Impact of Contract Farming on price and quality of Agriculture Produce in selected districts of Maharashtra.

Nagnath Bembde¹, Pravin Tamgade²

¹ Research Scholar, School of Management Sciences, SRTMU Sub Centre, Latur-413531, Maharashtra, India
² Assistant Professor, Management Department, SSBES’s Institute of Technology and Management, Nanded-431602, Maharashtra, India

Abstract
Most of the districts of Maharashtra are drought prone areas where farmers need to adopt innovative farming practices instead of depending on the uncontrollable factors such as rain, natural water resources and Government policies. Contract farming is an innovative farming practice through which many farmers come together and produce same agriculture produce with good quality and quantity. They sell their produce at predefined price as per contract with buyer. The bargaining power of farmers can be increased due to large quantity of produce. The organizations which make contract with farmers are involved in assisting the farmers in terms of training, soil testing and guiding towards increase in yield with quality. The study addresses the various dimensions of contract farming implemented by companies which influence positively towards price and quality of agriculture produce. The study also focuses on the factors which increase the productivity of farmers.

Keywords: Contract farming, bargaining power, innovative farming, drought prone area, organic farming.

1. Introduction
The study is based on effectiveness of contract farming with the firms towards increase in quality, quantity and price of produce. The farmers belong to Drought prone areas of Maharashtra are depends upon uncontrollable factors such as rain, natural water resources and new schemes of Government. But instead of those factors it is imperative necessity to adopt innovative farming practices such as contract farming, integrated farming etc. These methods of farming are providing farmers an opportunity to develop their skills and yield. The study focused on various private initiatives which are practicing contract farming and assisted farmers at every level.

The Government is also taking an initiative by providing assistance towards organic farming. This initiative implemented through PGS India(Participatory Guarantee System for India) Decentralized organic farming Certification System. Many private initiative are in need of organic produce. To motivate farmers towards organic farming, PGS play vital role. It is based on decentralized organic farming through different groups(Gut) from each Taluka of District. [3]

1.1 Objectives or Purpose of Study
- To describe the conceptual approach of contract farming.
- To study the contract farming practice of different organizations in Maharashtra
- To study the implication of contract farming on bargaining power of farmers

1.2 Hypothesis testing
H1: There is significant relationship between selection of crop and yield.

From the hypothesis testing the study has found that there is relationship between selection of crop and yield. Crop would be successful when it is suitable with climate and Land fertility. Contract farming provided the platform where the farmers select appropriate variety of crops in order to take
more yield and provide favourable environment to the crops with innovative cultivation methods.

2. Materials and Methods

The data belongs to study is collected from the sources of secondary data. The study is concerned with the analysis of contract farming due to which it focuses on the effectiveness of contract farming practice implemented by different organizations in Maharashtra. The study collected the data from websites of the private companies which are involved in contract farming. Governments portals such as MANAGE, ATMA, PGSIndia, Ministry of Agriculture and the survey carried out by Government Organizations.

3. Results and Discussions

3.1 Conceptual approach of Contract farming

Contract farming is an agreement between farmers, intermediaries, processing and or marketing company to provide the agriculture produce at predetermined prices and quality, at certain places after specific period of time. Basically there are three types of contract farming.

i) Procurement contract under which only purchase condition and sale specified.

ii) Partial contracts in which partial inputs are provided by the contracting company and produce is purchased at predetermined prices.

iii) Total contract in which the contracting company provide and guide all the inputs to the farmer. [1]

Eaton and Shepherd recognized five different contract farming models.

In the centralized model a firm gives support to small landholder for production, buy the crop, and then processes it, directly controlling its quality. Such model applicable for crops such as cotton, sugar cane, tobacco, banana, tea, and rubber. [1]

In the Nucleus Estate model, the firm also provide a plantation in order to support smallholder production for the processing plant. This approach is mostly used for tree crops such as oil palm and rubber. [1]

The Multipartite model usually involves a partnership between government bodies, private companies and farmers.

At a lower level of sophistication, the Intermediary model can involve subcontracting by companies to intermediaries who have their own personal arrangements with farmers. [1]

Finally, the Informal model involves small and medium enterprises who make simple contracts with farmers on a seasonal basis. Although these are usually just seasonal arrangements they are often repeated annually and usually depend for their success on the proximity of the buyer to the seller. [1]

In India most of the farmers belong to small and marginal categories, and are found resource poor. Against this backdrop, contract farming is billed to be a variable instrument to address many of the traditional ills affecting the agriculture sector and the farmers, such as fragmentation of holdings, long chain of market intermediaries, ignorance about the requirements of the buyers, low farm mechanization, inadequacy of capital and distress sale and consequent heavy losses to farmers etc. contract farming is an exciting way of giving the power of scale to the small farmers, of marrying the small farmer efficiency to the scale economy. [4]

The research (Shridhara 2010) analyzed the costs, returns, income and employment, production efficiency and modus operandi of private firm in chilli producing under contract farming taluks viz., Bilagi and Mudhol in Bagalkot District of Karnataka. Research found that the farmers can get higher price than the market due to export tie-ups of the company. Under contract farming companies often provide credit to the farmers. this enables the farmers to escape from the evils of private moneylenders.[6]

The study found that the Contract farming has been identified as a potentially inclusive alternative for smallholders to outright acquisition of farm land by agri-business capital. Adopting an agrarian political economy-informed livelihoods approach, the paper argues that rather than an inclusive alternative to land grabbing, contract farming in the study site represents another way that capital is coming to control land in rural India, with just as important implications for agrarian livelihoods. While some individual households have improved their livelihoods through participation, the contract scheme acts to reinforce already existing patterns of inequality. [5]

Some of the private companies in Maharashtra which has started contract farming which are described as follows.

Varun Agro Processing Foods Pvt. Ltd. Involved in providing training for pesticide spraying to farmers. Their team along with the buyer team
goes to every farmer’s farm for giving trading about how to do the plantation and spraying, which pesticide to be used and when to use for more yield. Gowardhan Dairy started contract farming activity for producing fodder required to their 3500 cows. This initiative not only fulfill their requirements but it also provided a platform for generating income to the farmers.

Ion Exchange Enviro Farms Limited (IEEFL) Are involved in producing organic produce which are globally certified. A subsidiary of Ion Exchange (India) Ltd., India’s premier company in water and environment management is specialized in certified organic farming. The company covers 900 acres with contract farming practices to produce organic produce in the areas of Maharashtra, Goa and Tamilnadu. This company increasing the scope for organic produce. Those farmers which are producing organic produce can sell their produce at high price through contract farming with such companies as these companies connected with global market.

Similarly Tinna Oil and Chemicals Latur and Panchganga Farms Solutions Pvt. Ltd. Aurangabad are providing platform to the farmers through contract farming.

In India the food processing industry facing challenge of post harvesting management of produce due to Lack of integrated cold chain facilities. To overcome such problems the Pepsi Co(I) taken initiative by providing solutions to the farmers of India. Through contract farming the company is guiding farmers for proper timing and method of sowing, harvesting and other field operations. At every stage of crop cultivation the company assisting the farmers to enhance productivity.

Table 1: Impact Difference between Contract Farming and Conventional Farming.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Contract Farming</th>
<th>Conventional Farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Company helps to monitor and maintain quality at every level</td>
<td>Farmers are responsible to maintain quality</td>
</tr>
<tr>
<td>2</td>
<td>Predetermined Price of produce</td>
<td>Price depend upon market</td>
</tr>
<tr>
<td>3</td>
<td>Proper training provided by firm</td>
<td>No scope for training</td>
</tr>
<tr>
<td>4</td>
<td>International quality standards can be possible under CF</td>
<td>International quality standard not possible</td>
</tr>
</tbody>
</table>

Table 1 shows the impact of contract farming versus conventional farming. It shows difference of benefits that can be possible from contract and conventional farming.

The following table 2 shows various private initiatives which made contract with the farmers of Maharashtra.

Table 2: Contract farming initiatives [2]

<table>
<thead>
<tr>
<th>S.No</th>
<th>Districts of Maharashtra</th>
<th>Company</th>
<th>Crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dindori and Peth Taluka in Nashik District</td>
<td>Varun Agro Processing Foods Pvt. Ltd.</td>
<td>Tomatoes(1200 acres)</td>
</tr>
<tr>
<td>2</td>
<td>Ambegaon Taluka, Pune</td>
<td>Gowardhan Dairy</td>
<td>Fodder for 3500 cows</td>
</tr>
<tr>
<td>3</td>
<td>Marathwada ( Latur)</td>
<td>Tinna Oil and Chemicals, Latur</td>
<td>Soyabean</td>
</tr>
<tr>
<td>4</td>
<td>Maharashtra</td>
<td>ION Exchange Enviro Firms Ltd</td>
<td>Several fruits, vegetables, cereals and pulses</td>
</tr>
<tr>
<td>5</td>
<td>Junner Taluka, Pune</td>
<td>Panchganga farms solution Pvt. Ltd.</td>
<td>Red Onion</td>
</tr>
<tr>
<td>6</td>
<td>Jalgaon</td>
<td>Pepsi Co(I)</td>
<td>Potatoes</td>
</tr>
</tbody>
</table>

4. Conclusion

The study has found that the bargaining power of the farmer can be increased by implementing innovative farming practice that is contract farming. The study has explored the factors which make farmers productive and eligible to make bargaining with the companies or buyer of agriculture produce. It also has found that the price and quality of produce can be increased by the means of contract farming with buyers or firms. The farmers of Maharashtra can have an opportunity to increase skills and knowledge.
of innovative farming practices which increase their income.

The companies in table 1 have been providing assistance and guidance to the farmers at every level. Due to increased quality of produce the farmers under contract farming have gotten the benefits of increased price of produce which raise the income. In Maharashtra many areas are drought prone areas where traditional pattern of farming could not effective as much as innovative farming practice. Contract farming provided farmers a platform where they can improve their methods of farming.

Due to lack of integrated cold chain facilities, the farmers couldn’t implemented post harvesting management effectively. The companies are guiding about cowing, harvesting at right time. So the contract farming not only providing good price to the produce but also it has been provided effective guideline and assistance at every levels to the farmers. These are the factors which increase the price and quality of produce and thus the farmers under contract farming can increase their bargaining power and so income.

References