

Contract Farming: A Boon to Farmers

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Abstract

Farming is an age-old means of livelihood for millions of India's small and marginal farmers. Contract farming has been in existence for many years as a means of organizing the commercial agricultural production of both large-scale and small-scale farmers. In an age of market liberalization, globalization and expanding agri-business, there is a danger that small-scale farmers will find difficulty in fully participating in the market economy. In the era of globalization, the concept of 'Contract farming' is an effective way to co-ordinate and promotes production and marketing in agriculture. "Contract farming can be defined as an agreement between farmers and processing or marketing firms for the production and supply of agricultural products under forward agreements frequently at predetermined prices."

Sustained income growth and urbanization are causing rapid changes in the "food consumption, production and marketing" in India. Over the last two decades, there has been a rapid increase in per capita consumption of high-value foods like fruits, vegetables, milk, meat, egg and fish, while consumption of food grains remained almost unchanged. Many big companies are coming in the field of agriculture and veterinary related business due to high demand. This has led to development of contract farming in India.

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effectively and are not getting sufficient profit. All these factors have lead to popularization of contract farming in India.

Issues in Small Producer Context in India

Major problems of small and marginal farmers in India include spurious input supply, inadequate and costly institutional credit, lack of irrigation water and costly access to it, lack of extension services for commercial crops, exploitation in marketing of their produce, high health expenditures, and lack of alternative (non-farm) sources of income [1,2]. For example, in wheat, marginal holders had the highest yield per hectare compared with all other categories in India but, they realized the lowest prices per quintal [3].

Farmers Connectivity to Market and Policy

The Indian farmer is connected to the Indian consumer through various supply chains, each of which has evolved over time. The first and oldest model, the Agricultural Produce Marketing Committee (APMC) supply chain, is one wherein the crop is sold to traders at the local agricultural market called a mandi. The mandis of the first model are run by APMCs that were ostensibly established to create well defined markets and reduce transaction costs for farmers. There are many policy and market instruments of risk reduction in India including crop/weather insurance against yield/production risk; state-sponsored tools e.g. Minimum Support Price (MSP) for 24 crops, Market Intervention Scheme (MIS) for other crops, and Farmer Income Insurance Scheme (FIIS); market based institutions i.e. futures markets and warehouse receipt system, besides other mechanisms like diversification of crops and use of risk reducing inputs [4]. But inspite of these policies and market instruments, the farmers are facing difficulties in purchasing of inputs and marketing their products

What is Contract Farming?

Contract farming can be defined as a system for the production and supply of agricultural and horticultural produce by farmers/primary producers under advance contracts, the essence of such arrangements being a commitment to provide an agricultural commodity of a type (quality/variety), at a specified time, price, and in specified quantity to a known buyer. Contract farming basically involves four things - pre-agreed price, quality, quantity or acreage (minimum/maximum) and time [5].

Contract farming involves agricultural production being carried out on the basis of an agreement between the buyer and farm producers. Sometimes it involves the buyer specifying the quality required and the price, with the farmer agreeing to deliver at a future date. More commonly, however, contracts outline conditions for the production of farm products and for their delivery to the buyer's premises [6].

Well-organized contract farming does, however, provide such linkages, and would appear to offer an important way in which smaller producers can farm in a commercial manner. Similarly, it also provides investors with the opportunity to guarantee a reliable source of supply, from the perspectives of both quantity and quality.

History of Contract Farming in India

In the 1920s, Indian Tobacco Corporation (ITC) established the first documented large-scale contract farming operation in coastal Andhra Pradesh [7]. There were very few instances of contract farming operations being established until the 1960s, when private

seed companies, that didn't own their own lands, contracted with farmers to supplement their seed banks [8].

However, contract farming in India truly emerged in 1989, when PepsiCo set up a plant in Hoshiarpur to procure tomatoes for processing. As a result of PepsiCo's intervention, the tomato yield increased from 7.5 tons per acre to 20-tons per acre. PepsiCo also introduced scientific methods of transplantation that caused the costs of production of tomato to reduce, and thereby enabled farmers to realize higher prices [9]. After selling off the tomato contracting operation to Hindustan Lever in the late 1990s, PepsiCo began to engage in potato contracting to source potatoes for its Frito-Lay brand.

Models of Contract Farming

Contract farming operations are usually placed into one of five categories, each of which is briefly described in this section.

Centralized model

This is the classical contract-farming model characterized by a single firm directly contracting with a large number of producers. The quantity that will be bought is usually predetermined at the beginning of the sowing season and quality standards are strictly monitored and enforced [10]. The contracting firm may intervene in the sowing process to varying degrees, often through the nature and magnitude of extension services provided to participating farmers [11].

Nucleus estate model

This model is a modified version of the centralized model in that firms source produce directly from producers but also maintain their own production facility. This is often to ensure a consistent supply of the crop but is also used for research and development purposes.

Multi-partite model

This model involves a joint venture between a public body and a private company, which come together to contract with producers. This model often has multiple participants, each responsible for the provision of a particular extension service throughout the production process.

Informal model

In the Informal model, small producers enter into simple contracts with farmers on a seasonal basis. The sourced produce is rarely processed and is often simply repackaged and sold [11,12].

Intermediary model

In this form of contract farming, firms source their produce from intermediaries who have sourced it from farmers (Table 1).

Structure – Model	Sponsors	General Characteristics
Centralized	Private corporate sector State development agencies	Directed contract farming. Popular in many developing countries for high value crops. Commitment to provide material and management inputs to farmers.
Nucleus estate	State development agencies Private/public plantations Private corporate sector	Directed contract farming. Recommended for tree crops, e.g. oil palm, where technical transfer through demonstration is required. Popular for resettlement schemes. Commitment to provide material and management inputs to farmers
Multipartite	Sponsorship by various organizations, e.g. • State development agencies • State marketing authorities • Private corporate sector • Landowners • Farmer cooperatives	Common joint-venture approach. Unless excellent coordination between sponsors, internal management difficulties likely. Usually, contract commitment to provide material and management inputs to farmers.
Informal developer	Entrepreneurs Small companies Farmer cooperatives	Not usually directed farming. Common for short-term crops; i.e. fresh vegetables to wholesalers or supermarkets. Normally minimal processing and few inputs to farmers. Contracts on an informal registration or verbal basis. Transitory in nature.
Intermediary	Private corporate sector	Sponsors are usually from the private sector. Sponsor control of material and technical inputs varies widely. At time sponsors are unaware of the practice when illegally carried out by large-scale farmers. Can have negative consequences.

Table 1: Characteristics of Contract Farming Structures [12].

Advantages and Problems of Contract Farming

Contract farming has significant benefits for both the farmers and sponsors (investors). However, along with these advantages there are also problems related to Contract farming.

Farmers point of view

Advantages for farmers

- Inputs and production services are often supplied by the sponsor
- This is usually done on credit through advances from the sponsor
- Contract farming often introduces new technology and also enables farmers to learn new skills
- Farmers' price risk is often reduced as many contracts specify prices in advance
- Contract farming can open up new markets which would otherwise be unavailable to small farmers

Problems faced by farmers

- Particularly when growing new crops, farmers face the risks of both market failure and production problems
- Inefficient management or marketing problems can mean that quotas are manipulated so that not all contracted production is purchased
- Sponsoring companies may be unreliable or exploit a monopoly position
- The staff of sponsoring organizations may be corrupt, particularly in the allocation of quotas
- Farmers may become indebted because of production problems and excessive advances

Sponsors point of view

Advantages for sponsors

- Contract farming with small farmers is more politically acceptable than, for example, production on estates
- Working with small farmers overcomes land constraints
- Production is more reliable than open-market purchases and the sponsoring company faces less risk by not being responsible for production
- More consistent quality can be obtained than if purchases were made on the open market

Problems faced by sponsors

- Contracted farmers may face land constraints due to a lack of security of tenure, thus jeopardizing sustainable long-term operations
- Social and cultural constraints may affect farmers' ability to produce to managers' specifications
- Poor management and lack of consultation with farmers may lead to farmer discontent
- Farmers may sell outside the contract (extra-contractual marketing) thereby reducing processing factory throughput
- Farmers may divert inputs supplied on credit to other purposes, thereby reducing yields (Figure 1).

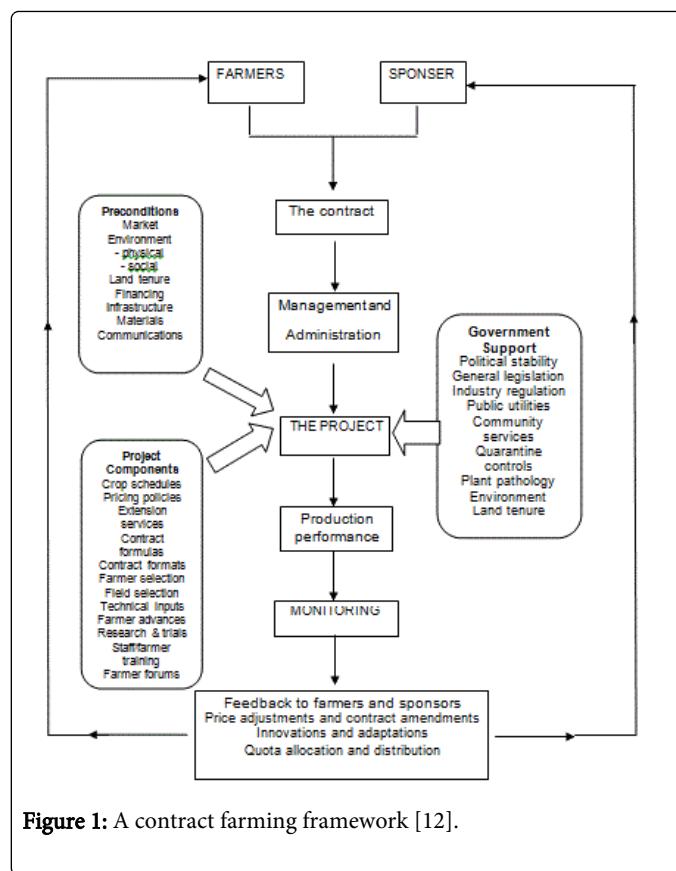


Figure 1: A contract farming framework [12].

Contract Farming in Respect to Broiler Farming in India

A contract farming arrangement involves a wage contract between an integrator who supplies the intermediate inputs and procures the output (as per pre decided terms) and a poultry farmer who provides inputs such as administration, rearing and care taking. The integrated/ contract farming model is gaining significant amount of popularity and acceptance among poultry farmers. This model protects and retains the interests of both the farmer and the integrator. The popularity of this model is influenced by the fact that the integrator takes most of the risks as opposed to an independent farmer.

The process can be described as under:

- Integrator supplies the 'raw-material' which in this case are the day old chicks
- He also supplies the feed, medications, veterinary supplies and equipment's that may be required (E.g.: Water dispensers, feeders etc.)
- As the integrator provides Good Manufacturing Practice and technical know-how it leads to higher productivity.
- The contract farmer provides his services (labor) and space for the shed and other related services or equipment that may be required
- The integrator also bears the marketing responsibility (risk) and the expense involved in transportation (to and from the farm)
- Since the major chunk of the expense (working capital) is borne by the integrator-he is the absolute owner of the moveable stocks (broiler) on the farm

- The farmer's role is like that of a 'care-taker' who gets a pre-determined wage which is listed in the contract
- This wage paid to the farmer is linked to various parameters such as the 'Feed Conversion Ratio or in other words the quantum of feed consumed by the bird to produce the weight, percentage of birds dead etc.
- A farmer is rewarded for surpassing the set standards and penalized if any of the agreed criteria is not met
- This penalty is deducted by calculating the loss incurred per bird and deducting that amount from the money to be paid (wage bill)

Due to heavy investments in housing, feed, feeding materials, chicks, medicines and vaccines etc. many poor farmers are unable to start broiler farming. In contract farming, the farmer has to provide only housing and labor and the other expenses are borne by the integrator. As a result of contract farming, many farmers are taking broiler farming as a source of livelihood. Further many farmers who are primarily engaged in agriculture are also taking broiler farming due to low investment and are utilizing their leisure time in broiler farm.

Conclusion

As agriculture-food systems change, supply chains will become increasingly coordinated. Need to deal with new asset specificities and uncertainties. Good planning and sound implementation are essential in contract farming. Need for measures to maximize development impact in relation production. To strengthen vertical coordination in agricultural products, the central and state governments have taken some important initiatives. The APMC act that restricted commodity transactions within the state-designated markets has been amended to facilitate direct transactions between producers and processors. Marketing extension which includes better product planning at farmer/group level, provision of market information, securing markets and alternative markets for farmers and improving marketing practice at farmer level in terms of grading, sorting, packaging and primary processing is much needed and could come from contract farming

linkage. It is also important to recognize that there is so much diversity in the type of firms, farmers, crops, and nature of contracts besides the local socio-economic environment that it is better to focus on a specific situation of contract farming than the generic institution of contract farming. The farmer and the sponsor for contract farming should work together in win-win situation for the success of contract farming in India.

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