CHAPTER-1

REVIEW OF LITERATURE

Reviewing the literature is an important exercise in research as it helps in discussing the results of existing studies and methodology adopted by them. It provides new dimensions in the existing study of knowledge. Keeping in view the importance of agriculture marketing, various studies from different approaches have been conducted and presented by authors and researchers from time to time. So, in this chapter, an attempt has been made to present an overview of some studies which have made important contribution in the field of agricultural marketing.

D.S. Nandal (1986) performed a study on marketing pattern of rapeseed and mustard in Hisar district of Haryana. The study was mainly confined to Hisar district as Hisar is the main export market of rapeseed and mustard oil to the various other states in the country. This is a secondary data based study. Data on market arrivals and prices of rapeseed and mustard for the period of 1974 to 1984 were collected from the mandi-records. The results were presented in tabular form. It was found that the indices of arrivals were above hundred from March to June. About 75 percent of total market arrivals reached in the markets in these months. The price indices were below hundred during this period indicating thereby that the prices were lower at the post-harvest time. The seasonal indices for arrivals were below hundred during the remaining eight months (July to February). The price indices were above average from August to December but again fell below average from January and continued up to July. Therefore, low price indices during lean period (Nov. to Feb) indicate that there was no price incentive for the farmers to withhold the stock and sell it in the lean period. Further the correlation co-efficient between the arrivals and prices of rapeseed and mustard in Hisar market was negative (-0.254) which was not statistically significant. This confirmed that the association between the magnitude of arrivals and prices of rapeseed and mustard in Hisar market was as good as nil.

Nandal et al (1989) conducted a study in Hisar district of Haryana with the main objective to examine change in the pattern of market arrivals of gram in the
regulated markets in Hisar district. For this purpose, secondary data was collected from the market committee of the regulated markets from 1974 to 1988. The study inferred that the farmers do respond to the changing prices in their acreage allocation decisions. The study indicated that during the period of fourteen years (1974 to 1988), arrivals were the maximum in post-harvest period. About 65 percent of total marketed surplus was sold in the market in peak-period while in mid and lean period the percentage arrivals were about 20 and 15, respectively. The study showed that over the passage of time the arrivals proportionately decreased in lean period and mid-period. This was mainly due to lack of with holding capacity of the producers and storage facilities with them.

**Agarwal et. al (1990)** performed a study to find out the relationship between market arrivals and prices of rapeseed and mustard in the state of Rajasthan. The study was conducted in Bayana market of Bharatpur district of Rajasthan. Bharatpur district stand second both in area and production of rapeseed and mustard in the state. Bayana is an important market of rapeseed and mustard in Bharatpur district from the point of market arrivals and number of oil expeller in the area. Data on market arrivals and prices of rapeseed and mustard for the period 1981 to 1987 were obtained from the records of Kirishi Upaj Samitti, Bayana as the data for the period prior to 1981 was not accessible. Karl Pearson correlation co-efficient was used to study the relationship between prices and market arrivals of rapeseed and mustard. It was found a clear seasonality in the pattern of quantum of arrivals of the rapeseed and mustard crop. The quantum of arrivals of rapeseed and mustard was more than 56 percent of the total arrivals in the peak-period (i.e. immediately after harvest). The arrival decreased subsequently in the other three seasons of the year. The arrivals were only 22.75 percent in the second season (mid-marketing period). The quanta of arrivals were more or less the same in the third and fourth seasons (lean and off-seasons) of the year i.e. around 10 percent. It was also found that prices were higher in the lean season over the mid-season in five out of seven years. On the whole, prices were low in the off-season by 8.48 percent compared to lean season. In the two years (1985-86, 1986-87) prices were higher in the off-season over the lean-season but the difference was less than two percent. This difference was much less to cover the storage cost of one-season. The holding of rapeseed and mustard up to the fourth-season was not found to be profitable. Thus, it can be inferred that
farmers can get better prices by the sale of rapeseed and mustard in the second and third seasons rather than in the first and fourth seasons of the year.

**Borah et. al (1991)** studied the price variation of rapeseed and mustard in Assam. For this purpose five major markets on the basis of annual arrivals were selected. From the analysis of price variations of rapeseed and mustard in Assam it appeared that like other agricultural commodities the seasonal indices of this crop were found higher in pre-harvest months as compared to post-harvest months. This indicated the existence of trader’s control over rapeseed and mustard marketing in Assam. During the harvest, the general practice of the traders was to lower the prices so that procurement could be made at a lower price. Very often, growers were compelled to take loan from traders on pre-condition of selling the produce at a lower price. The line fitted for price data revealed the existence of positive trend in all the five markets in Assam. The co-efficient of variation in price had a range from 3.35 percent to 24.1 percent. The movements of annual prices are highly correlated in the market in Assam. This higher correlation co-efficient indicates high level of integration between different markets.

**Singh et. al (1992)** conducted a study to identify the constraints responsible for poor arrivals of agricultural produce in the regulated markets and find suitable measures to promote these arrivals in the market. The study is based on the primary data but in support of certain facts, the secondary data has also been used. The primary data was collected from 75 respondents, randomly selected from 15 villages (5 villages from each market) of three regulated market of U.P. i.e. Kampur, Lucknow and Sultanpur for the agricultural marketing year 1990-91. In addition to this, 30 percent market functionaries were selected purposively to collect the required information. The secondary data was compiled from Regulated Mandi Prishad, Lucknow, office of the selected regulated markets, published reports, Journals, etc. The main constraint responsible for the poor arrivals of agricultural produce in regulated mandi is the location of mandi yard at a long distance from the production points. The construction of mandi yards is generally confined to tehsil or district headquarters which is not easily accessible to majority of farmers. 70 to 92 percent of farmers reported that due to situation of regulated markets at a long distance, the transportation cost is so high that it neutralizes the benefits obtained from other sources. Besides this, the loading/unloading charges, weighing charges,
mandi fees and commission charges are more or less same to those of local/unregulated markets. In bringing the produce to the mandi, the producer has to bear extra expenditure of gunny bags for filling the produce. Almost all the farmers were of the opinion that there existed neither grading & standardization facilities nor storage facilities for them. 70 to 75 percent farmers reported about the unsatisfactory link roads. Almost all the farmers denied that better prices were prevailed in the regulated market. Delay in payment made in regulated markets was reported by 80 percent farm-households. About 88 percent farmers reported that they were not aware about the prevailing prices of agricultural produce in the market. It was suggested that link roads should be constructed, grading and standardization should be implemented, storage facilities should be provided to the farmers and they should be paid for their produce timely in the regulated markets.

Parkash et. al. (1994) studied that pattern of market arrivals and price of gram in U.P. The time-series data on market arrivals and wholesale prices of gram for each month from 1987-88 to 1991-92 for whole U.P. was collected from the Directorate of Agricultural Marketing, Ministry of Agriculture, and Govt. of U.P. These months wise five year total arrivals were added to arrive at the total of all the months of the period under study. Averages for each month and of the aggregate were worked-out. Percentage variations for arrivals and prices for each month were also calculated. The relationship between wholesale price and market arrivals of gram was studied by working-out Karl-Pearson’s correlation co-efficient.

It was found that a low percentage of the production of gram reached in the regulated markets of U.P. Only during 1987-88 more than 47 percent of total production of gram in the state was sold through regulated markets of the state. The rest of the marketable surplus was sold in the unregulated markets at village or block levels. Credit facilities provided to the farmers by local traders or middle men appeared to be one of the most important reasons for selling most of their produce of gram in unregulated markets. There was a clear seasonality in the pattern of quantum of arrivals of gram. The variations in arrivals of gram varied between 51.3 and 218.9 percent. The quantum of arrivals was more than 46 percent of total arrivals in the months of April, May and June i.e. the time of immediately after harvest of the crop. After June, the market arrivals again increased slightly in the month of October but after-wards, it showed a declining trend up to the month of
February. The month of March noticed significant increase in market arrivals of gram due to release of holdup stocks of gram in the market in anticipation of arrival of a new crop. It was found that prices of a crop do not vary from year to year but fluctuates during different months of the same year. The variations in monthly wholesale prices of gram varied between 87.6 and 108.8 percent from average wholesale price. Prices of gram were the lowest in the month of April followed by May and June. Price levels of gram touched the peak in the month of October. After October, declining trend was observed till the next April.

**Tarit Kumar Datta (1994)** studied the seasonality in market arrivals and its impact on efficiency of agricultural marketing. This study is based on primary data. For the purpose of collection of data and other relevant information the ‘Samsi’ wholesale agricultural market in Malda district in West Bengal was selected. The market arrival pattern was subjected to a period of three years- 1979, 1980 and 1981 only. For major crops-Jute, paddy, wheat and pulses, the arrivals of which took place in bulk quantity in the market was covered in the study. In this study it was found that the large number of farmers sold their produce just after harvest. Medium and large farmers had post-harvest holding capacity while the small and marginal farmers were unable to store their produce as they had no facility for this. As a result, marginal and small farmers had to sell their produce just after harvest. Hence, off-seasonal rise in prices provided the medium and large farmers’ opportunities to earn more while seasonal fall in price encouraged the traders to buy more and more at the cost of small and marginal farmers who were compelled to sell the produce immediately after harvest for reasons more than one.

The seasonality of arrival of agricultural produce caused various marketing inefficiencies. The price declined with the rise in market arrivals of any agro-produce and reached the floor in the peak selling period when arrivals touched the ceiling. Sometime, the prices even went below the statutory minimum price fixed by the govt. It was found that the correlation co-efficient between price and market arrival of pulses was (-0.77) in 1979-80 and (-.065) in 1980-81 which were found significant at 0.5 percent and 2.5 percent level, respectively. The seasonality of arrivals left its impact on transport cost also. In the peak arrival months of all crops, the transport cost in local market increased significantly while in moderate, slack and lean arrival months it declined. The transport cost per quintal of pulses were
rupees 1.00, 0.75 and 0.50 in peak-period, moderate period and lean period, respectively. The seasonality of arrival created many other serious problems such as problem of infrastructural facilities, delay in disposal of produce and competition among the growers, difficulty in finding buyers, etc.

**Grover et. al (1994)** studied the impact of expended marketable surpluses on the pattern of market arrivals and their impact on the market development with reference to wheat, paddy, cotton and oilseeds. To achieve the stated objective, the wholesale regulated markets of Haryana were categorized into small, medium and large markets based on the arrivals of selected commodities during the triennium ending 1991-92. The cumulative total method was used to categorize the various markets. From each of the category of wheat, paddy, cotton and oilseeds markets, one market from each group was selected. Thus, in all, five markets namely Uklana, Hisar, Sirsa, Karnal and Ambala city were randomly selected. Secondary data related to arrivals and prices of wheat, paddy, cotton and oilseeds over a period of 10 years (1981-82 to 1990-91) were collected from the agricultural produce market committees operating in the selected markets. Besides tabular analysis, the coefficient of variation was also computed.

It was found that in case of oilseeds, the percentage of arrivals increased in peak-period only in medium market. It increased from 74.28 percent (in 1982-83) to 90.27 percent (in 1991-92). In mid-period, the market arrivals increased from 1.02 percent to 42.60 percent in case of small markets and from 9.36 to 19.80 percent in large markets. The market arrivals in lean-period decreased during the reference year in all the three markets (small, medium and large). Co-efficient of variation in arrivals ranged from 34.55 percent to 41.44 percent in case of oilseeds. In small markets it was 36.42 percent, while it was 34.55 percent and 41.44 percent in medium and large markets, respectively. The co-efficient of price variation ranged from 31 to 34 percent in the three markets.

**Nandal et. al. (1995)** conducted a study to examine the marketing pattern of gram. For this purpose, Bhiwani district of Haryana was purposively selected as it ranked first in the production of gram in 1992-93. In their study, they found that arrivals during the post-harvest period were the maximum in all the markets. With the passage of time, the arrivals proportionately decreased in lean period and increased in mid-period. This was mainly due to lack of with holding capacity of the
producers on account of poor financial position and lack of storage facilities with them. The findings in all the markets showed that producer-seller’s market decisions were not much directed by price differentials between different marketing periods. The producer’s share in consumer’s rupee was found 87 percent in the study.

**Raveendran et al (1997)** performed a study in Tamil Nadu with the main objective to analyze the marketing decision behaviour of oilseed growers in the state. The study was based on the agricultural year 1994-95. For the study, two oilseeds were selected—groundnut and gingelly—as they occupied the largest part of the total cropped area under oilseeds in the state. A sample of 120 farmers was selected using a three stage random sampling technique. It was found that 69.24 percent of the production of groundnut became the marketable surplus of the farmers. In case of gingelly, it was 91.60 percent of the total production. It was found that the selection of middlemen by the sample farmers was purely a regional one and not based on any economic or social factor. In North Arcat, South Arcat and Tiruchirapalli districts all the selected farmers sold their entire marketable surplus of groundnut through regulated markets. The major reasons behind their decision to sell through regulated markets were- long term practice, receipt of higher net price, immediate cash receipts. In Salam district, the respondent farmers sold their entire marketable surplus through co-operative marketing society at Kanganapuram. In other districts, all the farmers sold their entire marketable surplus of groundnut to village merchants. This was followed irrespective of age, education, size of land holdings and total income. The major reason behind this was the long term practice coupled with convenience rather than receipt of loans from the village merchants. Even farmers who did not avail any loan from the village merchants were found preferring sale to village merchants in spite of the fact that regulated markets were functioning within a distance of 10 to 15 kilometers. Thus, the results of the study had clearly indicated that the farmers’ selection of intermediaries was influenced by regional factors than any socio-economic factor.

**N.R. Shah (1997)** performed a study in Banaskantha district of Gujarat to identify the emerging problems in marketing of mustard. Banaskantha district was purposively selected for the selected crop viz mustard claimed 36 percent of the area and 38 percent of the production during the triennium 1987-88 to 1989-90. Similar procedure was followed in the selection of taluka (Deesa) and two villages (Tetoda
and Zerda). 50 farm households were selected randomly from different size groups (Marginal, small, medium and large). The reference period for the study was agricultural year 1991-92.

It was found that the marketable surplus was 92 percent of the total quantity of mustard. The proportionate share of marketable surplus of total production remarkably increased alongwith the operational holding size group. Nearly 98 percent of total mustard production was sold outside the village. Commission agents and traders were the main marketing agencies. They together purchased 75 percent of the total mustard production. Medium and large farmers preferred to sell to commission agents while small farmers depended on traders. A large quantity of mustard was sold between March to May. Medium and large farmers retained 6 to 7 percent of the total marketable surplus till October in order to fetch better prices. It was also studied that farmers were the victims of the unfair tricks used by the commission agents in fixing the price. The sample villages were well connected with the marketing centre but the transportation charges were high. The packing material was also found quite expensive.

Some farmers were compelled to sell the crop immediately after the harvest due to storage bottleneck. Farmers expressed the need for a separate processing plant. This would cut down the transportation cost. It could offer remunerative price to mustard growers. There should be adequate representative of farmers in the marketing committees. Procurement centre in the major mustard growing areas should be opened.

Kumar et. al (1998) conducted a study in Hamirpur district of U.P. during the agricultural year 1996-97 to examine the price spread and marketing efficiency of different marketing channels for gram in providing better prices to the producers. In this study, it was also tried to identify the problems in marketing and suggest various policy measures. Using multistage random sampling technique, the data was collected from 60 farmers, classified under three size-groups, from six villages in two blocks of the district. Besides, 55 intermediaries were also selected for the sample. The analysis of the data indicated that the farmers faced many problems in the marketing of gram like negligible storage facilities, poor transport structure, absence of strict implementation of market regulation act and involvement of a large number of intermediaries. The producer received a smaller percentage of consumer
prices for gram and higher proportion of consumer’s price was absorbed in marketing cost. The main marketing channels were:

(i) Producer-wholesaler I- miller-Wholesaler II- retailer-consumer

(ii) Producer- village traders- wholesaler I- miller-wholesaler II- retailer-consumer

(iii) Producer-miller-wholesaler II- retailer-consumer

The producer’s share in consumer price was observed to be higher in channel-III (93.92 percent) as compared to channel-II (81 percent) and channel-I (81.44 percent). The analysis of price spread in gram indicated a lower producer’s share in the consumer's price due to heavy margins taken by the intermediaries. It was suggested that to improve the share of the producer, the marketing cost involved in marketing of gram must be reduced. This is possible only when infrastructure is developed. To check the malpractices followed by the middlemen like under weighing, absence of open auction sale and unregulated collection of taxes from farmers by dalal, market regulation should be strictly implemented and better information technology be created.

Mishra et. al (1998) conducted a study to examine the extent of variation in the arrivals and relative prices of gram and soybean in two different seasons in two mandis of M.P. and the extent of variation in them. As gram is traditionally grown in Narsinghpur district, Narsinghpur mandi was selected. Similarly, as soybean was localized in Indore district, Indore mandi was selected for soybean. Month wise data on arrivals and prices of gram and soybean were studied for ten years (from 1981-82 to 1990-91) from mandi records. It was found that of the total arrivals of gram, about 52 percent occurred during harvesting season, nearly 20 percent each in the post-harvest and sowing seasons and about 8 percent in the pre-harvest season. In case of soybean, 74 percent arrivals were recorded during the harvesting season. During the post-harvest season the arrivals reduced to 15 percent and during the sowing season arrivals reduced to 7 percent. In the pre-harvest season, the arrivals decreased to 3 percent.

The price variation during different seasons was such that the minimum and the maximum prices during harvesting season were generally the lowest. However, in the three out of 10 years, the minimum and maximum prices were lower in the
pre-harvest season than in the harvest season. Thus prices, in general, were the
lowest during the harvest season and increased in post-harvest and sowing seasons
in both the cases of gram and soybean in the two selected mandis of Madhya Pradesh.

Barghese et. al (1998) performed a study to compare the growth in market
arrivals vis-à-vis production of major agricultural commodities in Rajasthan. The
compound growth rate of production and arrival of major agricultural commodities
in the state during the period 1974-75 to 1995-96 revealed that the production and
arrival of total cereals in the state increased at the same compound rate of 2.85
percent per annual. Bajra, maize and wheat emerged with positive growth rate in
both production and arrival while rice, jowar and barley recorded negative growth in
production as well as in terms of arrival. In case of total pulses, the production in the
state over the years declined at the rate of 0.93 percent per annum where as that of
market arrival declined at a lower rate of 0.3 percent per annum. It could be
concluded that the proportion of pulses retained by the producers declined over the
years. For oilseed crops market arrivals increasing at a lower rate of 10.11 percent
per annual as compared to production growth of 12.56 percent per annual. It showed
that the regulated system of markets in the state was not conductive to attract the
sale of surplus oilseeds in the regulated markets. The gap between production and
market arrivals for cereals was likely to widen in future. Hence there was a great
need to ascertain the factors limiting disproportionate arrival of some of the potential
crops of the state. Concerted efforts needed to be made to locate the factors for
decreasing preferences for the producers to sell their produce in regulated markets for
some of the major crops.

Sharma et. al (1998) performed a study to identify the processing of gram
and soybean in M.P. and suggested policy measures. Narsinghpur and Indore mandis
were selected for gram and soybean, respectively. From the jurisdiction of each
mandi five villages were selected and from each village 10 farmers were selected by
random sampling method. Thus the total sample of 100 farmers was selected. The
reference year was 1996-97. Of the total quantity of gram and soybean marketed, 46
and 43 percent was sold to the traders, respectively and of this quantity 32.6 percent
and 36 percent was sold to the traders in the village itself and to oil fed in the
villages, respectively. Slightly more than 50 percent of the gram was sold in the
mandi. Marginal and small framers preferred sale outside the village. In case of large farmers, the percentage of gram sold within village was only 27 percent. Three-fourth of the marketed surplus of gram was sold in the harvest and post-harvest seasons and remaining one-fourth was sold in the sowing season. The price of gram and soybean received within village were slightly lower than those received outside the village while the prices received in the mandi were the highest. It was found that maximum sale took place in the harvest season followed by the post-harvest season. The prices were the lowest in the harvest season and increased in the post-harvest season.

Parmod Kumar (1999) conducted a study to examine the determinants of marketed surplus crop wise and at aggregate level. The data used in the study was obtained from the field survey of 400 households in two districts namely-Kaithal and Sirsa in Haryana. 201 households from four villages in Kaithal district and 199 households from four villages in Sirsa district were surveyed during the agriculture year 1993-94. Multi-stage random sampling technique was used for sample selection. In the study, it was found that marginal farmers marketed 67.73 percent of the total output, small farmers marketed 73.95 percent, medium farmers marketed 87.79 percent and large farmers marketed 90.78 percent of the total output. It was studied that the co-efficient of output in case of pulses was 0.181. Paddy, oilseeds and cotton were highly commercial crops as their co-efficient of output exceeded 0.99. Regressing marketed surplus on the net operated area (NOA) under the crop instead of output showed that area was highly significant in case of all the crops with a positive co-efficient. The co-efficient of net operated area (NOA) crop-wise showed that one acre increase in net operated area (NOA) leads to one quintal increase in marketed surplus of pulses and five quintal in case of oilseeds. The value of $R^2$ was much higher when output was taken as independent variable than the area under the crop in case of all crops except pulses. There was significant negative relationship between household size and marketed surplus in case of all crops except-pulses and cotton. Marketed surplus falls significantly with the rise in proportion of unirrigated area to gross cropped area only in case of wheat and cotton. Distance located from the village was significant in main crops like wheat, paddy, cotton and even pulses. In case of irregular crops like oilseeds and coarse cereals, the co-efficient was significant with negative sign. Loan per acre turned to
be insignificant in almost all the corps, therefore, denying any extra pressure on the farmers in selling their produce due to indebtedness. Thus, the most important variables affecting the marketable surplus crop-wise were output and area cultivated under the respective crop with positive or direct effect and family size with negative or indirect effect.

**Malik et. al (1999)** conducted a study to examine marketing pattern and marketing problems of rapeseed and mustard in Haryana. For the sample selection, Hisar and Bhiwani districts were purposively selected as they accounted for the highest area and production in the state. Two main markets i.e. Hisar and Hansi markets from Hisar District and Bhwani and Charkhi Dadri markets from Bhiwani district were selected. From each market, two villages were randomly selected with in a radius of 10 Kilometers. In the last stage of sampling, 62 small farmers, 38 medium and 26 large farmers were randomly selected from these eight villages. Both time series and cross sectional data was used. Time series data was collected from market committees of the selected markets for the period 1985-86 to 1995-96. It was found that on an average per farm marketable and marketed surplus of rapeseed and mustard was 98.81 and 97.13 percent of total stock, respectively. Both marketable and marketed surplus of rapeseed and mustard increased in absolute quantities with the increase in farm size, whereas in percentage terms it showed inverse relationship with the farm size. In Hisar market, the arrivals in peak period ranged from 56 to 88 percent of the total arrivals while in Hansi market it ranged from 81.75 to 94.79 percent of the total arrivals in different years in peak period. In the lean-period, the arrivals ranged from 2.49 to 12.0 percent of the total arrivals in Hisar market while it ranged from 0.98 to 7.84 percent in different years in Hansi market. The peak-period arrivals ranged from 84.76 to 95.50 percent and in the lean period the arrivals were 0.75 to 3.70 percent in the different years in Bhiwani market. There was no specific change in the marketing pattern of the crop. There still existed glut of arrivals in the market during the post harvest period (peak-period) of rapeseed and mustard. In most of the years, there was increase in prices in the lean and mid-periods but the farmers could no avail the benefit of higher prices on account of their poor financial position and lack of storage facilities. The sample farmers faced various problems in marketing of rapeseed and mustard. Majority of farmers reported that no market guidance for proper arrangement to
transport the surplus produce from farm to market was provided. The farmers faced many other problems such as lack of storage facilities, large number of middlemen, lack of grading and standardization, malpractices in weighing, delay in payment, etc.

Patan et. al (2002) conducted a study on marketing problems and pattern of disposal of mustard in Banaskantha district of Gujarat state. The study was undertaken considering the large area (1563 hac.) under mustard cultivation in Banaskantha district, big markets for mustard and agriculturally advancement, for the year 1992-93. For selecting four talukas (Palanpur, Deesa, kankarej and Dhamera), two villages from each taluka and 10 mustard growers from each village, multistage random sampling technique was used. Marketing efficiency of channel-III i.e., when producers sold their produce through co-operatives was found to be the most efficient with 34.21 marketing efficiency whereas, channel I and channel II had 17.01 and 19.33 marketing efficiency. Even though farmers preferred to sell through regulated markets i.e., channel II, marketing efficiency of channel III was the highest. Most of the farmers included in this study were not able to sell their produce in the lean period and at the best price because of the poor financial position of farmers (77.22 percent), followed by inadequate grading and cleaning facilities in market yards (53.16 percent), lack of storage facilities (45.5 percent), lack of declaration of procurement price and poor co-operative structure (16.46 percent).

Sharma et. al. (2002) Conducted a case study entitled “Production and marketing of Rapeseed and Mustard in Block Akbarpur, District Kanpur (U.P.)” during the year 2000-01. The main objective of the study were (i) to work out the cost of production of rapeseed and mustard on the sample farmers (ii) to estimate the marketable surplus, marketing cost and price spread in the marketing of rapeseed and mustard under different Channels of distribution. The study confined to 60 farmers under the three size groups viz. below 1 hectare, 1-2 hectare and above 2 hectare randomly selected in proportion to the number of farmers falling in each size groups from 6 randomly selected villages from the selected blocks. The study concluded that on an average 15.23 percent of area has been observed under rapeseed-mustard to the total cropped area to the sample farms. The most common marketing channels in the study area were:-
(iv) Producer-wholesaler I- miller-Wholesaler II- retailer-consumer
(v) Producer- village traders- wholesaler I- miller-wholesaler II- retailer-consumer
(vi) Producer-miller-wholesaler II- retailer-consumer

It was found that the highest quantity of rapeseed and mustard was sold through channel III being 45.86 percent followed 21.14 percent being lowest in channel II. The marketing charges paid by middlemen was the highest being Rs 342.85 in channel–II and lowest being Rs. 272.15 in channel-III. Similar case was observed as regards to margin of the middleman. The study concluded that the producer’s share although was highest being 70.15 percent in channel III and lowest being 68.03 percent in channel II did not show any significant difference of producer’s share among three marketing channels. As regards to study of marketing efficiency, it has been concluded that marketing efficiency was found to be inversely correlated with the marketing cost.

Nandal et. al. (2002) conducted a study to examine the marketing pattern of rapeseed and mustard along with to work out marketing cost and margins in the marketing of rapeseed and mustard. Bhiwani market was selected for conducting the study. The study showed that during the post-harvest period arrivals of rapeseed and mustard were the maximum (78 to 91 percent) of the total arrivals while in mid and lean period, the arrivals were between 5 to 14 percent and between 2 to 9 percent, respectively. With the passage of time, the arrivals proportionately decreased in lean period and increased in mid-period. This was due to the lack of with holding capacity of the producers on account of poor financial position and lack of storage facilities. It was also found that prices for the crop during the mid and lean period were higher than the peak-period and this was due to the less stock available for supply with the producers and more demand by purchasers for rapeseed and mustard. It was further revealed from the study that in the marketing of rapeseed and mustard, the producer’s margin in the consumer’s rupee was 84.21 paisa. Cost of transportation was the major item of expenses incurred by the producer in selling his produce in the market. The expeller took the margin of 17.32 Rs per quintal, while the retailer’s margin was found to be Rs. 45.16 per quintal of rapeseed and mustard. In spite of the different types of cost incurred by the processor, the retailer’s margin
was quite high as compared to the processor. This showed that the margin of the producer was quite low. For this, the retailer could be branded as exploiter on account of his high margin and efforts should be made to reduce this margin of the retailer and benefits of this reduce can be given to the producer.

Finally we conclude this chapter by taking note of certain conclusions that emerge from these studies. Firstly, most of the studies on marketing pattern are based on secondary data on market arrivals and speak of relationship between market arrivals and prices. Secondly, very few studies tried to find out the constraints responsible for the poor arrivals of agricultural produce in regulated market. Thirdly, very few studies addressed the problems faced by farmers in marketing their produce in regulated markets. Fourthly, most of the above studies did not focus on farmers’ side properly and present the role of the farmer as a part of marketing channel. But in real, the farmer plays an eminent role in agricultural marketing. Keeping in view the main role of the farmer in agricultural marketing, the present study studies some aspect already covered in past studies with a different methodology examining the primary part of marketing channels i.e. farmer to purchasing agency from the farmer’s point of view.

Since the farmers in Haryana are drifting away from gram and mustard cultivation over the past few years. So, here, an attempt has been done to look into the marketing pattern of gram and mustard along with marketing cost. The marketing pattern of gram and mustard is studied with respect to place of sale, time of sale, agency of sale and price of sale. Here farmer’s behaviour with respect to time, place and agency of sale is studied. Since farmer’s decision is influenced by various facts such as proximity to the markets, availability of transportation means, accessibilities of physical infrastructure facilities in regulated markets, storage facilities, his economic viabilities. So all these mentioned facts has been addressed.
Table 4.3.5
Agency wise Sale of Mustard by Different Size-Groups in Hisar District During 2007-2008

<table>
<thead>
<tr>
<th>Category of farmers</th>
<th>Agency of sale</th>
<th>Traders within village Average Price (Rs./quintal)</th>
<th>Traders Outside village Average Price (Rs./quintal)</th>
<th>Average Wholesale/commission agents Price (Rs./quintal)</th>
<th>Average Price Direct to consumer (Rs./quintal)</th>
<th>Average Price Cooperatives (Rs./quintal)</th>
<th>Average Price Oil millers (Rs./quintal)</th>
<th>Average Price Total quantity sold (Rs./quintal)</th>
<th>Average Price All farmers (Rs./quintal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marginal</td>
<td></td>
<td>93.50</td>
<td>34.95</td>
<td>1714.50</td>
<td>1740.00</td>
<td>-</td>
<td>1750.00</td>
<td>-</td>
<td>16.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(52.16)</td>
<td>(19.50)</td>
<td>(18.74)</td>
<td>(0.56)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(9.04)</td>
</tr>
<tr>
<td>Small</td>
<td></td>
<td>141.95</td>
<td>54.05</td>
<td>1735.00</td>
<td>1755.40</td>
<td>1.50</td>
<td>1760.00</td>
<td>-</td>
<td>13.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(48.89)</td>
<td>(18.62)</td>
<td>(27.33)</td>
<td>(0.52)</td>
<td>(0.52)</td>
<td>-</td>
<td>-</td>
<td>(4.65)</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td>96.50</td>
<td>130.80</td>
<td>1780.20</td>
<td>1830.50</td>
<td>2.60</td>
<td>1782.00</td>
<td>-</td>
<td>75.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(13.77)</td>
<td>(18.74)</td>
<td>(56.45)</td>
<td>(0.37)</td>
<td>(0.37)</td>
<td>-</td>
<td>-</td>
<td>(10.7)</td>
</tr>
<tr>
<td>Large</td>
<td></td>
<td>260.60</td>
<td>223.80</td>
<td>1800.00</td>
<td>1850.00</td>
<td>6.00</td>
<td>1788.00</td>
<td>-</td>
<td>106.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(20.86)</td>
<td>(17.84)</td>
<td>(52.30)</td>
<td>(0.48)</td>
<td>(0.48)</td>
<td>-</td>
<td>-</td>
<td>(8.48)</td>
</tr>
<tr>
<td>All farmers</td>
<td></td>
<td>592.55</td>
<td>443.60</td>
<td>1779.50</td>
<td>1833.73</td>
<td>11.10</td>
<td>1779.39</td>
<td>-</td>
<td>211.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(24.48)</td>
<td>(18.83)</td>
<td>(48.02)</td>
<td>(0.46)</td>
<td>(0.46)</td>
<td>-</td>
<td>-</td>
<td>(8.77)</td>
</tr>
</tbody>
</table>

Source: Survey of the field

(Figures in the parentheses Represents the percentage to the total quantity Sold in the Category).
Table 4.3.7
Agency wise Sale of Mustard by Different Size-Groups in Bhiwani District During 2007-2008

<table>
<thead>
<tr>
<th>Category of farmers</th>
<th>Agency of sale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traders within village</td>
</tr>
<tr>
<td>Marginal</td>
<td>102.37 (53.47)</td>
</tr>
<tr>
<td>Small</td>
<td>158.71 (51.77)</td>
</tr>
<tr>
<td>Medium</td>
<td>240.90 (29.96)</td>
</tr>
<tr>
<td>Large</td>
<td>274.77 (25.02)</td>
</tr>
<tr>
<td>All farmers</td>
<td>776.75 (32.36)</td>
</tr>
</tbody>
</table>

Source: Survey of the field

(Figures in the parentheses Represents the percentage to the total quantity Sold in the Category).
Table 4.3.3
Agency wise Sale of Gram by Different Size-Groups in Bhiwani District During 2007-2008

<table>
<thead>
<tr>
<th>Category of farmers</th>
<th>Agency of sale</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traders within village</td>
<td>Average Price (Rs./quintal)</td>
</tr>
<tr>
<td>Marginal</td>
<td>57.90 (45.95)</td>
<td>1614.87</td>
</tr>
<tr>
<td>Small</td>
<td>69.30 (48.21)</td>
<td>1620.31</td>
</tr>
<tr>
<td>Medium</td>
<td>56.40 (28.85)</td>
<td>1641.36</td>
</tr>
<tr>
<td>Large</td>
<td>89.30 (24.10)</td>
<td>1689.51</td>
</tr>
<tr>
<td>All farmers</td>
<td>272.90 (32.65)</td>
<td>1646.15</td>
</tr>
</tbody>
</table>

Source: Survey of the field
(Figures in the parentheses Represents the percentage to the total quantity Sold in the Category).
### Table 4.3.1
Agency wise Sale of Gram by Different Size-Groups in Hisar District During 2007-2008

<table>
<thead>
<tr>
<th>Category of farmers</th>
<th>Agency of sale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traders within village</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Marginal</td>
<td>73.55 (51.70)</td>
</tr>
<tr>
<td>Small</td>
<td>92.90 (58.76)</td>
</tr>
<tr>
<td>Medium</td>
<td>82.60 (38.39)</td>
</tr>
<tr>
<td>Large</td>
<td>97.85 (23.48)</td>
</tr>
<tr>
<td>All farmers</td>
<td>346.90 (37.21)</td>
</tr>
</tbody>
</table>

Source: Survey of the field

(Figures in the parentheses Represents the percentage to the total quantity Sold in the Category).