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Contract Farming: Conceptual Framework and Indian Panorama

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Abstract

This paper deals with conceptual framework of contract farming and portrays Indian scenario especially after announcement of National Agricultural Policy (2000) which encouraged private participation through contract farming. The conception of contract farming is not new in India, but it gets momentum in the era of agricultural globalization, as an alternative method of farming. The study reveals that while contract farming can be effective in introducing new technologies and providing external inputs to farmers, danger lies in firms extending technologies that bring financial benefits in the short-term but result in negative long-term health and environmental impacts. Contract farming is not appropriate for all types of crops. To have a significant poverty impact, crops produced under contract farming should be labour-intensive rather than input-intensive and should be appropriate for production on small plots of land. Since the contracting company is financially stronger than individual farmers, the terms of the contract may go against the farmers. Herein the government will have to come forward.

Keywords: contract farming, sponsors, farmers, smallholdings, inputs, legal framework, pre-agreed price, quality, quantity

Introduction

The majority of poor people in the world lives in rural areas and is dependent on agriculture for their livelihoods and sustenance. Nevertheless, the agricultural sector has often been neglected as an important mechanism for reducing poverty and promoting development (World Bank, 2008; United Nations, 2009). Agriculture is an age-old means of livelihood for millions of Indians and its structure underwent rapid changes during the nineties both due to the pressure of commercialisation and increased dependence on trade. This was fuelled by many overt and covert changes in the sector, but diversification of crops along with the advent of WTO and liberalisation policies were the main players in the structural change. During post economic reforms period (1991), Indian agriculture is facing a complex situation, more than ever before. In consequence of that contribution of agriculture and allied sector to GDP has declined over the years. The contribution of agricultural sector to GDP has declined from 30.3 per cent in 1993-1994 to 13.9 per cent in 2013-2014, though 67 per cent of total Indian population still depends on agriculture. Parenthetically, in the era of globalization and liberalization, growth of agricultural sector has declined from 9.6 per cent in 1996-1997 to 6.2 per cent in 1998-1999 and further to 4.6 per cent in 2013-2014 (CSO, 2013-2014). This drift clearly indicates that Indian economic reforms process has not boosted the agriculture sector. Agriculture in India is not just an industry but is a way of life; it provides sufficient employment basically in rural area and also provides agricultural inputs to the agriculture based food industries. Timely and adequate quantity of good quality agricultural inputs is a *sine qua non* for smooth functioning of the agro industries. This underlying paradox of the Indian agricultural scenario has given birth to the concept of contract farming, which promises to provide a proper linkage between the farm and market, promote high degree of competition at the supply and market end and minimize intermediaries in order to increase farmers' income.

Contract Farming was recommended in the McKinsey Report submitted to the Govt. of West Bengal during the tenure of the Left Front. India's National Agricultural Policy (2000) states, "Private sector participation will be promoted through contract farming and land leasing arrangements to allow accelerated technology transfer, capital inflow and assured market for crop production, especially of oilseeds, cotton and horticultural crops". In view of the recent decision of the Govt. of India permitting entry of FDI in multi-brand retail sector, contract farming has become relevant. The colonial period saw the introduction of cash crops such as tea, coffee, and rubber, poppy and indigo in various parts of the country, mostly through a central expatriate-owned estate surrounded by small out growers' model. Indian Tobacco Company (ITC) introduced cultivation of Virginia tobacco in Coastal Andhra Pradesh in the 1920's incorporating most elements of a fair contract farming system and met with good farmer response. This was replaced by auctions in 1984. The Pepsico introduced tomato cultivation in Punjab in the 1990's under farming to obtain inputs for its paste-manufacturing facility established as a pre-condition to its entry in to India. This was sold to Hindustan Lever in 2000, which had earlier acquired the Kissan Karnataka. Big corporate houses such as Hindustan Lever, Pepsi Foods, A.V. Thomas, Daburs, Thapars, Marico, Godrej, Mahindra, Wimco, SAB miller etc. undertake contract farming for many crops apart from several small players (Ashokan and Singh, 2003). Contract Farming was the strategy of choice for almost all food processing projects contemplated in the 1980's and 1990's. Contract Farming is again vogue, and even tried for bulk production of subsistence crops, such as paddy rice, maize and wheat. Contract Farming is now considered to be a corrective to market imperfections and serving a useful purpose in India in its own limited sphere. Contract Farming has been promoted in the recent three decades as an institutional innovation to improve agricultural performance in less developed countries. This system was accepted and used as one of the promising institutional frameworks for the delivery of price incentives, technology and other agricultural inputs. Local Governments, private local firms, Multinational companies, some international aid and lending agencies etc have been involved in these contract farming schemes (Glover, 1994).

Review of Literature

Contract farming is an interesting meadow of research of social science especially in agricultural economics. Many experts, scholars, researchers and academicians have induced to conduct their research work on this field. In this phase, an attempt has been made to review some of the existing literature on contract farming conducted in different countries in the world, and also in India.

SPICE (2003) research examines that to establish an agrarian economy that ensures food and nutrition security to a population of over a billion, raw material for its expanding industrial base, surpluses for exports, and a fair and equitable rewarding system for the farming community, ‘commitment driven’ contract farming is no doubt a viable alternative farming model, which provides assured and reliable input service to farmers and desired farm produce to the contracting firms.

In his research paper, Sukhpal Singh (2005) concludes by drawing a lesson for agribusiness policy for contract farming to play an effective role in agricultural development in the state.

Sunanda (2005) recommends in her study that the Government should play the role of a facilitator and not that of a regulator in developing and promoting a healthy system of farmer-corporate relationship for mutual benefit

Swain (2007) opines that contract farming can change the cropping pattern of agriculture and farmer can earn more income, which leads to develop the economy.

According to Sununtar Setboonsarng (2008) success of contract farming may be dependent on sound managerial skills and the demonstration of corporate social responsibility and cultural understanding on the part of the firm.

Martin Prowse (2008) identified that there are also risks associated with contract farming and suggests that such risks can be reduced if a greater focus is put on strengthening market-oriented producer organisations and creating mechanisms for resolving disputes between farmers and firms.

Jos Bijman (2008) proves that contract farming is becoming more important for international food chain, rise super markets, supply chain management (quality, logistics, information).

Namrata Acharya (2012) expressed in her article that contract farming under the name of collaborative or partnership farming, is gaining popularity among farmers in West Bengal.

Jayati Ghosh (2013) warned in her article that relying only on contract framing to solve the current agrarian problems in the country is futile. Instead, if it is not properly controlled and regulated and if it adds to the reneging of responsibility by state actors, it is likely to intensify such problems.

Sita Ram and R. C. Kumawat (2013) evaluated contract farming as a way of providing earlier access to credit, input, information and technology and product markets for the small scale farming structure. Contract farming might also be seen as a way or as a part of rural development and promoted to improve agricultural performance especially in Third World Countries.

For successful implementation of contract farming Preetinder Kaur (2014**)** recommends that there should be proper co-ordination between farmers and firm then both will be acted in organised manner and advisable for sides.

Discussing about the problems and prospects of contract farming in India, Joydeb Sarkhel (2014) apprehended that since the company is financially stronger than individual farmers the terms of the contract may go against the farmers.

Objective

The objective of this paper is to analyse the theoretical aspects of contract farming and status of contract farming in India. In order to do that, the author will discuss about the definition of contract farming, the importance of contract farming, models of contract farming, advantages and disadvantages of farmers and sponsors, few successful cases, problems of contract farming in India, government's responsibility etc.

The final section summarizes recommendations for the successful promotion of contract farming in India as a strategy for alternative method of farming in the context of agricultural globalization

Methodology

This theoretical study is purely based on the information collected from different sources like websites, articles published in reputed national and international journals, news papers and reputed reference books related to this field. Phase wise discussion of different aspects relating to contract farming in India has been done to realise the objectives of the study. Finally the author reaches to the conclusion and recommends something for better implementation of contract farming.

Contract Farming

Agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products. Usually, the farmer agrees to provide agreed quantities of a specific agricultural product that should meet the quality standards of the purchaser and be supplied at the time determined by the purchaser as a result the purchaser gets a guaranteed, steady supply of produce. Consecutively, the purchaser commits to purchase the product and, in some cases, to support production through supply of farm inputs, land preparation and the provision of technical advice. Contract farming is an agreement between one and more farmer(s) and a contractor for the production and supply of agricultural products under forward agreements frequently at predetermined prices (FAO, 2001). It is a system for the production and supply of agricultural or horticultural produce under forward contracts between farmers and contracting company. The essence of such an arrangement is the commitment of the farmer to provide an agricultural commodity of a certain type, at a time and a price, and in the quantity required by a known and committed contracting company. Contract farming is a contract between a farmer and a purchaser established in advance of the growing season for a specific quantity, quality and date of delivery of an agricultural output at a price or price formula fixed in advance. The contract provides the farmer with the assured sale of the crop and at times provides for technical assistance, credit, services, or inputs from the purchaser (Binswanger et al., 1995). Thus, under contract farming the contractor supplies all the inputs while the farmer supplies land and labor.

Importance

Contract farming is an alternative method of farming, very useful in developing country like India. Farmer suffers from the problem of assured market, again agro-based and food industry requires inputs of good quality agricultural produce. Contract farming builds a bridge between the farm and the industry to fulfill their needs. It also provides a linkage between agriculture and processing industries. Private investment in agriculture will increase through contract farming and in consequence of that financial burden of central and state governments will be reduced. Farmers find a steady source of income through contract farming, not only that it will generate gainful employment in rural areas. Contract farming is needed to bring about a market focus in terms of crop selection by Indian farmers and to trim down migration of labor from rural areas to urban areas.

Models

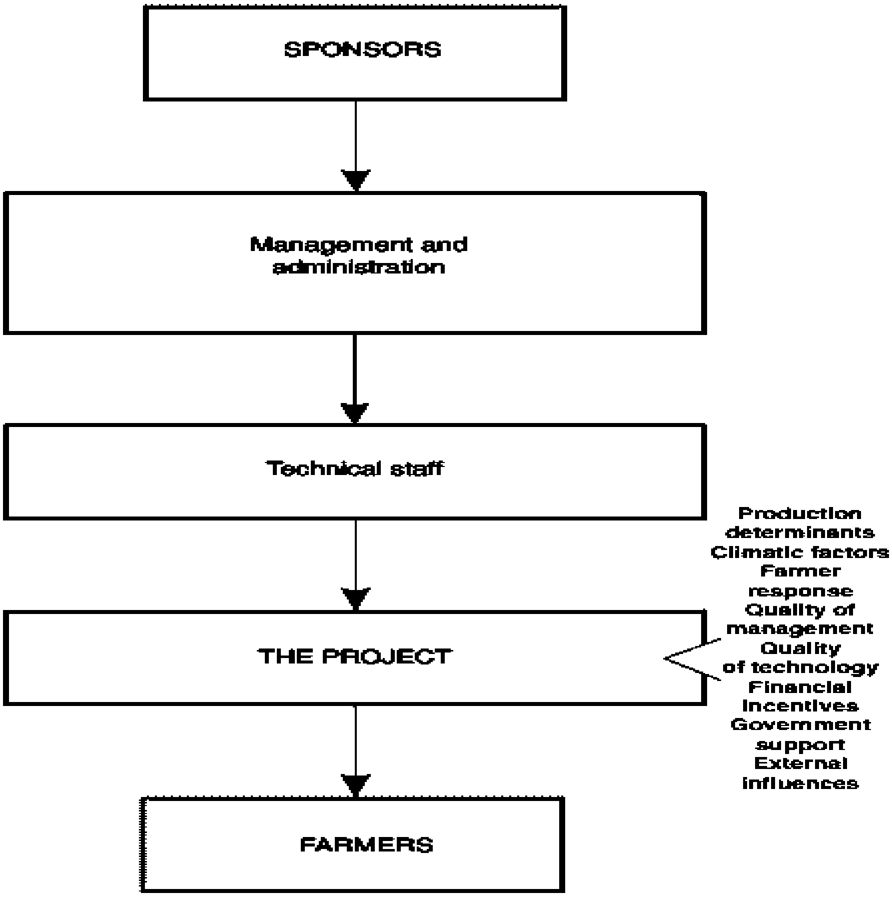
Centralized model

This is a vertically coordinated model where the contracting company provides support to the production of the crop by smallholder farmers, purchases the crop from the farmers, and then processes, packages and markets the product, thereby tightly controlling its quality (fig. no.1). This can be used for crops such as tobacco, cotton, barley, sugar cane, banana, coffee, tea, cocoa and rubber. This may involve thousands of farmers but the level of involvement of the contracting company in supporting production may vary. In India, a tomato processing factory in the Punjab was transferred in 1997 from one multinational company to another. The previous owners had supplied seed, supervised production and harvesting operations and provided technical advice when needed, but the new owners only provided seeds. In the Philippines, a vegetable canning company operating close to Manila decided to cease advancing fertilizer and chemicals to its contract farmers because these were being diverted to other crops and farmers were also making extra-contractual sales. The company changed to a policy of supplying only seeds unless it was convinced of the farmer's honesty. Centralised model of contract farming is very common in Africa, popularly known as "outgrower" scheme.

Nucleus Estate model

The British-based Commonwealth Development Corporation (CDC) was a pioneer of the nucleus estate model. Nucleus estates are a variation of the centralized model. In this case the contracting company also owns and manages an estate plantation which is usually close to a processing plant and the estate is often fairly large in order to provide some guarantee of throughput for the plant. This model is mainly used for tree crops, but can also be used for, e.g., fresh vegetables and fruits for export. A common approach is for the sponsors to commence with a pilot estate then, after a trial period, introduce to farmers (sometimes called "satellite" growers) the technology and management techniques of the particular crop. Nucleus estates have often been used in Indonesia and Papua New Guinea, for oil palm and other crops.

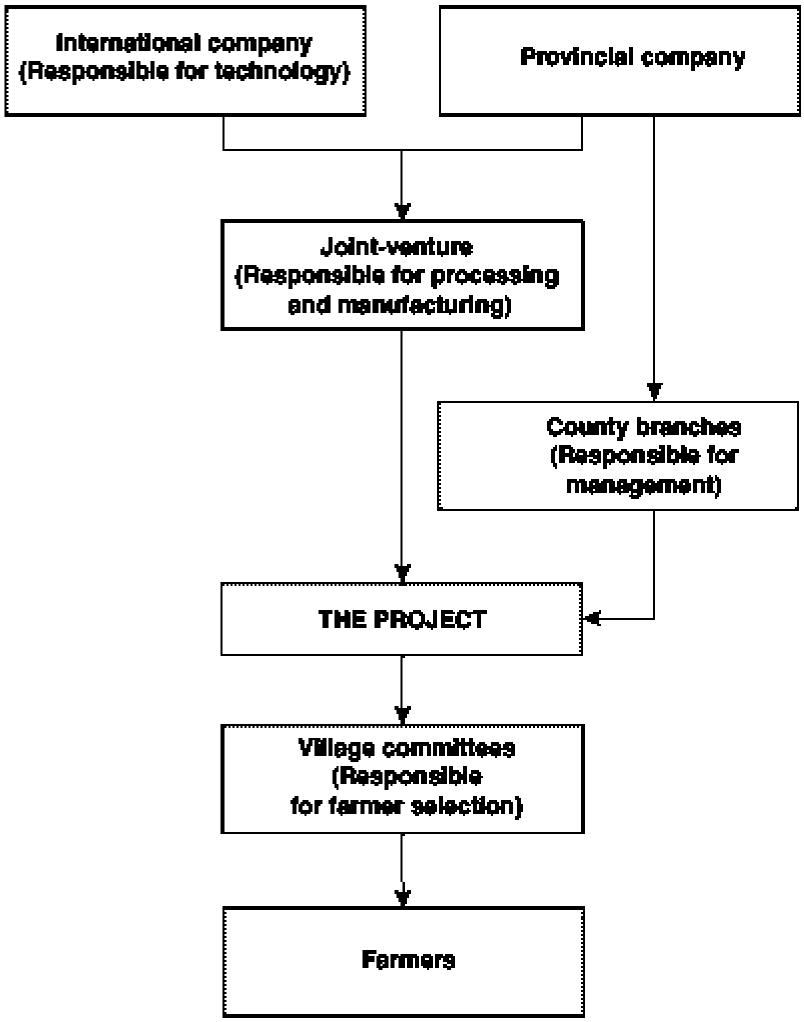
Figure no. 1
The centralized model



Multipartite model

The multipartite model usually involves the government, statutory bodies and private companies jointly participating with the local farmers. Multipartite contract farming may have separate organizations responsible for credit provision, production, processing, marketing and management of the produce. Governments have actively invested in contract farming through joint ventures with the private sector in Mexico, Kenya and West Africa. Multipartite models are common in China where government departments as well as township committees and, at times, foreign companies have jointly entered into contracts with village committees and, since the early 1980s, individual farmers. Figure no. 2 outlines a multipartite project in China.

Figure no. 2
The multipartite model



Informal model

In this case individual entrepreneurs or small companies make simple, informal production contracts with farmers on a seasonal basis.

The crops usually produced under this model require only a minimal amount of processing or packaging for resale to the retail trade or local markets, as with vegetables, watermelons, fruits and also require minimal amount of investment. Material inputs are often restricted to the provision of seeds and basic fertilizers, with technical advice limited to grading and quality control matters. Informal model is the most speculative of all contract farming models, with a risk of default by both sponsors and farmers.

Intermediary model

Sometimes, sponsors are agreed with intermediaries like collectors, farmer groups, NGOs with a formal subcontract of production and the intermediaries have their own informal arrangements with farmers. It disconnects the direct linkage between sponsors and farmers. This type of contract farming model is known as intermediary model. The formal subcontracting of crops to intermediaries is a common practice in Southeast Asia. In Thailand, for example, large food processing companies and fresh vegetable entrepreneurs purchase crops from individual "collectors" or from farmer committees, who have their own informal arrangements with farmers. In Indonesia, this practice is widespread and is termed ‘plasma’.

Advantages to the Farmers

- The farmers will be exposed to world class mechanized agro-technology which will increase productivity.
- The farmers obtain a guaranteed and fixed pricing structure for their product.
- The farmers get access to reliable markets.
- Contract farming usually allows farmers access to some form of credit to finance production inputs.
- The farmers get healthy disease-free nursery, agricultural implements and improved technology from the contracting company.
- There will be crop monitoring on a regular basis, technical advice will be provided free of cost at the doorstep of the farmer.
- The skills the farmer learns through contract farming may include record keeping, the efficient use of farm resources, improved methods of applying chemicals and fertilizers, knowledge of the importance of quality and the characteristics and demands of export markets.

Problems faced by Farmers

- Farmers entering new contract farming ventures should be prepared to balance the prospect of higher returns with the possibility of greater risk.
- The introduction of a new crop to be grown under conditions rigorously controlled by the sponsor can cause disruption to the existing farming system.
- The introduction of sophisticated machines (e.g. for transplanting) may result in a loss of local employment and overcapitalization of the contracted farmer.
- Management may be tempted to manipulate quality standards in order to reduce purchases while appearing to honour the contract.
- Problems occur when staff responsible for issuing contracts and buying crops exploits their position. Such practices result in a collapse of trust and communication between the contracted parties and soon undermine any contract.
- Allowing only one purchaser encourages monopolistic tendencies, particularly where farmers are locked into a fairly sizeable investment, such as with tree crops, and cannot easily change to other crops.
- Availability of credit may some time be the cause of farmers' indebtedness and over reliance on advances.

Advantages to the Sponsors

- The sponsor will get uninterrupted and regular flow of raw materials for its processing plant.
- The sponsor will get protection from fluctuation in market pricing as the company enters into forward contract with the farmers.
- It will be possible for the sponsor to formulate long term planning.
- If the move is successful for one crop it can be extended to other crops. As a result the sponsor can diversify its product base and farmers can also produce several products.
- The sponsor gets a dedicated supplier base. The contract farming builds long term commitment between the sponsor and the farmers. It also generates goodwill for the organization.

Problems faced by Sponsors

● Farmers must have suitable land on which to cultivate their contracted crops. Problems can arise when farmers have minimal or no security of tenure as there is a danger of the sponsor's investment being wasted as a result of farmer-landlord disputes.

● Problems can arise when management chooses farmers who are unable to comply with strict timetables and regulations because of social obligations. Promoting agriculture through contracts is also a cultural issue. In communities where custom and tradition play an important role, difficulties may arise when farming innovations are introduced.

● If 'farmer discontent' not readily addressed, such circumstances will cause hostility towards the sponsors that may result in farmers withdrawing from projects.

● The sale of produce by farmers to a third party, outside the conditions of a contract, can be a major problem. Extra-contractual sales are always possible and are not easily controlled when an alternative market exists.

● Farmers are tempted to use inputs supplied under contract for purposes other than those for which they were intended. They may choose to use the inputs on their other cash and subsistence crops or even to sell them.

Successful Cases

A few successful cases of contract farming ventures in India are highlighted in this phase of discussion:

Ugar Sugar works Ltd. runs a contract farming model in Belgaum-Karnataka for barley production in the year 1997. The causes of success are:

1. The company supplies genetically pure seed on credit to the contracted farmers without interest;

2. The price of barley seeds supplied for sowing and the final produce that is procured by the company is the same i.e. cost of the seed is same as that of the pre-agreed price of barley. Hence, the quantity of seed supplied for sowing is recovered from the time of procurement of the product;

3. A technical person from the company visits the farmers' fields at least four times in a crop cycle, giving free technical assistance;

4. The company supplies seed at the sowing points in farmers' fields, and the final product is procured from the fields at the company's transportation cost.

5. Under the contract, it is obligatory on part of both the contracting farmer and the company to sell and buy respectively the entire contracted quantity at the pre-agreed price

Pepsi Food Limited (PEPSICO) runs a contract farming model in Zahura in Hoshiarpur District, Punjab for tomato production in 1989. The model extended to Basmati rice, spices, oilseeds and potato also. The causes of success are:

1. Core R&D team

2. Unique partnership with local agencies including a public sector enterprise

3. Execution of technology transfer through well-trained extension personnel

4. Supply of all kinds of agricultural implements free of cost to contracted farmers

5. Supply of timely and quality farm inputs on credit

6. Prompt dispatch/delivery/procurement of the mature produce from every individual contracted farmer through the system of 'Quota Slips'

7. Effective adoption/use of modern communication technology like pagers for communication with field executives

8. Regular and timely payment to contracted farmers through computerised receipts and transparent system

9. Maintenance of perfect logistics system and global marketing standards.

Appachi Cotton Company (ACC) runs a contract farming model in Pollachi, Coimbatore District, Tamil Nadu, for the production of raw cotton in 2002. The causes of success are:

1. One village, one group (SHG)
2. One village, one variety/hybrid of cotton seed
3. Crop loan at 12% per annum on Group's guarantee
4. Door delivery of quality inputs at discounted rates
5. Cotton crop insurance
6. Synchronised sowing
7. Integrated crop management through competent Farm Service Centres
8. Contamination control measures from farm to factory
9. Assured buyback of final produce from farmers' doorsteps

10. The sponsor (ACC) plays the role of a perfect coordinator/ facilitator between the producer and the consumer.

Hindustan Level Ltd (HLL), Rallis and ICICI also run a contract farming model successfully in Madhya Pradesh for wheat production.

Problems of Contract Farming

Presently contract farming ventures in India are facing some basic problems discussed below:

● There is no credible enforcement mechanism for contract farming in India.

● Since the size of the holdings is small the company will have to enter into contact with a large number of farmers which increases costs of the company.

● There is a lack of comprehensive crop insurance scheme in India.

● Even in the absence of any legal framework the company can take certain measures to make the system effective such as maintain a proper database on farmers, publicize the names of defaulter, introduce a system of incentives/rewards and encourage farmers to sell their surplus output in the open market.

Concluding observations

The study reveals that though contract farming was emphasized in National Agricultural Policy (2000) of Government of India, but it is nothing new. During the British period there was indigo plantation through contract farming. But that was exploitative. The Government of India runs the largest contract farming model during the period of Green Revolution. Like a contracting company, the Government supplied inputs like HYV seeds, new technology, water for irrigation, fertilizers, insecticides, pesticides, subsidized credit etc. Again the Government purchased agricultural crops from the farmers at predetermined prices. This new agricultural strategy was a resounding success. While contract farming can be effective in introducing new technologies and providing external inputs to farmers, danger lies in firms extending technologies that bring financial benefits in the short-term but result in negative long-term health and environmental impacts. In addition, contract farming is not appropriate for all types of crops. To have a significant poverty impact, crops produced under contract farming should be labour-intensive rather than input-intensive and should be appropriate for production on small plots of land. Many developing countries lack the laws and ensuing legal framework to support contractual agreements, and thus contracts may not be easily enforceable or legally binding. As a result, it is inevitable that distrust and the potential for opportunistic behaviour exist between firms and farmers, undermining the viability of contracting. Modern contract farming is mutually advantageous. Since the company is financially stronger than individual farmers, the terms of the contract may go against the farmers. Herein the government will have to come forward. The success of contract farming may be dependent on sound managerial skills and the demonstration of corporate social responsibility and cultural understanding on the part of the firm.

Recommendations

The study reveals some problems which hinders the wide implementation of contract farming in India. The state of affairs led the author to several implications for the concern authorities, particularly the government of India. Suitable steps should, therefore, be taken by the respective authorities to remove the existing drawbacks. The following **recommendations** are made in this regard.

● State level legislation should be made for the regulation of contract farming. It would help to redress the disputes occurred between contracting company and farmer.

● The government should allow and encourage contract farming organizations to take out realistic and deregulated crop insurance policies.

● The government should give tax concessions or tax holidays to the companies engaged in contract farming to encourage their participation.

● The government should instruct the Indian Council of Agricultural Research (ICAR) and the University system to provide region specific crop solutions and make them part of the public information domain.

● The government should take initiatives to import of new improved varieties of seeds/saplings/hybrids and technology for contract farmers/contracting companies.

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