Chapter Scheme

The present study is divided into seven chapters. The contents of these chapters are outlined here.

Chapter-1. Introduction

The Chapter-1 presents the Importance of the Study, Agricultural Economy of the State. The Objectives of the Study and Hypotheses to be tested, Limitations and Chapter Scheme are also specified.

Chapter-2. Review of Literature

The Chapter-2 discusses the Review of Literature pertaining to production and marketing of coconut in different countries and the states.

Chapter-3. Methodology and Data Base

The Chapter-3, the Research Methods have been discussed. This section deals with general information of state, selection of study area, selection of sample block, selection of sample farmers, description of the study area, nature
and sources of data are discussed. The comprehensive discussion on sampling techniques, analytical procedure and statistical tools used in the study is also presented.

**Chapter-4. Socio-economic Background of Karnataka – A profile**

Chapter-4 deals with the Socio-economic Background of Karnataka. It includes fairly good rate of growth of the economy in the field of education, health, power, transportation, information technology, industry, agriculture and infrastructural development.

**Chapter-5. Agro-climatic and Technological Status for Coconut**

Chapter-5 analyzes the agro-climatic and technological status for coconut in the country and the Karnataka state. It includes planting materials into cultivation, mixed cropping, plant protection, pests and diseases.

**Chapter-6. Results and Discussion**

The results and discussion have been presented in Chapter-6. It deals with the compound growth rates of area, production and productivity of coconut in different states of the country and different districts of Karnataka 1980-81 to 2002-03. Trends in production factors associated and their relative contribution in the production of coconut. Identification of agencies involved and the channels they form in the process of marketing, trends and forecasting of month-wise wholesale prices of coconut in all the districts of Karnataka.

**Chapter-7. Summary and Conclusion**

In this chapter the main findings of the study are summarized and appropriate conclusions and policy are drawn for the development of coconut economy.

28
Bibliography


