

Review of literature encompassing consumer purchase behavior observed at the time of marketing of horticulture crops worldwide

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Introduction:

There has been concern in recent years regarding the efficiency and effectiveness of the various techniques used while marketing horticultural crops in India. The inefficiencies and inadequacies of the initiatives and efforts put in by various agencies are ultimately resulting in high prices for these crops on the one hand and also violent fluctuations in retail prices quoted to the consumer on the other. Further, only a small pie of the price paid by the consumer is reaching the farmers. Marketing of horticultural crops is a complex activity especially because of perishability, seasonality and bulkiness of these crops.

The efficiency of marketing process in India has been of significant concern in the recent years. Poor efficiency in the marketing channels and inadequate marketing infrastructure are believed to be the main causes for all these evils. Indian farmers continue to depend very heavily on middlemen particularly in the case of fruits and vegetables for marketing whereby their bargaining power is restricted. Understanding the buyer behavior is of utmost importance in so far as agricultural produce is concerned. This is most important for the marketers of horticultural produce as these items are not essential for the day-to-day living of an individual and the customers have unlimited choices. Take the case of apples. For many years, we had to be contented with the apples grown locally; however, during the past few years, our people can go for imported apples. Further, there is a marked shift in both the quantity and the quality of the items being bought and consumed by the youth today as many of them had an opportunity to visit different parts of the globe and have an idea about the availability of new varieties of produce. What is true in the Indian context is equally true in case of many of the emerging market economies thereby understanding consumer purchase behavior is the need of the hour.

Objectives of the study:

This study is taken up to understand the prime reasons for the poor efficiency in the marketing of horticulture crops in India and the factors affecting Consumers' purchase behavior through review of literature. The study also aims at highlighting the best practices used elsewhere for ensuring successful marketing of these crops.

Research Methodology:**Table: 1**

Type	Source	Purpose	Methods
Library Research	Secondary	To study the extent of work carried on in the related area	Literature review of research papers in reputed journals, conference proceedings, reports, magazines, newspaper articles etc.

Review of literature:

Team Yes Bank (2012) In India: Currently, small and marginal farmers receive a paltry percentage of the final market price and the major chunk is pocketed by the intermediaries, who add to costs; and not necessarily add value across the food chain. It is necessary to move to a system where efficient system of market intermediaries is created in the agricultural sector. Farmers in India have traditionally been price takers and the middlemen have been price makers. In order to create more value for farmers, impetus is required on agricultural infrastructure and direct-to-farmer access so that any exploitative tendencies are cut short. **California Legislative Information, February (2013):** A Regulatory scheme should be developed that provides the flexibility that will make direct marketing a viable marketing system. The legislative council has introduced 'Community based agriculture' in order to assist producers in organizing certified farmers' markets, field retail stands and other forms of direct marketing by providing technical advice on marketing methods and in complying with the regulations that affect direct marketing programs. **Frontline, July 2013:** In the PPP framework for agricultural development, corporates would have complete flexibility in designing scheme or programme. The Food and Agriculture Integrated Development Action (FAIDA) report released in April, 2013, suggested a 12-point plan of action to take PPP forward. The suggestions include creating scalable farmer-industry partnerships to encourage various emerging models such as FPCs. The report stresses that private capital and world class expertise will ensure the adoption of latest technologies and practices in all parts of the agriculture and food value chain. It also calls for a favorable policy regime to improve agricultural marketing mechanisms so that farmers can decide to whom and where they will sell their produce and ensure incentives for strategic industry initiatives. **Carl. E. Pray, Latha Nagarajan (2012):** Encouraging the growth of rural business hubs and supply chains established by supermarkets and the agricultural processing industry, which supply technology and market opportunities to poor farmers and job opportunities to landless laborers. Private innovations, research, and marketing of innovations can reduce poverty and improve the environment. Thus government agencies should consider incentives for firms to develop technologies that improve health and rural environment. **M, Hekmat (2011):** Agriculture cooperatives, managers' and workers' training should be the co-operatives first priority; each group, according to its activity type, should be trained and qualified experts employment is necessary. Making a positive insight over co-operatives in the rural societies and farmers is the greatest advantage for developing agriculture cooperative so that this advantage can be developed through training and notifying. Rural perception of agriculture cooperatives' activities and achievements in the economic and social fields can improve the public insight toward the agriculture cooperative. Based on the results, the recommendations are: (i) More job training courses for the managers and the workers of agriculture cooperatives (ii) Using the experiences of Entrepreneurship specialists (iii) Establishing a Entrepreneurship cooperative in the agriculture sector (iv) Creating an encouraging environment of invention and creativity for adolescents (v) developing the familiarity of

agriculture entrepreneurs with the agriculture cooperatives 'features (vi) using the experiences of successful countries in cooperatives administration and invite their directors to our Country. **Riccarda Moser, Roberta Raffaelli, Dawn Thilmany-McFadden (2011)** Their review confirms that the choice to buy fresh fruits and vegetables is primarily driven by privately-oriented attributes such as personal health or experiential eating quality. Analyzing differences across countries leads us to conclude that only health related aspects are similarly valued across regions, while the importance of others attributes varies considerably by consumers' place. Together with visual, smell and aroma components, health related attributes are perceived by consumers as the most significant reasons to buy sustainable food. Perceived personal health related differences in F&V can be linked to specific food components (artificial additives, genetically modified organisms), to the presence of nutritional components (rich in vitamins), and to the perceived risk associated with the use of agro-chemicals. Overall, it seems that people are especially concerned with the potential harm that conventional food production practices may cause to their personal health. Therefore, they are willing to pay a higher price to reduce the perceived direct and societal risk associated with the use of pesticides. Related to risk concerns, "pesticide free" is perceived as another important attribute in consumer buying behavior as respondents were willing to pay a premium averaging 15% above the regular price to buy pesticide-free fresh F&V. **Sushil Kumar, Jabir Ali, (2010)** In the agriculture sector, with negligible possibility of area expansion, the hope lies in improving the agricultural productivity by all means if population-led growing demand for food is to be met. Realizing the importance of availability of quality seeds to the farming community in adequate quantity in the country, current government policies are geared towards promoting and fostering entrepreneurship in seed industry in India. The paper finds that the firms established during last five to ten years have shown continuous growth indicating attractiveness of the industry. Ability to build entrepreneurial team with complementary skills and knowledge and experience of the lead entrepreneurs are found to be the critical success factors in this industry. **Linda Cox (2010)** Producers often wonder about the large difference between the prices that consumers pay for the food and the prices that they receive. As a result of high marketing margins, producers may be interested in direct marketing to consumers in order to increase profitability by receiving higher margins. However, producers involved in direct marketing efforts are likely to incur additional costs. Planning is needed to ensure that direct marketers receive prices high enough to cover the additional costs. Direct marketing strategies may include pick-your-own operations, roadside and farm stands, internet sales, community support agriculture (CSA) or subscription agriculture and farmer's markets. The largest issue of concern, other than increased costs, in direct marketing is the increased exposure to legal liability. But legal counsel is needed before a producer can feel confident that all liability problems have been addressed. Analysis of the most recent data indicates that the retail cost for the market basket rose 6.7 percent, while the farm value increased 3.6 percent. The combined effects of these changes yielded a 7.6-percent increase in the farm-to-retail price spread or marketing margin, and a concurrent 0.7 percent drop in the farm value share to 22.9 percent. The actual price spreads vary by type of product and degree of processing. Labor remained as the largest marketing cost element at 35.5 percent of consumer food expenditure. Packaging, transportation, energy and advertising are the next most significant components of marketing costs. **T N Venkata Reddy, P V Rame Gowda, P K Mandanna and V G Raghavendra (2010)** At present, there is a gap in the quality and convenient packaging of mangoes. By promoting branding and organizing direct sales, the branding concept can be popularized among the farming community and consumers can patronize the brand. **N Nagaraj, Jagannath Olekar and H Chandrasekhar (2010)** In order to address the problems of production and market inefficiency six key elements are to be addressed 1) entrepreneurship and

capacity building 2) participatory decision making and group formation 3) identification of appropriate market linkages 4) matching of production technologies and local resources with local and global demand 5) achievement of economies of scale, size, scope and agglomeration of production and distribution and, 6) information and market efficiency. **I Narendra Kumar, T. Sankaraiah and Sivaprasad (2010)** The marketing system for fruits and vegetables is now in the hands of middlemen. Middlemen exist at various levels between the farmers and the consumers and exploit through malpractices in weighing, handling and payments. **RABO India Finance Limited, (2010)** Mark-ups by each participant in the chain cause the farmer to receive as little as 25-35% of the price paid by the consumer. **(Lorcan Bourke, 2010)** Significantly, when fruit and vegetables are sold at a heavy discount, 45% of people get suspicion about the quality of the produce and place of its origin. This suggests that good quality produce is still a major focus for consumers. Indeed, 47% are prepared to pay more for local produce. So, retailers must find a balance between the price offered for produce items and its perceived quality and origin. **H.P.Singh January (2009)** Marketing of Agriculture crops is a major constraint in the production and disposal system and has a major role to play in making the industry viable. Fruits and vegetables are mostly marketed through commission agents. A very small portion is handled by Co-operative Marketing Societies. Storage due to over ripening and under ripening, Processing and packing due to inefficiency and contamination and Marketing due to loss of weight and quality with mutli-level handling. Not complete? Are these problems? The Horticulture marketing practices lack systems approach. The trading and marketing structure is very traditional and consists of a long chain of intermediaries. The farm gate price available to farmers is only 25% of the retail price under Indian conditions, whereas the same is 70 percent in the case of Dutch and US farmers, where more efficient marketing system is in place. Trade and market distortions are many and some of these are: high and unjust trading and marketing charges levied on producer sellers, delayed payment, pooling by traders and lack of open bid systems. Malpractices are rampant and the national market operates in a highly segmented manner. **Teddrick Hargrave (2009)** Most farmers' customers come to the markets for the superior quality and freshness, unusual varieties, and a chance to support local agriculture and meet the farmers who grow their food. And if these shoppers can get much higher quality at a competitive price, they're getting a lot better value for their money. **Bruce Roberts, Gary Morton, Thomas McGuire, Robert Royle (2008)** Strategic partnerships need to be explored, created and encouraged to develop at all levels of government and industry to facilitate the development of new direct-farm sales opportunities for producers of agricultural products.. **J P Jayathilake, R. P. Mahalianaarachchi, 2007.** Socio-economic characteristics of the consumers are directly associated with the consumption level of fruits and vegetables. The main reasons for their preference of market (Pola) was the low price followed by the other considerations such as freshness, good quality and high degree of selectivity. Consumers were interested in both price and quality (appearance, freshness and nutritional value when they purchased fruits and vegetables) **S S Acharya, 2007** Over the years, while the agricultural marketing and trade scenario has undergone tremendous changes it has not changed enough to meet the emerging demand for such services. Some of the marketing system-related limitations have been as follows (i) The market size is already large and is continuously expanding. The farmers' market linkages (both backward and forward) have also increased manifold, but the marketing system has not kept pace. (ii) Private trade, which handles around 80 per cent of the surplus produce, did not invest in marketing infrastructure due to excessive regulatory framework and dominance of unorganized sector. (iii) Increased demand for value-added services and geographic expansion of markets require lengthening of the marketing channel, but this has been hampered by lack of rural infrastructure. (iv) Efforts on direct marketing by 'farmers to

consumers' remain negligible. In the case of 85 per cent of the rural periodic markets numbering 27,294, where small and marginal farmers come in contact with the formal economy, facilities for efficient trade are still almost absent.(v) For facilitating trade at the primary market level, 7161 market yards/ sub-yards have been constructed, but they have become inadequate, ill equipped, and mismanaged. (vi) Globally, food processing industry has a high multiplier effect and employment potential. But in India, the value addition to food production has been only around 7 per cent. (vii) Due to lack of proper handling (cleaning, sorting, grading and packaging) at the farm gate or village level, about 7 per cent of grains, 30 per cent of fruits and vegetables, and 10 per cent of seed spices are lost before reaching the market.(viii)An estimated Rs 50,000 crore is lost annually in the marketing chain due to poorly developed marketing infrastructure and inefficient system of marketing activities (ix) The State Agricultural Produce Markets Regulation (APMR) legislation has hampered the contract farming initiatives, which otherwise can be highly beneficial to develop linkages of farmers with the markets. (x) Farmers shifting to higher-value crops face increased risks of fluctuations in yield, price and income. Whether it is increasing the incomes of farmers, saving the loss of farm produce along the traditional supply chain or creating more employment opportunities, sound development of agri-business provides a new frontier by creating an environment of much needed investment in agricultural marketing and trade. The Expert Committee on Agricultural Marketing, appointed by the Ministry of Agriculture, Government of India, in December 2000, estimated an investment requirement of Rs.2687 billion in agricultural marketing (Government of India, 2001). This includes possible investment of Rs.1364 billion by the private sector. The Working Group on Agricultural Marketing and Trade, appointed by the Planning Commission, had estimated the total investment requirement of Rs 643 billion during the XI Five-Year Plan, which includes a possible private sector investment of Rs 306 billion (Planning Commission, 2007). It is now absolutely clear that the needs for infusion of new technologies, and increasing the economies of scale in marketing for improving the efficiency of entire marketing chain can be met through higher level of investment in value addition and marketing system. Development and promotion of agri-business sector, which has strong linkages with the agricultural production, agro-processing, and service sectors, is capable of influencing each one of them through adequate investment in marketing activities. This can make a valuable contribution in terms of creating additional employment in the non-farm sector. Promotion of the agri-business can also substantially augment the availability of farm produce. **British Columbia, Ministry of Agriculture, Food and Fisheries (2004)** Attract customers, entertain them to visit a working farm. **V.M. Chole, J M Thalathi, and V. G. Naik, (2003)** In case of Brinjal following three channels were patronized by the vegetable growers for marketing of their produce: Channel I (producer-retailer-consumer), Channel II- (Producer-retailer-wholesaler-consumer) Channel III (Producer-commission agent-wholesaler-retailer-consumer). Channel II was the most preferred in the study area as maximum i.e nearly (50%) quantity was passed through this channel. Higher marketing margins intercepted by the market intermediaries in the channel II and Channel III resulted in the poor efficiency of marketing of brinjal. **Balappa. S. R and Hugas L B (2003)** Market intermediaries are accruing higher margin by incurring less cost. Therefore in order to regulate the expenditure on commission, transportation and packing, efforts should be made to develop the necessary infrastructure for the marketing in the state. Alternatively it is suggested to develop the farmers market for vegetables and fruits.

Analytical approach to the study

Cross sectional studies takes the sub division of the population and studies the nature of the relevant variables being investigated. Such studies are carried out at a single moment of time and thus the applicability is most relevant for a specific period. For example, if the study is conducted on a

section of respondents who are consumers of vegetables. Relevant variables influencing the consumers purchase behavior can be investigated using cross sectional studies. There are many factors that influence consumer behavior towards the purchase of vegetables.

Operational definition of a consumer

The term consumer is often used to describe two different kinds of operational entities: the personal consumer and the organizational consumer. The personal consumer buys goods and services for his or her own use. The products are bought for final use by individuals, who are referred to as end users or ultimate consumers. End use consumption is the most pervasive of all types of consumer behavior, for it involves every individual of every age and background in the role of either buyer or user or both. This research focuses on individual consumer, who purchases for his or her own use or for household use.

Evaluating consumer response to a marketing strategy is certainly measured in terms of behaviors. A proper evaluation of the impact of marketing strategies requires a more focused design. To develop a good marketing strategy the consumer response variables in the purchase should be defined thoroughly.

Table 2:
Attributes in Cross Sectional Study:

Marketing Mix	Consumer Response Variables
Price	Quantity
Product	Availability, Appearance, freshness, Nutritional Value, Quality, Visual, smell, taste
Promotion	Awareness, Brand, Packaging, Selectivity
Place	Accessibility

A subset of these consumers is selected and from these individuals data is collected to help answer question of research interest. Dependency and relationship between each of these variables can be investigated.

There are also situations in which the population being studied is not of a homogeneous nature but composed of different groups. Thus it becomes essential to study the sub-segments independently. This variation of the design is termed as multiple cross sectional studies.

Observations from the Review papers

Agricultural revolution and education – formal general as well as agriculture specific – has resulted in creating a new generation of agriculturists who desire to have a decent living today as against the simplistic life style adopted by them for centuries. In many countries of the world agriculture is being carried on as a commercial venture instead of as a source of livelihood. However, the limited quantity of agricultural land held by them acts as a big hindrance in expansion of their venture. Further, acquisition of new pieces of land adjacent to their present holding is also not possible in most cases. The cost of agricultural land is also sky rocketing whereby agriculture is becoming unprofitable with the passage of time. The advancement of science has also led to the cultivation of crops using pesticides and insecticides resulting in increased agricultural, but not without devastating effects on the consumers.

At the other end of the spectrum, the buyers of agricultural produce are also demanding superior quality produce to satisfy their individual and family needs. The growth in technology has also

provided the consumers with the powerful weapon of searching the supplier who is ready to cater to his needs. The consumers in some of the countries have also enhanced their bargaining power by united efforts in the form of establishment of consumer co-operatives and putting up a brave fight with the suppliers and middlemen.

Between the two ends, middlemen are reluctant to relax their grip on the farmer and want to perpetuate their control to ensure that they can take away a bigger portion of the cake with their financial muscle and business acumen. They have also succeeded, to a great extent, in manipulating the supply side of the market in their favor.

The fourth major stakeholder viz., the Government has also displayed its willingness and eagerness to empower the farming community by encouraging them in various ways. Governments, world over have encouraged the formation of co-operatives and thereby fostered the co-operative movement for the benefit of all the citizens.

This review of papers written by authors from different countries has successfully highlighted the problems being faced in the respective country with meaningful suggestions to overcome the problems. In view of the fact that agriculture continues to be a gamble with rains in most parts of the world, there is a continuous need to explore all the areas related to agriculture and horticulture.

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CERTIFICATE OF ORIGINALITY

We hereby declare that this submission is our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person.

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