The review of past studies helps us in framing objectives, developing research design, variable selection, interpreting the results and in drawing meaningful conclusions. In accordance with the objectives of the study, a brief review of literature is presented here under the following headings.

2.1 Concept of vegetable marketing
There are many concepts of ‘marketing’. Some concepts relevant to horticultural marketing are mentioned here. Marketing involves finding out what your customers want and supplying it to them at profit (Dixie, 2005). This concept stresses two important points: the marketing process has to be customer oriented and marketing, a commercial process, has to provide farmers, transporters, traders, processors, etc. with a profit otherwise they will be unable to stay in business. Vegetable marketing therefore involves identifying buyers and understanding what they want in terms of products; how they want to be supplied; operating a production-marketing chain that delivers the right products at the right time; and making enough profit to continue to operate vegetable production and trade.

Improving vegetables marketing in developing countries is vital for a number of reasons: rapid increase in demand from growing domestic urban populations, opportunities to earn foreign exchange by exporting high value-off-season produce; the income raising opportunities it offer to small farmers and
the contribution to employment made by its labor intensive production, handling and sales requirement are some to mention (FAO, 1986, cited in Abay, 2007).

2.2 Characteristics of vegetables marketing

Vegetable crops are more profitable than other crops particularly food crop commensurate with the fact that these crops are highly labor intensive and widely cultivated by small and marginal farmers (Prasad, 2001). It also suggested multi-pronged strategies for developing well integrated system of production and marketing. The irony of market development programmes initiated are of far fell for short of expectations in as much the prevailing vegetable marketing system bears many market disabilities. The production system is also not encouraging as is evident from low yield rate. The farm business of vegetables, therefore presents of sorry state of affairs. There have been evidences of traders’ strong influence or determination of prices, poor participation of vegetable growers in the market yard, inadequate development of actual market place for vegetables i.e. rural market and very low level of adoption of post harvest technology.

The marketing system was examined; the most important channels being followed are mentioned below as suggested by Subrahmanyam and Gajanana (2000); Gajanana et. al., (2002),

- Producer – Commission Agent/Wholesaler – Retailer – Consumer
- Producer – Agent of the distant market/wholesaler – Retailer – Consumer
- Producer – Cooperative Society – Consumer
Produce – Processor – consumer

The studies in the past have shown the predominance of commission agents (CA) in vegetable marketing. The analysis of costs and returns associated with this channel indicated that commission charges constituted a major component of marketing costs.

Diversification into horticultural crops is becoming attractive for many poor farmers around the world. Worldwide production of fruit and vegetable crops has grown faster than that of cereal crops, albeit from a much lower base. Between 1960 and 2000, the area under horticultural crops worldwide reached more than double. There are several reasons for the global increase in production and trade of fruit and vegetable crops. Horticultural production is profitable. Farmers involved in horticultural production usually earn much higher farm incomes as compared to cereal producers and per capita farm income has been reported up to five times higher (Lumpkin, et. al., 2005).

Horticulture production is profitable. Farmers involved in horticulture production usually earn much higher farm income as compared to cereal producers. Cultivation of fruits and vegetables allows for productive employment where the labor/land ratio is high, because horticultural production is usually labor intensive. Increasing horticulture production contributes commercialization of the rural economy and creates many off-farm jobs. However, expanding the scale of horticulture production is often hindered by lack of market
access, market information, and many biological factors (Weinberger and Lumpkin, 2005).

Ideally, measures commonly recommended for the improvement of vegetables marketing are better packaging, handling, and transport; sorting by quality; extending the market season and leveling out gluts and shortages by market delivery planning and storage; developing new markets; installation of refrigerated transport, processing equipment and establishing marketing enterprises.

2.3 Roles played by intermediaries in the vegetable supply chain

In a study conducted by Loanna Reziti (2003) entitled “An investigation into the relationship between producer, wholesale and retail prices of Greek agricultural products” verified the nature of the response of the wholesale price to changes in the producer price and also the response to the retail price to producer price changes. Monthly price information was analyzed by testing for the existence of a long-run equilibrium between the price series. The study facilitated that markets should be integrated in the long run, because in the long-run equilibrium relation exists between prices at different levels and price transmission is incomplete in the short-run. In most markets the causality runs from retailers to wholesalers and to producers. He found that changes in the price at one stage need some time to be transmitted to another stage for various reasons, such as policies, storage and inventory holding and delays caused in transportation and processing.
A marketing chain is used to describe the numerous links that connect all actors and transactions involved in the movement of agricultural products from the farm to the consumer (Lunndy, et. al., 2004). It is the path one product follow from their source of original production to ultimate destination for final use. Functions conducted in a marketing chain have three things in common; they use up scarce resources, they can be performed better through specialization, and they can be shifted among channel members (FAO, 2005a).

From the study on “Efficiency benefits pass on to consumers, new development in retail market environment in India, Narayana Reddy (2004) reported that most (61 per cent) of the retailers get their requirements from wholesalers, 15 per cent from the large and other retailers. Over 17 per cent of the selected retailers get their goods from more than one source, but a small percentage of retailers get some of their requirements from producers. From the side of the terms of supply, 67 per cent of retailers get their requirement by paying cash. Only 13 per cent of the retailers get their requirements on credit and 19 per cent get credit partly from the suppliers. Apart from this, the study also showed the organized retailers and super markets get wholesalers margin plus concession as they buy in bulk.

Agricultural commodities are produced by large numbers of farmers and consumed by large numbers of households. With the exception of foodstuffs consumed on-farm or sold locally, they are bought and sold a number of times between the farm gate and the final consumer. While moving between these two
points, the commodity is loaded, off-loaded, transported, stored, cleaned, graded and processed. The commodities that runs from a farmer down to a final user, through which the commodity passes and which embodies these transactions and activities is conventionally referred to as a “marketing and processing chain”, a “supply chain”, or a “value chain” (FAO, 2005a).

Supply chain management (SCM) is the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole (Suresh, 2005). Thus the focus of supply chain management is upon the management of the relationships in order to achieve a more profitable outcome for all parties in the chain. Organizations use SCM to reduce or eliminate the buffers of inventory that exists between organization in a chain through the sharing of information on demand and current stock levels.

2.4 Marketing efficiency, Marketing cost, Marketing margin and Producer’s share in consumer’s rupee for vegetable.

For studying the marketing of vegetables in Sewapuri block of Varanasi city Sen and Maurya (1998) surveyed ten sample villages for 10 vegetables and 150 sample farmers. The study revealed that for the total marketing charges (including cost of transport) payable, 65.92 per cent and 66.98 per cent are payable by the sellers (producers) 12.22 per cent and 11.84 per cent by wholesalers and 21.86 per cent and 21.18 per cent by retailers in Chandwa and Kamachcha markets respectively, and a little more than 28 per cent and 31 per cent of the
marketing charges are accounted for by the cost of transport in these two villages respectively. While studying price spread between the price received by producers in selected villages and that paid by the consumers in Varanasi city included all the marketing charges (including commission and transport charges) paid by the wholesalers and retailers. By this study it also observed that the producers share in consumer’s rupee for the vegetables was the lowest for tomato and highest for brinjal in both the markets. Totally, the share of the producers was highest for vegetables with less perishability or with facilities of cold storage while it was lowest for vegetables with greater perishability. The margin of wholesalers and retailers for such vegetables (like tomato, green pea) was highest. Finally, the price spread accounted for more than 33 per cent of the price paid by the consumer for major vegetables under study.

Conducted study on post-Harvest management of vegetable in Uttar Pradesh hills (now Uttarakhand hills) indicated that non-availability of cold storages, highly perishable nature of the vegetables, low marketing demand for the produce at the time of storage are the major problems as perceived by farmers (Anil Kumar and Arora, 1999).

There are two types of market efficiency: Operational efficiency which refers to the situation where costs of marketing are reduced without affecting consumers’ satisfaction and Pricing efficiency which concerned with the ability of marketing system to efficiently allocate resources and coordinate the entire agriculture production and marketing system in accordance with consumers’ interests (Sindhu, 1997; Shin, 2001). Small-scale production, poor infrastructure and inadequate post
harvest technology and facilities hamper operational efficiency. The pricing efficiency is hampered by several problems and constraints related to fruit grading, marketing channel and market information. Grades and standards simplify marketing process and reduce marketing cost, provide ethical basis for buying, selling and contribute to operational and pricing efficiency by lowering search and transaction costs, facilitating price discovery process and encouraging competitiveness (Shin 2001).

Marketing efficiency is essentially the degree of market performance. It is defined as having the following two major components: (i) the effectiveness with which a marketing service would be performed and (ii) the effect on the costs and the method of performing the service on production and consumption. These are the most important component because the satisfaction of the consumer at the lowest possible cost must go hand in hand with maintenance of a high volume of farm output (Ramakumar, 2001).

India has variety of marketing systems starting from farmer markets, cooperative markets to contract markets and corporate markets. The small farmer’s interests are protected through farmer markets and cooperative markets while the contract and corporate markets mostly cater the commercial farms and big holdings. The main functionaries in the marketing channel for agricultural commodities in India include village traders, primary and secondary wholesalers, commission agents, processors and retailers including vendors. Public agencies, farmers’ cooperatives and consumers’
organisations also perform many marketing functions. The private sector handles around 80 percent of the marketed surplus of agricultural products. The quantity of agricultural products handled by the government agencies has been about 10 per cent of the total value of marketed surplus. Further, around 10 percent marketed surpluses were handled by the producers or consumers cooperatives. Cooperative marketing by farmers and contract farming are emerging in different states. Rythu Bazars are one of such examples, which were initiated by the Government of Andhra Pradesh in 1999. The number of Rythu Bazars has increased from 49 to 102, and now they cover nearly 40,000 farmers of 2,800 villages. Rythu Bazars are located on government lands identified by the District Collectors. The locations are decided in such a way as are convenient to both for the farmers and consumers. The criteria for opening of new Rythu Bazars are the availability of at least one acre of land at a strategic location, and identification of 250 vegetable growing farmers including 10 groups. The price fixation in Rythu Bazars is through a committee of farmers and the Estate Officer. Adequate care is taken to fix the prices realistically. The prices in Rythu Bazars are generally 25 percent above the wholesale rates and 25 percent less than the local retail price (Government of India, 2007).

While studying vegetable marketing and its efficiency in India (Gandhi and Namboodiri, 2002), observed the use of open auction as a system market transaction is very limited and most of exchanges takes place through secret bidding or simple transaction. Significant market efficiency losses may be taking
place due to this. Analysis of marketing costs indicated that on an average they hover around 8 per cent of the consumer prices for vegetable. Among different cost components, transport cost and commission are the most important. Analysis of prices at different levels indicated that over all the average share of the farmers’ in the consumer price is only around 48 per cent for vegetables. A study of profit margin after accounting for explicit marketing costs showed that the margin is frequently as high as 80-90 per cent as a percentage of farmers-consumer prices difference. This may indicate significant imperfection and poor marketing efficiency. The study also indicated that the regulated wholesale market can help in improving the efficiency by measures such as increasing the direct contact with the farmer, increasing numbers of buyers and sales in the market, promoting the use of open auction of at the market and improving/adding facilities and services such as godown, cold storage, weighing and transparency and access to internal and external market information.

A study was conducted to know the efficiency of vegetable market in Northern Thailand by (Maria and Mathias, 2002) which indicated wholesale markets present outside the cities have strong influence on price determination for retailers. The average price for cabbage was 12.65 Baht/Kg, for carrot it was 19.42 Baht/Kg, for onion 22.31 Baht/kg and for tomato it was 18.07 Baht/Kg in retail shops in the city. Whereas it was 11.06, 17.63, 20.33 and 16.34 Baht/Kg respectively for cabbage, carrot, onion and tomato for the outskirt retail shops.
The price spread and producers and market intermediaries share of the consumer price in the channel: Producer – commission agent – retailer – consumer in potato marketing at Shimla was studied by (Pandey, et. al., 2003). The result showed that the producer realized around 73 per cent share in consumer’s price. The retailer and commission agent earned profit of about 3.5 and 8.0 per cent of the consumer’s rupee. The price spread and marketing efficiency was found to be about 27 and 3 per cent respectively.

Under North Eastern Regions (NER) of India the constraints in vegetable production and efficiency of marketing was studied by (Babu and Datta, 2004) and summarized as given below table:

<table>
<thead>
<tr>
<th>SN.</th>
<th>Production constraints</th>
<th>SN.</th>
<th>Marketing constraints</th>
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<tr>
<td>A</td>
<td>Infrastructure</td>
<td>A</td>
<td>Infrastructure</td>
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<tr>
<td>1.</td>
<td>Non-availability of good quality seeds</td>
<td>1.</td>
<td>Lack of rural roads</td>
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<td>2.</td>
<td>Inadequate irrigation</td>
<td>2.</td>
<td>Lack of cold storage facilities</td>
</tr>
<tr>
<td>3.</td>
<td>Lack of soil testing facilities</td>
<td>3.</td>
<td>Lack of refrigerated transport vans</td>
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<td>4.</td>
<td>Lack of extension staff and</td>
<td>4.</td>
<td>Inadequate space technical guidance</td>
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<p>| B   | Technological          | 5.  | Inadequate processing capacity |
| 7.  | Loss due to insect pest | 6.  | Poor market intelligence |
| 8.  | High yield variability  | B   | Technological |
| 9.  | Lack of suitable varieties | 7.  | Lack of mechanical grading incidence and pakaging |
| 10. | Non-availability of location-specific recommendations | 8.  | Lack of post-harvest management and processing technologies |
| 11. | Non-availability of effective | C   | Economic |</p>
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<thead>
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<th>No.</th>
<th>Issue描述</th>
<th>Category</th>
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<td>9.</td>
<td>Costly transportation</td>
<td>C Economic</td>
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<td>10.</td>
<td>High cost of packaging material fungicides to control rot diseases</td>
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<td>11.</td>
<td>High price risks post-harvest losses</td>
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<td>12.</td>
<td>Faulty weighing mechanism and price discounting</td>
<td>D Administrative</td>
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<td>13.</td>
<td>Shortage of skilled labour</td>
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<td>14.</td>
<td>Lack of bank facilities</td>
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<td>15.</td>
<td>High cost of production</td>
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<td>16.</td>
<td>Shortage of capital to purchase farm inputs</td>
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<td>17.</td>
<td>Lack of information on weather and technical know-how</td>
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<td>18.</td>
<td>Lack of forward trading</td>
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In Himachal Pradesh hills vegetables are the main crops grown both in Rabi and Kharif seasons collectively covering more than 50 per cent area of the total cropped area. Tomato in Kharif and cauliflower in Rabi season are the most important crops of the region. Regarding disposal of produce channel III (channel III: producer wholesaler/commissioned agent (local market) retailer consumer) has been found us the important one being followed by more than 70% vegetable growers who could dispose of 64-96% of the total produce (Singh and Chauhan, 2004). The marketing margin of wholesalers was observed to be highest for tomato (17%) and the marketing margin of retailers was the highest in case of cauliflower (19.03%) in channel III.
Most of the vegetable produced are disposed via producer - wholesaler/commission agent - retailer – consumer marketing channel. This leads to increase in wastage and indicated marketing cost. This can be reduced by providing additional regulated marketing facilities.

Due to perishable nature of vegetable crops and huge glut during peak season, farmer does not get ruminative prices. Therefore, storage facilities as well as a small unit of processing of tomato, cauliflower, peas and lady’s finger need to be established in the growing areas, especially in hills.

Conducted the study of economics of production and marketing of vegetables in Macaparh and Calicut of the south Andaman island of Andaman district, the marketing cost and margin of middlemen for vegetables at different level (wholesalers and retailers) the highest marketing cost was for cabbage, followed by tomato and snakegourd (Ganesh, et al., 2004). The main reason for the high marketing cost of certain vegetables was due to the fact that they are transported from far off islands to the main consumption point where they were located. The margin to both the wholesaler and the retailer was highest in ginger (Rs. 14.10 and Rs. 32.50 per kg respectively) and lowest in basal and Marsa (Rs. 0.90 and Rs. 2.00 per kg respectively.

The foremost causes of defective marketing particularity in case of vegetable marketing in Tripura are the marketing cost and margins of agricultural produce. The sales of agricultural produce in rural markets of Tripura are dominated by marginal and small cultivators (Chakraborty, 2005). Moreover
commercial production of vegetables except a few are still lacking in rural areas. Therefore, it is very difficult to identify any markets for any specific produce on a large scale and commercial basis thus collection of produce from different localities involves local arhyatdars or agents which further detect consumer price.

Majority of the population of the state is below poverty line and live in rural areas. About 43 percent of its total population come from relatively backward schedule tribe and schedule caste communities, basically depending upon agriculture and sifting cultivation. Therefore, effective agricultural marketing in the state is essential for overall development of the people of Tripura. Unless adequate care in agricultural marketing is taken, it is very to think for developments. The basic issue that arises is weather the price levels of farmers are giving enough margins to induce him to produce more. Adequate market and marketing facilities can probably be the appropriate answers to this question.

A look of other part of the country regarding market cost of banana in Theni district of Tamilnadu indicated that the cutting, loading and unloading commission, transportation and the like were the marketing costs of the banana growers, which amounted to Rs 805, Rs 760 and Rs 734 in the case of small, medium and large growers, respectively. The pre-harvest contractors incurred a marketing cost of Rs 775 per tonne (Mohammed and Namasivym, 2005). Transport cost dominated other costs. The marketing cost, excluding interest on working capital was less to pre-harvest contractors than to
the growers. Commission agents had to pay Rs 116.67 per tonne towards the marketing cost. The wholesalers incurred a marketing cost of Rs 417.09 per acre. More than 60 per cent of the marketing cost of the retailers was due to wastage. The total marketing cost of retailers was worked out to be Rs 336.67 per tonne.

Conducted a study to identify marketing channels, to estimate marketing cost, marketing margin and price elasticity the tomato growers of Latur district of Marathwada use to sale 80% of the tomato through channel-I i.e. producer-commission agent cum wholesaler-retailer-consumer channel. The cost of marketing incurred was the highest (Rs. 187.45) in channel-I, whereas it was the lowest (Rs. 55.40) in channel (producer-consumer). Retailers use to enjoy higher net proportion of margin as compared to commission agent cum wholesaler. Marketing efficiency was observed to be the highest (9.70%) in channel-II: producer-consumer, for achieving maximum profit and to reduce intermediary charges in trade when the produce is in small quantity and if the produce is in large quantity channel-II should be selected to safeguard the interest of tomato growers (Suryavanshi, et. al., 2006).

The potential contribution of the Global Value Chain (GVC) analysis in the commodity sector was studied by Gilbert, (2007) and resolved the apparent paradox that retail coffee and chocolate prices have declined at most, modestly, over the past three decades, while producer prices for coffee and cocoa have fallen more dramatically. Both industries are highly concentrated in the processing stages. Nevertheless,
developments in the producer and retail markets are largely unconnected and there is no evidence of the falls in the producer shares due to monopoly.

The tomato growers in Hoskote taluk of Bangalore rural district were evaluated with the specific objective of (i) to identify the modern supply chain management practices followed and (ii) to evaluate the results of the first objective with traditional marketing supply of tomato through market intermediaries by Lokanadhan, (2007). The supply chain process of tomato sold through modern retail outlet indicated use of plastic trays (25 kg each) by 92 per cent of farmers while the rest used bamboo basket. The packing in plastic trays reduced mechanical damages during transport. In case of spoilage of vegetables, 10 per cent at wholesale level and 15 per cent at retail level in traditional supply chain and only 15 per cent at retail level in the modern supply chain was noticed. In studying the price difference, the customer price was very high in traditional supply chain (Rs. 1200) and low (Rs. 8.75) in modern supply chain. The net price received by producer was very low (Rs. 4.20) in traditional supply chain and high (Rs. 5.05) in modern supply chain. Hence, that modern retail outlet management improved transparency, involvement of all levels of management, higher price to tomato growers and lesser price to consumers, less spoilage of tomatoes than traditional system of marketing.

The cooperative marketing has been found to be a more efficient system in terms of both operations and price. Marketing cost has been identified as the major constraint in
the wholesale marketing channel and bringing down the costs, particularly the commission charges as demonstrated in the cooperative channel, will help in reducing the price-spread and increasing the producers’ margin. A study of post harvest losses of banana at different levels viz. field, transit, wholesale and retail marketing in Karnataka was made by Sreenivasa, et. al., (2007). The margin of the retailers’ after taking into account the physical loss during retailing has been found to be negative (loss), which otherwise, was positive (profit) in the conventional estimation. Similarly, the producers’ net share and wholealers’ margins also decreased substantially. It has been shown that marketing efficiency is inversely proportional to the marketing losses. The need for specialized transport vehicles for perishable commodities has been highlighted.

Market-driven farm production leads for lower efficiency scores. The improvement in efficiency calls for institutional capacity building that enhances asset and capital formation, extension and credit services, consumption and family planning know-how and crop specialization study made by Haji, (2008) indicated lower economic efficiency scores for the market driven production which was attributable to limited access to capital markets, high consumer spending, and large family size. In general, the results of this study reveal the existence of considerable economic inefficiency in production, poor contract enforcement, and imperfect competition in the marketing of vegetables.

Furthermore, an assessment of the marketing performance of vegetables is conducted. Since most produce sales are based
on relational contracting with traders, the study of market performance encompasses an analysis of grower-trader marketing contract enforcement and factors influencing it. Despite its poor performance, contract enforcement is mainly due to mutual trust and brokers’ mediation. Information access, trader-specific investments, farmer’s age, whether the buyer is a trader, dependency on the trader, relationship duration, transaction frequency, and distance to the trader were found to be the significant factors affecting contract enforceability through brokers. Risks related to perishability and seasonality of supply, illiteracy, and client-buyer’s type were found to be the significant factors causing contract breaches by the traders. In addition, traders’ produce pricing behavior in the procurement of vegetables from growers showed that traders capture a significant proportion of the marketing surplus due to market power and audacity to absorb risk with this share varying along the degree of perishability and across cities. Thus there is need for governmental and/or private institutions interventions to improve the production and marketing performance of vegetables by providing the necessary institutional support to the small holder farmers.

2.5 Factors influencing the effectiveness of vegetable production and marketing

The factors influencing the effectiveness in marketing costs and margins of vegetables vary according to the perishability and market value of the commodity. There are differences in marketing services involved which have a bearing on the share of marketing margins in relation to consumer price. Selling good quality produce in supermarkets is more expensive than
selling average quality in simple market conditions. Thus there are major deficiencies in the available literature on agricultural marketing systems in India. All previous research has comprised mainly of descriptive analysis and use of secondary data.

The ability to compete does no longer depend only on single stage of the delivering chain. Instead of this whole chains are competing with other ones. Consequently the coordinating activities in the delivering chains also become more important to be efficient and competitive. Pre-requisites for value adding partnerships between trade and producers in the vegetable growing sector, in Germany was studied by Boklemann and Lentz, (2000) the present situation on the market for vegetables was indicated by over production and an unsatisfactory price situation for the producers in Germany. In face of these conditions a great meaning be fits to the orientation on consumer’s demands. The marketing system is increasingly driven by changing requests of consumers. Due to this situation and to progress in the information and communication technology far reaching changes of the sales system for vegetables took place within the last year.

Increase in technological changes, the marketing efficiency on the whole has increased over the past. There is still need to bring more technological facets in marketing of agricultural produce so as to provide benefits to farmers of increased production else farmers may loose incentives for increased agricultural production due to increased supply and comparatively lesser demand of agricultural products (Jairath
The barriers in technological changes responsible for increased marketing efficiency are: packaging of produce, transportation of produce, weighing of produce, storage of produce, market information, trading of agricultural produce, development of market yard, loading and unloading of produce and processing of agriculture produce.

In the retail markets in India, large retailers use to follow some issues like identifying customer segments and understanding differences in the shopping habits of consumers across income groups and also cost disadvantages vis-à-vis the smaller retail formats. In identifying customer segments, it was found that India is mainly a groceries market and in this area, supermarkets have not been able to cut into the customer base of the small retailers. While a typical Indian housewife might pick up toiletries at the super markets, she continues to use her local cart pusher for her daily needs such as fresh vegetables, fruits etc. In fact, organized retailing has only touched the self esteem and social recognition needs of the Maslow’s need hierarchy pyramid. And until organized retailing reaches out to the base level needs, the country won’t witness a retail revolution. For that to happen, super markets need to replace traditional shops. This may not be as simple as it looks since the smaller retailer maintains excellent customer relationships while providing a range of services such as extending informal credit, home delivery of groceries etc (Somayajulu and Venkataramana, 2002) conclude that, organized retailing has definitely made headway in the upper class. However, in this segment, items such as milk, fruits, vegetables and a significant portion of through the month purchases seem to be
done traditional outlets. The middle income class prefers shopping for processed food and personal care in supermarkets and fall back on traditional outlets for bulk shopping. Organised retail outlets seem to be associated with branded items and do not seem to have made an impact on the lower class, except for ‘curiosity’ shopping. While considering cost disadvantages vis-à-vis the smaller retail formats found that retailers have to get their strategies right i.e., correct identification of their target segment, a compelling value proposition and a flexible expansion strategy also they have to invest in processes and infrastructure. Now, companies have to make a beginning by inventing suitable approach. There is no specific international format or role model that can be easily adapted and applied in India. The Indian retailers, therefore, need to go through their own learning curve and get the right proposition only after some hits and misses. Some of the leading chains have succeeded to have a degree in convincing consumers that their quality products come at equal, if not lower, prices. This is largely due to efficiencies achieved in supply chain management.

The pricing strategies for perishables products indicate that consumers are less likely to purchase perishable goods when their expiry dates are near. For this reason, retailers frequently implement a discount pricing policy when the products have reached closer to their expiry dates (Bülent Sezen, 2004). Thus the retailer tends to gain by reducing losses due to spoilage.
While studying the dynamics of fresh fruits and vegetable pricing in the supermarket channel, (McLaughten, 2004) concluded that major factor that contribute to the complicated price formation process at several levels of fruits and vegetables in the US were marketing channels, market structure changes, pricing techniques and promotional impacts, retail responses to supply changes, and price versus value.

Cluster development programme is growing in India with the initiative of government of India and United Nations Development Organization. For this study, UNIDO has identified more than 2000 Astisan and 350 industrial clusters in India in which many are in food processing sector such as food processing cluster of Pune, Muzzafarpur and Petha cluster of Agra, Racsins cluster of Nasik and also some non-government agencies. The linkages with various actors of any industrial cluster are shown in the diagram below.

No development can be possible without proper linkage and co-ordination among the above actors in the diagram and particularly in marketing. The small enterprises compete with each other with in a limited market segment; the larger market enterprises have got the advantage of catering to affluent section of the society through their brand image, advertisement
and publicity and through procurement (Nath, 2004). Further he concludes that the age old system of procurement of fruits and vegetables and other raw materials from mandi with involvement of middlemen or commission agents is continued by most of the small enterprises. To reduce the cost of production, direct purchase from the source collectively by the cluster of units by forming where farmers are benefited with remunerative prices and processors are benefited with assured supply of right quantity and quality of raw materials may be thought of.

For an analysis of an agricultural production-marketing system, different approaches such as structure-conduct-performance, marketing system, institutional, functional, demand projection, marketing mix, value chain and sub sector analysis have been discussed in literatures. Though, termed differently, the approaches, to assess efficiency of commodity and information flow along marketing channel, describe market structure, its quality of operation and factors to influence its operation. Literatures on system-based analysis of agricultural production and marketing, especially at micro level, are very rare (Pokhrel, 2005). Mechanism of production and marketing varies with commodity and locations including other factors as well.

The impact of malls on small retail outlets is towards cut in margins which force to widen the wide range of products, losing loyal customers, concentrate more on product range, inevitability of promotional tools and credit sales, visual merchandising and store design. Also the impact of small retail
outlets on malls seems towards credit facility allowed by the small retailers, personalized service rendered by the small retailers, proximity of small shop to customer’s residence, common phobia to enter big shop and many customers prefer smaller ones. It is a hard fact that in India most of the people preferred small retail shops. A study on small vs mall in twin cities of Hyderabad and Secunadrabad with a total of 50 retailers, out of which 40 were kirana and 10 were super markets indentified the impact of malls on the existing retailers. This indicated 36 per cent of the retailers feel that there is no much impact of such mall, since their regular customers still patronize them and 24 per cent of the respondents opined that there is scope for healthy competition, 22 per cent feel that there would be cut in margin, remaining 10 per cent, there would be unhealthy competition. Also, identified the impact of malls on small retail outlets indicating 58 per cent of small retailers are of the opinion that there would not have much impact on retail trade by the big retail outlets (Venkateshwaralu and Ranjani, 2006). Unlimited timings of the small shop and they found that 54 per cent of big retail outlets believe there would not have much impact on small outlets on their business. The study ultimately concludes that survival of the retailers, irrespective of size (big or small), has become difficult and supermarkets are yet to get the Indian middle class and rural India in their fold. Vijaya (2007) also amitted at a conclusion that out of 275 respondents in Vijaywada city 71 per cent of purchasing of household goods and items are made from local kirana shops, 27 per cent getting goods from supermarkets and small percentage (6 per cent) buy from big outlets. The study also revealed that 54 per
cent of respondents visit shops because it is convenient for them to go and purchase goods. Quality of the goods is also a matter of concern for 24 per cent of respondents.

2.6 Problems faced by the farmers, retailers and consumers

Horticulture could be a way out for agricultural commercialization of small-scale farmers with relatively better agricultural resource potential. If small-scale farm household have to move towards the production of horticultural crops for agricultural commercialization, factors influencing household decisions behavior in resource use need to be studied (According to Moti, 2007).

Lack of market outlets, storage and processing problems, lack of marketing information, capital constraints, high transportation cost and price variation are some of the important constraints in vegetable production (Million and Belay, 2004).

Diversifying the export base towards non-traditional agricultural commodities, as horticulture is important. He added linking small-scale farm household horticultural production with export could help both in reducing export earning instability and enhancing farm household’s income. In addition, he pointed out that the production of high value and labor-intensive horticulture products contributes to poverty reduction and rural development through generating higher income and better employment opportunities for landless households. He also added that lack of cooling and storage facilities for perishable crops hampers for well functioning
markets. He suggested access and availability to market information and alternative market outlets can improve subsistence farming to commercialize.

Most of the value created by a company is pocketed by its consumers. When Wal-Mart enters the market, prices decrease by 8 per cent in rural areas and 5 per cent in urban areas (Pankaj and Ken, 2000). This was mainly because the retailers source their products from the suppliers who supply the required goods at a lesser price than others.

Dutch growers are able to produce high quality products, but they have problems to supply large quantities. At uniform qualities at low prices with their method, it is possible to get insight in price and future demands on horticultural products and on the services of their suppliers (Poot et al., 2000). This information can be used by horticultural industry to develop customers driven production and distribution strategies. Elsa, et al., (2002), while studying the Consumer Behaviour and Supermarkets in Argentina from the perspective of differences over regions and categories of consumers, noted that the more the education, income, durable assets and consumer credit of the consumer, the greater the probability that they will shop at a supermarket. Those living in a northern region showed less probability of shopping at a supermarket and finally concluded that Argentinean consumers were less likely to buy fresh fruit and vegetables, red meat, and bread at a supermarket, as they would rather buy these from shops offering personal attention and service for those products.
Issues and challenges for organized retailing in India in highlighting the challenges and impediments to growth of large retail formats indicates that challenge facing the organized retail industry in India is competition from the unorganized sector. Organized retail in India is largely, a proposition of poor economies of scale. It was interesting to note that the unorganized sector are mostly owner operated, is very competitive and offers products to consumers at a lesser price since it has low operation costs, negligible real estate and labour cost and pay little or no taxes. In contrast, larger organized retailers have substantially higher expenses to meet, and yet have to keep prices low enough to be able to compete with the traditional sector of real estate (as high as 40-70 per cent of the total investment), much bigger premises, cost of providing facilities such as air conditioning and backup power supply, high cost of capital, high levels of taxation etc. This forces the larger modern formats on wafer-thin margins (Somayajulu and Venkataramana, 2002) observed that the retail margins for fast moving consumer goods in India, range between 10-12 per cent the same margin in many other countries is in the range of 25-30 per cent. Nageshwar Rao and Bramhanandan, (2003) in their study on problems of retail traders in Guntur district of Andhra Pradesh found that increasing salary, other incentives and working hours were major problems from the employees’ side. Rent on building was a problem of retail traders (62 per cent) since they were facing many problems from the building owner side like high rent, frequent repairs and demand for more good-will. Apart from these retailers (44 per cent) also had faced many problems on
media like high rates, inadequate information and coverage of area and timing problems.

The major challenges posed before the stakeholders of horticulture in the state are presence of superfluous market intermediaries, lack of organized marketing system, lack of basic infrastructure (road, rail etc.) as well as specialized infrastructure (cold storage, grading and packaging), poor marketing information and intelligence network for farmers, low producers’ share in consumer rupees, poorly organized credit system and crop insurance and lack of quality input material such as seeds, planting material, pesticides and fertilizers as has been pointed out by Arora (2005).

In Kenya, the urban consumption patterns of fresh fruits and vegetables indicated that poorest people in urban areas were the lowest consumers of fruit and vegetables. Also, as income increases, the level of fruit and vegetable consumption increased and approached the WHO/FAO standards (Ayieko et al., 2005). The study further showed that fresh produce consumption is influenced by education level, age and the gender of household head. The fresh produce consumers tend to be highly specialized in terms of their shopping patterns as compared to other food groups, often dominating the open-air markets and kiosks.

Agricultural crops including tomato, chilies and onion production is stochastic, and its growth over time is subject to various shocks including heavy rains, floods, water shortages, diseases and on lag year prices. Forecasts provide accurate and advance information to the governments and policy makers.
before the availability of final estimates. Furthermore, this information would indicate whether the shocks have permanent or temporary effect on future production, and thus may also be useful for policy makers in choosing the appropriate support services for the agriculture sector. Forecasts can be made by various methods including judgmental approaches, structured economic models, univariate time series models, multivariate time series methods and economic models (Burhan, et., al., 2005).

In Brazil’s horticulture the industry was making a comeback after recovering from economic crisis in the previous decade. This was mainly due to rising purchasing power and stable middle class income. Brazilian Consumer’s preference was changing rapidly and the preference was shifting from household consumption to personal consumption. The retail trade was U.S $237.66 billion in 2005 of which retail food sales accounted for more than half of total retail sales with 54 per cent. The top 3 players accounted for more than 40 per cent of the total market share (Mark Gehlhar, 2006).

In Banguet and Laguna (Philippines) the marketing margin received for cabbage, carrot and potato by the assembler-wholesaler, wholesaler-retailer the proportion of gross marketing margin in buying price was highest for cabbage. Since cabbage is more perishable than potato and carrot. It is easily damaged and more losses are incurred in its transport and handling. The wholesaler-retailer selling cabbage has also the highest proportion of gross marketing margin in the buying price, amounting to 40.6% in Banguet (Piadozo et, al., 2007).
In Laguna the percentage of gross marketing margin in both the buying and selling price were high for cabbage, chayote, and bean. This was largely observed for the local assembler-wholesalers and assembler-wholesalers. These two traders were the major outlets of vegetables in village, with the limited competition in the vegetable market in the village. They could afford to earn a high gross margin by buying vegetables at low price and sell them to high price. The lack of price information and the suki relationship could also explain why farmers were paid relatively low prices for their vegetables as cited earlier. The farmers did not trim, sort and pack their vegetable so the traders were prone to damage and scratches during the transport of the products from the mountain slopes to the village buyers’ place, thus resulting in losses.

The vegetable marketing problems has been assessed us the bargaining power of the producer. Also there are inefficiency in the physical distribution of vegetables. The traders were the price givers and this had resulted in their big margins, which was also caused by a number of other factors. First, the farmers particularly in Laguna lacked price information. Unlike in Benguet where there are trading posts and radio information, Laguna farmers had no other sources of information except their buyers so that they were totally reliant on the buyers for price information. Second, the sold amount is small. Since buyers always sought large volumes, selling a few baskets of vegetables would weaken the farmers’ bargaining power. Third, the vegetables were not brought and sold far from the village. The lack of competition in the village due to
the presence of few traders only and little good information on price leave the farmers at the mercy of these traders.

The second marketing problems concern the poor distribution system arising from poor farm to market road, absence of storage facilities and not enough facilities, such as truck for bringing their vegetables out of the village. The poor road system and absence of storage facilities had resulted in big losses not only at the farm level but also at other level as well. Without trucks to transport their produce to other markets, farmers were constrained to accept the low prices offered by the traders operating in the village. Moreover, farmers could not keep their vegetables for five days or one week to wait for better prices because they did not have storage facilities in their production area.