

MARKET LINKAGES THROUGH CONTRACT FARMING: A WAY TO TRANSFORM INDIAN AGRICULTURE

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Abstract

Indian farmers are facing many challenges when they sell their farm produce in the markets. Farmers are not connected to food processors or organized retailers. Contract farming is an important non-conventional marketing arrangement through which farmers can do direct marketing of their farm produce. The objectives of this study are to find out the performance of contract farming operating in the region and to study challenges faced by the farmers. The present study is explorative research in nature and data is collected from 1086 farmers from 9 talukas of Pune district. It is evident from the study that farmers are not much aware about contract farming. Only a few farmers are aware about contract farming, however they do not want to do it because they do not fully understand and appreciate the significance of contracts. Another important reason is agriculture commodity prices are vulnerable to price fluctuations and only 'A' grade produce is accepted by the company and farmer himself has to take efforts to sell his 'B' and 'C' grade farm produce. There is a need to encourage farmers to do contract farming by providing necessary information, to train them for overcoming challenges faced while using the contract farming marketing models and to train them for developing contract negotiation skills.

Keywords: Contract Farming, Challenges, Farmers, Marketing, Farm produce.

Introduction

In India, agriculture is the main source of livelihood to a major portion of population, directly or indirectly. The future of the Indian farmer depends on the success of agriculture sector. Agriculture plays an active role in industrial development in India. Essential raw materials to various industries such as cotton textiles, jute, sugar, vegetables, fruits, oil, canned food, cigarettes, and rubber, etc., are provided by agriculture in India. Fruits and vegetables are very important in the agricultural economy of India, so it is essential to focus on the production and marketing of fruits and vegetables. Fruits are available during a particular season and in large quantities; therefore, marketing of fruits is a challenging task.

There are challenges such as transportation, scientific storage, wide price fluctuations, etc. Because of the perishable nature of fruits and vegetables, there are post-harvest losses. Reddy (2016) reported that farmers are usually facing many difficulties when they sell their farm produce in the markets. Farmers mostly sell their produce in a conventional way to local traders, input dealers, or commission agents. In India, farmers are mostly not doing direct marketing of agricultural produce and they are not targeting a particular consumer base. There is a disconnection between what the Indian farmer produces and what the consumer demands. Farmers cannot approach the wholesalers/retail chains or the final consumers of agricultural produce, so they are not associated with food processors or organized retailers.

It is important to analyze the market demand for agricultural produce and then make informed decisions regarding how and which crop to grow, when to harvest, whether to store, and in which market to sell. Farmers are not considering the requirements of the market for planning farm

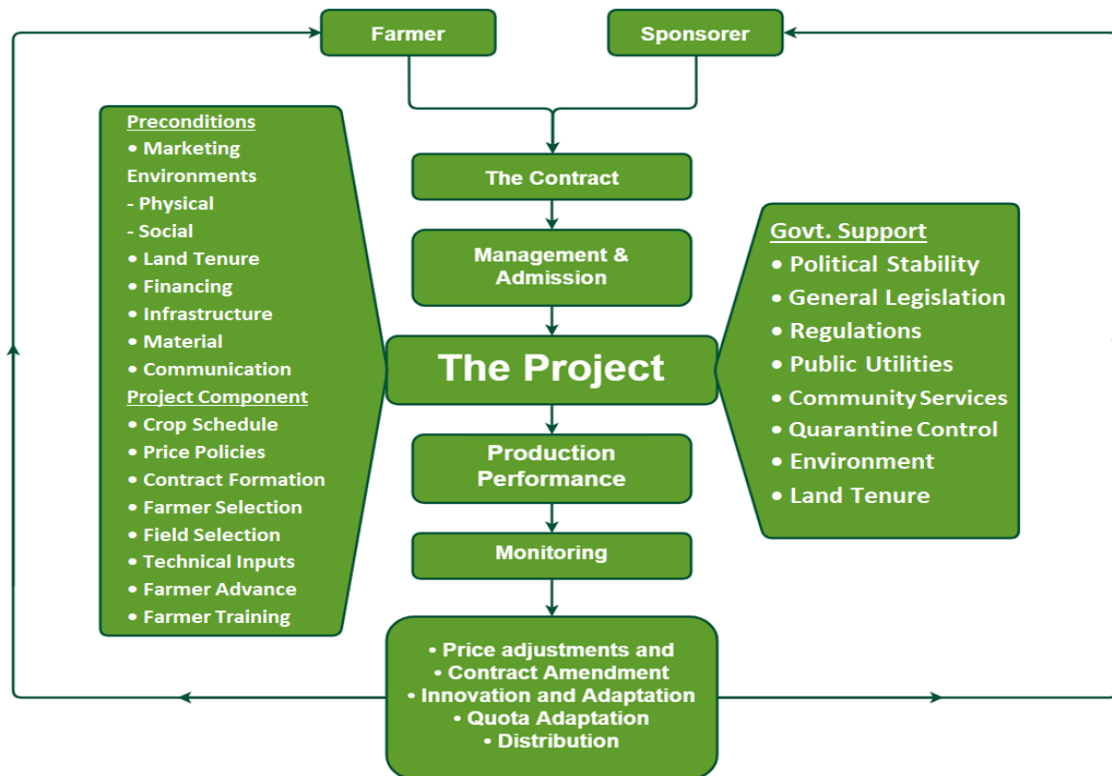
production. In India, majority of farmers are small farmers and they sell their produce to middlemen, local market yard, and wholesale markets. Farmers are not aware of market information because most of the farmers are illiterate. There are multiple channels of distribution of agricultural produce. These channels take away a major portion of the earnings of the farmer. Farmers cannot market their farm produce beyond their locality.

Agricultural marketing became more challenging because of the involvement of intermediaries and commission agents who are consuming maximum share of farmers' income. Improvement in the situation of farmers is possible only through diversification and commercialization of their agricultural activities (Salokhe, 2016). An efficient marketing system contributes to optimum utilization of resources, post-harvest management, an increase in farm income, growth of the agro-based industry, employment generation, and value addition. It is essential to establish effective linkage between the farmers and the processing industries. Ramesh Chand (2017) reported that diversification of crops towards high-value crops helps improving farmers' income. Salokhe and Walvekar (2016) reported that direct marketing helps in ensuring higher remuneration to farmers and improving the consumer's satisfaction level.

Contract farming is a legal agreement between farmers and food processing companies to supply farm produce under forwarding agreement at predetermined prices. It is an effective way to coordinate and promote production and marketing in agriculture. These are effective means of producing supplies for agro-processing industries for adding value to the agricultural produce. It is a preferred mechanism through which agri-businesses can directly engage with farmers. The companies bridge the gap by providing the inputs to the farmer who is now required to focus mainly on the maintenance of the crop cycle. In contract farming, the agreement encompasses three areas; viz., market and resource and management specifications. In the present situation, under the contract farming model, a linkage between farm and firm is essential for high-value agricultural commodities. This will help farmers to get good returns from their farm and also help to reduce wastage of fruits and vegetables. Through this agreement, the firms also are benefitted because they get desired quality and assured supply of fruits and vegetables as per norms mentioned in the agreement. Contract farming is gaining an important place in the Indian agriculture sector (Kumar et al., 2019).

Contract farming has shown a positive impact on farmers; it is one of the important extension strategies that can be considered to improve the social status of the farmers. Sahana et al. (2017) studied the impact of contract farming on farmers and reported that the contract farming has significantly influenced the social characters of the farmers such as organizational participation, political participation, mass media participation, health management, extension contact, public recognition, and extension participation.

Figure 1: Contract farming conceptual framework.



Source: based on Eaton, C.S., 1998b: 274

Dutta et al. (2016) have written a case study on Contract Farming of PepsiCo for Potatoes and reported that it is essential to encourage organized players to enter this sector by doing investments and should make a difference in the next few years. For successful implementation of contract farming, having co-ordination and collaboration, consciousness, and acting in an organized manner are advisable to both sides (Kumar et al., 2019). Most of the studies show that companies prefer to work with mainly medium and large farmers in contracts (Kaur et.al, 2016). Harish (2019) reported that possession of draft animals, power tiller, and tractor after contract farming has improved drastically due to change in technology. The material possession of movable and immovable has increased after contract farming.

Chakrabarty (2015) reported that after the opening up of the Indian economy, many domestic and multinational players came into the agribusiness sector and now contract farming has become an important mode of required raw material production and procurement. In contract farming, there is co-ordination between the processors, marketers, and the exporters. Contract farming proved successful in helping farmers solve the problem of access to the agricultural market. The State Agricultural Produce Marketing (Development and Regulation) Act, 2003, has a better impact on the development of agriculture model of contract farming.

There have been a variety of research about contract farming in India. However, there is no study available in India focusing on awareness and performance of contract farming in the region and challenges faced by farmers while making use of these nonconventional models for marketing their farm produce. The main objective of this research is to study contract farming

as an existing nonconventional model of agricultural marketing and also to analyze challenges faced by farmers.

Research Methodology

The present study is exploratory and the researcher has used a combination of both primary and secondary research. Primary research is done by collecting data personally through the use of interviews, surveys, and by taking feedback. To select the samples, the researcher had used a multi-stage sampling technique and the area which is selected for the research is Pune District. There are 15 talukas in Pune district. From these 15 talukas, we randomly selected 11 talukas. From each taluka, 7 villages were randomly selected. From each village, 15 farmers cultivating high-value agricultural commodities (Tomato, Potato, Grapes, and Pomegranate) were selected by snowball technique. The 'Structured Questionnaire' is designed from standard questions by considering the relevant literature as a research tool. Selected 1155 farmers were interviewed to assess their views and opinions on contract farming. Researcher has received 1034 appropriate responses.

Statistical analysis was done with the help of "Statistical Package for the Social Sciences (SPSS)" version 17.0. By applying the appropriate statistical techniques, the data analysis and interpretation process were carried out thoroughly and the researcher determined significant results. The present study will provide an opportunity to know the emerging challenges faced by the farmers. It will help several beneficiaries such as academicians, policymakers, and agriculture departments to get in-depth knowledge about contract farming and challenges associated with the use of this non-conventional agricultural marketing model.

Results and Discussion

Farmers selected as a sample for an opinion on various marketing models are young adults with an average age of 42 years. On an average, each farmer owns a land of 5.2 acres. Their education is secondary school to graduation (49%) and illiterates are only 15%. Mainly 4 high-value crops of tomato, potato, grapes, and pomegranate are cultivated by these farmers.

The study revealed that most of the farmers are selling their farm produce to the APMC market, middlemen, money lenders, and local market yard. Farmers are not getting a good price for their farm produce. Farmers are not aware of prices of agricultural produce prevailing in other markets at big towns so they sell their farm produce at very low prices to middlemen or moneylenders. Out of total of 1038 respondents (farmers), 588 farmers usually sell their produce at APMC, followed by middleman, local market yard, and lastly directly to the consumer. Majority of the farmers are not satisfied with the price they receive after selling high-value agricultural commodities to different agencies.

It is observed that farmers are facing a lot of problems in marketing their farm produce. The main problem is not being aware of commodity prices at different markets. These days, we have many apps which give information about the price of different products in different markets; however, the farmers have no access to new technology and they cannot use the internet. The existence of middlemen is another major problem because middlemen take away the major portion of farmers' earnings. Then other problems are Competition, Transportation, Lack of Grading, Lack of Institutional Finance, Problems of Produce Collection, 'Distress Sale,' and 'Weight and Measures.'

Table 1 Ranking of the problems faced by farmers while marketing of agricultural commodities

| Sr. No. | The Problems Faced while Marketing Farm Produce | Frequency | Percent | Rank |
|---------|---|-----------|---------|------|
| 1 | Competition | 600 | 58.0 | 5 |
| 2 | Transportation | 586 | 56.7 | 6 |
| 3 | Existence of Middle-men | 755 | 73.0 | 2 |
| 4 | Necessary Market Information | 824 | 79.7 | 1 |
| 5 | Access to New Technology | 650 | 62.9 | 3 |
| 6 | Lack of Storage Facility | 633 | 61.2 | 4 |
| 7 | Lack of Grading | 553 | 53.5 | 7 |
| 8 | Lack of Institutional Finance | 457 | 44.2 | 8 |
| 9 | Problems of Produce Collection | 284 | 27.5 | 9 |
| 10 | Weight and Measures | 199 | 19.2 | 11 |
| 11 | Distress Sale | 220 | 21.3 | 10 |

The study reveals that farmers know that they will get a good price if they sell their farm produce directly to customers, however it is difficult to get direct customers. Hence, farmers cannot sell directly to consumers and they are selling through middlemen.

Table 2 Selling produce directly to consumer

| Sr. No. | Selling produce directly to the consumer | Frequency | Percent |
|---------|--|-------------|--------------|
| 1 | Yes | 291 | 28.1 |
| 2 | No | 743 | 71.9 |
| | Total | 1034 | 100.0 |

The supply chain in APMC markets involves a large number of intermediaries (commission agents, traders, and retailers) who work between farmer and consumer. In agricultural marketing, there are middlemen and they are held responsible for the exploitation of farmers. This study reveals that middlemen get a major share in profit. This is happening because of the ignorance of marketing and its functions by farmers. Ultimately, the farmers are not getting a good return from the sale of their farm produce.

Table 3 Problems faced while selling through a middleman

| Sr. No. | The problems faced while selling through middleman | Frequency | Percent | Rank |
|---------|--|-----------|---------|------|
| 1 | Farmers receiving less prices for their produce | 368 | 35.6 | 3 |
| 2 | The middlemen get a major share in the profit | 745 | 72.1 | 1 |
| 3 | The margins of intermediaries are not proportionate to the services provided by them | 266 | 25.7 | 4 |
| 4 | Farmers not getting the true value of their produce | 382 | 36.9 | 2 |
| 5 | Farmers not receiving money in time | 250 | 24.2 | 5 |
| 6 | Any other | 20 | 1.9 | 6 |

Contract farming is an agreement between farmers and food processing companies to supply farm produce under forwarding agreement at predetermined prices. It is a key solution for the problems related to agricultural marketing. By amending the Agricultural Produce Market Committee Act, the Government of India has allowed agri-business firms to source raw materials directly from the farmers through contract farming. If contract farming is properly managed, it is an effective way of coordinating and promoting agricultural production and marketing.

Table 4 Knowledge about contract farming

| Sr. No. | Knowledge about contract farming | Frequency | Percent |
|---------|----------------------------------|-------------|--------------|
| 1 | Ye | 516 | 49.9 |
| 2 | No | 518 | 50.1 |
| | Total | 1034 | 100.0 |

This study reveals most of the farmers (50.1 %) are not aware about contract farming. Only a few of them are aware about contract farming but they do not want to do contract farming. The researcher was interested in knowing the reason behind it. It has been revealed from the study that the main reason behind this is farmers do not fully understand and appreciate the significance of contracts. Another important reason is agriculture commodity prices are vulnerable to price fluctuations and only ‘A’ grade produce is accepted by the company and farmer himself has to take efforts to sell his ‘B’ and ‘C’ grade farm produce. Delay in payments to the farmer is also another reason for not doing contract farming.

Table 5 Practicing contract farming

| Sr. No. | Practicing contract farming | Frequency | Percent |
|---------|-----------------------------|------------|-------------|
| 1 | Yes | 80 | 16% |
| 2 | No | 436 | 84% |
| | Total | 516 | 100% |

Table 6 Reasons for not doing contract farming

| Sr. No. | The reasons for not doing contract farming | Frequency | Percent | Rank |
|---------|--|-----------|---------|--|
| 1 | Farmers do not fully understand and appreciate the significance of contracts | 850 | 82.2 | 1 |
| 2 | Agricultural commodities are vulnerable to price fluctuations | 127 | 12.3 | 2 |
| 3 | Delay in receiving payments after selling the farm produce | 78 | 7.5 | Ignored since the percentage is very low |
| 4 | Only grade ‘A’ farm produce is accepted | 127 | 12.3 | 2 |
| 5 | Defaulting attracts relatively high penalties | 37 | 3.6 | Ignored since the percentage is very low |

The study reveals that the farmers are benefitted through contract farming because they get more profits as compared to traditional farming and marketing. In contract farming, the prices are fixed in advance because of which farmers need not have to worry about the marketing of produce; they can concentrate on quality production.

Table 7 Benefits of contract farming for farmers who are practicing it

| Sr. No. | The benefits obtained through contract farming | Frequency | Percent | Rank |
|---------|---|-----------|---------|--|
| 1 | Good quality inputs are provided | 2 | 0.2 | Ignored since the percentage is very low |
| 2 | Guidance for quality production by the technical person | 13 | 1.3 | |
| 3 | Prices are fixed in advance | 24 | 2.3 | |
| 4 | More profits as compared to traditional farming and marketing | 42 | 4.1 | |
| 5 | Crop risks are shared | 23 | 2.2 | |
| 6 | Reduce price uncertainty | 10 | 1.0 | |
| 7 | Infrastructure provided | 4 | 0.4 | |

Suggestions and Recommendations

1. Improvement in the status of the farmer is possible only through diversification and commercialization of their agricultural activities.
2. The traditional marketing chains are characterized by high margins of the middlemen and low prices to the farmer. There is a need to remove middlemen from the agricultural marketing system so that farmers will get a good price for their farm produce.
3. The promotion of non-conventional marketing system that may operate parallel to and in addition to the present marketing system will help give proper reward or return to the efforts of the farmers.
4. Effective linkages need to be developed between farmers and purchasers of agricultural produce to strengthen support services for small farmers. Farmers will get a higher share in consumer rupee in nonconventional marketing system as compared to the traditional marketing system
5. The hopes of emergence of efficient agricultural marketing are new agricultural marketing arrangements such as contract farming. Farmers should be trained and encouraged to participate in these new arrangements. Linking farmers to these nonconventional marketing arrangements is a key driver for the industrialization of agriculture.
6. It was also noticed that non-conventional marketing models are emerging in the last few years in terms of contract farming. Contract farming is in the nascent stage in India. The Government has formulated and released the ‘Model Contract Farming Act, 2018.’ This act is facilitative with the wider scope of contracts in the entire agri-value chain, starting from pre-production, production to post-production. There is a need to implement this act. The Agriculture Department should do a lot of extension work for this, so that farmers fully understand and appreciate the significance of contract farming. There is a need to develop contract negotiation skills of farmers through training programs.
7. The researcher observed that the informal model of contract farming is practiced by multinational companies. However, it is noticed that MNCs do not develop a bond with farmers because they are dealing with the farmers only for a season; this should be stabilized.

Researchers propose a hybrid model of contract farming taking the fundamental points from different types of contract farmings in terms of input provision, service provision, training provision, and marketing provision so that multinational companies should provide end-to-end services to the farming communities and develop a permanent linkage with the farmer.

8. The government should play an important role in developing and implementing a suitable legal system of contract farming so that dispute settlement can be looked into. Terms and conditions of the contract between the farmers and the company should be known to both parties and both parties should mutually understand it.

Conclusion

There is a need to strengthen support services for small farmers for which effective linkages need to be developed between farmers and buyers of agricultural produce. Based on this, the researchers conducted this study in Pune district in eleven blocks (talukas). Respondents in this study were farmers from the Pune district. The present study was done with certain objectives. The main objective was to find out the performance of the marketing channels, contract farming, and the challenges faced by farmers.

The study revealed that production in agriculture has to move from the current supply-driven production system to a demand-driven production system and, for that, it is necessary to link farmers directly with the consumer. Linking farmers to nonconventional marketing arrangements is a key driver for the industrialization of agriculture. It is possible only through direct marketing of farm produce to consumers. Contract farming is an important nonconventional marketing arrangement. Through contract farming, it is possible to link farmers with the food processor and organized retailers. Market linkages through contract farming is a promising way to transform Indian agriculture.

This study reveals that most of the farmers are not aware of contract farming. Only a few farmers are aware of contract farming but they do not want to do it. The main reason behind this is farmers do not fully understand and appreciate the significance of contracts. Another important reason is the agricultural commodities are vulnerable to price fluctuations and only 'A' grade produce is accepted by the company and farmer himself has to take efforts to sell his 'B' and 'C' grade farm produce. Delay in payments to the farmer is also another reason for not doing contract farming. The agriculture department should do a lot of extension work so that farmers fully understand and appreciate the significance of contract farming. There is a need to encourage farmers to do contract farming by providing necessary information, to train them for overcoming challenges faced while using the contract farming marketing models, and to train them to develop contract negotiation skills.

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