CHAPTER-II
REVIEW OF LITERATURE

Literature review aims to portray the critical points of current and collected knowledge on the topic under study. It seeks to describe, summarize, evaluate, clarify and integrate the content of primary reports. Moreover it forms the basis for the justification for future research in the area. As such, review of literature has become an inevitable part of any scientific investigation. Hence a brief review of available literature, related to the study is presented under following heads.

2.1 Marketing efficiency of groundnut growers
2.2 Factors affecting the marketing efficiency
2.3 Financial feasibility of groundnut processing unit
2.4 Technical efficiency of groundnut oil industries

2.1 MARKETING EFFICIENCY OF GROUNDNUT GROWERS

Joshi (2011) analyzed marketed surplus and price spread for brinjal in Western Uttar Pradesh. The marketed surplus of the medium category of farms have slightly higher surplus than marginal, large and small categories of farms. Their relative proportion was 94.84 per cent, 94.51 per cent, 94.49 per cent and 94.48 per cent respectively of the total production. The share of producer in consumer rupee is high in channel-III were there are less number of intermediaries. The marketing cost incurred by wholesaler in different channels were estimated 5.01 per cent, 6.39 per cent and 7.88 per cent of the consumer price respectively and their corresponding net margins were 9.68 per cent, 9.61 per cent and 10.23 per cent of the price paid by the consumer.

Makadia et al. (2011) studied economics of production and marketing of summer groundnut in Tapi district of South Gujarat. Total sample size comprised 40 farmers, 10 wholesalers from Vyara APMC and 20 retailers from surrounding area. The per quintal marketing cost of summer groundnut was found to be Rs. 64, Rs. 85 and Rs. 105 for farmers, wholesalers and retailers, respectively. The price spread and marketing margin were Rs. 783 and Rs. 529 per quintal, respectively. The producer’s share in consumer’s rupee was estimated to be 77.82 per cent.

Prasad et al. (2013) studied economics of production and marketing of groundnut in block Behandar in district Hardoi (U.P.). The marketing channels
identified channel I producer - wholesaler + miller - wholesaler II - retailer - consumer (regulated market) and channel II producer - village trader – wholesaler – retailer - consumer (unregulated markets). About 28.22 per cent of the total surplus was sold through channel I, while remaining 71.77 per cent throughout channel II. The producer share in consumer price was little higher (87.10 per cent) in channel I as compared to channel II (85.31 per cent). Total marketing cost was Rs. 151 per quintal in channel I as compared to Rs. 87 in channel II.

Singh and Kaur (2013) conducted study in Punjab state to estimate the marketing costs, margins and price spared in the marketing of milk under different channel. The producers share in consumer’s rupee was the highest in channel I. The next best was channel V where producer got 71.09 per cent of consumers rupee and this was also supported by the higher index of marketing efficiency in this channel II lack of good marketing network, costly medicines and feed, and shortage of improved breed animal were some of the problem faced by dairy farmer in Punjab. There is a need to strengthen structure of organized milk marketing system to save the producers from the clutches of intermediaries in order to stimulate the growth of dairy industry in the state.

Chavhal et al. (2014) studied marketing cost, marketing margin and price spread of soybean in Parbhani district of Maharashtra. Total 30 market intermediaries and 80 cultivator’s were studied. Three marketing channel were identified for selling of soybean viz. channel I producer – village merchant – wholesaler – oil processor, channel II producer – wholesaler – oil processor and channel III producer – oil processor. They examined the production of was 24.47 quintals on 1.50 hectares and its retention for seed was 0.96 quintals. The result revealed that the quantity of soybean as 3.91, 11.73 and 7.87 quintals were marketed through channel I, channel II and channel III with percentage 15.98, 47.93 and 32.17, respectively. Thus total marketed surplus of soyabean was 23.51 i.e. 96.07 per cent. It was observed that per quintal marketing cost was higher in channel I i.e. Rs. 169.69 followed by Rs. 138.65 in channel II and Rs. 38.80 in channel III, respectively. Producer’s share in consumer’s rupee was maximum in channel III (98.93 per cent) while minimum in channel I (83.14 per cent).

Mane et al. (2014) studied price spread in different channels of groundnut in Maharashtra. Total 96 summer groundnut growers, 5 wholesalers, 5 retailers and 5 town retailers were selected to investigate marketing cost and marketing margin in groundnut marketing. The result revealed that channel III was dominant through which 11.95
Review of Literature

quintals of groundnut was marketed followed by channel I (6.39 quintals) and channel II (0.44 quintals). The result, revealed that price paid by consumer was the highest as in channel III (Rs. 6470.41) in which producer’s share in consumer’s rupee was 71.89 per cent and price spread was found to be Rs. 2119.12. It is revealed from the study that the net price received by producer was the highest in channel III followed by that of channel II and channel I.

Murty et al. (2014) studied value chain analysis of castor in Mahabubnagar district of Andhra Pradesh. It is revealed from the study that there exist four marketing channels of which channel I (producer – trader – oil mill) is predominant and we farmers sell their 99 per cent of produce to nearby traders (at jakler village). The producer’s share in consumer rupee was found to be 45.74 per cent which is very low and the margins received by traders and processors were Rs. 145.7 and Rs. 1470.83 per quintals, respectively.

Nzima et al. (2014) studied the structure, conduct and performance of groundnuts markets in northern and central Malawi. Five marketing channels were identified. It was observed majority of farmers 85.2 per cent sold their produce to traders consisted of vendors, retailers, wholesalers and individual households or fellow farmers. About 60.9 per cent of farmers sold their produce to vendors 22.6 per cent to wholesalers 7.0 per cent to retailers and 7.0 per cent to fellow farmers. Vendors are the major buyers of groundnut produce from farmers because they are accessible and available all the time. Farmer 29.6 per cent also sold groundnut produce to consumers at designated government markets. Farmer’s share was lowest 73.76 per cent in channel I and highest 100.00 per cent for channel IV. The producer share increased to 100.00 per cent because farmers played the role done by vendors and retailers and took the profits that could have gone to them. The producer share for channel II and III was the same 75.63 per cent despite the difference in the number of players in between each of the channels. The reason for the same producer shares was because farmers sold their produce to all the types of traders in their locality. So, farmers’ selling price was the same for all the channel but the consumer price differed.

2.2 FACTORS AFFECTING THE MARKETING EFFICIENCY

Mariyono and Battharai (2009) analyzed factors that determine level of pesticide use in chili farming. Farmers also apply very high doses of pesticides on chili field. There is a wide range of variation on level of pesticide use across farmers and
Review of Literature

across the location within the province. The result shows that factors leading to higher doses of application of pesticides are market price of chili, number insect pest on the field as observed by farmers, non-hybrid variety of chili grown, more frequency of spray in a season and production location. Factors that contribute in less use of pesticides use are increased price of pesticides, higher level of farmers’ education, long year of farming experience, more number of diseases observed by farmers and large acreage cultivated to chili. On an average, farmers are using about 12 kg of pesticide per hectare of chili. To reduce pesticide use in chili farming, farmers need more training and exposure to the improved crop management practices, growing resistant to common pest and diseases, reduce the frequency of spray and apply single method of targeted pesticide.

Chand et al. (2010) studied price spread, marketing efficiency and constraints of carrot marketing in Sri Ganganagar district of Rajasthan. Study identified two marketing channel viz. channel I producer – trader/wholesaler – commission agent – retailer – consumer and channels II producer – commission agent – retailer – consumer. It is revealed from the results that marketing cost and marketing margin had negative and significant effect on marketing efficiency. The volume of produce had positive and significant relationship with marketing efficiency while number of marketing intermediaries and open market price were found to be non-significant.

Han and Che (2010) analysed supply factors affecting the housing price in Beijing. Construction, installation costs, land costs, development area of completion and real estate investment as a representatives of supply factors. It is seen from the result that construction and installation costs and the land prices were the important factors affecting the housing price and the variables explained about 99.9 per cent of the variation which shows that model has good explanatory power.

Sidhu et al. (2011) analysed marketing efficiency of green peas under different supply chains in Punjab. Study identified two marketing channel viz. channel I producer – wholesaler- retailer – consumer, channel II producer – retailer – consumer and channel III producer – consumer. It was analysed the factor affecting the marketing efficiency has revealed that with one per cent increase in marketing margin and costs, the marketing efficiency declined by 0.45 per cent and 0.44 per cent, respectively. The impact of cost in reducing marketing efficiency has been found smaller than that of margin. It has been inferred that marketing efficiency increases by 0.99 per cent with one per cent increase in the net price received.
Kalule and Kyanjo (2013) studied the marketing margins and efficiency of cooking banana retail trade in Kampala city in Uganda. The result revealed that factors such as trade volume and age of household had positive and significant import on marketing margin of small size bunches which explain 32 per cent of the variation. While 30 per cent of the variation in marketing margin of big size bunches was explained by handling cost, trade volume and size of household. Among which handling cost and trade volume had positive relationship while size of household had negative relationship with marketing margin of big size bunches. Factors such as trade volume and age of household had positive and significant relationship on marketing efficiency of small size bunches which explain 0.65 per cent of variation. While 0.63 per cent of the variation in marketing efficiency of big size bunches was explained by trade volume, household size and trading experience. Among which rental costs and handling costs negative relationship in both small and big size bunches.

Xaba and Masuku (2013) studied factor affecting the productivity and profitability of vegetables production in Swaziland. A two-stage sampling technique was used to collect data from 100 vegetable farmers. Conventional vegetables (cabbage, carrot, onion, tomato) and baby vegetables (baby corn and baby marrow) were studied. The results showed that the factors that significantly affected productivity of vegetable farmers were access to credit, selling price, fertiliser quantity, distance to market and gender of the farmer. Selling price of carrot had a positive relationship with the productivity of vegetable farmers, suggesting that when the selling price of carrot increase by one unit, all else equal, the quantity of carrot produced would increase by 0.417 kilogrammes. The determinants of profitability of vegetable production were level of education, land under vegetable production and type of marketing agency. For example, with an additional year of education, profit would increase by 0.304.

Ganapathi (2015) studied factors affecting marketing of jasmine at Dindigul district of Tamil Nadu. The result revealed that the price, lack of infrastructure, fraudulent practices and lack of export promotions are the factors affecting marketing of jasmine. The results also showed that there is significant difference between socio-economic status of jasmine growers and factors affecting marketing of jasmine. It revealed that about 59 per cent of the variation in dependent variable satisfaction of jasmine growers about marketing of jasmine is explained by the independent variables factors affecting marketing of jasmine. The f value of 19.67 is statistically significant at one per cent level indicating that the model is significant.
Tiri et al. (2015) assessed the factors affecting marketing efficiency of sweet orange among wholesalers and retailers in Kano metropolis, Nigeria. A two-stage sampling technique was used in collection of cross sectional data (34 Wholesaler and 65 Retailers) using well-structured questionnaires. Descriptive statistics and multiple regression analysis were used to analyse the data. The result of regression analysis revealed that the age of the wholesalers and retailers marketing efficiency. The household size membership of association were with marketing efficiency positively significant. The result also showed that the marketing efficiency of retailers (66.36 per cent) was higher than that of wholesaler (51.70 per cent).

2.3 FINANCIAL FEASIBILITY OF GROUNDNUT PROCESSING UNIT

Ninan (2006) studied non-timber forest products and biodiversity conservation in Tribal area of South India. The result revealed that economics of Non-Timber Forest Products (NTFPs) and the economic values appropriated by tribals in a protected area. The net present value of NTFP benefits derived by the tribal households were over Rs 30,378 per household (at 12 per cent discount rate for cash flows over 25 years). Interestingly, when the external costs borne by third parties (i.e., coffee growers) are taken into account, the net NTFP benefits turned negative.

Sedaghat (2006) analysed the economic viability of production and processing of pistachio in Iran both in short run and long run. The selection of sample for the study, a two stage cluster random sampling technique was adopted. In the first stage 40 villages and in the second stage 100 sample farmers were selected randomly based on the population of each village. In addition to the sample farmers, 10 processors – cum-exporters were randomly selected. The economic viability of the three varieties of pistachio gardens, variety-wise, was assessed using the discounted cash flow measures. The net present value of the varieties fendoghi, kaleghoochi and akbari was negative -8402774, -8991670 and -6671439 respectively. They indicating that pistachio production is not viable. This is corroborated by the IRR values of less than the required rate of 18 per cent and the B-C ratio of less than unity. The major reasons for the non-viability of pistachio gardens in Iran are low yields, high cost of production and low prices of the output. The economic viability analysis of the processing servicing and export terminals. they indicated by high positive values of NPV is 26488010 and 1502636493 respectively, more than unity of B-C ratio (1.17 and 2.79) and high IRR is 21.32 per cent and 52.20 respectively.
Chand and Jangid (2007) studied economic viability of henna in semi-arid Rajasthan. Total 100 farmers were selected based on the probability proportionate to the number of farmers in each selected village. Henna is a perennial plantation crop with economic life-span of 25 years. It was observed highly capital intensive crop as it requires about Rs 30,800 per ha for establishment. On an average, it provides a net return of about Rs 8,300 per ha with BCR more than one, positive NPV and IRR higher than the opportunity cost of capital. Thus henna cultivation has been found profitable and economically viable and provides a sustainable income to the farmers of arid fringes of Rajasthan.

Gangwar et al. (2008) studied economic evaluation of peach cultivation in North Indian plains (Punjab and Uttarakhand). The investment in peach orchards was found as a profitable business. The internal rate of return (IRR) was found to vary from 20.98 per cent to 23.80 per cent depending on the size of peach orchards. The net present value, benefit-cost ratio and IRR at 12 per cent discount rate was Rs. 44,807, 1.681 and 22.20 per cent, respectively in an average situation. The economic life of peach orchards in Punjab and Uttarakhand was calculated for 24 years.

Reddy and Kumar (2010) studied mango processing plants at Chittoor district of Andhra Pradesh. Total 40 sample from small scale, 4 from medium scale and 2 from large scale units were selected. It was observed that the IRR of small firms (19.31 per cent) is the highest followed by that of large firms (17.5 per cent) and medium firms (13.87 per cent). The B:C ratio of small firms is higher than that of large firms for all the discount rates. On the other hand based on the NPV criteria, large firms (Rs.679.7) ranked first followed by small and medium firms (Rs.159.1) and (Rs.129.6) respectively at 10 per cent discount rate.

Karthick et al. (2013) studied mango processing industry in Tamil Nadu. Net income realized from the industry was 272 lakh and net return per kilogram of pulp was Rs 3.61. Further financial ratio, operating ratio, gross ratio and rate of return on investment revealed the operational efficiency of firms. Financial feasibility analysis indicated that the investment on mango pulp processing plant is financially viable.

Datarkar et al. (2014) studied economic processing of mango at Gadchiroli district of Maharashtra. The results revealed that, the processing unit had a capital investment of Rs. 6.42 lakh. Net returns from mango pickle and amchur were Rs. 19,746.71 and Rs. 9,265.23, respectively. Input-output ratio for mango pickle was
Review of Literature

1:2.72 and for amchur it was 1:2.35. Break-even quantity was observed for mango pickle and amchur was 6.00 kg and 7.37 kg, respectively.

Shivanaikar et al. (2014) studied financial appraisal of organic and inorganic jaggery preparation at Bagalkot district of Karnataka. Total selected organic and inorganic sugarcane cultivating farmers were 120 and 36 organic and inorganic jaggery processing units. The net present worth or value (NPW) of organic and inorganic jaggery processing units at 12 per cent discount rate were 28, 04,239 and 25, 74,475 respectively over the average life span of jaggery processing unit (10 years). The break even output of organic and inorganic jaggery processing unit were 77.54 tonnes and 91.46 tonnes respectively. The internal rate of return (IRR) in organic and inorganic jaggery processing was more than 100 per cent. The benefit-cost ratios of organic and inorganic jaggery processing were 1.26 and 1.22 respectively.

2.4 TECHNICAL EFFICIENCY OF GROUNDNUT OIL INDUSTRIES

Ibrahim et al. (2010) evaluated the economic empowerment potentials of groundnut processing by women in rural areas of North central Nigeria. 100 women processors were randomly selected from the study area. The input is variable cost items considered include capital (cost of transportation, firewood, and packaging), labour, cost of grinding, water, salt and raw groundnut and the fixed cost items include; drums, basin, processing machine, frying pan and mortar. Output is net farm income they have to sell both groundnut cake and groundnut oil. The average pure technical and scale efficiency scores were 80 and 83 per cent respectively.

Adanacioglu and Olgun (2010) studied profitability and efficiency in the cotton ginning industry from Aegean region of Turkey. Total 15 cotton ginning industries were interviewed in survey. Data envelopment analysis was used to find out the efficiency of cotton ginning industry. The data was analysed also reading to CRS (constant returns to scale) and VRS (variable returns to scale) models. The results it was observed the average efficiency scores of the 15 ginneries interviewed were found to be 0.888 (88.53 per cent) in both an input and output oriented CRS model, 0.935 (93.52 per cent) in the output-oriented VRS model, and 0.942 (94.18 per cent) in the input-oriented VRS model. Also four of the 15 ginneries interviewed (26.67 per cent) were found to be full efficient (1.000, or 100 per cent) according to the CRS model, while seven ginneries (46.67 per cent) were found to be full efficient according to the VRS model. The minimum efficiency score was observed to be 0.573 (57.34 per cent) in both an input
and output oriented CRS model and it was 0.631 (63.13 per cent) in the output-oriented VRS and 0.744 (74.37 per cent) in the input-oriented VRS.

Reddy and Bantilan (2011) studied competitiveness and efficiency in groundnut oil sector of Anantapur district in South India. Total 320 farmers and 29 processing units (10 expellers and 19 power-operated ghanis) were selected to estimate technical and allocative efficiency of farmers and processors. Estimation of allocative inefficiencies in the use of different input levels in groundnut production revealed that the critical inputs like irrigation, fertilizers, seed and machine labour were under-utilized at given production costs. The mean technical efficiency (MTE) of farms ranges from 57 per cent to 79 per cent for small and large farmers, respectively. The efficiency in groundnut processing is staggeringly low (only 41 per cent) compared to other industries in India. The mean efficiency of ghanis is 30 per cent which is significantly lower than baby-expellers (63 per cent). The co-existence of inefficient ghanis along with more efficient expellers in rural areas may be due to the lack of short-run flexibility needed to convert ghanis into baby-expellers because of higher adjustment costs.

Miller and Naulas (2012) determined the efficiency by using Data Envelopment Model among 201 US bank by using 10 factors including 6 outputs (commercial and industrial loans, consumer loans, real estate loans, investment, total non transaction deposits, total non interest income) and 4 input (total transaction deposits, total non transaction deposits, total interest expense total non interest expense). They conclude that the foreign bank were more efficient than rest of the banks in United States.

Afzal and Ayaz (2013) analysed the efficiency of 22 food producing companies of Pakistan for the period 2007-2010. The study included the capital, salaries, materials and energy as the inputs while net sales is taken to be the output variable. The year-wise technical efficiency scores showed that the performance of the food producing companies improved over the past four years. The overall efficiency analysis suggests that the industry level technical efficiency scores ranged between 0.5 and 0.8 in the year 2007 which was increased to 0.9 in the year 2010. The food industry was most efficient (90.7 per cent) in the year 2010 when the technical efficiency score assuming VRS with output orientation was considered.

Dwivedi and Ghose (2014) used Data Envelopment analysis (DEA) to calculate the scale efficiency measures of the public and private sugar manufacturing firms of the Indian sugar Industry (2006 to 2010). Within DEA framework the input and output oriented Variable Return to Scale (VRS) and Constant Return to scale (CRS) model is
employed for the study of Decision Making Units (DMUs). A representative sample of 43 firms which account for a major portion of the total market share is studied. They observed 15 firms perform better than the industry average efficiency for both CRS and VRS.

Tafamel and Akrawah (2015) studied cost efficiency of oil and gas industry in Nigeria. It was used a sample of 9 quoted oil and gas companies in Nigeria that have consistently published their audited annual financial report between the periods under study. The adopted a data envelopment analysis to test the efficiency of the various companies under variable returns to scale (VRS), constant return to scale (CRS) and scale statistics and correlation analysis. The used output variables were taken as the gross profit, profit after tax, return on equity and return on assets, and input variables were taken as the cost of goods sold, staff cost and operating cost. It was revealed that the technical efficiency scores that only five oil and gas companies out of the 9 were efficient while 4 were found to be relatively inefficient in turning their inputs to relatively higher output. The five efficient oil and gas companies that were able to use their input to generate better output.

Bing and Peng (2017) analyzed 16 listed commercial banks in Chaina during 2006-2015, selecting fixed asset net value, employee number and operating expenses as input index, loans, other profit assets and pretax profit as output index. It was used CCR and BCC model to measure the technical efficiency and pure technical efficiency and scale efficiency of bank. On that basis using super efficiency DEA method to analyze further between efficient decision making units of listed banks. The result shows that the average technical efficiency trend of china’s listed commercial banks is roughly “U” in the past ten year. The average technical efficiency showed a decreasing trend in 2006-2009 four year and in 2010-2015 year, the average technical efficiency of bank showed an increasing trend. They found that the Bank of Beijing Co. Ltd, Industrial Bank Co. Ltd and China Merchants Bank were ranked the top three and their efficiency value all greater than 1, comparing with the other joint-stock banks efficiency, four major state-owned banks still have not a small gap, the state-owned commercial banks need great improvement in efficiency.