Corporatisation of Agriculture in India- A Study of Contract Farming

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ABSTRACT

Indian Agriculture has been under policy reforms for some time now. With the onset of liberalisation and globalisation, technology has entered even the farms as the need for greater productivity and output is being realised all over the world to meet the growing demands of food grains. Contract farming has been in existence for some years from now mainly as a means of organising the commercial production of agriculture by both large scale and small scale farmers. Yet the expanding agri- business unfolds a foreseen danger for the small-scale farmers who will find it difficult to sustain and participate in the market economy. This paper therefore intends to identify the extent of penetration of corporate farming in India, and the resulting implications thereof.

Key Words : Corporate Farming, Contract Farming, Product Processor, Distributor.

Introduction

Corporatization of agriculture can be traced back to the forced commercialisation of agriculture under the aegis of East India company where farmers were forced in 18th and 19th century to cultivate opium and Indigo for the benefit of the Company leading to loss of the fertile quality of the land rendering it unsuitable for any other crop cultivation which resulted in India losing its independence for food grains at the time of independence.

After independence, India heavily relied on foreign countries for its food grains requirement. Being an agrarian economy which was once independent and self sufficient for all types of agricultural requirements had become dependent on other countries because of hostile policies of East India Company. Subsequently, the Indian Policy makers tried hard to get to the previous status of self sufficiency but attained it only after green revolution which made India largely self sufficient and an exporter of food grains. Agriculture contributes significantly to the Indian economy. In the year 2009-10, it contributed 14.6% to GDP, 10.23% to exports and provided employment to 55% of the workforce.

For a long time, Indian government discouraged private and corporate participation in agriculture, because corporatisation of agriculture could lead to cultivation of cash crops instead of food grains making India dependent on imports for its basic food necessities.

With the emergence of a market oriented economy and increasing need for food grains and other agriculture products, the Indian government recognised the need of liberalisation, globalisation, privatisation and rapid expansion of agro-business in order to meet the growing demand. With the urbanisation of rural areas and migration of rural population to urban areas for better living and in search of alternative occupations, the land holdings under agriculture have consolidated facilitating use of modern technology and the government encouraged the participation of corporate houses to ensure capital inflow for better use of technology and better output of agriculture sector.

The national agricultural policy thus, envisages that "private sector" participation will be promoted through contract farming and land leasing arrangements (corporate farming) to allow accelerated technology transfer, capital inflow and an assured market for crop production, especially of oilseeds, cotton and horticultural crops, leading to two types of private participation models i.e. corporate farming (land leasing arrangements) and contract farming

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Objectives :

(i) To identify the need for legalising corporate farming in India.

(ii) To understand the scope, rationale and limitations of contract farming in India.

(iii) To understand successful models of contract farming in India

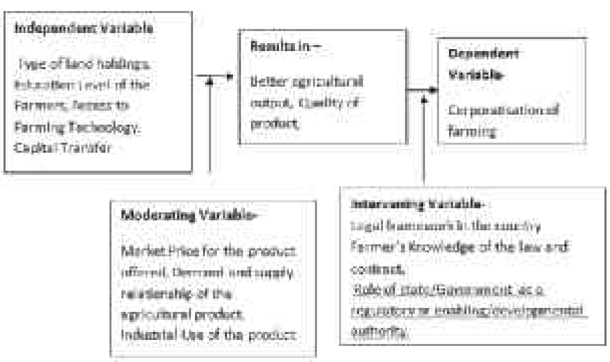
(iv) To identify the implications of corporate farming.

(v) To know the current scenario of contract farming in India

Methodology

The research depends on secondary data and information which is used for further analysis to draw suitable inferences.

Theoretical Framework



Corporate Farming

Corporate Farming is a term that describes the business of agriculture where mega-corporations are involved in food production on a very large scale. It is a modern food industry concept which encompasses a chain of agricultural related business viz., seed supply, agro-chemicals, food processing machinery, storage, transportation, distribution, marketing, advertising and retail sales. The ultimate goal of corporate farming is to integrate the entire process of food production, up to the point of distribution and sale of food to the consumers which means retailing of the food products. As a broad term, corporate farming deals with the general practices and effects of a small number of large global corporations that dominate the food industry with better capital and technology inflow (Wikipedia). As a part of corporate farming initiation, waste cultivable and uncultivable land will be allotted to approve projects submitted for development of such land for cultivation and subsequent agricultural production.

Contract Farming

Contract farming is defined as a system for producing and supplying agricultural/horticultural produce under forward contract between producers/suppliers and buyers. The essence of such an arrangement is the commitment of the producer/seller to provide an agricultural commodity of a certain type, at a time and price and the quantity required by a known and committed buyer (Crisil report).

Contract farming has also taken a new dimension whereby, farmers with small land holdings can come together to form companies in which they would be the joint owners along with the corporate entities supporting these groups by engaging in agro-processing and trading to support the farmers.

If the framework works out, the new-found love of corporates like ITC, Bharti and Reliance for farm produce could create a new breed of companies in which farmers rub shoulders with corporate biggies on company boards. Farmers would pool their land and that would form their contribution to the capital base of the company. While farmers would hold equity stake in the company in proportion to the land contributed by them, companies involved in agro-processing or trading would have their stake capped at 25%.

Legal Frame Work

The National Agriculture Policy (NAP) was enunciated in July 2000. The NAP does not, quite correctly, emphasise corporate farming. It encourages participation of the corporate sector through contract farming and land leases to allow technology transfer, capital inflows and assured markets and through collaboration between producer, co-operatives and companies to promote the agro-processing industry.

The NAP emphasises the importance of improving farm productivity and incomes and the reduction of risk through commodity futures. However, the NAP incorrectly ignores the composite role that forward contracts could play in improving productivity and incomes and reducing risk. (Business Line,2001). As a policy to encourage participation of corporate houses in agriculture, the government ensures a 20-year lease of wasteland to big business houses and individually capable (big) farmers.

Scope of Contract Farming

In India, contract farming is classified into following three categories :

1. Procurement contracts under which only produce, sale and purchase conditions are specified
2. Resource provision contracts where in some of the inputs are supplied by the contracting farm and the produce is bought at pre-agreed prices.
3. Total contracts under which the contracting firm supplies and manages all the inputs on the farm and the farmer becomes just a supplier of land and labour.

The first type is generally a marketing contract (Nestle model) and the other types are production contracts viz., MDVFL Model (Scott, 1984; Welsh, 1997). The relevance and importance of each type of contract depends on the type of the product and the time. The relevance and importance of each type varies from product to product and over time and these types are not mutually exclusive (Hill and Ingersent, 1987; Key and Runsten, 1999). There is a link between product and the market factor under the contractual agreement as these necessarily require a definite quality of produce and therefore, needs specific type of inputs (Scott, 1984; Little, 1994). Different types of production contracts allocate production and market risks between the producer and the processor in different ways.

Rationale of Contract farming

The rationale for both the farmers and the farm product processors/distributors for preferring contract farming are discussed below.

Rationale for farmers

1. A farmer may prefer a contract which can be terminated at reasonably short notice without much legal hassles.
2. Contracting gives access to additional sources of capital with a reasonably certain price by shifting part of the risk of adverse price movement to the buyer (Hill and Ingersent , 1987).
3. Farmers also get an access to new technological inputs including credit through contracts (Glover, 1987; Eaton and Shepherd, 2001).

Rationale for the farm product processor/ distributors

1. Contract farming is a better alternative to corporate farming because corporate farming can be more risky and requires lots of investment which can be difficult to manage especially for new entrants and may not be viable. (Payer, 1980).
2. For a corporate who wants to venture into farming as a fresh initiative especially those interested in marketing contracts like processing and distributor firms' contract arrangements are more flexible and needs less investment and impose less additional burden of labour relationships, ownership of land and production activities in the face of market uncertainty (Buch-Hansen and Marcussen, 1982; Kirk, 1987). The firm gets access to unpaid family labour (White 1997) that can make use of state funds which are directed at farmers by developmental agencies (Clapp 1988).
3. Food processing units receive a continuous supply of raw material which enables them to use their capacity at the optimum level and reducing their operating cost (Kirk. 1987).
4. Product quality is ensured as it's pre-determined and any deterioration in the quality has financial consequences. (Wolf et al, 2001).
5. Contract farming reduces market imperfections in the produce capital (credit), land, labour, information and insurance markets at a micro economic level. (Grosh, 1994; Key and Runsten, 1999)

6. Contracts help in reducing transaction cost and facilitate better coordination of local production activities which often involve initial investment in processing, extension etc. (Grosh, 1994; Key and Runsten, 1999).

7. Contract farming is used as a policy step by the state to bring about crop diversification and to improve farm incomes and employment opportunities. Because of economies of scale, contract farming is seen as a way to reduce production and marketing costs. It also provides access to better inputs and more efficient production methods. (Benziger 1996; Singh, 2000).

8. Agro-business firms create more positive externalities like employment, market development or infrastructure (Key and Runsten, 1999).

9. Contributes to development in the agricultural sector in the fields of inputs, product exchange, and product upgrading through research and innovations (Glover, 1987, Christensen, 1992)

Advantages for the farmers

1. Provision of inputs and production services;
2. Access to credit;
3. Introduction of appropriate technology;
4. Skill transfer;
5. Guaranteed and fixed pricing structures; and
6. Access to reliable markets.

Limitations for farmers

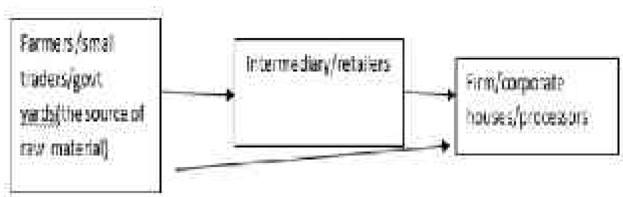
For farmers, the potential problems associated with contract farming include:

1. Increased risk
2. Unsuitable technology and crop incompatibility
3. Manipulation of quotas and quality specifications
4. Corruption;
5. Domination by monopolies
6. Indebtedness and over reliance on advances.

As a part of the study, this paper also intends to look into some of the successful corporate/contract farming models and understand the popular types of such models available.

Direct Procurement Models

Direct procurement models are the agreements between the firm and the farm which range from simple marketing agreements to risk sharing and the forward and futures contracting. In a bid to keep their supply chain moving, processors and retailers may choose to source raw materials from government regulated market yards, small traders or even from farmers. Direct procurement is preferred to reduce the transaction costs and eliminate any quality problems associated with procuring. In such an arrangement there is no contractual tie-up with the farmers and everyone is free to sell their produce subject to certain quality criteria. Indian retailers such as Amul, Reliance, Spencer's, Subhiksha, and Food Bazaar currently use this procurement model.



Advantages

(i) It reduce transaction costs and quality problems.

(ii) There is no contractual tie-up with the farmers and they are free to sell or not to sell in such an arrangement.

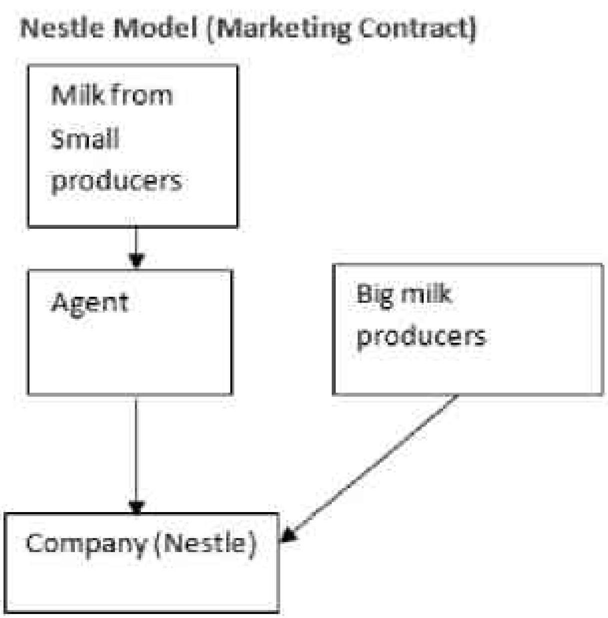
(iii) The chances of exploitation of the farmers by the corporate in a country like India where there is low level of literacy and understanding of corporate laws is automatically minimised.

Some Successful direct procurement models of contract farming

Success of contract farming can be examined by three different models of contract farming adopted by firms dealing with three different commodities viz., milk, vegetables and Boilers (Birthal 2005)

Contract farming in dairying takes form of an intermediate contract. The model was developed and is being implemented by the Nestle India Limited. It is well-known that dairying in India is an integral part of rural economy, yet its scale of production is too small for a majority of the households to generate cash benefits (Birthal, 2007)

Contract Farming Models in India



With 62 percent farm households in India producing only 24% of the total milk, Nestle wanted to reduce the cost of contracting with such a large number of small producers. Hence it followed an intermediate model where a local villager was appointed as an agent. The agent collects milk from small scale producers and also facilitates distribution of inputs and delivery of services with this agreement. Nestle was assured of the procurement because of this contractual agreement. The contract farming scheme of the Nestle now covers about 100 thousand dairy farmers in over 1500 villages in several districts of Punjab. In 2005, Nestle collected 438 million kg of milk from farmers. The Intermediate option being the dominant one the firm also started direct contracting with the large producers. Most of the milk collected by Nestle firm is processed into value- added products like baby food, butter, ghee, curd, etc. The firm observes strict food safety and quality standards right from the milk production stage. It has a well-developed traceability and milk chilling systems, and for quality milk supplies it encourages farmers to use milking machines and quality inputs. This model was proven successful and was used subsequently by other companies.

Table-3. Economics of Contract Versus Non-contract Production of Milk.

Item	Con-tract	Non-contract	% difference
Yield*	11.9	11.4	4.4
Production cost	5586	5782	-2.5
Marketing and transaction costs	100	1442	-93.1
Total cost	5686	7170	-20.7
Price	9337	8991	3.8
Net revenue	3651	1821	100.5

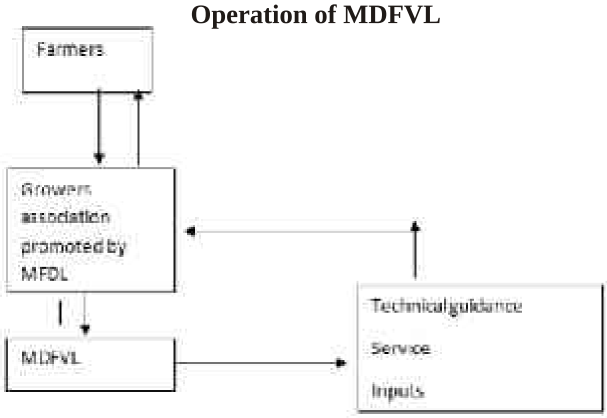
Source : Birthal et al. (2005)

The data provided in table 3 clearly presents the success of contract farming of milk which shows the positive improvement in yield and reduction in the production and marketing cost and thereby in total cost. This means an increase in yield and decrease in the cost that results in an increase in the net revenue.

Mother Diary Model : Mother Diary fruits and vegetable Ltd. (MDFVL)

Mother diary fruits and vegetables limited is a pioneer case of contract farming in vegetables. Widely dispersed horticulture in India led to a new model of contract farming. 15% farm households in India grow vegetables and 5% grow fruits (Birthal et

Operation of MDFVL



al., 2007), which means high transaction costs to the firms in securing supplies from scattered suppliers. MDFVL reduces these costs and also secures the supply from associations promoted by it. Firm also provides technical guidance, services and inputs to association members whereby ascertaining that the farmers follow production and marketing practices. MDFVL (earlier called SAFAL) is an organised retail chain started in 1988 in Delhi. MDFVL secures its supplies from 300 growers spread across the country and also has an almost equal number of retail outlets across Delhi.

Venkateshwara Hatcheries Limited (VHL)

The model of contract farming in broilers in India is a replica of what prevails in most other countries. Firms provide day-old chicks, feed, vaccines and services to farmers at no cost to them, and lift entire output by paying fixed growing charges (per kilogram of body weight of bird) in lieu of their contribution to cost (labour, water and electricity charges, litter and rent for poultry shed and equipment). Farmers are thus insured against market risks.

The case of contract farming in broilers relates to the Venkateshwara Hatcheries Limited (VHL) - one of the leading firms in poultry business in India since early 1970s. The firm is engaged not only in contract farming poultry, but also manufacturing of poultry feed, medicines, vaccines and value-added poultry products. Recently, the firm has started a retail chain in poultry products with brand name BROMARK.

Open Source Intermediation

This is a variant of farm-firm linkage where the firm acts as an open source intermediary and acts as a source of providing information about market prices, crop and good cultivation practices to farmers without any buy back guarantee. The idea is not to create a back-end supply chain but to bridge the knowledge and information gap that exists at the farmer level, and also supply inputs to farmers without any 'lock in' agreement . This is well observed in the case of the Choupal Sagar and Choupal Fresh models adopted by ITC following the success of e-choupal.

Implications of Corporate Farming

Corporate farming has different implications at different levels which are discussed below :

(a) Social and economic implications

(i) It will lead to urbanisation of rural areas leading to commercialisation of agriculture.

(ii) Unemployment at rural level.

(iii) Shortage of food grains as corporate houses may force the agriculturists to cultivate cash crops.

(iv) Farmers may lose their land and these corporate may tempt the farmers by giving very high prices as values for their land.

(v) Concentration of wealth in the hands of few large scale farmers because of their affordability to adopt modern practices.

(b) Business Implications

(i) Better technology leads to lower cost of the product.

(ii) Better quality of the product

(iii) Some agricultural products which used to be seasonal once upon a time are now available throughout the year because of the storage facilities and packing standards.

(iv) Self dependency on agricultural produce means less import of food grains and saving forex.

(v) Continuous supply of raw materials to industries which depend on agriculture for raw materials which keeps them running and providing employment opportunities.

(vi) Export of agricultural products because of better quality meeting international standards.

Present Scenario of Contract Farming In India

1. The Union Agricultural Ministry is on its way to draft a model law to give support to a practice that makes technology & resources accessible to small farmers. An institutional mechanism is being contemplated to record contractual arrangements and help to resolve possible disputes.

2. The ministry has formed an agenda for expansion of agricultural credit to the tune of Rs.7,36,570 crores during 10th plan and the official note to the finance ministry gave financing of contract farming by banks priority.

3. Agricultural and Food processing Development Authority is developing policy guidelines on contract farming and sending it to the state governments for implemantation. The guidelines will focus on regularizing the relation between producers and processors of food materials. During this year, 20 Agro-Export zones set-up in different states that would integrate the complete process from production to export stage and contract farming is being encouraged to rope in local farmers to join these export zones as members to pool in their produce.

4. The national agricultural policy, announced last year, had highlighted the need for an increase in the private sector participation in farming by leasing private land for agro-business and contract farming to private companies.

5. The Standing Committee on Food Management and Agricultural Exports had recommended suitable amendments to the State Agricultural Produce Marketing Regulation Act to promote development of marketing infrastructure in private and co-operative sectors, direct marketing and contract farming.

6. Contract farming is already undertaken in tea estates by major companies including Pepsi Food, ITC, Hindustan Lever and for crop diversification by Mahindra Shubhlabh Services with Punjab Agro Food grains Corporation; Escort Limited with Punjab Agro for Basmati rice and durum wheat besides drawing a plan to set up grain handling and storage facilities like conveyor belts and silos and earmarking Rs.1 billion for contract farming and creating post-harvest infrastructure in Punjab and other states in next three years.

7. Punjab plans to diversify crops in 1.5 million acres in next four years through contract farming. Already 3 lakh acres under contract farming have been diversified from paddy and wheat to commercial crops like maize, barley, white mustard, Basmati rice and oil seeds during this year.

8. In Karnataka, wide varieties of vegetables, gherkins, lime, pomegranate, grapes for resins pearl onions, asparagus and mangoes for pulp are already covered under contract farming. Table 4 shows state-wise contract farming initiatives, involving about 90000 farmers in about 1600 villages.

Tabel 4. State-wise Contract Farming Initiatives by Private Sector

State	Crop	Company/ Corporate
Karnataka	Ashwagandha	Himalaya Health Care Ltd
Karnataka	Dhavana	Mysore S N C Oil Company
Karnataka	Marigold & Caprica Chili	AVT Natural Products Ltd
Karnataka	Coleus	Natural Remedies Private Ltd
Karnataka	Gherkins	20 Pvt Companies* (Major Companies Global Green Company Pvt Ltd, Unicorn Agrotech Ltd, Green Agro Park Pvt Ltd, Ken Agritech Pvt Ltd, etc)
Maharashtra	Soybean	Tinna Oils and Chemicals

Tabel 4. State-wise Contract Farming Initiatives by Private Sector (Contd.)

State	Crop	Company/ Corporate
Maharashtra	Several Fruits, Vegetables, Cereals, Spices & Pulses	Ion Exchange Enviro Farms Ltd (IEEFL)
Maharashtra	Safflower Oilseeds	Marico Industries
Madhya Pradesh	Wheat, Maize & Soybean	Cargil India Ltd
Madhya Pradesh	Wheat	Hindusthan Lever Ltd (HLL)
Madhya Pradesh	Several Fruits, Vegetables, Cereals, Spices & Pulses	Ion Exchange Enviro Farms Ltd (IEEFL)
Madhya Pradesh	Soybean	ITC_IBD
Punjab	Tomato & Chilly	Nijjer Agro Foods Ltd
Punjab	Barley	United Breweries Ltd
Punjab	Basmati, Maize	Satnam Overseas, Sukhjit

Source: NIAM (2003), Times Agriculture Journal (2003), (FICCI-IFPRI-ICRISAT: 2003[1]) and Centad, Sukhpal Singh:2005)

Findings

1. Agriculture plays very important role in India by contributing about 16 % to GDP and provides employment to 55% of the workforce.
2. Government has lots of inhibition in legalizing and allowing free entry of corporates as they would result in exploitation of farmers.
3. Modifications made in the national agricultural policy and corporate farming is allowed with some regulatory mechanism.
4. The outcome being some corporate have invested in the sector but not in direct farming activities as it needs lots of investment and they have still very little experience in farming activities especially in Indian context.
5. Majority of the corporate farming ventures are marketing and intermediating deals of agricultural and related goods viz., Agricultural machinery, seeds fertilizer, pesticides and building up related infrastructure(cold storage and food processing units) which will definitely help the farmers in marketing their produce and get better price.
6. It is identified that use of technology is also essential to increase productivity and growing market demands.
7. Government intervention is must to prevent exploitation of innocent Indian farmers by the corporate.
8. Corporate farming in India has still long way to go which depends on the success of such ventures and social acceptance in India.

Conclusions

Corporate farming is the need of the hour. With the growing population and soaring food grains requirement the demand for better technology and investment in this sector is necessitated. India's low consumption of high-yield seeds, fertilizers, and pesticides in comparison with other countries indicates a huge potential for market growth. Many farmers do not use high-quality agro-inputs. Others tend to misuse agro-inputs thus, leading to higher costs and lower yields. In the interiors of rural India, farmers lack access to a wide choice of agro-inputs. These farmers have disadvantages of price and accessibility. Government has to come forward and solve such problems with the help and participation of corporate houses.

Hence, extensive and efficient supply chains have to be built to service these farmers. While the untapped parts of the rural market present profitable opportunities, companies will have to innovate and adapt products to suit rural operating conditions. New marketing tools would be critical for companies eyeing rural markets to enlarge their rural pie. Also the rural consumers need to be educated of new concepts, relevant to the environment and thereby increasing their income.

Companies have traditionally distributed their agro input products through their own distributors and through collaboration with a local distribution network. The need of the hour is to increase the accessibility of rural markets by companies. This is possible only through decentralisation of the whole chain. For better delivery of agro inputs and services, HLL has proposed a model that would create a partnership between agro input companies, banks, insurance companies, grain handling and storage companies and food processors. This would make the agro inputs directly available to the farmer, credit and insurance would be available to the farmers at reasonable rates, increase the accessibility of information.

When it comes to deploying innovative distribution strategy, several companies are exploring alternative cost effective channels. Direct selling through company delivery vans, syndicated distribution between non-competitive marketers, setting up of temporary stalls in rural melas/ haats are few successful examples. Use of stockiest and their staff for effecting direct sales to rural consumers have also been found to be successful by companies. Rural markets /mandis are emerging as target centers for direct sales. Because of these necessities corporatization of farming became a necessity. Indian government has made necessary changes in the agricultural policy to encourage corporate participation in agricultural sector. The reason for such a drastic shift in government policy is to attract investment to the sector and increase productivity for meeting growing demands. The kind of investment India witnessed in farm sector is more farming related than direct farming which was in the expected line. This sector needs huge investment and corporate houses lack experience in farming. Thus, the investments are seen in the area of building supply chain, farm machinery, agricultural inputs like seeds, fertilisers and pesticides and infrastructure services like banks, insurance companies and storage facilities

Some successful models of contract farming discussed in the paper shows landholding and production capacity of the farmers being very small. Majority of the contractual agreements are marketing and purchase agreements carried out with the help of intermediaries. Like any other policy legalizing, corporate farming has its own advantages but to get maximum utility and benefit government should monitor and control any misuse of the law and protect farmers from being exploited. Against such a backdrop, we suggest a model which considerably protects farmer's interest from corporate exploitation through a regulatory framework.

Proposed Contract farming model of Organizational Regulatory Structure

State Government
↓
Ministry of commerce and Industry
↓
DIC
Corporate houses ↙ ↘ (Farmers /Farmers' representatives)

With the present economic and education status of Indian farmers the government should take necessary steps and intervene wherever necessary for safe guarding the interests of the farmers. Studies prove that in some cases contracts with the farmers have been used for exploitation by the corporate. Contract growers in Punjab and Haryana faced many problems like undue quality cut on price and high rejections in the name of quality, delayed deliveries at the factory, delayed payments, low price and pest attack on the crop. The firms were found to be working only with large farmers and contracts were also biased against the farmers. Many such studies undoubtedly prove that there is a need for constant monitoring from the government. The government regulatory structure should involve the farmers and farmer representative bodies, ministry, administrators from the District industries center should be empowered to look into all types contracts especially legal contracts between farmers and corporate. DIC along with some representatives of the farmers should constitute a forum where such elected and nominated members should look into all types of contracts and grievances and take necessary action to protect their interests. The aim of any such regulatory body should be to protect the interest of innocent farmers from the illicit interests of the corporate.

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