A STUDY OF AGRICULTURE MARKETING WITH SPECIAL REFERENCE TO GREEN CHILLIES IN PALGHAR DISTRICT

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Abstract

The Research paper is going to analyse the agriculture marketing concepts which are considered important for marketing of agriculture produce in India. Marketing of agro produce has change over a period of time. It is no longer a farm output which is only consumed in the specific geographies or district or a state but it has cross the boundaries of the state and ventured in to the other parts of the country. The product can also be sold directly in the local markets or through different distribution channels across the state. The three functions which have to be undertaken before it reaches the consumer are Cleaning, Grading, Packaging and made ready for transportation to various agents at APMC markets with the help of co-operative societies. Chillies are not stored in the raw form when it is plucked from the fields. So marketing becomes essential as the product shelf life is short before it goes for consumption. Hence, distribution plays a vital role in the marketing of chillies.

Key Words: Agriculture Marketing, Distribution Channels, Harvest, Grading & Transportation

Introduction

India has immense potential to grow and export different types of chillies required to various markets around the world. India’s Agro climatic conditions provide scope for cultivation of 63 different spices, making India the ‘Land of Spices’. India has produced around 1014.60 million tonnes of chilli with area of 654 million ha. and productivity 1551kg/ha during 2005-06 (Source: Directorate of Arecanutand Spices Development). The most important chilli growing states in India are Andhra Pradesh (59%), Karnataka (15%) Maharashtra (6%) and Tamilnadu (3%) which constitute nearly 75 per cent of the total area under chilli. Chillies exports from
India are mostly to Srianka, USA, Nepal, Mexico and Bangladesh. Among these countries USA, Srilanka and Mexico are the major importers of India's chillies. China has emerged as the major exporter in the world market and as a serious competitor in the international market for India. India exported 1,48,500 tonnes of chilli valued Rs.807.75 crore in the year 2006-07 (http://www.assocham.org/prels/shownews.phpid1306). In Maharashtra state area, production and productivity of chilli was around 90 million ha., 44 million tonnes and 489 kg/ha respectively during 2003-04(Source: Directorate of Arecaanut And Spices Development).

In India the southern states grow spices like pepper, cloves and cardamom. Southern states of India together produce 30 percent of cardamom and 25-30% pepper of the world. Gujarat and Rajasthan grow the spices like cumin, coriander, fennel and fenugreek. They alone produce 80 % and 90 % world production in respect of coriander and cumin. The states of Uttar Pradesh, Madhya Pradesh, Andhra Pradesh, Maharashtra, and West Bengal, are major producers of onion, garlic, mustard and chillies. Orissa, Tamil Nadu, Andhra Pradesh, Meghalaya, Assam and Himachal Pradesh grow turmeric and ginger.

Kerala contributes 96 percent of the total black pepper production in the country. Karnataka and Kerala alone grow 90 percent of small cardamom.

Chillies are pungent fruits of capsicum annum L and capsicum frutescence. It is also known as red pepper or dry chillies. Majorly used as condiment or culinary Chillies are used for taste as well as for the colour of the food. Chillies are the ingredients used for ketchup, sauces, pickles which are part of the Indian dishes. Chillies have alkaloid capsacian which is used as a medicinal purpose along with that it is also rich in Vitamin C. Indian consumption of chillies is average per capita is between the range 50 grams to 60 grams per day.

Chillies are grown over the world the leading countries which produce are India China, Pakistan, Morocco, Turkey and Bangladesh. Chillies are grown in various parts of India like Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra, Rajasthan and Orissa are the states which contributes more than 60% of the chillies produce in India. In the state of Andhra Pradesh the largest amount of chillies are produce which contributes about more the 50% of the production of chillies in India.
Warangal, Khammam, Karimnagar, Guntur, Prakasham and other district in Andhra Pradesh chillies are grown alone in the state of Andhra Pradesh the production of Chillies is about 5.50 Lakh Metric Tonnes which is about more than 50% of the chillies produce in India. Chillies in India are distributes in India as well as abroad.

In India the trading hub of chillies are in Andhra Pradesh (Guntur, Khammam & Warangal) followed by Karnataka (Raichur & Bellary) and in Maharashtra (Jalgaon). Indian Exports chillies to countries like Bangladesh, Sri Lanka, Malaysia, Nepal, Indonesia & Italy.

The marketing channel of the agriculture produce has to reach the end consumer at the appropriate price through the which the producer gets the pricing which will motivate him to be in the business on the other end the final consumer should be happy to pay the price for the product. The income generated by the farmers should be sufficient enough to take care of the cost of production and additional portion of money should be there to take care of the other needs, then only the farmers will have the motivation to enhance the production and the productivity of the farm produce.

The various intermediaries in the supply chain have to minimize, So that the smooth transit of the produce from farmers to the consumer happen which will benefit both of them.

**Literature Review**

Chilli is one of the most important commercial crops of India. There are over 50 spices produced in India and good number of them is grown in the country which is indigenous. Among them pepper, cardamom, ginger and turmeric are important. Among spices, a few spices viz., clove, nutmeg, vanilla and certain varieties of chillies were introduced to the country. Many varieties of chilli are grown for vegetables, spices, condiments, sauce and pickles. India is the largest producer and consumer of chilli among other major producers n the world. India contributes 36 per cent to total world’s production and remained in first position in terms of international trade by exporting nearly 30 per cent from its total production. Indian chilli is mainly exported to Asian countries like Vietnam, Thailand, Sri Lanka, Bangladesh and U.A.E. (http://www.indianspices.com).
Global Scenario

Major chilli growing countries are – India, China, Indonesia, Korea, Pakistan, Turkey and Sri Lanka in Asia; Nigeria, Ghana, Tunisia and Egypt in Africa; Mexico, United States of America in North – Central America; Yugoslavia, Spain, Romania, Bulgaria, Italy and Hungary in Europe and Argentina and Peru in South America.

India being the leader in the production of Chilli and the countries which follow India are China and Pakistan. Chillies are produced worldwide but the major chunk is produced in the Asia region. More than 60% of Chillies are produced in the world are from countries like Indian , China, Pakistan, Bangladesh & Peru. India Produce about 15 Lakh Metric Tonnes of Chilies, China has production capacity of about 4 Lakh Metric Tonnes and Pakistan has been producing about 3 Lakh Metric Tonnes rest is shared by the other countries. India’s share of chilie production is about 38% of the world chillies production.

India satisfies the consumption demand of chillies which is nearly about 50% of the requirement. China on the other hand has a export share of about 19% of entire export of chillies in the global market. Peru also has a export share of about 9%, Spain is consider as fourth player in the export of chillies in the global market. The remaining chilly producing countries take care of the balance requirement. The countries which Import Chillies are USA, Malaysia & Sri Lanka.
Domestic Scenario

In the world of Spices Chilli is universally accepted, Chilli is the crop which is cultivated in the larger part of the country. India is the biggest chilly producing country, not only that the highest number of chilly are consumed in India. Largest producer of Chillies in India is considers as Andhra Pradesh, the agriculture area which is covered under cultivation of Chilies is about 35 per cent of the total area cultivated in the country.

Other states which contributes are:
Karnataka has a share of 14 per cent, Orissa is about 11 per cent, West Bengal is 9 per cent, Tamil Nadu is about 8 per cent. Rest of the states contributes about 23 per cent of the total area under cultivation of Chilly.

The production of chilly is dominated by the state of Andhra Pradesh which has the share of chilly production of about 59 per cent. Karnataka stand at the second position by contributing 8 per cent of the production in the country, West Bengal is after that which has a production of 7 per cent of the total produce, Orissa contributes 6 per cent, Maharashtra and Madhya Pradesh has a share of 5 per cent each and other states combined contribution is 10 per cent.

Some of the important districts in Andhra Pradesh where chilly is grown in large Scale are Guntur, Khammam, Prakasham, Warangal and Krishna. Among these districts, Guntur is the largest district which produce chilly the total chilly which is produce in Andhra Pradesh 30 per cent is cultivated in Guntur with an annual turnover of about Rs. 800 Crore. The shift in the production of chilly is moving to the northern states of the country. It is because of the change in consumption pattern in the country. The demand for the Indian grown chilly is increasing since the price for the export is motivating, as well as the domestic demand is also helping the farmers to bring more area under cultivation of Chilly.
## Major state-wise area and production of spices in India

(Area in Hectares, Production in Tons)

| States         | AREA  | PRODN   | AREA  | PRODN   | AREA  | PRODN   | AREA  | PRODN   |
|----------------|-------|---------|-------|---------|-------|---------|-------|---------|
| Rajasthan      | 866868| 618309  | 1014540| 920810  | 1056170| 1004380 | 1004380| 1099750  |
| Andhra Pradesh | 200675| 918018  | 212730 | 1099750 | 246450 | 1099750 | 1099750| 1099750  |
| Gujarat        | 473822| 1014470 | 508750 | 184175  | 510750 | 906850  | 510750 | 906850   |
| Telangana      | 122345| 493930  | 128870 | 786950  | 184175 | 786950  | 184175 | 786950   |
| Karnataka      | 218667| 400297  | 225560 | 250925  | 537460 | 246410  | 537460 | 246410   |
| **Maharashtra**| **123240**| **130094**| **41820**| **31180**| **393190**| **31140**| **395600**|          |
| West Bengal    | 97555 | 207775  | 118170 | 329980  | 109820 | 334575  | 109820 | 334575   |
| Uttar Pradesh  | 58039 | 221711  | 58590  | 217670  | 387000 | 281010  | 387000 | 281010   |
| Orissa         | 123324| 181500  | 123320 | 146630  | 201960 | 146630  | 201960 | 146630   |
| Kerala         | 167293| 140225.36| 161500 | 149520  | 160850 | 130060  | 160850 | 130060   |
| Tamil Nadu     | 105057| 196127  | 113200 | 214120  | 112600 | 140050  | 112600 | 140050   |
| **TOTAL (INCLUDERS)** | **3192639**| **6169901.3**| **3457000**| **4031700**| **8610810**| **3969390**| **8413980**|          |

Source: Spice Board of India

Source: State Agri/Horticulture Departments/DASD Kozhikode
Marketing Channel for the Agriculture Produce:

Once the harvest is ready to be marketed the farmer need to make arrange for the marketing channels to distribute the farm produce in the various market which is located in the same thesil or district or need to send it to the bigger market which are based at District level or State level i.e. APMC. The produce may go through the various distribution channels which includes the wholesalers, Retailers Middle Level Buyers or in some cases it is the cooperative Societies formed at tehsil, or district level. In certain scenario the distribution channel has different format like the produce which receive from the farmer may need to undergo a classification as per the grades and then again repacking needs to be done as per the quality of produce received.

The distribution channel or middle men they perform the activity of the grading packaging and arrange for the further transport to the destination of consumers. For e.g. if we consider the nearest APMC Market is located in Vashi which is in Navi Mumbai the producer sells his produce in this market from all over the state/ country. Since Vashi APMC is considered as a secondary market as this is the extension of commercial capital Mumbai so very little cultivation of vegetables are growing in this vicinity. Similarly the vegetables or chilly which is grown in the parts of Palghar District are sold by the small farmers in the daily market in the district place of Palghar and the weekly bazaar i.e. on every Friday in Palghar. They also have this kind of weekly bazaar in the other parts of the district like Manor, Boisar, Saphale etc.

The Rural Marketing Channels has various formats like Village Market for daily usage, Market located in Tehsil place for weekly bazaar or the district place were large produce are assembled like APMC market in Kalyan in Thane district and Vashi in Navi Mumbai. The marginal farmer or the farmers with the small output they prefer to sell the produce in the village or tehsil market. Farmers with the large quantity of farm produce tend to sell the produce at the district or state level market. These large quantity producers also have a Channel which is cooperative societies located at the District level which provide with the farmers the network with the wholesalers in the APMC markets. The Cooperative societies play a vital role in the marketing channel of farm produce in the rural belt.
Methodology

The present study is conducted in Palghar tahsil from Palghar the district was selected. Total five villages and 4 farmers from each village i.e. 20 farmers were selected randomly as sample size. Data collected for study pertaining to the period Jan 2019 to Feb. 2019. Personal interviews of farmers and marketing intermediaries were conducted by survey method with specially designed questionnaire. Besides data relating to quantity purchased, price paid/received, costs incurred were collected from the market functionaries. Simple tabular analysis was made to analyse data to find out marketing channel of green chilli in this region.

Findings and Discussions

The major functionaries involved in Marketing Channel for distribution of chillies are:

Market
The organised market is the major institutional unit establishes under the APMC act of the state to establish regulated market, which also creates and develops infrastructure require for the market and see that there is no malpractices during the marketing process.

Farmers
Farmers play a major role in marketing because the produce is transported from the farms after the important practices like Cleaning, Grading and Packing are done by the farmers. The process plays major role in supply chain because these practices influence the price of produce, which is ultimate goal of any marketing process.

Agents
Agents are licensed brokers in regulated market through APMC (Agricultural Produce Market Committees). The Agents normally charge certain percentage of commission (ranging from 2 to 3 %) from farmers on the sale of the produce. The competitive environment between the supply chain i.e. Wholesaler, Traders and Processor during the purchase process from producer to consumers. This agents are not directly involved in trade process but play a role of facilitator during the process of trading by arranging certain Weighing Machines, Loading and unloading,
Transportation and arranging for the credit facilities to farmer before the beginning of the season.

**Traders**

Traders/Exporters are the purchasers who participate in trade. They handle the produce for a short period on behalf of distantly located wholesalers, exporters and for processors. They play very important role in chillies trade then other crops because the quantity sold by the wholesale and exporter are in small quantities but throughout the year. But chillies require cold storage facilities to retain their quality (colour). These traders purchase on behalf of wholesalers and exporters by taking the orders and store them in cold storages in the vicinity of the market place and facilitate the supply throughout the year. Traders normally operate from the centralised location. They are located in APMC Market from Navi Mumbai they are connected to the farmers either through cooperative societies or the traders meet the farmers before the season begins. In the case of Farmers located in Palghar tehsil especially this comes under the Mahim Gram panchayat the farmers are connected through the Mahim Sahakari Cooperative society.

The Cooperative society arranges the free transport for the farm Produce (Green Chillies) from the various destinations to the APMC Markets in Mumbai which reached to the traders and based on the quality and markets rates they will be graded and the receipt of the rate will be communicated to the society and the farmer as well.

**Wholesaler Merchants**

Wholesale merchants purchase large quantities of produce (Chili’s) from various parts of the districts and process them further(Grading and Packaging ) before they sell in bulk quantity to the retailers. There are only very few wholesalers take part who belong to local areas. For distant wholesalers depend on traders for purchasing these products as storage is main constraint for them, because cold storage facilities are not available at their place of business as wholesalers are scattered unlike traders.
Agriculture Co-operative societies

Cooperative societies play a vital role in ensuring that the nation’s economic progress confirms to the requirements of democratic planning. The institution of a cooperative society provides support and sustainability to rural economic activities.

The poorly equipped rural folk struggling to cope up with rural indebtedness and the evils of usury, need resources. Small and marginal farmers need support in the form of inputs, harvesting, storage facilities, distribution channels and a network of market information system. Technical guidance is required to help agriculturists in processing their produce and reap benefits through value addition.

Agricultural processing cooperatives provide support towards paddy milling, oil seed crushing, processing fruits, vegetables and so on. The farmers, gain through value addition to their produce. Agricultural marketing societies enable farmers to benefit from increased bargaining strength. By removing intermediaries, they help farmers to have a direct interaction with the consumer. The National Agricultural Cooperative Marketing Federation of India (NAFED) is an example.

Agricultural service cooperatives are instrumental in arranging cheaper transportation, storage facilities and similar such services.

Mahim Vivid Cooperative society which is operational in the Palghar tehsil arranges for interest free loans for the first financial year to the farmers in the Mahim Region. They provide the Loan to the small and marginal farmers and the society also makes arrangement for the transport of the produce from the farm to the Market located in Navi Mumbai (APMC Market). The society has tied up with TDC Bank (Thane District Cooperative Banks) which provides the loan to the farmers has a membership with the Society.

Middle level Buyers

Middle level buyers who work in the rural sector especially in the region where we have small and marginal farmers. The small or marginal framers sell their produce in a smaller quantity
either in the local market to the local middle level buyer or trader. Who procure the chillies in small quantity from the different part of the thesil / taluka or district. Post procurement the chillies are grade based on the quality and repacked in the bigger quantity to be transported to larger markets or to the wholesalers. The middle level buyer has his own transport system. Sometimes several buyers together arrange for a common transport system.

They assist the small farmers with the initial finance before the season begins, so that the produce is sold to the requisite buyers only. The profit margin is higher in this channel because the farmers don’t have a say in the rate offered to him for his produce, since they have a small quantity to be sold. The buyers dictate the terms during the sale of the produce and earn the extra pie out of the transaction.

**Retailers**

Retailers who finally deliver chillies to customer in the daily market or the weekly market the farmers themselves sales the produce in the market or they sells the produce to the local retailers at the wholesale price. Farmers get the best price only when there is less supply especially in the beginning of the season. Once the flow starts from the various parts of the regions around the market the rate starts collapsing and then the farmers have to accept the rate in the market. Chilli’s from the wholesalers are assembled from various parts and graded based on the quality of the produce and packed and transported in the other parts of the state or outside the state for the further consumption.

The Farmers who grow various vegetables need to classify their products based on the grades of the produce The chilly which is grown in the district are graded by the farmer in the farm after the harvest, once it is graded then it is packed in the gunny bags which has an average weight of 50 to 70kgs per bag. The farm produce are then transported to the retailers in the Teshil or district place. Transport facility are arrange individually or a group of farmers do it collectively. The retailers normally weighs the produce and grade them as per the quality and then price for produce is decide based on the market conditions. The retailers grade them once and then either sell the same produced to the wholesaler or sell it to the local vendors for the final consumption.
Below mentioned Marketing Channels are identified in trade of chillies in Palghar District

- Producer (Farmers) – Traders – Wholesalers – Retailers
- Producers (Farmers) – Cooperative Societies – Wholesales in Markets (APMC)
- Producers (Farmers) – Middle Level Buyers - Traders – Wholesalers – Retailers

Constraints for Marketing of Chillies

During the survey some of the constraints at the level of farmer, Agents and Market which important part of the marketing channel are mentioned below:

- Non-Consistency of Transportation facilities from the farm.
- Inadequate Pricing information about the current market.
- Need to send the produce to the agent or Market because of Non-Availability of Storage facility at the district Place
- Inaccurate weighing Practices
- Delay in payments from agents
- Collection of excess commission
- Lack of storage facilities at District level
- Distribution chain eats up the profit margin
- Absence of Grading
- Flow of finance at the beginning of the season
- Facilities for farmers at Market place is insufficient
Conclusion

> Price fluctuation of the farm produce normally benefits the marking intermediaries since the farmer is not updated on the same. Hence the middle men take away the additional profit from the price fluctuation.

> Farmers receive negligible amount of profit from the share of rupee from the distribution channel, the middle men and the intermediaries take away the bigger pie out of the profit.

> The current marketing channel is not sufficient enough to decide to sale the produce to the best vendors because they are nominated or the farmer doesn’t have much choice for his produce.

> Inadequate Post harvest practices like, cleaning, grading, and packaging of farmers are rendering the quality of chillies.

> Agents, wholesalers and Traders decide the market price, farmers who sale the farm produce through co-operative society have lesser choice of buyers.

> Storage facilities if made available to various location in the district would help the farmers to take decision for the sale of the produce.

> Availability of interest free loan to farmers for the first year through the cooperative societies gives a big boost to the farmers in the region

> Cooperative societies had tie up with the District level cooperative banks to provide loans to farmers

> Payments need to made to the farmers post the sales so that they can repay the debts and expenses incurred till the harvest.

> Technical education and training pertaining to the crop and market need to be provided to the Farmers from time to time.

> If the processing units is established in the region will make the marketing channel more efficient
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