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Globalization and contract farming in India-Advantages and problems

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Cantract 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 marketing liberalization, globalization and expanding agri business, there is a danger that small-scale farmers will find difficulty in fully participating in the market economy. The era of glozalization, the concept of 'Contaract Farming can be defined as an agreement between farmers and processing of markeating firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices."

Contract Farming is essentially an agreement between unequal parties, compaines, Government bodies of individual entrepreneurs on one hand and economically weaker farmer on the other.The main feature of contract farming is that the buyer/contractor supplies al the material inputs and technical advise required for cultivation to the cultivator. This approach is widely used, not only for tree and cash crops but also, for fruits and vegetabales, poultry, pigs, dairy. Characterized by its "enormous diversity" not only with regard to the products but also in relation to many different ways in which it could be carried out.

The advantagaes, disadvantages and problems arising form contract farming varies according to the physical, social and market environments. More specifically, the distribution of risks depend on such factors as the nature of the markets for both the raw material and the processed product, the availability of alternative earning opportunities for farmers, and the extent to which relevant technical information is provided to contracted farmers. These factors are likely to change over time, as with the distribution of risks.

History of contract farming :

Contract Farming can be traced back to colonial period when commodities like collin Indigo were produced by the Indian farmers for Engligh factories. Seed production has been carried out through contract farming by the seed companies quite successfully for more than four decades in the country. The new agricultural policy of 2000 was sought to promote growth of private sector participation in agribusiness through contract farming and land bearing arrangements to accelerate technology transfers, capital inflows and assured maraket for crops.

The colonial period saw the introduction of cash crops such as tea, coffee, and rubber, poppy and indigo in various parts of the country. LIC introduced cultivation of Virginia tobacco in Coastal Andhra Pradesh in the 1929s incorporating most elements of a fair contract farming system and met with good farmer reponse. Organized public and private seed companies, which emerged in the 1960' s under farming to obtain input for its bast manufacaturing facility established as a pre-condition to its entry in India. This was sold to Hindustan Lever in 2000 which had earlier acquired the Kissan Karnataka. 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 productionof subsistence crops, such as paddy rice, maize and wheat. Commodity Co-operatives, which emerged in the 1950's provided most services evisaged under ideal contract farming to their members and bought back the supplies offered at contracted prices, although these were not strictly contract arrangements. the succeeded enormously, leading to their replictation and compelling private compaines also to adopt similar approaches. Contract Farming is now considered to be corrective to market imperfections and serving a useful purpose in India in its own limited sphere.provide only seeds and essentiasl agrochemicals. the policies and conditions that control advances are normally described in attachments to contract.

Introduction of appropriate technology:

New techniques are often required to upgrade agricultural commodities for markets that demand high quality standards. New production techniques are often necessary to increase productivity as well as to ensure that the commodity meets market demands. However, smalls-cale farmers are frequently reluctant to adopt new technologies because of the possible risks and costs involved. They are more likely to accept new practices

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when they can rely on external resources for material and technological inputs. Navertheless, the introduction of new technology will not be successful unless it is initiated within a well managed and structured farming operation. Private agencies have direct economic interest in improving farmers' production. Most of the larger sponsors prefer to provide therir own extension rather than rely on govemment services.

Skill transfer :

The skills which 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 for quality and the characteristics and demands of export markets.Farmers can gain experience in carrying out field activities following a strict time table imposed by the extension service. In addition, spill over effects from contract farming activities could lead to investment in market infrastructure and human capital, thus improving the productivity of other farm activities. Farmers often apply techniques introduced by management (ridging, fertilizing, transplanting, pest control, etc.) to other cash and subsistence crops.

Guaranteed and fixed pricing structures :

The returns farmers receive for their crops on the open market depend on the prevailing market prices as well as on their ability to negotiate with buyers. This can create considerable uncertainty which, to a certain extent, contract farming can overcome. Frequently, sponsors indicate in advance the price (s) to be paid and these are specified in the agreement. On the other hand, some contracts are not based on fixed prices but are related to the market prices at the time of delivery.

Access to reliable markets:

Small-scale farmers are often constrained in what they can produce by limited marketing opportunities, which often makes diversification of new crops very difficult. Farmers would not cultivate unless they know that they can sell their crop, and traders of processors will not invest in ventures unless they are assured that the required commodities can be consistently produced. Contract farming offers a potential solution to this situation by providing market guarantees to the farmers and assuring supply to the purchasers. Even where, there are existing outlets for the same crops, contract farming can offer significant advantages to farmers. They do not have to search for and negotiate with local and international buyers. Project soponsors usually organize transport for their crops, normally from the farm gate.

Table 1 : Problems faced by the arecanut growers

Sr. No.	Problems	Percentage (N=100)
1.	Non-availability of skill labour	12.00
2.	Shortage of water in April and May	44.00
3.	Load shading	49.00
4.	Insufficient organic manures	24.00
5.	High cost of organic manures	12.00
6.	Lack of knowledge about pest and disease	60.00
7.	Intercropping decreases the yield of main crop	77.00
8.	Possibility of transferring disease from intercrop to main crop	67.00
9.	Exploitation by middle man	15.00
10.	Did not get minimum price to the arecanut by middle man	69.00

Problems faced by farmers :

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

- increased risk :
- unsuitable technology and crop incompatibility :
- manipulation of quotas and quality sepcifications:
- Corruption;
- domination by monopolies; and.
- indebtedness and over reliance on advances.

Increased risk :

Farmers Entering new contract farming ventures should be prepared to balance the prospect of higher returns with the possibility of greater risk. Such risk is more likely when the agribusiness venture is introducing a new corp to the area. There may be production risks, particularly where prior field tests are inadequate, resulting in lower-than-expected yields for the farmers. Market risks may occur when the company's forecasts of market size or price levels are not accurate. Considerable problem can result if farmer perceive that the company is unwilling to share any of the risk, even if partly responsible for the losses. In Thailand, for example, a company that contracted farmers to rear chickens charged a levy on farmers' in order to offset the possibility of a high chicken mortality rate. This was much resented by the farmers, as they believed that the poor quality of the day-old chicks supplied by the company was one reason for the problem.

Unsuitable technology and crop incompatibility

The introduction of a new crop to be grown under conditions rigorously controlled by the sponsor can cause disruption to the existing farming system. For example, the managers may identify land traditionally reserved for food crop as the most suitable for the contracted crop. Harvesting of the contracted crop may fall at the same time as the harvesting of food crops, thus causing competition for scarce labour resources. Problems may be experienced when contract farming is relaated to resettlement programmers. In Papua New Guinea, for example, people from the highlands were resettled in coastal areas to grow oil palm and rubber. This required the farmers, who were traditionally sweet potato eaters, to learn cultivation techniques for new food crop and to adapt their dietary practices accordingly. Two factors should be considered before innovations are introduced to any agricultural environment. The first is the possible adverse effect on the social life of the community. When tobacco growers in Fiji were encouraged to cure tobacco themselves rather than sell it in the fresh green form, it was found that they were unable to handle the highly technical curing operation with any degree of continuity. This was attributed to intermittent social commitments and customary obligations that overrode contractual responsibilities and eventually resulted in the cancellation of their contracts.

The second factor is the practical introducing of innovations or adaptions. The introduction of sophisticated machines (e.g. for transplating) may result in a loss of local employment and over capitalization of the contracted farmer. Further more, in field activities such as transplanting and weed control, mechanical methods often produce less effective result than traditional cultivation methods. Field extension services must always ensure that the contracted crop fits in with the farmer's total cropping regime particularly in the areas of pest control and field rotation practices.

Manipulation of quotas and quality specifications:

Inefficient management can lead to production exceeding original targets. For example, falures of field staff to measure fields following transplanting can result in gross over planting. Sponsors may have unrealistic expectations of the market for their product or the market may collapse unexpectedly owing to transport problems, civil unrest, change in government policy or the arrival of a competitor. Such occurrences can lead managers to reduce farmers' quotas. Few contracts specify penalties in such circumstances. In some situations management may be tempted to manipulate quality standards in order to reduce purchases while appearing to honor the contract.

Such practices will cause sponsor-farmer confrontation,especially if farmers have no method to dispute grading irregularities. All contract farming ventures should have forums where farmers can raise concerns and grievances relating to such issues.

Corruption :

Problems occur when staff responsible for issuing contracts and buying crops exploit their position. Such practices result in a collapse of trust and communication between the contracted parties and soon undermine any contract. Management needs to ensure that corruption in any form does not occur. On a larger scale, the sponsors can themselves be dishonest or corrupt. Governments have sometimes fallen victim to dubious or "fly-by-night" companies who have seen the opportunity for a quick profit.Techniques could include charging excessive fees to manage a government-owned venture or persuading the government and other investors to set up a new contract farming company and then sell that company over priced and poor quality processing equipment. In such cases farmers who make investments in production and primary processing facilities run the risk of losing everything .

Domination by monopolies :

The monopoly of a single crop by a sponsor can have a negative effect. Allowing only one purchaser to encourage monopolistic tendencies, particularly where farmers are locked into a fairly sizeable investment, such as with tree crops, and cannot easily change to other crops. On the other hand, large-scale investments, such as nucleus estates, often require a monopoly in order to be viable. In order to protect farmers when there is only a single buyer for one commodity,the govearnment should have some role in determining the prices paid.

Drucker suggests that privately managed monopolies under public regulation are preferable to non-regulated private or public monopolies.The greatest abuses do tend to occur when there are public monopolies, where buying prices are set by the government, or where farmers hve made long-term investments in perennial crops. In 1999 the Kenya Tea Development Authority experienced serious unrest amongst its growers, reportedly because of the Authority's inefficient extension services and alleged "manipulaation" of farmers. There was also discontent in Kenya among sugar farmears because the price set by the government did not change between 1997 and 1999.

Indebtedness and over reliance on advances were high, as they thought contract farming did not pay. One of the major attractions of contract farming for farmers is the availability of credit provided either directly by the company or through a third party. However, farmers can face considerable indebtedness if they are confronted with production problems, if the company provides poor technical advice, if there are significant changes in market conditions, or if the company fails to honour the contract. This is of particular concern with long-term investments, either for tree crops or for on-farm processing facilities. If advances are uncontrolled, the indebtedness of farmers can increase to uneconomic levels. In one venture "compassionate" advances for school fees, weddings and even alimony resulted in many farmers receiving no payments at the end of the season. Dropout rates for farmers in that particular project.

Advantages for sponsor:

Companies and government agencies have a number of options to obtain raw materials for their processing and marketing activities. The benefits of contract farming are best examined in the light of the other alternatives, namely spot market purchases and large-scale estates. The main potential advantages for sponsors can be seen as:

- political acceptability;
- overcoming land constraints;
- production reliability and shared risk;
- quality consistency; and
- promotion of farm inputs.

Political acceptailiy :

It can be mere politically expedient for a sponsor to involce small holder farmers in production rather than to operate plantations. Many governments are reluctant to have large plantations and some are actively involved in closing down such estates and redistributing their land. Contract farrming, particularly when the fatmer is ont a tenant of the sponsor, is less likely to be subjected to partial criticism. As a result of the restructuring to their economies, many African governments have promoted contract farming as an alternative to private corporate and state owned plantions. In recent years many countries have seen a move away from the plantation system of production, to one where smaller-scale farmers grow crops under contract for processing or marketing. The decision to choose contract farming does not make a company totally immune from criticism. For example, in the late 1990s a negative effect on investment in contract farming by foreign agribusiness corporations was seen.

Overcoming land constraints :

Most of the world' s plantains were established in the colonial era when land was relatively plentiful and the colonial powers hed few scruples about either simply annexing it or paying landowners minimum compensation. Most large tracts of suitable land are now either traditionally owned, costly to purchase or unavailable for commercial development. Moreover, even if it was possible for companies to purchase land at an affordable price, it would rarely be possible to purchase large enough parcels of land to offer the necessary economies of scale achieved by estate agriculture. Contract farming, therefore, offers access to crop production from land that would not otherwise be available to company, with the additional advantage that it does not have to purchase it.

Production reliability and shared risk :

The failure to supply agreed contracts could seriously jeopardize future sales. Plantation agriculture and contract farming both offer reasonable supply reliability. Sponsors of contract farming, even with the best management, always run the risk that farmers will fail to honor agreements.On the other hand, plantation agriculture always runs the risk thet farmers will fail to honor the case of horticultural production some companies do prefer estate rather than contracted production. ln Zambia and Ghana, for example, a number of crops are grown under the estate model, as strawberries and flowers in Kenya. Working with contracted farmers enables sponsors to share the risk of production failure due to poor weather, disease, etc. Both estate and contract farming methods of obtaining raw marerials are considerably more reliable than making purchases on the open market. The open market is rarely an acceptable option for organiztions that have significant assets tied up in processing facilities and need to have guaranteed quantities of raw material to justify their investment. Companies must ensure that crops are harvested and sold on a carefully scheduled on consistent basis: a factor that is normally assured under a well-directed contract farming scheme.

Quality consistency :

Markets for fresh and processed agricultural products require consistent quality standards. Moreover, these markets are moving increasingly to a situation where the supplier must also comfirm to regulate controls regarding production techniques, particularly the use of pesticides.

For fresh produce there is growing requirement for "traceability", *i.e.* suppliers to major markets increasingly need to be confident of identify the source of production if problems related to food safety arise. Both estate and contracted crop production require close supervision to control and maintain product quality, especially when farmers are unfamiliar with new harvesting and grading methods. Often, large numbers of crops with a single profect has to be transplanted, harvsted and purchased in a uniform manner so as to achieve product consistency. Agribusinesses producing markets demanding high quality standards, such as, fruits and vegetables for export, often find that small-scale farmers and their families are more likely to produce high-quality products than farmers who must supervise hired labour. Also contract farming makes quarantine controls more manageable. It is easier for quaranrine authorities to inspect a limited number of exporters thousands, of individual selling through open markets. Much of the production of "organic" foods is being done on contract, as integrated operation facilitates a clear crop identity from farmer to retailer. In some highly sophisticated operations, containers are now bing loaded on the farm for direct delivery to the super market.

Promotion of farm inputs :

An example of an unusual but, nevertheless, interesting benefit for sponsors comes from the Philippines. A feed milling company experienced difficulties in marketing its feed, which was more expensive than that produced by competing companies. To solve this problem it developed rearing schemes for pigs and poultry under contract in order to provide a market outlet for its feeds and to demonstrate their performance to other farmers living near the contracted farmers.

Problems faced by sponsors:

The main disadvantages faced by contract farming developers are;

– land availability constraints;
– social and cultural constraints;
– farmer discontent;
– extra-contracrual carketing; and
– input diversion.

Land availability contraints :

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 result of farmer landlord disputes. Difficulties are also common when sponsors lease land to farmers. Such arrangements normally have eviction clauses included as part of the conditions.

Some contract farming ventures are diminated by customary land usage arrangements negotiatad by landless farmers with traditional landowners. While such situation allows the poorest cultivator to take part in contract farming ventures, discrete management measures need to be applied to ensure that landless farmers are not exploited by their landlords. Before entering into contracts, the sponsor must ensure that to access the land is ecured, at least for the term of the agreement.

Social and cultural constraints :

Problems can arise when managenent chooses farmers who unable to comply with strict timetables and regulations because of social obligations.

Promoting agriclture through contracts is also a cultural issue.In communites where custom and tradition play an important role, difficulties may arise when farming innovations are introduced. Before introducing new cropping schedules, sponsore must consider the social attitudes and the traditional farming practices of the community and assess how a new crop could be introduced.Customary beliefs and religion issues are also important factors. For example, Easier for some Christians is an inappropriate time for sowing vegetable crops. Harvesting activities should not be programmed to take place during festivals, and failure to accommodate such traditions will result in negative farmer reaction. It must also be recognized that farmers require time to adjust to new practices.

Farmer disontent :

A number of situations can lead to farmer dissatisfaction. Discriminatoy buying, late payments, inefficient extension services, poor agronomic advice, unreliable transportation for geneate dissent. If not readily adjusted. such circmstamces will cause hostility towards the sponsors thet may result in farmers withdrawing from projects.

Extra-contractual marketing :

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. For example, a farmer cooperative in Croatia bought cucumbers, red peppers and aborigines on contract. The cooperative's to the farmers included all necessary production inputs. Unfortunately members often sell their vegetables to traders at higher price than the cooperative had contracted. The outside buyers offered cash to farmers as opposed to the prolonged and difficult collection of payments negotiated through the cooperataivae. Sponsors themselves can sometimes be a cause of extra-contractual practices.There are several companies working with the same crop (e.g. cotton in some southern African countries), they could collaborate by establishing a register of contracted farmers. Managers must be aware of produce being sold outside the project and also be aware of produce from outside being channeled into the buying system. This occurs when non-contracted farmers take advantage of higher prices paid by an established sponsor. Non-contracted crop are filtered into the buying system by outside farmers through friends and family who have crop contracts. Such practices make it difficult for the sponsor to regulatae production targets, chemical residues and other quality aspects.

Input diversion :

A frequent problem is that farmers are tempted touse input supplied under contract for purposes other than those for which they were intended. They may choose to use the inputes on their other cash and subsistence crops or even to sell them. Clearly this is not acceptable to the sponser, as the contracted crop's yields will be reduced and the quality affected. Steps to overcome such problem include improved monitoring by extension staff, farmer training and the issuing of realistic quantities of inputes. However, the knowledge that the contract has the advantages of technical inputs, cash advances and a guaranteed market usually makes the majority of farmers confirm to the agreement. Unless a project is very poorly managed, input diversion is usually an annoyance rather a serious problem .

Conclusion :

Contract Farming is not a panacea 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 and technology and product market 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, having co-ordination and collaboration consciousness and acting in an organized manner are advisable for both sides. On the other hand, Government attitudes and incentives are also important aspects.

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