Chapter 2

Review of Literature
Review of studies did in the past helps us in enclosing the objectives, developing research design, variable selection, interpreting all the outcomes and 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 Growth rate and trends in the production, area and productivity.
2.2 Marketing system and work out the price spread.
2.3 Production and marketed surplus
2.4 Role of intermediaries and supply chain

2.1 Growth rate and trends in the production, area and productivity

Phuke et al. (2004), Conducted a study on export potential of banana in India based on secondary data during 1991-92 to 2001-02. One of the main objectives of this study was to examine the production, area and productivity of banana in Maharashtra and India. In the study, they found that the maximum area of production for banana was 72 thousand hectare in the year of 2001-2002 in Maharashtra and the lowest area was 52.2 thousand hectare in 1992-93. Statewise productivity of banana is higher than the country’s productivity, except in the year 1995-96 and 1997-98. Production of banana is increasing at a compound growth rate of 6.27 percent per annum.

Verma et al., (2004) studied about the economics of production of onion on farms of different sizes and size-groups. They examined the input-output relationship and resource use efficiency in onion production and worked out the growth rate of onion export from India, quantity of onion and value for the period 1980-81 to 2000-2001. The main objective of this paper was to identify various constraints in onion production and marketing and to suggest measures for their improvement.

Malik et al., (2004) analyzed the production and export of onion in India. The data with regards to area, production and productivity of onion in world was scanned from FAO production Yearbook for the period 1980-2000, pertaining to states like Maharashtra, Karnataka, Gujarat,
Uttar Pradesh, Orissa, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Rajasthan, Bihar and Haryana. This study indicates that significant increase was recorded in area, production and productivity in all countries during the period 1980-2000. The state-wise analysis discloses that all major onion making states recorded positive and significant growth in production, area and productivity of onion. The quantity and value of onion export from India decreased at the rate of 2.82 and 5.21 per cent per annum, respectively. Further, the decline in export of onion to different countries was observed except Malaysia. The productivity of onion is very low in comparison to the countries like Egypt and China. There is a need to develop high yielding area specific varieties. The Govt. should be made aware of the improved production technology among the farmer through effective extension system. Marketing, monetary, storage and processing facilities need to be enhanced. Farmer should be encouraged to cultivate export quality varieties of onion. Market survey of capable importing country is required and export promotion policies should be liberalized.

Jain (2002), study about production and marketing of Rabi crop in India from 1997-98 to 1999-2000. He suggests that there should be good, strong and durable storage of agriculture produce in India.

Verma et al., (2002) studied of Marketing and export of fresh vegetables with the help of Marketing concepts, marketing method, market activity, pricing strategy and export performance. He explored the export of fresh vegetables in world market from the year 1998-99 to 2000-01.

Kumar and Badal (2004) made an effort to work out the growth rates of area and yield and calculated yield instability of various vegetables and fruits produced in North Eastern region of India for the period of 1991-92 to 1999-2000. With the help of time series data, the authors concluded in their study that the north Eastern States account for 6 % of total area and 4.4 % of total production of vegetables in the country. The average productivity of vegetables is 10.4 tones per hectare, which is much lower than the national average of 14.4 tones per hectare. Similarly, this region also accounts for 7% of area and 5% of total fruit production in the
country. But the productivity is only 8.9 tones per hectare as against the country’s average 11.8 tones per hectare.

The growth in productivity of vegetables is observed but some of the crops have also shown very high yield instability. This shows that the absolute yield variability tends to increase with the introduction of the new technology. The study of inter-district growth performance of rapeseed-mustard crop by Sharma (1988) revealed that the production of this crop has witnessed a significant increase only in the Jalandhar district of Punjab. In Amritsar, Ludhiana and Sangrur districts, the rise in production was statistically non-significant. The remaining districts of the state have shown a significant decline in production. Fall in area was the major factor contributing to dismal performance; it was followed by insignificant increase in productivity.

Wadhwani and Bhogal (2003) studied the economics of production, post harvest management techniques and price behavior of cole crop due to highly perishable nature of the vegetable, low marketing request for the crop are the major problems at the time of storage as perceived by farmers in western U.P. The preventable wastage of esteemed wares can be tried in the event that they are very much handled into worth included items or enough circulates in various separated of the nation and by enhancing the post harvest dispersion and preparing office. On the off chance that new foods grown from the ground furthermore prepared organic products are uniformly promoted from the spot of plenitude to the spot of shortage not just will the buyer get the produce at a sensible cost additionally the maker won't be found to offer at discard costs and distinguished a portion of the systems which are not followed in our nation like essential handling pressing station. On homestead stockpiling, bundling, palletisation, containerization, cool/icy chain and so on and in conclusion inferred that post harvest misfortunes are all the more monetarily practical in future on the off chance that they are not focused on.

Kumar et al., (2005) studied about four metropolitan markets on association of market arrivals and price. He state in his paper that what are changes in production, productivity, area and market arrivals of vegetables cabbage, cauliflower, tomato and peas. He found that cabbage arrivals in banglore are lower and higher in Mumbai. Price position was found to be stable in
Mumbai, Delhi and Kolkata market. The arrival position is of tomato is very high in different month in all four market.

**Nandal et al., (1985)** Computed the compound growth rates for area, production and yield of rapeseed - mustard for the state of Haryana, (from 1962-63 to 1981-82) and found positive growth but the incremental rate was not observed significantly. The trend analysis for area, production and productivity also witnessed the similar condition. The acreage response function indicated that the expected price had a significant impact, whereas the uncertainty in price of rapeseed-mustard had significant and negative impact on the acreage allocation rapeseed – mustard in Haryana State.

**Billore (1999)** has also analyzed trends in growth rate of area, production and productivity of soybean in India during 1980-84. According to his study, it was the production, which was found most encouraging followed by area and productivity.

**Singh and Kumar (1990)** carried out an all India level studies on groundnut and rapeseed - mustard respectively. They tried to find out the performance of area, production and yield from1950-51 to 1977 –78. According to them, rapeseed - mustard crop has substantial edge over the groundnut crop in all three parameters, particularly yield. Whereas the growth rate of rapeseed-mustard was 1.36% per annum and for groundnut it was only 0.19% per annum.

**Chand and Tewari (1991)** have performed their study on growth and instability of Indian exports and imports of agricultural commodities for the period of 1970-78. In their study, they found the changes that had taken place in the commodity complex of agricultural exports and imports. The rate of growth in the exports of the agricultural sector was slightly higher than the rate of growth in its imports. The total merchandise imports exhibited a significantly higher rate of growth (13.27% per annum) compared to the rate of growth of total merchandise export (9.87%). Except pulses, sugar, honey and other forest products, all agricultural products have shown positive growth rates in exports. The annual rate of decrease in sugar export was recorded as 10.5%. The imports of vegetable oil and coffee, tea, cocoa and spices group were estimated to be growing at a rate of 25% per annum. The growth rate in the imports of fruits and vegetables,
dairy products and fertilizer ranged between 7.71 and 9.84 percent per annum. The exports showed less instability than the imports for most of the agricultural commodities and pulses, vegetable oil and fertilizer exerted severe strain on our foreign exchange earnings.

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### 2.2 Marketing system and price spread

**Bala et al., (2011)** studied about cost and return of off-season vegetable on the level of small and large farmers. He found that average yield of tomato was 341 quintal per hectare, 111 quintal peas, 295 quintal cabbage and 162 quintal cauliflower production per hectare. He also found that the average yields of Off-season vegetables were higher in larger farms. Marketable surpluses varied from 96 to 99 per cent of the total produce in different vegetables. He observed that the highest cost of cultivation is for tomato, followed by cabbage, cauliflower and peas. He also found in his study that there is more profit from off-season production.

**Jha (2011)** stated that importance of oilseed in the agricultural economy is second only to food grains. Oilseeds are important for economy & foreign exchange. These are part of staple diet of humans as well. Rapeseed-mustard is very critical when it comes to oilseed crops which are 9 in number.

Present study focuses upon
(i) Identifying market channels for rapeseed – mustard and
(ii) Study the price distribution and marketing effectiveness under different marketing channels. Lalitpur consists of six blocks, namely: Talbehat, Jakhaura, Bar, Birdha, Mahroni and Madawara.

Mahroni and Bar blocks were selected by random sampling method. From each block 75 rapeseed – mustard growers were selected by the convenient sampling method. Out of these 75, 25 rapeseed – mustard growers were selected randomly from each category of rapeseed-mustard growers i.e., Marginal (up to 1.25 Acre), Small (1.26 –2.50 Acre) and Large (>2.50 Acre) categories for non - irrigated land. But in the case of irrigated land it became just the double the size of land of above categories. Thus from the district, 150 rapeseed-mustard growers were selected for a comprehensive study. To judge the marketing pattern, ‘Naveen Galla Mandi’ was selected at the district level from where 20 whole sellers and 20 retailers were selected randomly for study purpose. The reference year was 2004-05.

The quantity of rapeseed-mustard sold has been observed higher in channel III in comparison to other channels but the most efficient marketing channel is channel II (P-R-C). This channel not only pays higher profits to producers but also provides rapeseed- mustard oilseed to consumer at cheaper rates in comparison to channel III (Producers-Middlemen Retailer Consumer). The efficiency of channel II has been observed 176.32% and for channel III it reduced up to 161.33%.

Singh and Chauhan (2004) studied of marketing of vegetable in Himachal Pradesh. He found the relationship between the cost of marketing, marketing margin, price spread and marketing efficiency under the different marketing channels. In this study the most favored vegetables are tomato, pea, cauliflower, frenchbean, lady finger and brinjals on the basis of kharif and rabi season and found to be 42.80 and 46.73 percent of area under the vegetable production respectively.

Barakhade et al., (2011) studied economics of onion cultivation and its marketing pattern in satara district of Maharashtra. He determined the economics of onion cultivation, price spread,
marketing channel and marketing efficiency. He selected 180 onion farmers/producers from 20 villages in 10 tehsils of Satara district. He found that the total cost of cultivation was Rupees 102,637.04 per hectare and the gross return and net return was Rs 1,524,374.5 and Rs 49,800.41 respectively.

In this study, the cost of marketing was found to be 6.94 percent in channel I, 17.83 percent in channel II, 18.15 percent in channel III and 19.48 percent in channel IV. The gross marketing margin was 6.94, 23.21, 25.24, 31.18 percent in the channels I, II, III, IV respectively. The marketing efficiency was found 13.41, 4.61, 4.51, 4.13 percent in the channels I, II, III, IV respectively.

Birari et al., (2004) Study the marketing efficiency and marketing cost of cole vegetables. He was found in this study that the per quintal marketing cost of kharif cabbage was 40.57 percent in primary market and 66.43 percent in terminal market. In the rabi season cabbage marketing cost (per quintal) was 44.84 percent in primary market and 70.49 percent in terminal market. Marketing cost per quintal of cauliflower in kharif season was 42.41 percent in primary market and 67.43 percent in terminal market. Rabi season cauliflower marketing cost was 41.28 percent in primary market and 72.57 in terminal market. They also found that the marketing efficiency of cabbage in kharif season was 91.80 percent and in Rabi season was 64.16 and cauliflower marketing efficiency in kharif season was 63.92 and 86.34 in Rabi season.

Shiv prakash and singh (2002) analyzed the points about production and marketing problems of Kinnow and its marketing pattern of sales in Rajasthan. In this analysis they found 37.78% of the total marketing price was packing material followed by picking, grading and packing cost which was 26.04%. Then came transportation 17.08% of the cost. It had watch, ward going upto 13.93% and transportation loading and unloading charges were found to be 5.17%. Sri Ganganagar district was selected from the 32 districts, as it had the highest area under Kinnow farming. For the year 1997-98 to 1999-2000, the market arrival cost of kinnow in all market regulated district were obtained following the given methodology: markets were arranged in ascending order on the basis of average arrivals & were then grouped into two categories viz.
large and small based upon collective total method. Then each one of the large and small market was selected randomly.

Shaheen et al., (2002) studied economics of apple marketing in Kashmir province. The main objective of this study was to examine marketing system of apple trade, to estimate the marketing cost, margin and price spread and to observe/examine the different constraints in costing/financing, production and marketing faced by the apple producers and suggest policy intervention to advance the production and marketing.

Babu et al., (2002) worked out price spread in groundnut marketing under different chains in Andhra Pradesh. Producer's share in consumer's rupee in channel-II is found large with proportion of the 78.78 per cent as compared to channel-I. In channel- II, the share of retailer was more (3.23%) when compared to Middlemen (1.69%) and oil processor (2.62%). The cost incurred on marketing of groundnut was found higher in channel–I than channel–II, hence channel–II was efficient. The commodity passes through from producer to mills and consumers appeared to be a crucial factor in influencing the magnitude of marketing cost and margins.

Gupta et al., (2004) conducted the study on cost and margins in cashew nut marketing. The study was conducted in Goa and South Goa city. It was interesting to note that all the sample farmers sold their produce at their nearest markets in Goa and South Goa. The study results explicitly indicate that cashew nut trade is a profitable venture with a price spread of nearly 49 per cent among all the intermediaries the net return per kg of cashew nut trade was the highest in case of retailers due to creation of form utility. The constraints called for an orderly marketing by establishing co-operative for cashew nut marketing. Among all of the six channels, channel-VI is observed as most efficient channel as the producers receive 73.02 percent of the consumer rupee which is highest among all the channels. The total marketing cost is observed as minimum i.e. Rs. 1148.72 per quintal (2123 percent) since produce is going from farmers to processors directly. The margin earned by processors and retailers is Rs. 311.28 per quintal for the services rendered by them. The next efficient channel is found to be channel-II in which produce is reaching to the processors through itinerant merchants. The gross price received by the farmer is Rs. 3783.33 per quintal which is next to price received in channel-VI. The itinerant merchants
paid this higher price to the farmers just to compete with other established intermediaries in this trade. The total cost incurred in this channel for various operations is estimated to be Rs. 1229.75 per quintal (22.72 percent) while the net margin gained by intermediaries is estimated as Rs. 446.58 per quintal (8.25 percent). Though, the farmers received 69.03 percent of the consumer rupee, the involvement of farmers in the channels is restricted up to 5 percent only. Some of the itinerant merchant who are able to purchase relatively large quantity from farmers, sell the produce to the processors directly who paid adequately higher price to the itinerant merchants for the produce. Itinerant merchants with less quantity sell the produce to wholesale as processors may not be ready to purchase this small quantity (channel-I), the percentage share received by farmers is 68.46 percent which is slightly less as compared to channel-II. This channel is also not much popular in the study are as very few farmers sell their produce through this channel. Channel-III and channel-IV are providing almost equal percentage share to the producers. The percentage share of produces in consumer rupee is estimated 67.67 and 67.88 percent in these two channels respectively. Producers sell their produce to village merchants in both of these channels who sell the produce either to Middlemen (channel-III) or to processors (channel-IV). Some of the village merchants purchase huge quantity of produce from large farmers and sell it to the processors directly (Channel-IV) while others purchase small quantity of produce from medium and small farmers. Since the produce is perishable in nature, village merchants are forced to sell small quantity of produce to Middlemen (Channel-III). Channel-IV is the most popular channel among large farmers as about 50 percent of the large farmers sell their produce to those village merchants who are directly in contact of processors. Though, channel-V is providing minimum share (66.52 percent) to the producers, this channel is most popular among the small and medium farmers. About 82 percent small and 77 percent medium farmers sell about 83 percent and 70 percent of their produce through this channel. It is surprising to note here that Middlemen is paying minimum price among all the intermediaries prevailing in the market, however, maximum number of small and medium producers bring their produce to Middlemen. The reason responsible for this situation is already mention earlier. This channel is not only popular among small and medium growers but about 33 percent large producers also preferred this channel to sell about 27 percent of their produce through Middlemen. The total marketing cost is estimated to be Rs. 1281.14 per quintal in this channel for the various facilities and services rendered by Middlemen, processors and retailers dealing with final product.
Uma Devi et al., (2004) conducted a study on Economics of Coffee Cultivation and its Marketing in Visakhapatnam District. The main objectives of this paper are to study economics of production of coffee and to study the marketing pattern and price spread in the marketing of coffee. They found out the Price spread of coffee in different marketing channels are analyzed and presented the price received by the farmers per quintal of coffee was higher in channel IV (43.06%) compared to other channels. This situation may be due to the fact that in channel IV, produce is sold to GCC getting higher margins of profit. It may also be observed that the retailer’s margin of profit was higher at 26.45 per cent in case of channel III. In this channel, the higher retailer’s margin of profit existed because retailers had directly purchased the produce in APFDC auctions. The retailer’s margins were less in channel I (16.46%) and channel II (10.23%) because they had purchased the produce after a long chain of price spread. In channel IV, the exporter’s margin of profit was 22.73 per cent. It can be observed from the table 6 that the total marketing cost was higher (Rs. 3147.87) in channel II. This may be due to the higher involvement of intermediaries and the product travelled a long distance to reach the ultimate consumer as compared to other channels. Out of total marketing cost, transportation cost constituted 10.79, 7.76, 6.78, 13.82 per cent in channel I, II, III and IV respectively. The storage loss was similar in channel I and II. The sales tax borne by the Middlemen and retailers was very high accounting to 52.02, 49.30 and 32.63 per cent of total marketing cost in channels I, II and III. The cost of curing, garbling and storage was found to be 15.69, 6.86, 10.15 and 13.89 per cent in channel I, II, III and IV respectively. The expenditure on roasting, powdering and packaging was 10.69, 8.26 and 12.21 per cent in channels, II and III. There was no such cost involved in channel IV.

Sharan and Singh (2002) Kinnow sales anm marketing costs in rajasthan were part of their study. They found in the study that the producer's share in profit is extra in direct sale if compared to contract sale. And this was due to exclusion of pre-harvest Contractor. Marketing cost and profit/margin indicate that producer's share in consumer's rupee may be enlarged by decreasing the number of mediators in the existing marketing system.
Gyan Prakash et al., (2007) conducted study which empirically analyzes the estimation of marketing efficiency of chicken farms in the Indore block of Indore district in Madhya Pradesh. Three types of marketing channels were taken in the process of marketing chicken to evaluate and estimate the performance. The results conclude that though the number of chicken sold in Channel 3 is higher compared to the other channels, the utmost well-organized marketing channel is Channel 2. Further, it proves that as the market mediators are involved, marketing cost goes faster while the producer’s share in the consumer’s price drops. This study exposes some marketing glitches, which are compelling the producers to sell their chicken at lower prices. Finally, it endorse the need to organize a training program for producers, distribution of medicines at subsidized rates, complete marketing information system to the fowl products, and regulation of the market, to solve the basic problems of the chicken farms.

Khatkar et al., (2005) directed a study on promoting of new mushroom in Haryana. They discovered the expense of creation and value spread of mushroom, helped essential information, yield and costs for the year 2001-02 gathered from the chose 30 mushroom cultivators disseminated in five towns of Sonepat region in Haryana. The showcasing expenses and edge information were gathered from the business sector of Azadpur Delhi. Furthermore, they broke down from this study and research that the maker's offer in the customer’s rupee is shortened to around 28 for every penny if there should be an occurrence of quality included offer of prepared mushroom. The processor's and retailer's edge established around 14 for each penny and 31 for every penny to purchaser's rupee separately. The processor is encountering around 19 for each penny and retailer is bringing about around 7 for every penny of shopper's Price to compact the lion's offer of customer's rupee.

Chakraborty (2005) led a study Marketing expenses and edges of rural produce in Tripura. They found from this study the agriculturist's offer in the customer value markets lies between 44.38 to 54.63 for each penny with an aggregate normal of 50.51 for each penny as it were. Consequently, they expressed that almost 50 for each penny of each rupee in cost goes to showcasing set up including transportation cost. Comman/Middlemen's edge remains somewhere around 15.77 and 23.07 for each penny and aggregate normal is approx. 17.93 for each penny. The Arhyatdar's Margin normal assessed 5.72 for every penny in Bishalgarh, 8.74 for every
penny in Sonamura market, 6.11 for each penny in Kulai market, 4.68 for each penny in Garjee market and 4.09 for each penny in Nutan Bazar market. The retailer's edge is evaluated to be 19 for each penny in shopper cost. Agents' offer in purchaser value in this manner comes to nearly 42 for each penny of buyer's expense. Transportation charges are similarly high in the event of Nutan Bazar. Promoting consumptions, including rent, tolls, pressing and so forth lie somewhere around 1.13 and 1.80 for every penny of shopper's cost, while stacking, emptying and other work charges are somewhere around 0.79 and 1.11 for each penny of Consumer's cost.

Dhillon et al., (2005) estimated marketing cost and price spread of marigold flower in Haryana. They found estimate the price spread for marigold, two marketing channels identified in the study area, that is Producer—Commission agent—Retailer—consumer and Channel second Producer—Retailer—Consumer. This study is based on the primary data collected from 35 marigold flower growers of these selected districts for the year 2001-02. Net price received by the marigold producers when sold as garlands was Rs. 492 and Rs. 525 per quintal of flowers which worked out to be 23.08 and 24.63 per cent of the consumer’s price in case of Channel I and II, respectively. The expenses incurred by the producers were same under both the channels, i.e. Rs. 28.90 per quintal accounting for 1.35% of the consumer’s price. Producers had brought the flowers generally packed in gunny bags and cloths weighing about 20 kg weight. Prices were quoted per kg of flowers. For bringing the produce to the assembling market, i.e. Kharibaoli, Delhi, the cheaper transportation facilities were found.

Gadre et al., (2002) concentrated on value spread and makers and business sector middle people offer in the buyer cost in white onion in Raigad District in Maharashtra. They were watched that creation of white onion on test ranches was 144.91 quintals for each hectare, of which 89.23 for each penny was advertised overflow. The showcasing framework for white onion was in the hands of advertising functionaries to the degree of 93 percent. The most extreme amount of white onion was gone through Channel IV i.e. Maker Middlemen-Retailer-Consumer (66.96%) trailed by Channel III i.e. Maker Retailer-Consumer (17.32%) Channel II i.e. Maker Middlemen-Consumer (14.62%) and Channel I i.e. Maker Consumer (1.07%). The maker offer in buyer's rupee was the most elevated in Channel I (98.85%) and it was least (65.60%) in Channel II. The rate offer of advertising edges in shopper value paid was 11.56, 31.99, 29.57 and 28.88 for each
penny in Chanel I, II, III and IV separately. The advertising productivity (ME) was much higher in Channel I (84%) than that of Channel II (2.19) and Channel III (2.38) and Channel IV (2.46). The white onion cultivators ought to streamline advertising procedure to minimize the part of showcasing functionaries to saddle better from white onion development.

Gauraha et al., (2002) led a contextual analysis of showcasing systems of rice in Chhattisgarh to think about the advertising cost, benefit and edge in the three channels, that is maker to purchaser, maker to retailer to customer and maker to broker to retailer to shopper. They found that the costs caused by the maker in channels I and II were 9.43 percent of the cost paid by the purchaser. In channel II and Channel III costs brought about and edge taken by the retailer were 3.23 percent and 5.34 percent separately of the cost paid by the customer. The aggregate advertising expense were Rs. 30 Rs. 67.12 and 67.68 for each quintal of rice sold through channels I, II and III separately. The advertising cost in this manner differs as indicated by the length of the dispersion channel. The showcasing expense of rice in channel III is Rs. 0.56 more than that of channel II. Thus, the showcasing expense of rice in channel II is Rs. 17.12 more than that of channels I. In Channel-II and III aggregate edge of delegates were 5.34 percent and 11.19 percent of buyer's rupee individually. Cost paid by buyer per quintal of rice in Durg business sector is same (Rs. 530.00) independent of promoting channel, however variety happens just in cost got by the agriculturists in various channel on account of its lower or higher showcasing expense and edge. The maker's offer communicated. As shopper's rupee if there should be an occurrence of channel III was just Rs. 403 for every quintal of rice (76.04%) which is 16.04 percent and 7.27 percent not as much as that of in channels I and II separately. Essentially in channel II offer of rancher communicated in end clients rupee was Rs. 434.60 for each quintal of rice (82%) which is 9.46 percent not exactly in channel I. Consequently the offer of maker in purchaser's rupee was conversely with respect to the length of the dispersion channel.

Devaraja (2004) conducted a study on Producers and Consumers Price Parity for the Vegetables in Rural and Urban Markets. They found out estimate the per quintal cost of marketing of selected vegetables in Mysore (rural) and Bangalore (urban) markets, they also studied the estimate of the net prices received by the producer and paid by the consumers for the selected vegetables sold in rural and urban markets. They found from this study that the producers share are 41.10, 40.72,
53.94, 48.47, 58.79 and 72.68 per cent respectively for tomato, cabbage, cauliflower, ladyfinger, brinjal and onion respectively. There was 23.07, 29.50, 29.61, 40.9, 42.78 and 53.12 per cent distribution for the respective vegetables to be sold at Bangalore. This study finally concluded that the consumers’ price which is comparatively higher in Bangalore market for all vegetables is to the level of difference in transportation cost, commission charges and cost of packing material. The price parity even though is to be reduced at consumer level between rural and urban market, the difference is bound to be there to the extent of difference in costs on account of these items.

Chauhan and Singh (1998) originate the marketing cost and marketing profit in Ajamgarh district of U.P and they also found in their study that how to improve the selling and supply with the help of marketing channel.

Kumar bahu et al., (2003) studied price spread and marketing of green chilies in Guntur district of Andhra Pradesh based on area under chilli cultivation. Data collected from three villages from each mandal were randomly selected to make a total of six villages and 30 farmers were selected randomly from each village. Thus, the total sample size was 90. The data related to channels, intermediaries, marketing cost and margins etc. They observed from this study that share of the producer in the consumer’s rupee was very low (41.48%). It was due to the presence of large number of intermediaries in between the producer and the consumer. So, the farmers were not getting good remunerative price for their produce.

Banafar et al., (2003) conducted a study in marketing of soybean in sehore district of Madhya Pradesh. Main objectives of this study was to examine the elasticity of production of soybean on different size groups of farms and to examine the marketing cost and consumer share in producer price under different marketing channels of soybean. They found that the marketing charges paid by the producer, village merchant, Middlemen, processor, wholesale dealer of soybean oil, cake and retailer of soybean oil, cake in the marketing of soybean came to Rs. 5.75, Rs. 22.50, Rs. 40.37, Rs. 13.00, Rs. 6.50 and Rs. 7.00 per quintal in channel-I respectively. The marketing charges paid by the producer, cooperative societies, processor, wholesale dealer of soybean oil, cake and retailer of soybean oil, cake came to Rs. 16.50, Rs. 10.00, Rs. 13.00, Rs. 6.50 and Rs.
The marketing charges paid by producer, Middlemen, processor, wholesale dealer of soybean oil, cake and retailer of soybean oil, cake came to Rs. 17.00, Rs. 40.37, Rs. 13.00, Rs. 6.50 and Rs. 7.00 per quintal respectively in channel III. Total marketing charges were higher being Rs. 202.52 per quintal in channel I followed by Rs. 191.27 in channel III. Price paid by consumers for per quintal of soybean products was calculated to Rs. 2000 which was Rs. 800 for soybean oil and Rs. 1200 for cake. Middlemen’s margin was highest being Rs. 753.23 per quintal in channel I followed by Rs. 701.10 and Rs. 685.73 per quintal in channel II and III respectively. Producer’s share in consumer’s price was highest being 56.92 per cent in channel II followed by 56.15 and 52.21 per cent in channel III and I respectively. Thus, it can be concluded that the marketing channel I is comparatively much complicated involving a number of middlemen and market functionaries between the producer’s and consumers as compared to the others marketing channels.

**Jyothi (2003)** conducted a study marketing of crossandra, jasmine and rose flower in east Godavari district of Andhra Pradesh. And find out price spread and found the producer’s share in consumer’s rupee to be highest in crossandra (63.38 per cent), in jasmine (58.06 per cent) and in Rose (50.00 per cent). Wholesales have realized higher margin in case of marketing of rose flowers 20.00 per cent followed by jasmine with 19.51 per cent and then finally in crossandra with 11.61 per cent. Retailers were also getting more profits in marketing of rose (13.50 per cent) followed by jasmine (12.09 per cent) and crossandra (7.39 per cent). In marketing of all three flower crops Middlemen were found to be realising more market margins than retailers.

**Chole et al., (2003)** worked out prices spread of brinjal with the help of 100 vegetable growers in Panvel tahsil of Raigad district of Maharashtra was selected randomly to have information in different aspects of marketing of brinjal. They found from this study that the channel II was most favoured channel in the study area as maximum (nearly 50%) quantity was passed through this channel. The producer’s share in consumer’s rupee was maximum in channel I (68.28%), followed by channel II (57.94%) and channel III (53.14%). And the share of retailer in consumer’s price 21.04 per cent in channel I, 24.37 per cent in channel II and 25.83 per cent in channel III. The share of Middlemen in consumer’s price was 5.12 per cent in channel II and 5.06 per cent in channel III. The net share of commission agent was 6.17 per cent in consumer’s
rupee in channel III. The total marketing cost was highest in channel III (46.86%) and minimum in channel I (30.72%). It was also revealed that the marketing efficiency was higher in Channel-I (2.25) followed by Channel-II (1.37) and Channel-III (1.13). It is revealed that the marketing efficiency was higher in channel I (2.25) followed by channel II (1.37) and channel III (1.13).

**Shah and Mukhopadhyay (2003)** conduct study on intertemporal variation in the price and marketing margin of potato in West Bengal. The main objective of this study is to examine wholesale price, marketing margin and price spread at wholesale level. They also conducted a study entitled levels of and variation in wholesale prices and exports of potato in West Bengal. An examination is made of the levels of and variation in monthly prices of potato period from 1956-57 to 1983-84 relevant data prior to 1956-57.

**Balappa and Hugad (2003)** conducted study on onion marketing system in Karnataka. They used the 30 farmers growing onion from selected taluks of the district were selected at random in view of spread out of onion growers in different villages. The sample size constituted of 150 for the study as a whole. For studying marketing aspects, six markets namely Belgaum, Dharwad, Hubli, Bijapur, Raichur and Gulbarga were chosen based on the size of the market for the selected crop. From each of the market, five Middlesmen, five commission agent-cum Middlesmen and five retailers were chosen and interviewed personally to elicit compulsory information with the aid of well organized and pre-tested questionnaire. They found from his study that price spread and total cost of marketing incurred by different market functionaries formed major components in both the channels (21.33% to 22.13%) followed by total margins accrued to them (9.85% to 11.44%). Similar pattern was observed in all the markets, the village merchants with higher marketing coast incurred, realized lower margins out of the total marketing margin.

**Shapoo and Banerjee (2003)** conducted a study on Apple trade in Anantnag district of Jammu and Kashmir with the help of primary and secondary data are pooled together for detailed analysis. Primarily 50 orchards were collected randomly from 10 purposively selected villages of Anantnag district of Jammu and Kashmir. The main objective of this study to identify marketing channels in the apple marketing and to examine price spread. This study clearly reveals that the increase in number of middlemen and distance travelled, the commodity becomes dearer to the
consumers. Moreover, the profit reaped by different intermediaries clearly depends on the level of investment. Higher profit earned by traders makes the fruit dearer. Steps should be initiated to regularize the market operations. Apple should be marketed after proper grading and standardizing to protect consumers and retailers.

Banerjee and Ali (2004) contemplated value spread and useful investigation of business sector edges of Rangan Flower in West Bengal. To analyzed this case they helped the month to month variance in wholesale costs, value spread and promoting edge, one essential wholesale market Mullickghat, in Kolkata, one auxiliary wholesale market New Market, Kolkata and two retail advertise first New Market and second College Street Market in Kolkata are chosen purposively. Choice of business sectors depends on the volume of blossoms executed through the business sectors concerned. Twenty (20) maker venders visit to Mullickghat wholesale market, ten (10) Middlemen (5 from every business sector) and twenty (20) retailers (10 from every business sector) have been haphazardly chosen as business sector delegates. Pre-tried study plan has been utilized to gather information with the assistance of Survey Method. This study is identified with the horticultural year 1992-93. They are found from his study that maker's benefit out of purchaser's rupee ranges from 26.85 for each penny to 50.81 for every penny at least and most extreme value levels separately. Transport cost brought about by the maker merchant constitutes significant offer in advertising cost took after by bundling and stacking and emptying at maker's level. It is watched that cost increments from the month of May and keeps going through August and afterward decays.

Baba et al., (2010) has reported in his study that marketing surplus and price spread of vegetables in Kashmir valley. He defined the marketing of vegetables as a complex phenomenon due to their perishable nature, seasonality and bulkiness. The study has revealed a significant role of technology mission in the development of vegetable sector in the Kashmir valley. He worked on the total quantity of 316 quintal in all channels in study area. For price spread they found producer gathering in daily local mundi or went through streets as vendors and sell the fresh vegetable directly to the consumers. The total marketing cost incurred 7.75 percent in tomato and 12 percent in cabbage. In the second channel, they found that producer received 50 percent of consumer price in all selected vegetable. In the third channel, producer received 43.93 percent in
cauliflower due to high consumer price. The total market count has been noted increased by more than 92 per cent of the vegetal production in total for the specific vegetables. The proportion of marketed surplus is little higher in cauliflower than other vegetables. It has also been observed that as the number of mediator’s rises, the producer’s share in the consumer’s charge decreases. The net price received by the producers is higher in the channel where they sell the products/yield directly to the consumers or retailers. The producers have been found that they are collecting higher total net returns in tomato, trailed by brinjal and cauliflower across all the channels.

Sidhu et al., (2010) studied supply chain analysis on onion and cauliflower and determined market efficiency and increasing producer as well as consumer surplus. In this thesis, the supply-chain for cauliflower and onion in Punjab has been carried out with a focus on estimating costs of cultivation and returns in their marketing. Marketing costs and share of different channels of supply chain in marketing of the vegetable and degree of price transmission from important producing/distributing market to other markets. They found the estimation of cultivation for onion and cauliflower provides good returns to the farmers. The net profit return has been estimated to Rs 74,597/ha from onion and Rs 38,072/ha from cauliflower. Under producer-Middlemen-retailer-consumer supply chain, he found the marketing costs incurred by sample farmers will be Rs 35.23/q, secondary Middlemen Rs 49.38/q and retailer Rs 12.46/q in onion marketing. The marketing margins of secondary Middlemen and retailer were Rs 26/q and Rs 195/q, respectively. In the channel of producer-retailer-consumer, the cost on marketing incurred by retailer was Rs 37.36/q and his marketing margin was Rs 197/Qt. Under channel I, the share of Middlemen in consumer rupee was 3.28 per cent and that of retailers was 24.57 per cent; however during channel II, the costs of marketing for retailers were 4.42 per cent and their margins was founded 23.31 per cent of what consumer was giving. In the case of cauliflower, the marketing costs incurred by few farmers, secondary mediator and retailer were recorded as 1.81 per cent, 9.48 per cent and approx. 3.26 per cent of the consumer price, while their profit gain were 52.24 Per cent, 5.78 per cent and 27.43 per cent, respectively in producer-Middlemen-retailer-consumer supply chain. In supply chain II, the marketing cost experienced by retailer comprises 5.97 per cent of the consumer price and his profit was 27.71 per cent.
Singla et al., (2011) performed study and analysis on “Fresh food retail chain”, which is organized in the retail chain and non retail chain farmers in Punjab. They studied on 100 farmers out of which 50 farmers supplying with retail chain and 50 farmers with traditional (non-retail chain). In this study, they used all category of farm like marginal, small marginal, semi medium farm, medium, large, and all farms in two vegetable like okra and Cauliflower. They found that the production of okra and cauliflower is high in RC farmers than non RC farmers and production cost of RC farmers is not higher than non RC farmers in cauliflower and okra. Marketing cost is high in RC farmers. But net return is good in RC farmers but non RC farmers net return is less than RC farmers in both vegetable marketing.

2.3 Production and marketed Surplus

Jha and Jain (2013) conducted study on market gains and the market arrivals of rapeseed mustard in Jhansi division of Uttar Pradesh. They found efficient marketing system is a vital adjunct for raising oilseeds production and income of the farmers. Therefore, a complete study of the production and marketing of oilseeds is of immense importance, particularly in the view of the present national method to associate the demand - supply break of comestible oils and for the well being of the farmers. Therefore, an effort has been made in the present education/study to assess the production and market addition of rapeseed-mustard crop at farm level and the relationship between market arrivals and market surplus; and to evaluate the production and market gain of rapeseed – mustard crop at the farm level and relationship between market leftover and market arrivals.

Singh (1975) has made an effort to study the market arrival and rates of groundnut in the Punjab. He observed that the arrivals of groundnut in the post-harvest period varied from 55 to 91 percent, whereas the prices varied from Rs.45 to Rs.125.12 per quintal during the same period. In the mid season, the variations in the arrivals and prices were about 8 to 32 percent and Rs.49 to Rs.141, respectively, in the lean period, the percentage of arrivals was very small and ranged from 0.65 to 12.56, correspondingly the prices were found to be high, ranging from Rs.52 to Rs.145 per quintal.
Chauhan and Singh (2002) conducted a study, marketing surplus of paddy in allehpur block of bijnor district, to find out level of marketed surplus by size of farmers and to measure the nature and extent of relation of identified variable with marketed surplus.

Shivaraya and Hugar (2002) studied pricing integration and arrival and price of onion and potato in Karnataka State and found by this study that the prices of onion and potato were governed not only based on arrivals and other factors in the given market but also those prevailing in the other markets. This might be due to the movement of produce from one market area to another depending upon prices prevailing in the markets. The competitive conditions prevailing in the selected markets might have influenced the movement of prices in the same direction.

Srivastava et al., (2002) study the cost of production and various marketing channels operating in market for broiler. He found mainly three channels in this system that is, producer to consumer, producer to retailer to consumer and last producer to Middlemen to retailer to consumer.

Chavan, Patil Bosale and Pawar (1999) have tried to estimate the relationship between marketed surplus of Paddy and various explanatory variables with the help of multiple regression functions. For the study purposes they have to collect 120 paddy growers from Konkan region of Maharashtra State and categorized them into small, medium and large farmers.

Through this study, the authors concluded that the increase in production is closely associated with an increase in productivity of land per unit area and its intensive cultivation. Higher productivity is attributed to use of seeds of high yielding varieties, extents of availability of irrigation facilities, application of recommended doses of manure and fertilizers, adoption of plant protection measures as per recommendation and adoption of recommended package of practices.

At overall level they observed that only 24.75% area was under cultivation. This shows the scope for bringing more area under cultivation and thereby increasing crop production. The family size
is also an important factor to extent the marketable surplus. The average size of family was 7. Hence it is important to reduce the size of family by adopting the family planning measures. The elasticity coefficients for volume of production (0.120), area under paddy (14.649) and size of holding (2.858) were positive and significant at 1% level of probability, while quantity for home consumption, quantity used as seed and size of family was negative. R2 value at overall level was 0.6948 indicating 69.48% variation in the dependent variable is explained by these explanatory variables.

Singh and Sidhu (1973) made study on groundnut crop in Punjab regarding the assessment of the level of marketable surplus. They found in their study that “the maximum percentage of the produce of the cultivators forms the marketable surplus and out of it very small percentage is kept for home requirements. The marketable surplus was high on large holdings (86.17%) as compared to small (79%) and medium (71.06%) holdings.

Kalamkar (2004) studied Agricultural Price Policy and its Impact on Farm income, and give a chart the price contribution and per hectare gross income in food grain.

Singh and Singh (2004) conducted a study about Marketing of Jagger, the main objective of this study is to obtain main marketing channel used to supply important consumer groups, to study various marketing charges paid by the producers and purchaser to find out the price range and distribution in marketing of Jagger and producer portion in consumer rupees. They found that about 70-80% of the total arrival conveyed by the Jagger manufacturers themselves to the market of which nearly 70% brought by their own or hired bullock carts. They also observed that the private agreements prevalent systems in mandi for selling the Jagger. Auction system was opted very rarely. Producers’ opted more than one channel sells their produce. The marketing cost per quintal of Jagger is Rs. 158.65. Producers share in consumer rupee is 84.85 percent. It is noted that the marketing of sugarcane does not have a complicated process of marketing and produce was directly transferred from the producers to the consumers but on the other hand the marketing of its by-product i.e. Jagger was a complicated one involving a long marketing channel and number of middlemen.
Jha (2007) presented efficient marketing system as an essential assistant for growing oilseeds production and farmers income. Consequently, the complete study of production and in the opinion of present national approach to link the demand supply gap of edible oils and for the good existence of the farmers it is extremely important to do the marketing of oilseeds particularly.

Deveshwar and Rathee (2010) assessing supply chain performance and quality, leads to identification of glitches and opportunities in the market. Having a strategy and scheming key parts are important to understand and take control of your supply chain. To create the competitive advantage, put the process, people and technology in place and it will create advantage for both for today and tomorrow.

Gong (2008) emphasized on flexibility as a key determinant of strategy and recommended an economic/financial model for Supply Chain Flexibility assessment and evaluation.

Kumar et al., (2005) study has been undertaken with the double objectives of examining the variability design of market arrivals and selected prices of vegetable crops (peas, cauliflower, tomatoes and cabbage) in metropolitan markets of Mumbai, Delhi, Bangalore and Kolkata and analyzing the relationship between market arrivals, cost and values. The study and research results have confirmed the bad & negative relationships among market arrivals and prices in terms of correlation measurements over the years and across months in all the four urban markets, though there were several instances of positive relationship.

Rahman et al., (2005) In this study they found that 83% of household sold exclusively unpolished rice and only 17% of household sold partially polished rice, although there are chances of earning 30% more money by trading polished rice. Land cultivators having less than one acre did not have sufficient marketable surplus, they were excluded from the survey.

Birari et al., (2004) in this Study, researcher presented marketing channels in marketing cole of vegetable, estimate the marketing cost, price spread and marketing efficiency of cole vegetable.
Gupta (1996) has pointed in her study and whole time span 1960-61 to 1987-88 and for three sub-time periods, each approximately depicting no change in technology (1960-61) to (1966-67), change in the technology of one substitute crop, namely wheat (1967-68) to (1973-74) and change in the technology of more than one substitute crops which in Punjab primarily mean wheat and paddy (1974-75 to 1987-88). She further analyzed that since oilseed crops proved to be poor substitute for paddy and wheat, the land use pattern disfavored the former crops, the production of crop was not favoured even by growth.

Kainth (1982) has also made study in Punjab regarding rapeseed – mustard crop and according to this study “Merchantable surplus in Amritsar district was about 96% and the retention for feed, seed and family consumption was about 4 percent. The marketable surplus was observed 78.95, 87.55 and 81.37 percent on small, medium and large sized holdings respectively.

Singh (1975) has made an effort to study the market arrival and rates of groundnut in the Punjab. He observed that the arrivals of groundnut in the post-harvest period varied from 55 to 91 percent, whereas the prices varied from Rs.45 to Rs.125.12 per quintal during the same period. In the mid season, the variations in the arrivals and prices were about 8 to 32 percent and Rs.49 to Rs.141, respectively, in the lean period, the percentage of arrivals was very small and ranged from 0.65 to 12.56, correspondingly the prices were found to be high, ranging from Rs.52 to Rs.145 per quintal.

Gupta (1973) Verma and Nigam (1979) and Awasthi et al., (1985) have conducted their studies regarding seasonal behaviour of groundnut and rapeseed-mustard crops in State of Madhya Pradesh and Uttar Pradesh. A unanimous finding of these research works in prevalence of inverse relationship between market arrivals and prices and highest market arrivals were recorded during the peak (post-harvest) season, the lowest market arrivals and relatively high market prices were recorded during the lean season.

Jha, Murthi and Sharma (2005) have tested in their paper that there is integration in wholesale price markets in India. They have taken under study in India about 55 wholesale rice markets using monthly data over the period January 1970 – December 1999. In the study, the authors
have identified the existing maze of controls and government interference in rice markets, though well intentioned as counterproductive and accountable for such distribution of rice markets. Such fragmentation for agricultural operations damages the efficiency and isolates some markets stunting the fluctuation in the markets signals. Much has been written about state decision and self-government in some, stuffs of economic policy in India. It should be pointed out that this latitude should not level up to place restrictions on internal trade. Furthermore, for decision-making this has nothing to do with decentralization. Economy like US, which is significantly more decentralized than India’s, still bans most, it not all, impediments to inter-state trade.

A number of studies have been conducted an all India level and at the state level in the context of rapeseed – mustard and groundnut crops.

2.4 Role of intermediaries and Supply Chain

Jha, Murthi and Sharma (2005) have tested in their paper that there is integration in wholesale price markets in India. They have taken under study about 55 wholesale rice markets in India consuming monthly data over the period January 1970 – December 1999.

Gabre-Madhin (2001) describes the supply chain in the Ethiopian grain market where brokers and middlemen play an important role in trade facilitation and lowering the transaction costs between unknown parties. The extensive supply chains and the use of brokers are not unique for Sub-Saharan Africa, but similar findings have been observed earlier e.g. in India.

Pandey et al., (2013) conducted study on supply chain re-engineering in the fresh produce industry. In this case they describe the challenges faced by Agrifresh including securing supplies from farmers, product portfolio and volume utilization problems. The case is intended to be used in educating a variety of management subjects to the undergraduate students, graduate, and executive levels, which comprises agribusiness approach and supply chain management, predominantly emerging markets as they apply.

Lee and Corey (1995) stated that Supply Chain Management consists of the combination of activities which are taking place among a network of facilities that obtain raw material, perform
transformation to convert them into intermediate goods and then to the ultimate product & transport all the products through a distribution system to customers.

Bowen et al., (2001) stated that the organizations will embrace green supply chain management practices if they classify that this will provide the specific financial and operational benefits. Collaboration and integration of suppliers into environmental management system could be accomplished in just two steps process.

Walton et al., (1998) first step - Walton et al suggest that environmental matters become the most important part of distribution system strategic planning to respond on the regulations and the demands of environmental accountability. In second step - To make reduction in operational costs and improve customer service, organizations connect their supplier to their supply chains.

Fox et al., (2000) in his study the production network is an all inclusive system of commercial ventures, makers, suppliers, showcasing, stockrooms, conveyance focuses, and retailers through which crude materials are acclimatized, changed, and conveyed to the clients. As of late, to manage the inventory network at the strategic and operational levels, new programming design has risen. It portrays the store network as the made set out of smart programming operators, each responsible for one or more exercises in the inventory network and each interrelating with different specialists in the arranging, arrangement and execution of their obligations.

Wever et al., (2012) found that how inventory network on-screen characters deal with their presentation to both free market activity side. What's more, hazard is a point that has been ineptly seen inside the writing i.e. exchange cost financial aspects. They was concentrates frequently just audit exchange dangers in the setting and reference of two-sided trades. This study objective is to add to a movement inside the Tata Consultancy Engineer (TCE) writing from an attention on respective exchanges, to investigate exchanges inside a store network foundation/connection.

Reddy (2005) all around characterized that the supply chain management, inventory network administration is the administration of upstream and downstream relationship with the suppliers
and clients to bring better client esteem at less cost than the store network as an aggregate. In this manner the accentuation of production network administration is over the administration of the connections with a specific end goal to finish more productive results for all social events in the chain. Associations use SCM to decrease or kill the cradles of stock that exists between association in a chain through the data sharing on interest and current stock levels.

**Gligor and Autry (2012)** displayed essentialness of correspondence between organizations inside the inventory network that were all around settled in the writing, various gaps stay same in relating how singular level representative connections impact firm-to-firm interchanges. One such gap case is the center of the ebb and flow study in the writing which speaks to; slight examination has addressed the part of non work fascinated individual connections (i.e., kinships) built up between representatives of production network accomplice organizations and unequivocally how such connections impact business-related correspondence forms.

**Pagell and Kristal (2011)** examined sense of a failed project and builds on that failure to hopefully stimulate fresh thinking on how we perform Supply Chain Management (SCM) research. The initial objective of this discussion medium was to encourage and lift authors with manuscripts that were weakening in a “file drawer” to submit them once more. But the call for papers received one inquiry and no submissions. This apparently empty file drawer led us in a very different direction, one of trying to understand why the SCM file drawer might be blank. This essay summarizes the expectations that directed our process of discovery, what we actually did when confronted with no submissions, what we found via our additional data collection and then completes with some recommendations for moving the field forward.

**Wagner et al., (2003)** defined a distinct distributed active supply chain management problematic and specified how TAEMS agents, prepared with new mechanisms for coordination, automate and manage base of supply chain.

**Sahay et al., (2003)** surveyed in light of an as of late decided across the nation study titled "Store network administration rehearses in Indian Industry: 2000", hurls clear realities about the present design of supply chains in India. This article reasons that however some Indian
associations are developing quick towards refining store network proficiencies, a large portion of them are still a long way from comprehension its impact on business execution.

**Daugherty and Pittman (1995)** uncovered the utilization of time-based methodologies all through the store network from assembling to purpose of-offer. They put an unmistakable quality on supporting appropriation operations.

**Tan (2001)** furnished a system with the accompanying blueprints: (i) The angle of modern purchasers for purchasing and supply (ii) The transportation and logistics stance of dealers and (iii) the bound together/coordinated store network administration approach.

**Mohammad Khair (2002)** identified and examine the advertising benefits for kaja apple in two regular promoting channels, they are: A. Maker, pre-harvest temporary worker, commission specialist, agents, retailer and buyer. B. Maker, commission operator, go betweens, retailer and buyer. The net promoting benefits for KAJA apple are 69% when the yield is advertised through the pre harvest temporary worker and 57%, when the producer performs self showcasing. Rancher's offer in purchaser's cost is 31% and 43% which demonstrates that the rest 69% and 57% of shopper cost is going to various showcasing done by go betweens.

**Vaart and Pieter (2003)** drawn derivations on the requirement for entomb remedial methodology, consolidating the specialized and social perspectives from the comparing fields of framework changes and relationship keeping in mind the end goal to convey higher request recharging execution.

**Huang et al., (2009)** in this paper they displayed relationship between Smallholder Incomes, Vegetable Marketing and Food Safety in hina. They are generally found that development of such a showcasing situation is, to the point that little, poor agriculturists in Shandong are taking an interest at the same levels of cooperation as greater, wealthier ranchers in vegetable generation and promoting. Truth be told, there are almost no cultivators with homesteads that are more noteworthy than one hectare. By and large, tomato and cucumber ranchers develop under 2/3 of a hectare. The little and denied agriculturist amicable plant economy that is creating
colossal measures of products of the soil at lower costs is vulnerable to sustenance wellbeing issues. With the greater part of the exchanges which have been ordered as unadulterated spot market, there is no traceability in the framework. Agriculturists are not capable once their cucumbers and tomatoes are gone to brokers in return for money.

**Demirbas (2005)** this study plans to seek the effects of late changes for wholesale markets of new foods grown from the ground on maker, middle people at the wholesale markets and retailers. The consequence of the review did with natural product – vegetables makers, and middle people at the entire deal market and chambers and relationship of retailers, issues in use of late lawful game plans were resolved. In addition, insurances that should be taken to take care of the issues were likewise examined.

**Frizelle and Efstathiou (2007)** contemplated the effect of operational many-sided quality on the expense in customer– supplier frameworks.

**Barakade et al., (2011)** displayed financial matters of onion development and its promoting design. In this study they find that the business sector delegates are gathering higher edge by in acquiring less cost and administration. The significant offer of buyer rupees is took by the mediators.

**Sandika (2011)** Defined the effect of brokers on vegetable advertising channels, and discover retail cost of bean, carrot, beet, pumpkin and brinjals had every year expanded by 10%, 9.2%, 8%, 9.3%, and 10%, individually. With the appreciation of go betweens in regards to bean, carrot, beet, pumpkin and brinjals have additionally expanded just about in a comparable rete.

**Xaba (2013)** contemplating the variable influencing the decision of showcasing direct by vegetable ranchers in Swaziland. The primary goal of this study is to discover and examined variables influencing ranchers' decision of showcasing channels by the assistance of 2011 creation season. The examining gathers from 100 arbitrarily rancher's age, separation from generation territory to market, agriculturist enrollment and so forth. He was recommending that vital is to advance the aggregate activity as an institutional vehicle for associating ranchers to agribusiness supply chains. Aggregate activity is energized on the grounds that it fortifies
smallholders' business sector position and haggling power. Ranchers ought to make systems since they help in sharing information, agriculturists can enhance produce grades as required by business sector. Vegetable agriculturists ought to be urged to take part in enforceable contract cultivating or assentions, since they could be a method for enhancing ranchers' item quality and guaranteeing market accessibility. There is additionally a need to enhance the accumulation of vegetables from ranchers by NAM Board since separation turns into a requirement in utilizing it as a business sector.

Kumar and Chandrakar (2012) examined about green inventory network administration and show operation and ecological effect at various period of the production network. The Green Store Network Administration (GSNA) is additionally the association for overseeing upstream and downstream relationship with suppliers and clients to convey bigger client esteem at a littler add up to the inventory network all in all. Along these lines the accentuation of store network administration is on the administration of the connections keeping in mind the end goal to finish a more beneficial result for all gatherings in the chain. Associations use Supply Chain Management (SCM) to diminish or cancel the supports of stock that exists between association in a chain through the sharing of data on interest and current stock levels.

Sandika (2011) concentrated on the Impact of brokers on vegetable promoting diverts in Sri Lanka. An essential goal of this study is to know and distinguish conduct of showcasing edge of brokers for vegetable promoting in Sri Lanka. The retail value, maker piece, showcasing edge, and promoting channels is critical key of this study. They found the Marketing edge is under 50 percent in chose vegetable. It was additionally watched that for the most part when the Retail Price and Producer Prices expand the advertising edge reduction and the other way around. It is clear likewise that when the Retail Price and Producer Price are high the mediators attempt to control the business sector costs by lessening their Marketing Margin. It might ensure the buyers specifically on the grounds that Retail Price and Producer Price for the most part increment because of moderate and low supply of the generation of vegetable and when it have appeal in business sector.
Saunders (1995) conflicts that inside the store network administration writing is that there are confounding wealth of covering phrasing and implications. As an outcome, in the writing various marks can be discovered expressing to store network and to track and take after inventory network administration which incorporates coordinated acquiring approach.

Khan and Burnes (2007) concentrated on of "Danger and store network administration making an exploration motivation" was produced to research plan for danger and production network administration. The paper exhibits that there are numeral key contentions in the general writing on danger, particularly as far as subjective and quantitative strategies, which should be known by the individuals who are searching for applying hazard hypothesis and danger administration techniques to supply chains. Moreover, the paper shows that the utilization of danger hypothesis to store network administration is still in its underlying stages and that the models of production network hazard which have been proposed should be tried top to bottom.

Bharadwaj et al., (2007) exhibited a model of assembling execution that at the same time considers the embellishments of a company's incorporated IS ability in conjunction with entomb utilitarian and bury authoritative coordination machines. Always with the relating point of view, they look this particular type of IS capacity as upgrading assembling’s heading with promoting and production network purposes to drive fabricating execution.

Halder et al., (2011) led a study on requirement for common movement to enhance the inventory network administration of vegetable and organic product in India. It was resolved that inventory network administration is worried with perishable item or merchandise in our nation and concentrated on difficulties and opportunities developing in everyday item taking care of to the last customer. In practices, it looks to separate the hindrance which is available between each of the units in the production network so as to perform larger amounts of administration and significant investment funds in expenses. They ponders six stages fundamental for good inventory network administration from the perspective of the essential makers, size of operation, key collusion, creation/stockpiling adaptability, coherence of supply, quality control and great correspondence. The significant test is the manner by which to receive best practices in store network administration like information incorporation, aggregate estimating, high utilization of
IT, interest based creation, including a draw framework for leafy foods generation as opposed to a push framework sharing hazard and compensates by the production network accomplices, and so on.

**B. Samuel et al., (2006)** analyzed contract hones amongst suppliers and retailers in the agrarian seed industry. They develop and examine single-retailer models of different contract sorts really utilized as a part of the business. Under the supposition of uniform interest, they completely describe all planning contracts. Furthermore, look at and match the models contemplated here with different models in the writing and show that present conduct in the developed seed industry is essentially not the same as that taken by different models. With boundless returns at aggregate wholesale value, retailers have impetus to request compelling amounts from their supplier. While trying to facilitate this conduct in the horticultural seed industry, suppliers have founded a reward framework whereby if income are not very great, merchants (retailers) are paid a for each unit reward taking into account the deals. Now and again, the reward framework is extremely powerful and productive in dropping merchant guidelines to the point where absolute store network (channel) expected edge is boosted so that the inventory network coordination is successfully accomplished. However when a merchant requests are too huge, suppliers have included a punishment plan (for an excessive number of profits) to diminish the merchant arranges significantly further.

**Oguoma et al., (2010)** examined on the parts of mediators in the dispersion of farming items and the characteristic ramifications to sustenance security. The outcomes demonstrated that atmosphere and climate are known restricting variables of generation in horticulture. Additionally, mediators intercession raise cost for purchasers. The outcome demonstrated that ranchers experience high generation costs in their endeavors to help creation yet scarcely get reasonable valuing of their items from the agents, the mass homestead entryway purchasers. The genuine benefit goes to the brokers who purchase up the ranch items at practically give away costs and offer at over the top costs to the buyers. This state of mind of center men have disheartened bona fide financial specialists getting into farming as a result of the negligible benefit connected with it as the center men truck away the greater part of the benefits. Hence, the exercises of go betweens appear to be a danger to sustenance security.
Roger (2005) examined on the little and medium size ventures taking care of foods grown from the ground are burdened by expanding focus inside the creation to retailer production network. Retail merchant chains have gotten to be bigger halfway because of the passage of mass retailer in nourishment retailing. Shipper firms are growing to give the length of season and wide product offerings expected by substantial retailers. The advancement of electronic equipment and programming intended to improve client benefit and decrease logistics expenses is costly and, some contend, hard to execute. Research on effects on and reactions by produce production network wholesale and conveyance firms is inspected as a premise to comprehend the fate of these and comparative firms.

Raghuvir Vedhantham (1998) directed a study keeping in mind the end goal to follow the chain of middle people between the production and the end purchaser in the advertising story. In the study, portraying the historical backdrop of appropriation is an account of moving force structure. After 1960s, the force of makers developed as three sizes of their operations expanded, essentially because of advancements underway procedures. As creation turned into an overwhelming variable in looking for upper hand producer planned brands came to be offered all the more broadly. This procedure went too far bringing about over supply, and the accentuation exchanged towards showcasing. This developmental procedure likewise had impact on dissemination capacity itself. It was recognized that the number or sorts of merchants required in a specific framework will rely on upon different variables, including kind of item and recorded a portion of the circulation capacity like transport, Bulk breaking and capacity, credit, neighborhood learning and input, show, promoting, conveyance speed relationship amongst middle person and purchaser, Price – Discount structures, producer validity, Documentation, Product preparing, esteem included by merchant and joint deals calls.