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SEMINAR REPORT

ON

Contract Farming in Strengthening Indian Agriculture

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CONTRACT FARMING IN STRENGTHENING INDIAN AGRICULTURE

Introduction

India has been a predominantly agrarian economy since the first human settlements on the subcontinent. While development efforts over the last four decades have doubtlessly strengthened India's industrial base, agriculture continues to be a significant pillar of the economy, contributing nearly 14 percent to GDP and representing approximately 11 percent of India's national exports. Liberalization, privatization and globalization of the post WTO regime have created new market opportunities and challenges. The agriculture sector, like any other sector of the economy, must evolve a response mechanism to face these new realities. This requires reforms in agricultural marketing in order to bring about the requisite changes and to push the agriculture sector to take-off from its current low growth rate of 2-3 per cent to a healthier 4-5 per cent. Wide support for contract farming under the Structural Adjustment Programme (SAP) and liberalization policies and its promotion by the international development agencies such as the World Bank, the USAID, the IFC and the CDC has further supported the development of contract farming in India, which in turn helps reform agriculture marketing practices indeed.

The first known evidence of contract farming in India dates back to the British colonization; The East India Company had contractual farming arrangements in the coffee and tea estates. As such, the concept of contract farming is not new to India but there are new forms and models of contractual arrangements which have prevailed post-independence. The total area covered by contract farming is less than 2 percent of the total cultivable land. However, if one were to consider purely corporate contracts with farmers for their crops, then this figure would barely touch 0.05 percent of total cultivable land.

In India, by the corporate sector Contract Farming has been so far more of a case of buyback and input supply, except for some exceptions in states like Punjab, where the state is actively involved in some of the contracts. The new agricultural policy of the Government of India is aimed at promoting growth of private sector participation in agribusiness through contract farming, which accelerates technology transfer, and capital flow and provides assured markets for crops. Contracting leads to environmental equity, food security and sustainability problems. It provides better income to farmers and generates more employment for labour through introduction of new crop technologies and by providing markets and inputs. In fact, contract farming as a system would affect the producers positively or negatively depends on the context of the economy. With this background the present seminar is conceptualized with following objectives

- 1) To understand the concept of Contract farming
- 2) To know the advantages and challenges associated with contract farming

3) To review the research studies related to contract farming

DEFINITION OF CONTRACT FARMING

Contract farming or marketing essentially is an arrangement between the farmer producers and the agribusiness firms to produce certain pre-agreed quantity and quality of the produce at a particular price and time. It can only be a pure procurement transaction or can extend to the supply of inputs or even beyond. It is emerging as an important mode of procurement of raw materials by agri-business firms in India due to the development in the field of agricultural marketing, changes in food habits and agricultural technology in the new economic environment. This is an important initiative for reducing transaction costs by establishing farmer-processor linkages in addition to the already existing methods of linking the farmers to the consumers.

Need for Contract farming

- Production and marketing are very critical in India.
- Overcome inadequate linkages with market.
- Lack of capital, poor infrastructure, technology transfer, etc.
- To avoid post-harvest losses.
- Unfavorable climate conditions for procurement.
- To avoid migration.

Why Contract farming?

- Financial burden of central and state Govt. will be reduced.
- Private investment in agriculture will increase.
- Contract farming is needed to bring about a market focus in terms of crop selection by Indian farmers.
- It will generate a steady source of income at the individual farmer level.
- It will provide a linkage between Agriculture and processing industries.
- It will generate gainful employment in rural areas.
- It will reduce migration of labour from rural areas to urban areas.
- It will provide Assured Income
- To promote processing and value addition.
- To flatten as far as possible, any seasonality associated with such employment.
- To promote rural self-reliance in general by pooling locally available resources and expertise to meet new challenges.

Historical Background of Contract farming

- C.F. was introduced for the first time in Taiwan in 1895 by the Japanese Govt.
- In India, C.F. has its historical roots during the time when the Europeans first introduced Indigo & Opium Cultivation in the Bengal Region, under the East India company rule.
- **1920:** ITC's contracts with the farmers of A.P. for growing Virginia tobacco.
- **1927:** C.F. by PepsiCo for the cultivation of vegetables particularly tomatoes and potatoes in Hosiarpur Taluk of Rajasthan,
- **1990:** Tomato farming contracts by PepsiCo in Punjab
- **2000:** In Karnataka C.F. was started with the cultivation of gherkin.

Contract Models in India:

Eaton and Shepherd (2001) classified 5 major models in which contractual arrangements occur between the firm and farmers. A sponsor (defined as the contracting firm/corporation) decides to follow a model depending on the market demand, production and processing requirements, and economic and social viability of the farmers.

➤ **Centralized Model:**

In a centralized model, a sponsor (a processor/ packer) buys from large number of small farmer. The quantity that will be bought is usually predetermined at the beginning of the sowing season and quality standards are strictly monitored and enforced. The firm provides inputs such as seeds, fertilizers, pesticides, credit and machines, etc. This model was used for annual crops and crops which often require a high degree of processing. Centralized Model contracts are also found concerning products where market requirements necessitate frequent changes in the farm technology with fairly intensive farm level support from the sponsors. Sponsors involvement in production varies from minimal input provision to the opposite extreme where the sponsor takes control of most of the production aspects such as tomato processing by PepsiCo in Punjab. It is same as the Type I contract farming in the contract farming classification given in a study by the National Institute of Agricultural Marketing.

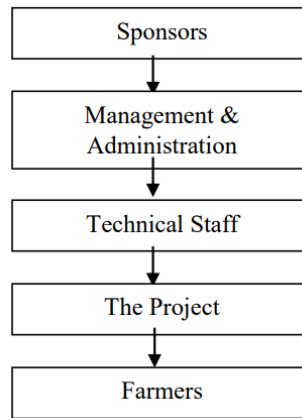


Fig 1: Centralized Model

➤ **Nucleus Estate Model:**

Nucleus estate model is a variation of the centralized model where the sponsor also manages a central estate or plantation. The central estate is usually used to guarantee throughput for the processing plant but sometimes the estate is used only for research or breeding purposes. The sponsor provides a significant amount of material and helps with the management inputs. This model is appropriate for crops such as tea, coffee, rubber, cocoa, sugar and oil palm, crops with which farmers may have had little or no experience. These crops require significant long-term investment and generally require immediate processing after the harvest. Sometimes firm may also procure from farmers around the estate.

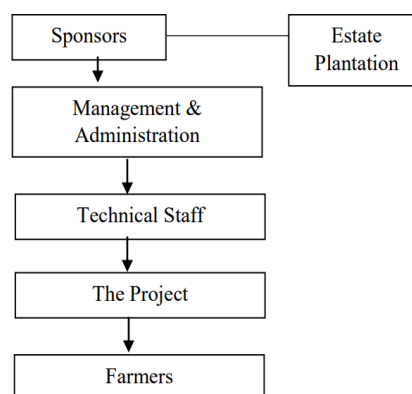


Fig 2: Nucleus Estate Model

➤ **Multi-partite Model:**

The multipartite model may involve a variety of organizations, frequently including statutory bodies. Each entity may be responsible for providing different goods and services such as credit, inputs, machineries, equipment's, transport, processing and marketing facilities. The following is an example of multipartite contracts in India: a leading firm (Dabar) acquired a leasing arrangement of land from the government and entered into an agreement with the tribal

communities to grow medicinal plants. A similar example is the firm, Rallis which organized production with farmers on contract basis.

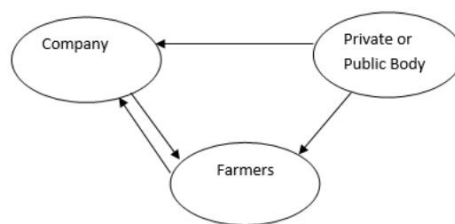


Fig 3: Multi-partite Model

➤ **Intermediary Model:**

The intermediary model involves sponsors in subcontracting linkages of farmers with intermediaries. Using this model, sponsors run the risk of losing control of production and quality as well as prices received by farmers. If the processors/sponsors are not unduly bothered about quality and concerned only with quantity this model may work. The decision to appoint intermediary depends on the trade off in terms of cost and quality to the firm. An example of this model in practice can be seen in appointment of Rallies by The Hindustan Lever Limited for the procurement of wheat and paddy in Madhya Pradesh and Uttar Pradesh.

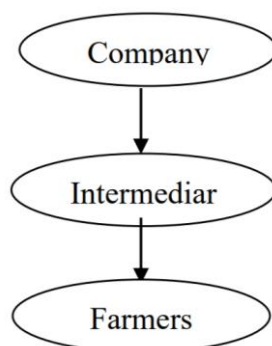


Fig 4: Intermediary Model

➤ **Informal Model:**

The informal model is characterized by individual entrepreneurs or small companies. It involves informal production contracts, usually on a seasonal basis (Prasad, 2013). It often requires government support services in the form of research and extension. Informal contract arrangement can be found in crops that require minimal processing. Usually these are sorted and graded before being put to market. As such, this arrangement is mostly found in fresh fruits and vegetables. Typically, the firm's involvement in actual production and input procurement is very minimal. Many supermarket chains in India usually follow this model to ensure a steady supply

of produce. Even with these several successful models on contract farming in India, there are a myriad of necessary preconditions needed in order to facilitate successful contracts between firms and farmers. And the preconditions like assured market and profitability, physical and social environment, adequate communication system, land , irrigation and input availability, social consideration of rural communities, and mutual trust between the firm and the farmer are noted for successful contract farming practice.

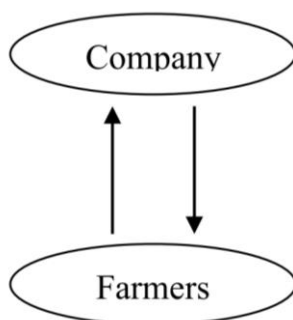


Fig 5: Informal Model

Fig 6. Area under contracting farming in different states of India:

States	Corporates	Crops	Area (ha)
Punjab	NIJER Agro Foods Ltd.	Tomato and Chilli	250
	United Breweries Ltd.	Barley	2270
	PepsiCo India Ltd.	Basmati, Groundnut, Potato and Chilli	6000
	Nestle India Ltd.	Milk	650 lakh kg/day
	Satnam Oversease, Sukhjit Starch	Basmati and Maize	4000
	Satnam Oversease, Amira Indian Foods Ltd.	Basmati	14700
Madhya Pradesh	Cargil India Ltd.	Wheat, Maize and Soybean	17000
	Hindustan Lever Ltd.	Wheat	15000
	Ion Exchange Enviro Farms Ltd.	Several Fruits, Vegetables, Cereals and Pulses	12098
	ITC	Soybean	1200
Maharashtra	Tinna Oil and Chemicals	Soybean	154.800
	Ion Exchange Enviro Farms Ltd.	Several Fruits, Vegetables, Cereals and Pulses	19
Karnataka	Himalaya Healthcare Ltd.	Ashwagandha	700
	Mysore S N C Oil Co.	Dhavana	400-500
	AVT Naturals Products Ltd.	Marigold and Caprica Chilli	4000
	Natural Remedies Pvt. Ltd.	Coleus	150
	20 Pvt. Co.	Gherkins	8000
Tamil Nadu	Super Spinning 570 Mills	Cotton	570
	Appachi Co.	Cotton	260
	Bhuvi Care Pvt. Ltd.	Maize and Paddy	1000

Table 1. State wise Contract Farming initiatives by private companies in India

State	Company	Crop
Karnataka	Himalaya Health Care Ltd.	Ashwagandha
	Mysore S N C oil Co.	Dhavana
	AVT Naturals Products Ltd.	Marigold and Caprica Chilli
	Natural Remedies Pvt. Ltd.	Coleus
	20 Pvt. Companies	Gherkins
	Rallis India	Basmati, Wheat, Fruits, Vegetables
	Appachi Company	Cotton
Maharashtra	Tinna Oil and Chemicals	Soyabean
	Rallis India	Basmati, Wheat, Fruits, Vegetables
	ION Exchange Enviro Farms Ltd.	Several Fruits, Vegetables, Cereals and Pulses
Madhya pradesh	Cargil India Ltd.	Wheat, Maize And Soybean
	Hindustan Lever Ltd	Wheat
	ION Exchange Enviro Farms Ltd.	Several Fruits, Vegetables, Cereals and Pulses
	ITC	Soybean

Punjab	NIJER Agro Food Ltd.	Tomato And Chilli
	United Breweries Ltd.	Barley
	Satnam Overseas, Sukhjot Starch	Basmati, Maize
	Satnam Overseas, Amira Indian Foods Ltd.	Basmati

	PepsiCo India Ltd.	Basmati, Groundnut, Potato And Chilli
	Nestle India Ltd.	Milk
Tamil Nadu	Super Spinning 570 mills	Cotton
	Bhuvi Care Pvt. Ltd.	Maize
	Bhuvi Care Pvt. Ltd.	Paddy
	Appachi Company	Cotton

Measures taken by Indian Government:

- In India, Contract farming is regulated under the outdated Indian Contract Act, 1872. The Act has many provisions that are relevant to contract farming.
- Model APMC Act 2003
- The State /UT Agricultural Produce and Livestock Contract Farming (Promotion & Facilitation) Act 2018
- The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act 2020

Model APMC Act, 2003:

- The Union Govt through its Model APMC Act, 2003 had suggested the states to promote C.F. and also provides specific provisions for contract farming. like compulsory registration of contract farming. sponsors and dispute settlement.
- Contractual agreements were recorded with the APMCs.
- APMC resolve disputes arising out of these contracts.
- 20 states had amended their APMC Acts to provide for contract farming, while Punjab had a separate law on contract farming.
- Only 14 states notified rules related to contract farming, as of October 2016.

Model Contract farming Act 2018:

- The act lays special emphasis on protecting the interests of the farmers, considering
- Also, services contracts right along the worth chain including pre-production, production and postproduction are included.

- “Registering and Agreement Recording Committee” or an “Officer” for the aim at district/block/taluka level for online registration of sponsor and recording of the agreement provides.
- Contracted produce is to be covered under crop/livestock insurance in operational.
- Contract farming to be outside the ambit of the APMC Act
- No permanent structure are often developed on farmers land/premises
- No right title of interest of the land shall vest within the sponsor.
- Promotion of FPOs to mobilize small and marginal farmers has been provided.
- FPO/FPC is often a contracting party if so authorized by farmers.
- No rights, title ownership or possession to be transferred of 1 or more of agricultural produce, livestock or its product of contract farming producer as per contract.
- Contract Farming Facilitation Group (CFFG) for promoting contract farming and services at the village/panchayat level provided.
- The accessible and straightforward mechanism at the root bottom possible provides for quick disposal of disputes

The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm service ordinance, 2020

Main objectives:

- To provide the required legal framework to facilitate C.F. in Agri. and allied activities
- The Bill aims at liberalizing Agri. trade and to accord considerable benefit to both parties that is, farmers will have a guaranteed purchaser and uncertainty regarding prices will be minimized.
- In some cases, the buyer would also be willing to give loans in kind to the farmer that is, seeds, fertilizers, supply of farm inputs, land preparation, technical inputs, etc., thereby moving them away from the clutches of traders who would also act as money lenders.

Silent features:

- improve market linkages, provide access to new technology, lead to improved quality of produce which in turn will lead to a risk-free higher income and better living standards for the farmer community.
- The company entering into a direct contract with farmers will ensure better control on the quality of the end-product with both stakeholders having an equal interest in its success.
- Directly contracting with buyers will increase competition leading to higher prices of farm produce for farmers and higher income.

- Until now, a farmer was prohibited from selling his produce to food-processing companies or retailers directly, they were forced to go through a licensed trader for the same.
- This Bill will facilitate ‘**my crop, my right**’, improve the bargaining position of farmers and will help get the farmers benefits of higher prices for their produce.

Role of Farmer producer organisations (FPOs) in Contract Farming

➤ One constraining factor in case of contract farming is that large corporations, food-processing companies, processors, modern retailers are hesitant to engage with hundreds of small and marginal farmers and thus prefer to opt for hiring a middleman called an organiser. On the other hand, farmers too are nervous about being exploited by large organisations.

➤ This drawback can be overcome with the help of promoting Farmer Producer Organisations (FPOs) / Farmer Producing Companies (FPCs) to mobilise and coordinate small and marginal farmers to benefit and avail of scales of economy in production and post-production. The government has released guidelines for **setting up and enabling 10,000 FPOs** in the country. FPOs can group together small landowners into a co-operative and give a shareholding to the farmers in proportion to their land-holdings (giving them a sense of ownership), thereby making them into an integral stakeholder in the company which can subsequently enter into a contract with modern retailers.

➤ Thus, the farmers’ interest will also not be compromised as being part of an FPO their **bargaining capacity will improve and entering into a legal contract** will justify investments made by companies on agri- technologies and farms.

➤ Interestingly, companies such as ITC Ltd has also set its eyes on contract farming, thereby grabbing the opportunities created by the agricultural reforms announced in June 2020.

➤ ITC has strong and enduring partnerships with farmers and has led to farmer empowerment through e-choupals and web-enabled the Indian farmer. Now, it plans to involve FPOs.

Contract Farming – Triangular Benefit

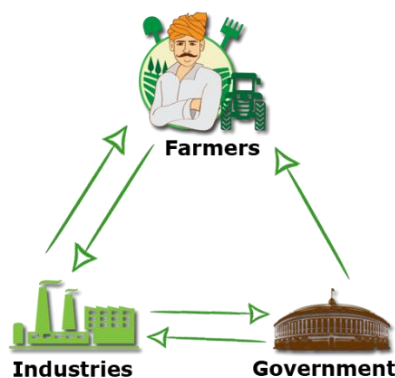


Fig 7: Triangular Benefit of contract farming

Contract farming win-win situation for the farmer, industry and government like in India farmer facing some problem like lack of capital, lack of resources (new technology, fertilizer, seed, etc.) and the measure problem is farmer are not connected with the market so they have not knowledge about the market so they not produce as per market demand and they get lower price of produce. Through the contract farming also benefit for the Industry like at a time of requirement of raw material easily get, risk sharing with the farmer, price benefit like raw material price increase so effect of the cost of production increase and measure benefit is quality of the goods as per requirement. Also benefit for government like employments generate so reduces government burden, foreign currency, etc.

Specifications of contract farming

Contract duration:

The duration of agreements depends on the nature of the crop. Contracts for short-term crops such as table vegetables are normally issued and renegotiated on a seasonal basis, whereas crops such as tea, coffee, sugar cane, and cocoa require long-term contracts that can be amended periodically.

Quality standards:

Product quality or, more precisely, the absence of quality, can have far-reaching consequences in terms of market acceptance and future expansion. Most contracts contain detailed quality specifications so that produce that does not conform to the agreed criteria can be rejected. It is important that farmers fully understand the reasons for standards and also understand that the acceptance of poor-quality produce from some farmers will ultimately affect an entire project and thus there is no long-term advantage to individual farmers to try to cheat. In the case of most smallholder tea schemes, for example, all leaf purchased on one day is processed at the same time. Poor quality green tea delivered by a few farmers will reduce the overall quality of the processed tea, thereby reducing returns for all.

Production quotas:

Both insufficient and excessive production can have serious ramifications. Overproduction can mean unpopular quota reductions and costly stockpiles. Conversely, underproduction caused by poor farmer selection, disease or climatic factors could eventually result in a project becoming insolvent, as processing costs per ton could rise to unacceptable levels. Moreover, if a processing

plant is unable to meet pre-arranged marketing contracts, future orders could be decreased or cancelled. Quotas are employed in the majority of contracts in order to:

- utilize processing, storage, and marketing capacities efficiently.
- guarantee markets for all farmers.
- ensure quality control.
- monitor farmers' performance.

Cultivation practices:

When sponsors provide seeds, fertilizers and agrochemicals, they have the right to expect that those inputs will be used in the correct quantities. They also have the right to expect that farmers follow the recommended cultivation practices. Of particular concern is the possibility that farmers may apply unauthorized or illegal agrochemicals which can result in toxic residues, with dramatic repercussions for market sales. It is therefore essential that all contracted farmers adhere strictly to the project's input policies. Managers and their extension staff must make every effort to explain to farmers why the specifications and input recommendations must be followed.

Crop delivery arrangements:

Arrangements for collection of products or delivery by the farmers vary widely. Some ventures stipulate that farmers should deliver their harvest to processing plants at given dates; others may include the use of the sponsor's transport to collect harvested crops at centrally located buying points. For contracted fresh vegetables a normal practice is farmgate collection. When the sponsor's transport is used there is normally no cost to the farmer. In the sugar industry, small railways are used extensively; farmers deliver their harvested cane to a central loading point from which it is then transported to the crushing mill, weighed and purchased. Many formal contracts have clauses that outline the obligations of both the farmer and the sponsor regarding delivery and collection respectively.

Pricing arrangements:

Pricing and payment arrangements are the most discussed and challenging components of all farming contracts. The choice of which crop pricing structure to use is influenced by whether the crop is for the local or export market, the seasonal nature of production and the degree of competition in the marketing system. The application of transparent pricing formulas is crucial and the drafting of a clear pricing structure and the organization of a practical method of payment encourage confidence and goodwill. There are several ways prices offered to farmers can be calculated, including:

- fixed prices.
- flexible prices.
- prices calculated on spot-market values.
- prices on a consignment basis
- split pricing.

Payment procedures:

For all farmers the most convenient method of payment is usually cash-inhand immediately following delivery of any part of their crops. However, this is not always possible, particularly if the sponsor has limited resources, where payment depends on the total production after processing, or where the payment is based on the price the sponsor obtains. Also, the company may have the obligation to repay loans advanced by banks to farmers using the contract as collateral. In the majority of cases payments are made periodically throughout a season, perhaps two to four times, with the final payment after the last harvest. Any material and cash advances given to farmers during the season are normally deducted from the final payment.

Insurance arrangements:

Agricultural investments always involve risk. The five most likely reasons for investment failure are poor crop management, climatic calamities, pest epidemics, market collapse and price fluctuations. The standard agribusiness approach to indemnify against quantity shortfalls is crop insurance. Although government-run crop insurance schemes often prove to be unsatisfactory, success with insurance programmes offering named (i.e. limited) peril cover for certain crops has been reported in Mauritius, the Philippines and Cyprus. There is also a growing awareness by the private sector that crop insurance should be encouraged and promoted.²⁹ As the farming involved in a contract arrangement becomes technologically more advanced, the range of risks to which it is subject generally becomes more limited.

. Some authorities classify the four main categories of crop insurance in order of “their comprehensiveness in terms of coverage of risks” as follows:

- Acts of God.
- destruction of specified assets.
- loan default.
- production and income loss.

Contract Farming Framework

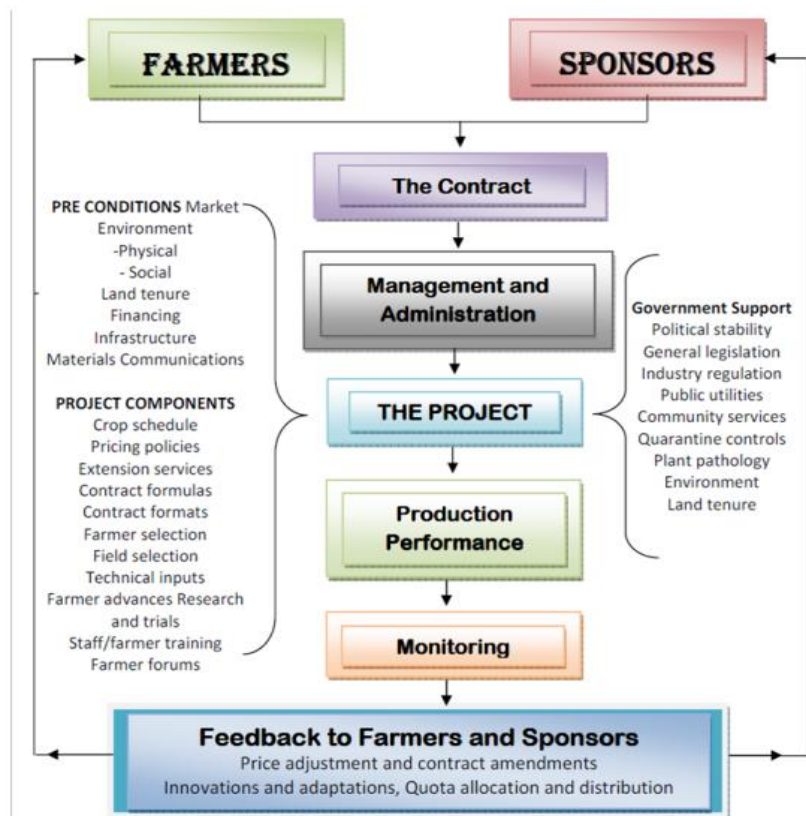


Fig 8: Contract Farming Framework

Figure 8 shows diagrammatically a hypothetical contract farming framework. It sets out those aspects that must be considered when planning and implementing a venture. These are discussed in detail in the following chapters. Chapter 1 initially reviews both the major advantages of contract farming and the problems associated with it. From the point of view of farmers, contractual arrangements can provide them with access to production services and credit as well as knowledge of new technology. Pricing arrangements can reduce risk and uncertainty. Some contract farming ventures give farmers the opportunity to diversify into new crops, which would not be possible without the processing and/or marketing facilities provided by the company. Offsetting these benefits, however, are the risks associated with the cultivation of a new crop, the fact that the company may fail to honor its commitments and the danger of indebtedness if problems arise. From the point of view of the sponsoring companies, contract farming may in many cases be more efficient than plantation production, and will certainly be more politically acceptable. It can give them access to land that would not otherwise be available and the opportunity to organize a reliable supply of products of the desired quality, which probably could not be obtained on the open market. On the other hand, from the companies' perspective contract farming is not without difficulties. On occasion farmers may sell their outputs to outsiders, even though they were produced using company-supplied inputs. Conflicts can also arise because the

rigid farming calendar required under the contract often interferes with social and cultural obligations.

Fig 9. Salient features of contract farming companies

Particulars	Foreign company	Domestic company
Year of establishment in the state	2002	2000
Type of contract	Written/Oral	Oral
Criteria for choosing farmers	Entrepreneurship, resource endowment (specifically assured groundwater irrigation)	Entrepreneurship, resource endowment (specifically assured groundwater irrigation)
No. of farmers under contract	1500	2500
Input supply	Seeds, fertilizers, plant protection chemicals	Seeds, fertilizers, plant protection chemicals
Flexibility to grow crops of other company	Allowed	Allowed
Mode of payment	Payment after deducting cost of inputs	Payment after deducting cost of inputs
Advanced payment	No provision	Sometimes provided
Form of payment	By cheque	In cash
Time of payment	20-25 days after the day of last delivery of produce of produce	15-20 days after the day of last delivery
Compensation in the event of crop failure	No compensation	Indirectly provided by allocating larger acreage in the ensuing season
Crops contracted	Gherkin, chilli, baby corn	Okra, gourd, brinjal, chilli, beans, green peas, carrot, asparagus, baby corn, cole crops, capsicum, onion, lettuce, tomato, cucumber, green leafy vegetables, melons
Area	3300 acres (all outsourced)	300 acres (captive) 1200 acres (outsourced)
Most common type of contract violation	Selling to other buyers	Using prohibited pesticides, selling to other buyers
Catchment area	Parts of Bangalore rural and Tumkur districts	Parts of Bangalore rural and Ooty
Price fixation	Pre-determined	Pre-determined
Research and development unit	Absent	Present
Technical guidelines	Provided	Provided
Processing unit	Semi-processing unit	Processing unit with sophisticated refrigeration for fresh packing of commodities
Type of commodities traded	Canned and pickled commodities	Fresh refrigerated
Market destination	International markets	Local and international markets

Advantage of contract f farmers

- 1. Provision of better inputs and production services:** It is also to the supply of basic inputs such as seeds and fertilizers. Sponsors may also provide facilities such as land preparation, field cultivation and harvesting as well as free training and extension services to the farmers.
- 2. Easy access to Credit:** Contract farming sometimes allows farmers access to some type of credit to finance production inputs. Arrangements can also be made with commercial banks or government agencies through crop loans that are guaranteed by the sponsor, i.e. where the contract serves as collateral.
- 3. Application of better technology:** Private agribusiness will usually offer technology more conscientiously than government agricultural extension services because it has a direct economic interest in improving farmer's production.
- 4. Improvement in skills of the farmers:** Farmers will gain experience in carrying out field activities following a strict timetable imposed by the extension service. Farmers ordinarily apply techniques introduced by management (seed and fertilization, transplantation, pest and disease control, etc.) to other cash and subsistence crops.

5. **Guaranteed Pricing System:** Farmers receive return an open market depends upon the predominant market prices further as on their ability to discount with consumers for their crops.

6. **Easy access to reliable market:** Contract farming offers a possible solution to the present situation by providing market guarantees to the farmers and insuring supply to the traders. Even wherever there are existing shops for similar crops, contract farming can offer considerable advantages to farmers.

Advantages for sponsors:

1. **Political Acceptability:** Contract farming, particularly when the farmer is not a leaseholder of the sponsor, is less likely to be subject to political criticism. It can be more politically expedient for a sponsor to involve smallholder farmers in production instead of to control plantations.

2. **Overcoming barriers on land restrictions:** In present days most of the large tracts of suitable land are either traditionally owned, costly to purchase or unavailable for commercial development. Contract farming, therefore, offers access to crop production farmland that will not well be available to a corporation, with the extra advantage that it does not get to purchase it.

3. **Production consistency and shared risk:** Working with contracted farmers facilitates sponsors to share the risk of production failure because of the poor weather, disease, etc. Both estate and contract farming strategies of getting raw materials are significantly more reliable than making purchases on the open market.

4. **Quality assurance:** Steady markets for fresh and processed agricultural produce need reliable quality standards. Contracted crop production and estate both require close management to regulate and maintain of quality of products, mainly when farmers are adopting new harvesting and grading methods.

Disadvantages for farmers:

1. Reduce the household's freedom or lose flexibility in making decisions.

2. Possible late purchase and input delivery, and delays in payments

3. Manipulation of agreed quantity and quality specifications

4. Might buy less of the product than the pre-agreed quantities, or

5. rejected for not meeting required standards.

6. Possible high price of inputs

7. Possible greater environmental risks

Disadvantages for sponsors:

1. Farmers against contract
2. Social and cultural constraints
3. Farmers discontent
4. Government reforms
5. Limitation of land availability

Problems in Contract Farming**Problems faced by Farmers.**

1. Lack of complete knowledge on the contract farming would increase the risk in terms of coordination among the parties to the contract and its execution.
2. Lack of availability of alternatives and access to information on contract farming
3. The prevailing corruption dominated by monopolies and manipulation of quality specification along with Indebtedness and over reliance on advances.
4. Lack of technology to test the suitability of technology and crop compatibility of the land characteristics.
5. Low level of commitment of corporates towards rural development, leading to less employment generation, transparency in system and communication
6. Lack of established statutory regulatory authority might lead to unintended problems for farmers.
7. Corporates tend to work on cost cutting calculations, in long run farmers might not be honoured similar to the past years as the farmers will end up with no alternative markets to sell the produce.
8. Due to Price fluctuations, farmers sometimes tend to divert the agricultural produce to spot markets when prices are high, instead of executing the contract.

Problems Faced by Companies

1. Poor management and lack of consultation with farmers.
2. Farmers may sell outside the contract.
3. Farmers may divert inputs supplied on credit to other purposes.
4. Small size of farmer landholdings.
5. Need to contract with a larger number.

6. Lack of a comprehensive crop insurance scheme to protect against natural calamities.

Challenges in contract farming:

- contract farming is criticized for being biased in favour of firms or large farmers while exploiting the poor bargaining power of small farmers.
- Growers faced problems like delayed payment, low price and pest attack on the contract crop which raised the cost of production.
- Less awareness among farmers about contract farming.
- Gender issues - Women have less access to contract farming than men.
- Lack of infrastructure and transportation.
- Problems of Monopsony (Single Buyer - Multiple Sellers)

Suggestions for improvement on performance of contract farming:

- Emphasis should be on infrastructure development.
- For the better understanding of terms and condition of contract farming the agreement should be in regional language.
- The data should be maintained at state level, country level to made available for effective policy making.
- Success in developing contracting models or other forms of farm-firm linkages.
- The contract farming in India in nascent stage so steps should be taken to boost growth.
- Government should give some incentives to contract farming firms.

RESEARCH STUDIES

Research study 1- SWOT Analysis and Suggestions, Opinion of Respondents on Contract Farming

By: Harish (2020)

Methodology- The study was conducted in two districts of Karnataka state viz., Bangalore Rural and Tumakuru. Two taluks each from each district, Tumakuru and Gubbi taluks from Tumakuru district, and Nelamangala and Doddaballapura taluks from Bangalore Rural district were selected. A total of threecrops were selected purposively, namely Gherkin, Watermelon, Tomato. The respondents were selected based on simple random sampling techniques; the sample size was Gherkin 35, Tomato 35, Watermelon 10, and noncontract farmers 20 from each taluk of two districts and the total number of sample size was 200.

Table 2: SWOT Analysis of Contract Farming

Indicator	Particulars	Tumakuru		Bangalore Rural		Total	
		No	%	No	%	No	%
Major Strengths	Fixed price	24	15.00	32	20.00	56	17.50
	Price security	17	10.63	18	11.25	35	10.94
Major Weakness	Rejection of Crop	12	7.50	28	17.50	40	12.50
	No High Support	10	6.25	13	8.13	23	7.19
Major Opportunitis	Job Opportunities	13	8.13	17	10.63	30	9.38
	Additional Benefits	11	6.88	17	10.63	28	8.5
Major Threats	No Crop Insurance	11	6.88	19	11.88	30	9.38
	No Compensation	24	15.00	21	13.13	45	14.06

From Table 2 it is found that majority (17.50 %) of respondents said that fixed price is the major strength of contract farming. 11.00 percent of respondents have price security as a major strength. It was found that in the study, across two districts are the same strengths. The p 0.594 value obtained by the Chi-square statistics test result indicates that the various strengths of contract farming across districts are independent. It is also evident that the majority (12.50 percent) of respondent's major weakness of contract farming is the rejection of crop, and 7.19 percent of respondent's major weakness of contract farming is no high support from the firm. The p 0.28 value obtained by the Chi-square statistics test result indicates that the various weakness of contract farming across districts is independent. Most 10.00 percent of respondents, major opportunities of contract farming, are job opportunities. 8.75 percent of respondents, major opportunities of contract farming, are additional benefits. The p 0.28 value obtained by the Chi-square statistics test result indicates that the various opportunities for contract farming across districts are independent. A majority (14.06 %) of respondents, major threats of contract farming, is no compensation for their crops, while any risks happened. 10.00 percent of respondents, major threats of contract farming are no crop insurance. The p 0.156 value obtained by the Chi-square statistics test result indicates that the various threats of contract farming across districts are independent.

Table 3: Suggestions to improve contract farming

Particulars	Tumakuru		Bangalore Rural		Total	
	No	%	No	%	No	%
Timely payment	71	44.38	77	48.13	148	46.25
Drip irrigation facility	22	13.75	18	11.25	40	12.50
Company have to provide labour services	7	4.38	5	3.13	12	3.75
Incentives must be provided	1	0.63	2	1.25	3	0.94

Table 3 reveals that almost 46.25 percent of respondents suggested improving contract farming is timely payment. It was in the Tumakuru district is 44.38 percent, and Bangalore rural district is 48.13 percent. Many times, contract firms delay the payment of contract farmers. It was found in the field survey. It is true in both districts. 12.50 percent of farmers suggested improving contract farming as a drip irrigation facility. Farmers have required drip irrigation facilities for their crops, and many times, farmers are faced with the problem of shortage of water from various sources of irrigation. Drip irrigation is suitable for contract crops; it saves water and reduces the problem of irrigation in farm activity. 3.75 percent of respondents gave suggestion is the company must provide labor service, and nearly 1.00 percent said incentive must be provided. The p 0.685 value obtained by the Chi-square statistics test result indicates that Suggestions to improve contract farming are independent of district

Table 4: The opinion of Contract Farming

Particulars	Tumakuru		Bangalore Rural		Total	
	No	%	No	%	No	%
Dissatisfied	7	4.38	13	8.13	20	6.25
Satisfied	151	94.3	147	91.88	298	93.13
Very Satisfied	2	1.25	0	0.00	2	0.63

Table 4 reveals that the majority (93.13 percent) of respondents; the opinion of contract farming is satisfied. It is true across both the districts. In the Tumakuru district a majority (94.38 percent) and Bangalore rural district (91.88 percent) of the respondent's opinion of contract farming is satisfied. 6.25 percent of respondents, opinion is dissatisfied. Only two respondents' opinion is very satisfied. The p 0.146 value obtained by the Chi-square statistics test result indicates that the opinion of contract farming based on experience is independent of districts. It indicates that the contract farming across both districts is successful.

Research study- 2- Attitude of paddy growers towards contract farming in Jammu region of J&K State

By- Parvani *et al.*, (2020)

Methodology- The present investigation was carried out in Jammu and Kathua district of Jammu Region. Three villages from each districts having maximum number of contract farmers were selected purposively for the study. In each selected village the list of farmers practicing contract farming was prepared. From such a list fifty contract farmers and fifty non-contract farmers were randomly selected. Thus, 100 contract and 100 noncontract farmers constituted the sample size of the study. The data was collected through personal interview method with the help of pre-tested interview schedule. Descriptive statistics like averages, percentages were used. Further, Ranking technique was used to compile the benefits and problems faced by the paddy growers under contract farming.

Table 5: Attitude of sampled respondents regarding contract farming on the basis of t score.

Attitude	Contract farmers (n=100) %	Non-contract farmers (n=100) %	Absolute difference value	t-value (P-value)
More Favourable (>51)	55	31	24	1.09(0.276)
Less favourable (<50)	45	69	24	2.358*(.029)
Mean attitude score	-	-	-	49.739
SD	-	-	-	8.700

Table 5 revealed that, 55.00% of contract farmers had most favorable attitude towards contract farming, 31 % of non-contract farmers had most favorable attitude towards contract faming.

CONCLUSION

Contract farming modernizes farmers by providing new technology, credit, inputs and technical advice besides linking them to the international market. It is not an easy to solve all related problems of agricultural production and marketing systems. But contract farming could be evaluated as a way of providing earlier access to credit, input, information, technology and product markets for the small-scale farming structure. But there are some problems in contract farming. For successful implementation of contract farming, having co-ordination and collaboration, consciousness and acting in an organized manner are advisable for both sides. On the Other hand, Government attributes and incentives are also important aspects

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DISCUSSION

1. Is contract farming applicable for all the crops?

The various agricultural produce are suitable for practices under contract farming like tomato pulp, organic dyes, poultry, pulpwood, mushrooms, dairy processing, edible oils, exotic vegetables, baby corn cultivation, basmati rice, medicinal plants, potato for making chips and wafers, onions, mandarin oranges, durum wheat, flowers and orchids, etc.

2. Is contract farming in India really worth it?

The agricultural sector in India has not seen much development in recent years and the government has consistently been pushing for increased industrial development, often choosing to ignore the Indian farmer in favor of the Indian (factory) floor worker and factory owner. Contract farming is an efficient way to ensure that there is increased investment in the agricultural sector thanks to increased interest arising out of contractual farming. It also acts as a buffer in situations where there is an unprecedented and unforeseen decrease in the MSRP of most produce crops.

Most experts agree that contract farming generally tends to favor larger farmers more than smaller farmers, mainly due to the increased efficiency in operating and communicating with a single farmer. The recent bill allowing contract farming makes it possible to effect changes that experts on agriculture and the economy have been suggesting for decades; the consolidation of smaller farms. It was found in surveys that over 82.61% of the farms in India were under 2 hectares in size.

3. What are the negative impacts of contract farming?

- increased risk;
- unsuitable technology and crop incompatibility;
- manipulation of quotas and quality specifications;
- corruption;
- domination by monopolies; and
- indebtedness and overreliance on advances.

4. Do the farm laws remove MSP?

While the government does declare the MSP twice a year, there is no law making MSP mandatory. What this technically means is that the government, though it buys at MSP from farmers, is not

obliged by law to do so. As a matter of fact, there is no law which says that MSP can be imposed on private traders as well.



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Venue: Dwarakinath Hall

Seminar I
on
Contract Farming in Strengthening Indian Agriculture

Synopsis

Agriculture is an age-old tradition and the main source of livelihood for about 58% of India's population. It holds a pivotal position and contributes almost 17-18% of India's economy. Rapid development and globalization have paved the way for contract farming, and it has now attained an important place in the agriculture industry. Though contract farming is not new to India, it was prevalent during British rule; cash crops such as indigo, cotton, opium, tobacco, tea was always grown through this system and it has also been in practice for at least 2 decades in many states of India but no absolute and nationwide Act was formed for it, until September 2020. The introduction of privatization in agriculture and the process of trading, export, and low-cost production for maximum profits gave a commercial outlook to farming. It has grown dramatically during the last few years, but it has also given rise to the issues to focus on such as; impact on small farmers, women, laborer's, soil fertility of agricultural land, local markets. With this background the present seminar is conceptualized with the following objectives:

1. To understand the concept of Contract farming
2. To know the advantages and challenges associated with contract farming
3. To review the research studies related to contract farming

Concept of Contract farming

Contract farming is a system of production in which the company/buyer/sponsor and a farmer, (producer or seller) enter into an agreement to produce various products of fixed quantity and quality on the farmer's land and he has a duty to harvest and deliver the same to the company. All the inputs required for farming like; land preparation, market facilities, and technical advice are supplied by the company and the land and labour for production are supplied by the farmer. The agreement can be oral but it is mostly a written and registered contract.

Different models of contract farming: Some of the important models used in contract farming are Bi partite model, Tri partite model, Multipartite model, Centralized model, Nucleus estate model, Informal model, Intermediary model.

Measures taken by Indian government.

Contract farming is regulated under the Indian Contract Act, 1872. National Agricultural Policy (NAP) of GOI announced in 2000 envisaged that Private sector participation in Agriculture shall be promoted through Contract farming. The Union Govt through its Model APMC Act, 2003 had suggested the states to promote contract farming. Model Contract Farming Act, 2018 was envisaged by Government of India and formulated The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Bill, 2020.

Advantages of contract farming:

a) Farmers: Enables small scale farming competitive – small farmers can access technology, credit, marketing channels and information while lowering transaction costs, Assured market to sell their produce at the doorsteps by reducing marketing and transaction costs, Minimises the risk of production, price and marketing costs, It assures higher production of better quality, financial support in cash and technical guidance to the farmers, For Agri-processing level, it assures a consistent supply of agricultural produce with quality at the appropriate and lesser cost.

b) Sponsors: Uninterrupted & Regular Flow of Raw Material, Protection from Fluctuation in Market Pricing, Long Term Planning Made Possible, Concept Can Be Extended to Other Crops, Builds Long Term Commitment, Dedicated Supplier Base, Generates Goodwill for The Organisation.

Challenges of contract farming:

Contract farming is criticized for being biased in favour of firms or large farmers while exploiting the poor bargaining power of small farmers, Growers faced problems like delayed payment, low price and pest attack on the contract crop which raised the cost of production, less awareness among farmers about contract farming, Gender issues - Women have less access to contract farming than men, Lack of infrastructure and transportation, Problems of Monopsony.

Review of the research studies

Harish (2020) revealed that, about the level of major strength, it is seen that the majority (17.50%) of respondents said that fixed price is the major strength of contract farming. It is also

evident that the majority (12.50%) of respondent's major weakness of contract farming is the rejection of crop, most (10.00%) of the respondents, major opportunities of contract farming, are job opportunities. A majority (14.06%) of respondents, major threats of contract farming, is no compensation for their crops, while any risk happened.

Parvani *et al.*, (2021) observed that 55.00% of contract farmers had most favorable attitude towards contract farming. Out of 100 noncontract farmers, just 26.00% of them were not aware about contract farming. From non-contractors just 31.00% of the respondents had positive disposition towards contract farming. From unfavorable class, 45.00% and 69.00% of the contract and non-contract cultivars had less favorable attitude towards contract farming

Conclusion

Contract farming modernizes farmers by providing new technology, credit, inputs and technical advice besides linking them to the international market. Contract farming can be evaluated as a way of providing earlier access to credit, input, information, technology and product markets for the small-scale farming structure. For successful implementation of contract farming, having co-ordination and collaboration, consciousness and acting in an organized manner are advisable for both sides. On the Other hand, Government attributes and incentives are also important aspects.

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