

Contract Farming for Agricultural Development

Review of Theory and Practice
with Special Reference to India

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Centre for Trade & Development

An Oxfam GB Initiative

Contract Farming for Agricultural Development

Review of Theory and Practice with
Special Reference to India

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Foreword

Contract farming is fast emerging as a very prominent issue in agriculture, especially in the context of globalisation and liberalisation. The advent of globalisation and liberalisation has intensified the role of the agribusiness firms who are entering into contract with primary producers and farmers for supplying raw materials. There are diverse views on the merits and demerits of contract farming. Many argue that since the primary producers or the farmers lack the bargaining capacity to negotiate the contract, they often end up on the losing side by entering into contracts that are detrimental to their interests. There are also arguments to suggest that if contract farming is rooted in appropriate policy, statutory and institutional framework, it has tremendous potential to help the agricultural community in general and the small and marginal farmers in particular.

This paper addresses all these issues by exploring the basic economic rationale of contract farming and the existing practices and their implications. The nature and the practice of the 'contract' are central to the issue of contract farming. The paper argues that it is of utmost importance to cogently draft the contract with apposite pricing clauses to protect the benefits of the primary producers and farmers. The need to have a comprehensive statutory protection from ill effects of contract farming for the farmers also need not be overemphasised. The paper also points out the need to strengthen the agricultural co-operatives, the Non Governmental Organisations (NGOs) and the civil society, so as to enable them play a prominent role in protecting the interests of farmers in contract farming.

It is expected that the analysis in this paper will be useful for policy-makers, researchers and the civil society. Any suggestions or feedback on the paper would be welcome.

Samar Verma
Regional Policy Advisor
Oxfam GB

Abbreviations

ACC	:	Appachi Cotton Company
AoF	:	Association of Farmer
APMC	:	Agricultural Produce Market Committee
AoP	:	Association of Persons
BILT	:	Ballarpur Industries Limited
CCI	:	Cotton Corporation of India
CGG	:	Community Grower Group
GAP	:	Green Agro Pack
GoI	:	Government of India
HLL	:	Hindustan Lever Limited
ICICI	:	Industrial Credit and Investment Corporation of India
IFC	:	International Finance Corporation
ITC	:	Indian Tobacco Company
MNCs	:	Multi National Corporations
MoU	:	Memorandum of Understanding
MSSL	:	Mahindra Shubhlabh Services Limited
NABARD	:	National Bank for Agriculture and Rural Development
NDDB	:	National Dairy Development Board
NGOs	:	Non Governmental Organisations
NGCs	:	New Generation Co-operatives
PAFC	:	Punjab Agro Foodgrains Corporation
PAIC	:	Punjab Agro Industries Corporation
RKKs	:	Rallis Kissan Kendras
SAP	:	Structural Adjustment Programme
SBI	:	State Bank of India
SHG	:	Self-help Group
TICA	:	Tobacco Industry Control Authority
UB	:	United Breweries
UPASI	:	United Planters Association of South India
USAID	:	US Agency for International Development
UTI	:	Unit Trust of India

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Executive Summary

Contract farming refers to a system wherein, a farmer/primary producer agrees to supply a pre-agreed quantity/acreage of a certain quality/variety produce at a pre-agreed price and time, to a processing/marketing firm (a known buyer). It is also known as outgrower scheme, and satellite farming. The contracts could be only procurement arrangement or resource providing as well. The relevance and importance of each type varies from crop/product to product over time and these types are not mutually exclusive.

A farmer may prefer a contract due to:

- access to additional sources of capital,
- a more certain price,
- access to new technology and inputs.

For a processor or distributor, contracts:

- make smaller demands on scarce capital resources,
- are an alternative to costly and risky corporate farming,
- provide an access to unpaid family labour and a route to make use of State funds directed at farmers by development agencies.

At a more macro-economic level, contracting can help remove market imperfections in produce, capital (credit), land, labour, information and insurance markets. But, contract farming is viewed, in political economy terms, as one mode of capitalist penetration of agriculture for capital accumulation and exploitation of farming sector by the agribusiness companies.

The review reveals that in most of the situations:

- The contracts are highly biased against the growers,
- Firms favour large farmers and relatively better endowed regions,

- Companies work with small farmers only when the area is dominated by small farmers or they are dictated/encouraged by the state or the nature of the crop,
- There is 'agribusiness normalisation' in contract price over time,
- There is little bargaining power of the farmer due to 'monopsony' of the firm,
- Farmers compete with each other to get contracts,
- Companies refuse to buy or reject with quality standards manipulation,
- The extension is poor and there is no compensation for crop failure,
- Small farmers are excluded,
- There is inter-locking of markets,
- Higher costs are passed on to the farmers,
- There are bribes/cheating by company officials and 'tying of contracts',
- Labour conditions are poor and exploitative in terms of wage rates, gender discrimination, use of child labour, and casual employment,
- Contracts encourage 'reverse tenancy',
- Contracting has serious equity and efficiency implications,
- Contracting also leads to food insecurity, social and economic differentiation, and ecological degradation like over-pumping of groundwater, salination and chemicalisation of soil and water.

In India, where contract farming is prevalent across regions and crops, it has moved from firm-farmer (two-party) system to tri- and quad-partite arrangement wherein state and its apparatus have been involved e.g. in Punjab. There have also been some cases of group contracting. In both, state and agribusiness models, contract growers have faced many problems like:

- undue quality cut on produce by firms,
- delayed deliveries at the factory,

- delayed payments,
- low price and
- pest attack on the crop with no compensation.

The reasons for failure of contract farming have been mainly in the design and the management of the projects by the companies and their partner institutions. The model has moved onto the franchisee route more recently. Whereas companies are sharing their risk with other companies/intermediaries and banks, the farmer's risk is not being shared.

The above discussion suggests that it is not the contract *per se* which spells hardship or doom for growers, particularly small growers as a system, but how it is practised in a given context. In fact, all over the world, contracting of some kind is a necessity for modern commercial agriculture due to the wide support for contract farming under the SAP and the international and national competitive pressures in agribusiness sector worldwide. Contract farming has the potential to lead to a betterment of all the parties, especially the small and marginal farmers, if it is promoted and undertaken judiciously and if there can be certain mechanisms in place.

The lessons and mechanisms are:

- Contract farming need not be promoted for all crops, and there is no single model suitable for all conditions but a series of alternatives.
- Contracts require frequent and independent scrutiny so that they remain competitive both with similar contracts and with open market transactions.
- Vigorous bargaining co-operatives or other agricultural producer organisations are needed to negotiate equitable contracts. A New Generation Co-operative (NGC) is the need of the hour.
- A legal protection to contract growers as a group is a must to protect them from ill-effects of contracting.
- There can also be a quasi-judicial system at the local level to monitor the contracts and resolve any conflict with appropriate penalties to any of the defaulting parties. A general code of conduct for both the parties in order to avoid conflicts and breaking down of contracts can help.
- A careful examination and design of the pricing and other aspects of the contracts and a reduction in the number of intermediaries/parties in contracts is required in India. Preferably, it should be a farmer-company arrangement.
- State agencies and NGOs should intervene in contract situations as intermediaries to protect the farmer and broader local community interests.
- Companies and state should promote group contracts with the intermediation of local NGOs and other organisations and institutions so that contractual relationships are more durable, enforceable, and fair.
- An insurance component in contract farming interventions is a must to protect the farmer's interest.
- The most important thing is to ensure market for the farmer produce at better price and to build trust with small and timely steps.

1. Introduction

The developments in the field of marketing, food habits, technology, and agriculture in the new economic environment have brought about a new arrangement in raw material production and procurement known as contract farming. Under the contract system, a farmer agrees to supply a pre-agreed quantity of a certain quality produce at a pre-agreed price and time, to the processing or marketing firm, which may or may not provide certain facilities like provision of inputs, finance, etc. This is happening as good quality, timely raw material is a pre-requisite for any successful agribusiness firm, whether operating in the domestic or international market. It is important to recognise that this reorganisation or restructuring of the agricultural production sector is taking place due to policy and market changes outside the sector i.e. in the industrial and trade sectors, and, these macro-policy changes drive micro-changes like contract farming which have the potential to change the production structure and relations of production in the agricultural sector. As a part of the internationalisation process in agriculture which involves production, capital, and trade, contract farming encompasses all the three dimensions through intervention in input supply and production decisions, supply of capital and finance, and global marketing of agro-products. In fact, it is nothing but an extension of the phenomenon of global sourcing wherein a firm can produce anything anywhere, by sourcing inputs from anywhere, to be sold in any market in the world.

The proponents of agribusiness promotion argue that contract farming leads to big jumps in incomes and employment in agriculturally backward regions and brings a break from low levels of productivity and instability in production, thus putting the local economy on a dynamic path of growth and development. This is possible not only because of the technological and capital resources of these firms, but also because of the international character of agribusiness processes, which gives access to international markets. The

agribusiness firms take risk by undertaking new projects in processing and marketing and provide a stream of cash flow to the local economy. This brings not only benefits to the local economy but also helps earn foreign exchange and increase food supply nationally and locally (Williams and Karen, 1985; Leisinger, 1987; Benziger, 1996). Contract farming has also been used to promote new high value crops which are more input intensive, risky, high-tech, and market dependent for profitability, to lower costs either by yield improvement or cutting input costs through better extension, and to raise returns by value addition to primary produce (Benziger, 1996; Singh, 2002). However, it is important to recognise the role of the state in encouraging or discouraging the agribusiness firms and in protecting the producers in contract situations (Asano-Tamanoi, 1988; Christensen, 1992; Grosh, 1994; Benziger, 1996). There is also a need to look at the potential role of agribusiness more specifically for different commodity sectors and regions, and not as a blanket solution since there are certain sectors which may require a more effective public sector or state intervention especially in technology and institutional innovations, instead of a private agribusiness effort (Christensen, 1992).

But, looking at agribusiness growth from a different perspective (political economy) makes it clear that it is nothing but a process of industrialisation of agricultural and rural production which takes place through simultaneous processes of appropriationism and substitutionism. Whereas appropriationism operates as a process of exploitation of land and other biological sources of supply by the application of modern and advanced technology to get more and cheaper raw materials, substitutionism operates as a process which tries to move industry or agribusiness away from direct and linear dependence on crop and other direct sources of raw materials by way of application of technology to create new products and sources of products. Thus, the two processes are contradictory to each other though they are driven

Contract farming is more like the practice of subcontracting in industrial sector where the large firms can farm out many production activities to small firms and benefit from lower costs and better skills.

by the same agribusiness sector and forces. Further, the application of biotechnology accelerates these processes and leads to what can be called bio-industrialisation (Goodman et al., 1987). In fact, contract farming directly promotes the process of appropriationism. Further, contract farming is more like the practice of subcontracting in the industrial sector where large firms can farm out many production activities to small firms and benefit from lower costs and better skills (Wilson, 1986; Watts, 1992; White, 1997).

Given the failure of government mechanisms to support agriculture, and wide support for contract farming under the Structural Adjustment Programme (SAP) and liberalisation policies everywhere, in the presence of promotion of

contract farming by the international development agencies like the World Bank, the USAID, the IFC and the CDC (Little and Watts, 1994; White, 1997), it is inevitable that new forms of contracts will be tried by the agribusiness firms as it is the only way to ensure quality and timely availability of raw material for processing, especially when, in some countries like India, captive farming is not allowed legally under Ceilings on Land Holding Act. Besides, captive farming means putting large resources in raw material production which may not be the best economic option for many agribusiness firms especially small scale ones. Since contract farming also leads to changes in the way agricultural production, processing and marketing are organised (White, 1997), it is important to understand its practice and dynamics. This paper examines the logic of contract farming (section 2), and its practice and implications from the producers' and the local economy's point of view with the help of an exhaustive review of various strands of literature (section 3). It also discusses the Indian experience of contract farming (section 4) and concludes by examining some possible alternative institutional mechanisms to use contracting as a developmental vehicle (section 5).

2. The Logic of 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, at a specified time, price, and in specified quantity to a known buyer. In fact, contract farming can be described as a halfway house between independent farm production and corporate/captive farming and can be a case of a step towards complete vertical integration or disintegration depending on the given context. It basically involves four things – pre-agreed price, quality, quantity or acreage (minimum/maximum) and time. From a developmental intervention point of view, it

is a situation in which the relationship between the agribusiness firm and the farmers takes the form of an expert endowing the apprentice with resources, knowledge and skills. Or alternatively, it is more a case of bringing the market to the farmers which is navigated by agribusiness firms (Christensen, 1992). Contract farming is known by different variants like centralised model which is company-farmer arrangement, outgrower schemes, which is run by government/public sector/joint venture, nucleus-outgrower scheme involving both captive and contract farming by the contracting agency, multi-partite arrangement involving many types of agencies, intermediary model where middlemen are involved between the company and the farmer, and satel-

lite farming referring to any of the above models (Eaton and Shepherd, 2001; GoI, 2003). In fact, contract farming varies depending on the nature and type of contracting agency, technology, nature of crop/produce, and the local and national context.

Contracts could be of three types; (i) procurement contracts, under which only sale and purchase conditions are specified; (ii) partial contracts, wherein only some of the inputs are supplied by the contracting firm and produce is bought at pre-agreed prices; and (iii) 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 relevance and importance of each type varies from product to product and over time these types are not mutually exclusive (Hill and Ingersent, 1987; Key and Runsten, 1999). Whereas the first type is generally referred to as marketing contracts, the other two are types of production contracts (Scott, 1984; Welsh, 1997). But, there is a systematic link between product and factor markets under the contract arrangement, as contracts require definite quality of produce and, therefore, specific inputs (Scott, 1984; Little and Watts, 1994). Also, different types of production contracts allocate production and market risks between the producer and the processor in different ways.

Contract farming emerged as an important phenomenon in the developed countries of the West during the 1950s and the 1960s. By 1980, about one-third of the total US farm output, and as much as 100 percent of poultry meat, milk and certain vegetables, was produced under contracts (Little and Watts, 1994). Even in Tasmania island of Australia, by the mid-1990s, 95 percent of the potato production was under contracts compared to almost nil in the 1950s (Fulton and Clark, 1996). On the other hand, in the developing countries, the Multi-National Corporations (MNCs) brought in the system of contract farming during the late 1970s and the early 1980s. Besides private and multinational enterprises, contract farming is also practised by statal and parastatal agencies in many countries in differ-

ent commodity sectors like tea production in Kenya, tobacco and livestock in Thailand, rubber in Malaysia, coconut in Indonesia, palm oil in the Philippines, and seed in India (Nanda, 1995; White, 1997; Shiva and Crompton, 1998).

The production, marketing and distribution of agricultural products are becoming increasingly sophisticated for several reasons. Firstly, modern advances in technology have made it feasible for agricultural products to be produced to 'specification' and preserved in a fresh condition. Secondly, the optimum scale of operations has been increasing, especially in processing and distribution. Thirdly, new selling methods have emerged emphasising a brand image based on consistent quality. On the demand side, due to rising incomes, consumers are becoming increasingly discriminating in their tastes, especially about the timing of production and marketing, and the quality of products. This increased sophistication in consumer demand gives an added impetus to the search for ways of improving the co-ordination of production, processing and distribution, especially with respect to timing and quality control (Hill and Ingersent, 1987). In fact, value addition is increasingly taking place in the upstream stages of the agribusiness chain, as the downstream stages have been more or less exhausted so far as quality and value of product are concerned. This provides a strong rationale, from the demand side, for contract farming as a means of raw material supply.

For different reasons, both farmers and farm product processors/distributors may prefer contracts to complete vertical integration. A farmer may prefer a contract which can be terminated at reasonably short notice. Also, contracting gives access to additional sources of capital, and a more certain price by shifting part of the risk

Contract farming varies depending on the nature and type of contracting agency, technology, nature of crop/produce, and the local and national context.

of adverse price movement to the buyer (Hill and Ingersent, 1987). Farmers also get access to new technology and inputs through contracts which otherwise may be outside their reach. For a processor or distributor, contracts are more flexible in the face of market uncertainty, make smaller demands on scarce capital resources, and impose less of an additional burden of labour relations, ownership of land, and production activities, on management (Buch-Hansen and Marcussen, 1982; Kirk, 1987). The firm even gets an access to unpaid family labour (White, 1997) and can make use of state funds indirectly through agricultural production sector which are directed at farmers by development agencies (Clapp, 1988). Also, food processors can minimise their overhead costs per unit of production by operating their plants at or near full capacity as contracting gives assured and stable raw material supplies from farms. The firm can also project an image of working with local producers as a partner when it undertakes contract farming and may even obtain statal and international agency incentives for its activities as developmental projects, instead of corporate farming (Kirk, 1987). Allen (1972) identifies certain pre-conditions for development of contract farming practice i.e. (a) Producers geographically concentrated in an area/s, which is relatively distant from the final market, so that bulk assembly prior to distribution in retail outlets is a necessary condition of efficient marketing; (b) Producers not shielded by government price support or a strong producers' organisation, so that significant scope exists for reducing uncertainty regarding supplies and prices; (c) Buyers demand rigorous grading standards but existing standards (govt./producer) are inadequate or incapable of upgrading, and (d) Agricultural

extension system is unable to help farmers adapt/meet these standards (Allen, 1972 as quoted in Hill and Ingersent, 1987, p. 169).

At a more macro-economic level, contracting can help remove market imperfections in produce, capital (credit), land, labour, information and insurance markets; facilitate better co-ordination of local production activities which often involve initial investment in processing, extension etc.; and can help in reducing transaction costs (Grosh, 1994; Key and Runsten, 1999). It has also been used in many situations as a policy step by the state to bring about crop diversification for improving farm incomes and employment (Benziger 1996; Singh, 2000). Contract farming is also seen as a way to reduce costs of cultivation as it can provide access to better inputs and more efficient production methods. The increasing cost of cultivation was the reason for the emergence of contract farming in Japan and Spain in the 1950s (Asano-Tamanoi, 1988) and in the Indian Punjab in the early 1990s (Singh, 2000).

From an institutional economic perspective, the logic for contract farming could also come from the creation of positive externalities like employment, market development or infrastructure, if agribusiness firms create them better than the open market or the state (Key and Runsten, 1999). In other words, can contract farming help people other than those who have direct stakes and pay for it? Contract farming figures as an institutional arrangement for agricultural development in the fields of inputs, product exchange, and product upgrading, the last referring to research and innovations (Christensen, 1992).

Contract farming is also seen as a way to reduce costs of cultivation as it can provide access to better inputs and more efficient production methods. The increasing cost of cultivation was the reason for the emergence of contract farming in Japan and Spain in the 1950s.

However, a political economy view of contract farming rejects its benefits to consumers and farmers and argues that contracts develops only when there is diminished role of the state in agriculture, increased specialisation of agricultural production processes, and the agricultural markets like farm produce or credit become less competitive or inefficient (Wilson, 1986). In fact, it argues that contract production is one mode

of capitalist penetration of agriculture for capital accumulation and exploitation of farming sector. This leads even to processes of 'self-exploitation' of the farmers, and the companies gain indirect control of land. The political economy approach rejects the various rationale of contracting like perishability of produce, specialisation of a crop, capital intensity of production etc. as it is the social relations of production which determine these aspects of the production system. And, product differentiation and monopolistic tendencies cause contracting (Wilson, 1986). Though there are many benefits of contract pro-

Contract farming should be viewed as a cultural and historical phenomenon rather than as an imposed legal category of relationships as these contexts determine the response of the farmers to the new arrangement.

duction for the farmers, what happens when yields stagnate, costs rise and there are open market gluts?

3. Nature of Contracts and Growers

3.1 Understanding Contracts

Since the system of contract farming has its influences on the entire local and regional economy, all producers and organisations have to recognise the intervention of such a system and bear the consequences. Even for individual farmers, it is not contract *per se* but the relationship it represents, which is crucial as the divergence between the two may prove crucial in determining the development of contract farming as an institution (Clapp, 1988; White, 1997). Further, it is the context of the contract which can make a whole lot of difference as there are many actors and factors in the environment which influence the working and outcome of contracts and lead to a culture of contracting which is location and community specific. The way farmers perceive contract farming, i.e., define their relationship with companies, differs in each cultural context (Asano-Tamanoi, 1988; White, 1997). In fact, there is so much diversity in the type of firms, farmers, nature of contracts, crops, and socio-economic environment that it is better to focus on specific situation than the generic institution of contract farming (Little, 1994; White, 1997). Some others argue that contract farming should be viewed as a cultural and historical phenomenon rather than as an imposed legal category of relationships as these contexts determine the response of the farmers to the new arrangement (Asano-Tamanoi, 1988).

3.2 Nature of Contracts

Contracts differ in their nature and effect due to the variations in the nature of crops, contracting agencies, farmers, crop technology, and the context in which they are practised. Even within a crop, different companies can have different types of contracts. For example, contract systems adopted by different seed companies in India differ in their provisions as far as relationship with farmer is concerned (Shiva and Crompton, 1998). A review of evidence reveals that farming contracts are generally oral or unwritten, if written then in non-local language, and are quite loose in their specifications. For example, seed companies in India do not have written contracts, and do not even guarantee a price, though the farmer is assured of a profit in terms of seed being bought at a rate higher than the market price of the grain. Some of them do not even assure of the purchase of seed (Shiva and Crompton, 1998). Only a delivery slip or a credit/seed/seedling slip is the proof of the contract a grower has.

Contracts are highly biased against the growers. The company obligations are not specified. The contracting agencies end up rejecting low quality produce without any compensation for the grower, and the defaulters, on the other hand, are expelled from future contracts. Firms favour large farmers for various reasons, discussed in

the following paragraphs, and finally large farmers also become dependent on these firms due to large volumes of produce they grow (CDC, 1989; Little and Watts, 1994). In Jamaica, the state Tobacco Industry Control Authority (TICA) guaranteed a minimum price of tobacco before planting, paid for the produce delivered within two weeks, deducted all input costs from the payment for the produce, and distributed bonus as and when warranted, under contracts. On the other hand, the MNC (CCJ) worked with selected growers including former company employees, provided all the inputs, and had total control over farming operations, though it did allow diversified cropping by the growers and ensured farmer participation in management of contracts through grower committees (Lewis, 1985).

Plantation contracts are much more stringent in that the quality standards are tough, companies control plantations, and a very early advance notice (three years) is necessary to withdraw from contracting for both the parties. The company can refuse to procure produce and the growers are not even allowed to grow food crops (Sachikoyne, 1989; Porter and Phillips-Howard, 1995). Generally, grower's fixed price is the price formula followed in most contracts, though there are other possibilities like processor's fixed price, sharing of profits between firm and farmers, and administered prices which are rarely practised in contract situations (CDC, 1989; Little and Watts, 1994).

3.3 Nature of Contract Growers

Contract farming may involve medium or large capitalist farmers relying on wage labour, small peasant producers who depend, to a larger

Contract farming may involve medium or large capitalist farmers relying on wage labour, small peasant producers who depend to a larger or smaller extent on family labour, and even landless who lease in land for contract production.

extent on family labour, and even landless who lease in land for contract production as was the case in Thailand and India (USAID, 1994; Singh, 2002). But, agribusiness corporations tend to prefer large farmers for contract farming because of their capacity to produce better quality crops due to the efficient and business-oriented farming methods, large volumes of produce which reduces the cost of collection for the firm, their capacity to bear risk in case of crop failure, and various services provided by these large producers like transport, storage, etc. (Wilson, 1986; Winson, 1990; Key and Runsten, 1999). This happened in Australia where the MNCs started working with only large producers and rationalised the grower numbers as soon as the government withdrew from contract regulation. Also, the companies resorted to growers groups and group contracts to reduce farmer freedom to hold multiple contracts which was prevalent earlier (Burch and Pritchard, 1996). As a result of contracting, the number of potato growers declined from 7000 in 1950s to just 550 in the 1990s (Fulton and Clark, 1996).

On the other hand, small farmers are picked up by firms for contracts only when the area is dominated by them, there is government directive to do so or they are found to be low cost producers in certain areas and crops (CDC, 1989). Further, firms may work with small farmers to make use of the state support (financial and technical) to these producers under various development programmes (Glover and Kusterer, 1990), and to benefit from lower cost production on these farms as these farmers have access to cheaper family labour, and being residual claimants of their labour, work more conscientiously than hired labour (Key and Runsten, 1999). Companies often engage local procurement agents, NGOs, and state agencies as intermediaries to procure and to enforce contracts respectively (Clapp 1988; and USAID, 1994). In fact, some of them even use large growers, rural elite, and local small processors as sub-contractors to procure from the small growers for the company (Kirk, 1987). The seed companies in India use small companies as sub-contractors

to procure seeds produced under contracts (Shiva and Crompton, 1998).

In Canada, small tomato growers were preferred as the crop required hand-picking which only small farmers do as the large ones do mechanical harvesting, especially when weather limits the use of mechanical harvesters (Winson, 1990). Similarly, in India, gherkin contract farming is carried out by small and marginal farmers as the crop requires plenty of labour inputs which these farming families can provide from within (Dev and Rao, 2004). Also, working with many small farmers in the case of small processors gives the required flexibility in procurement schedule helping to extend the processing season and use the equipment efficiently, and helps spread risk of supply failure as compared

Contracting helped farmers become better farmers, gave more reliable incomes, generated employment especially for women, provided new skills of farming and did away with patron-client relationship between large and small producers.

to working with a few large farmers. Further, the small producers are at a greater risk working with small processors as these processors could go broke quicker than the large ones, in the face of competition and restructuring of markets (Winson, 1990).

4. Practice and Implications of Contract Farming

The studies of contract farming effects can be grouped into three broad categories; a) agribusiness management studies which look at contracts only as a management tool and a strategy to overcome procurement and related business problems; b) project evaluation studies which view it as a project and evaluate it in terms of tangible development objectives of the projects like income, employment, and technology transfer; and c) political economy studies, which go beyond the tangible outcomes and look at the broader production and social relations effects of the contracting system, in terms of changes in economic opportunity and welfare of different classes, and in rural social structures.

4.1 Firms and Contract Growers

Many project evaluation type studies show that contracting helped farmers become better farmers, gave more reliable incomes, generated employment especially for women, provided new skills of farming, did away with patron-client relationship between large and small producers, and farmers got better help in farming than without the contract (Glover and Kusterer,

1990, USAID, 1994; Dunham, 1995; Porter and Phillips-Howard, 1995; Fulton and Clark, 1996; Singh, 2002). Farmers were also found to switch between companies for deliveries under contract as well as to default on the produce delivery and the relevant use of inputs supplied by the firm (Christensen, 1992; USAID, 1994; Singh, 2002). But, farmers generally found that the contract firms provided poor extension service, overpriced their services, passed on the risk to the producers, offered low prices of produce, delayed payments, and did not explain the pricing method (Glover and Kusterer, 1990; Grosh, 1994; White, 1997; Singh, 2002). In fact, contracting in a way reinforces or reintroduces the phenomenon of 'interlocking of markets' under the control of firms, which was criticised as an exploitative mechanism in rural development literature and something which needed to be eliminated.

In certain other situations like in Africa, the farmers faced problems of bribes by company officials, manipulation of inspection standards by companies, tying of one contract to another,

Though contracts do lead to increase in income and employment initially, they may not be stable and sustainable, and prove to be costly in terms of use of local resources in the presence of unstable international commodity and product markets.

and outright cheating in accounts (Little and Watts, 1994; Glover and Kusterer, 1990). On a larger level, farmers felt that they had little bargaining power compared to that of the company which they perceived benefited more than the farmers in the contracting process, and that they had become dependent on the firms for credit and other inputs (Glover and Kusterer, 1990; Fulton and Clark, 1996; Burch, 1996). There is generally a monopsony of the processing firm in a given area and the contracts are one-sided i.e. they favour the firm and their enforcement is carried out very strictly on the farmers (Kirk, 1987; Grosh, 1994; White, 1997; Singh, 2002). Further, firms backtrack in times of surplus produce and do not compensate the farmers for natural calamity losses (Collins, 1993; Singh, 2002). Due to their unequal bargaining power vis-a-vis a few large buyers or suppliers, contracting farmers may not be able to negotiate a 'fair' contract price (Hill and Ingersent, 1987). But, wherever there have been collective responses, through co-operatives or farmer groups, to contracting situations due to the cultural and historical reasons, the farmers have managed their relationships with companies well, as in Japan (Asano-Tamanoi, 1988). Contracting leads finally to the worsening of the relationship between producers and the firms to the disadvantage of the farmers. Even the market choices become limited, and contracting tends to reinforce itself over time. Finally, how can a contract between a processor and a farmer be equitable, as the two are not equal entities? (Wilson, 1986).

Though contracts do lead to increase in income and employment initially, they may not be stable and sustainable, and prove to be costly in terms

of use of local resources in the presence of unstable international commodity and product markets for which the produce is meant and due to the way the contracts are practiced (Dunham, 1993; Little, 1994; Dunham, 1995; Torres, 1997). In the Australian case, the firms were using local resources for global competition and it was doubtful whether they will continue to procure locally. They did not show any concern for the local economy, as it was only a route to access Asian markets (Burch and Pritchard, 1996). The firms also tend to practice "agribusiness normalisation" over time which means that they reduce the prices and other benefits offered to the growers with which they commence operations, when the procurement base is created and there are enough farmers to procure from (Glover and Ghee, 1992; Burch, 1996; Singh, 2002). Further, the contracting farmers are exposed to the adverse impact of the misjudgement of market requirements by the firm, and other policy decisions (Hill and Ingersent, 1987; Little and Watts, 1994; Torres, 1997).

Contract farming can lead to change in social relations of production, in terms of relations between the farmers and the companies. The loss of independence, if at all, suffered by the farmer and the dominance of local production systems by an outside firm may be counted as a social cost. The loss of autonomy is especially pronounced when contract farmers incur heavy debts with the corporations. The contract growers in Australia agreed that field officers exercised significant influence on farmer decisions of tactical nature and more day to day decisions like use of inputs and timing of harvest of crop. Also, farmers become dependent on companies for financial requirements due to the use of high cost inputs (Fulton and Clark, 1996).

4.2 Impact on Peasantry and Labour

It is frequently argued that agribusiness in general, and contract farming in particular, reinforces the trend toward proletarianisation of the peasantry (Korovkin, 1992) though it is of an incomplete or impure character. In the case of peasant contract farming, the trend towards proletari-

anisation appears in a disguised form, whereby peasant producers preserve their access to land but lose their productive autonomy to agri-corporations and become "piece-workers with their own tools for the job" (Clapp, 1988). In Indonesia, the outgrowers on the contract farming schemes are referred to, in the official documents, as "plasma farmers" as against industrial workers who are known as "black ants" (White, 1997). To reduce their production costs, transnational corporations and capitalist farmers rely on seasonal rather than stable labour. As a result, the majority of workers employed in agribusiness are either semi-proletarianised peasants or pauperised labourers – the rural semi and sub-proletariat with little or no land and no stable jobs (Payer, 1980; Clapp, 1988; Little and Watts, 1994). Even the wage rate for the landless workers may be lowered over time due to contracting as workers from outside may in-migrate and the out-migration may stop from the given area (Kirk, 1987; Little and Watts, 1994).

Contract farming also reinforces reverse tenancy wherein small and marginal farmers lease out land to large and medium farmers who are often contract growers for the companies as was the case in the Indian Punjab (Singh, 2002). Further, the contract farm labour is generally composed of women and child labour that too female child labour as they are docile, flexible, and quality labour besides being low cost (Singh, 2003).

Contracting also leads to monocropping which in turn leads to deskilling of the farmers and labour over time as they no longer grow other crops or the same crop with different local techniques (Clapp, 1988; White 1997). The companies tend to prefer monocropping as it is necessary to meet processing unit needs, gives better control over farmers and is easy to manage. But, from farmer's side, this reduces the efficiency of farmer's other crop initiatives, reduces food availability, leads to duplication of input services as farmers have to approach another source for procuring inputs for the non-contracted crops, increases farmer risk, leads to underutilisation of his labour time as each crop has only certain periods of work requirement, and chances and

implications of the misuse of cash crop money are high (CDC, 1989).

4.3 Equity and Efficiency

The equity and efficiency implications of contracting is an important economic issue as it creates asymmetries of both static as well as dynamic type. The static asymmetries created by the monopsony of the firm, incomplete contract specifications, and crop specific access to inputs lead to allocational inefficiencies and reduce grower income, thus creating inequity. On the other hand, dynamic asymmetries in the production contracting arrangement like quality control exercised by the processor, transfer of skills to growers, and the relative bargaining power of the growers lead to very uncertain or unfavourable outcomes for efficiency and equity depending on the local context of the participating growers, processors, and the markets (Scott, 1984). Though inequality generated by contract farming does not create poverty, it can exacerbate existing poverty (Kirk, 1987; Baumann, 2000).

4.4 Effect on Food Markets and Non-Contract Growers

The effect of contracting on non-contract farmers and the surrounding areas may not always be positive, and contracting therefore, needs to be examined in its totality. What is favourable for the contracting firms and farmers may harm other actors and sectors of the local economy (Little and Watts, 1994; Porter and Phillips-Howard, 1995). It is argued by some that contract production tends to shift the production in favour of export-oriented and cash crops at the cost of basic food crops for the poor. This can lead to higher prices of the food commodities and products, especially for non-contract farmers and the

Contract farming reinforces reverse tenancy wherein small and marginal farmers lease out land to large and medium farmers who are often contract growers for the companies as was the case in the Indian Punjab.

labour households who do not benefit from contracting in terms of higher incomes. Even regional differentiation tends to be increased as the firms choose relatively better off areas for contracting (Little and Watts, 1994). The growth of contracting might also reduce the volume of trading in the open market such that prices may no longer reflect overall market conditions. In other words, the open market might become so narrow that prices may cease to be truly representative of the total market situation and the contracting farmer no longer has a reliable benchmark for judging the fairness of his contract price. But, effective competition in agricultural markets need not be reduced by contractual arrangements, provided firms are competing with each other for the contracts of adequately informed producers (Hill and Ingersent, 1987).

4.5 Social and Economic Differentiation

It is feared that by favouring the large-scale farmer, who is better able to meet the exacting requirements of producing to contract specification, contracting may encourage a socially undesirable 'dual' agricultural development (Sachikoyne 1989; Grosh, 1994; Little and Watts, 1994; Dunham, 1995). The agribusiness companies may follow different contract methods for different types of farmers for the production of the same crop. The bigger farmers have contracts which provide for an advance assessment of produce, fixing of price and payments, as against the small/poor farmers from whom the firm picks up only a selected part of the produce which meets quality standards (Grosh, 1994; Morvaridi, 1995).

While a majority of impoverished peasants become progressively proletarianised, a wealthy minority develops into commercial producers

The growth of contracting might also reduce the volume of trading in the open market such that prices may no longer reflect overall market conditions.

(Clapp, 1988). This process can eventually result in the disintegration of the peasantry, whereby poor peasants lose all their links with land while rich peasants develop into peasant capitalists (prosperous small farmers who combine family and wage labour). The differentiation is accentuated as contracting offers rich peasants with an opportunity to incorporate modern technologies, augment their assets and increase the reliance on wage labour, at the same time accelerating the transformation of poor peasants into a rural semi-and sub-proletariat (Wilson, 1986; Kirk, 1987; Korovkin, 1992; Burch, 1996; White, 1997). But, there are others who argue from their studies of the Kenyan agricultural economy that contract farming, *per se*, does not create a class of rural accumulators as household production is sustained only at a subsistence level, and it does not lead to proletarianisation and food insecurity, though capitalist relations of production do develop in contracting contexts, and a rural bourgeoisie emerges. But, other pressures from the world economy might lead to the implications of contracting pointed out by the dependency school (Buch-Hansen and Marcussen, 1982; Currie and Ray, 1986). The socio-economic divide between the contracting and non-contracting farmers could also deepen due to contracting (Glover and Kusterer, 1990).

4.6 Effect on Environment and Gender

The contracting firms tend to aggravate the natural resource crisis as most of the contracts are short term (one or two crop cycles) and the firms tend to move on to new growers and lands after exhausting the natural potential of the local resources, particularly land and water, or when productivity declines due to some other reason (Morvaridi, 1995; Torres, 1997). The over-exploitation of groundwater, salination of soils, soil fertility decline, and pollution are typical examples of environmental degradation due to contract farming (USAID, 1994; Rickson and Burch, 1996; Siddiqui, 1998). The firms do not care for this as the costs of such effects are externalised so far as the firm is concerned.

The gender effects of contract farming is also an important area of enquiry. Though, in many

cases, women did not express dissatisfaction with the contract arrangement and in fact, reported that the employment under contract production had given them better self-esteem, self-confidence and influencing power within the household (Kirk, 1987; Glover and Kusterer, 1990; USAID 1994; Dunham, 1995; Porter and Phillips-Howard, 1995; Torres, 1997), contract farming does lead to gender inequalities both in the quantity as well as quality of work for women and children. The women not only end up working longer hours in the field, as they are considered better workers and paid less (Collins, 1993), the burden of off-farm work also falls on them due to the over-occupation of men with contract production (Porter and Phillips-Howard, 1997; White, 1997). Since there is a close connection between contract system and gender, it affects gender division of labour and gender relations of production. There is gendering of tasks in the field and practice of female child labour (Torres, 1997; Singh, 2003). The gender relations within the household are affected by way of tension over contribution by women to contract production, and negotiation by women for share in the contract income (Carney, 1988). This, in turn, affects productivity of the farm as fields tend to be neglected and these disputes, being private family matters, are difficult to resolve. But, it is important to recognise that the impact on women is class differentiated. There have been instances of collective action by women's groups over control of contract production and income (Buloh and Sorensen, 1993).

4.7 Contracting and Local Organisations

Contract farming may have profound organisational implications. Historically, peasants in Latin American, Asian, and African countries have relied for their survival on communal arrangements which spun off various forms of communal organisations. These organisations regulated the management of local resources (natural pastures, woods, and water for irrigation) and defended their members' interests against outsiders. The growth of contract farming leading to commercialised sophisticated export agriculture undermines the communal arrangements, giving rise to new forms of mass-

The growing importance of contract farming has serious implications for the agribusiness co-operatives, which have been practising some form of contract procurement in the past simply because they are producer-owned organisations.

based rural organisations: labour unions among agricultural workers, on the one hand, and associations defending the commercial interests of small agricultural producers, on the other (Clapp, 1988).

The growing importance of contract farming has serious implications for the agribusiness co-operatives, which have been practising some form of contract procurement in the past simply because they are producer-owned organisations. They will have to now compete with the private and/or multinational firms at the farmer/producer level in terms of providing competitive price and other incentives so that producer members do not turn away from the co-operative organisation. This will require more efficient functioning of the co-operatives. In Australia, the lack of financial support to co-operatives by the state and the competition from the MNCs and other local agribusiness firms, under deregulated environment, led to the closing of some co-operative processing plants and a change in the form of organisation in others (Burch and Pritchard, 1996).

Also, an agribusiness firm generally does not encourage the co-operative formation and expansion in its area of operation as it may become a competitor in the relatively longer term and spoil the procurement base of the firm (Wilson, 1986). This happened in the case of a Unilever subsidiary in Cameroon wherein as farmers tried to organise a co-operative to strengthen their bargaining power, the company refused to procure and the crop was wasted. This happened despite the fact that the co-operative was dominated by large farmers. Finally, the co-operative failed. However, it is seen that a parastatal may encourage co-operatives genuinely and

if that happens, then they do succeed as well. This happened in Kenya in case of tea (Konings, 1998). But, the success of the contract system *per se* in Kenya was the result of the coming together of the state, donors and transnational capital, favourable market conditions, access to capital, and a relatively decentralised management system (Little and Watts, 1994).

The above review of literature reveals that in the context of African, Latin American and a few Asian countries, contract farming has led to

many ill-effects in the spheres of livelihoods of producers, community organisations and institutions, environment, and gender. These studies point out that though the contract system leads to better incomes and employment in the beginning, the relations between firms and farmers worsen overtime and the system results in ecological and economic degradation of local production systems. Most of the studies, which are in the context of relatively less developed regions, find contracts inequitable, short-term, and ambiguous.

5. The Indian Experience in Contract Farming

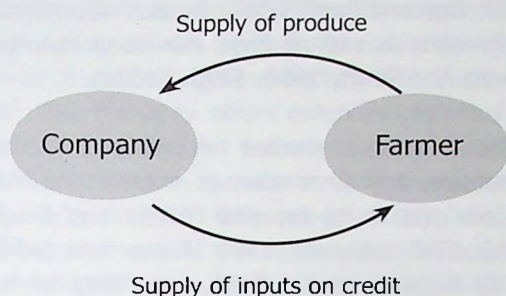
The experience of agricultural development in India has shown that the existing systems of delivery of agricultural inputs and purchase and use of agricultural output have not been efficient in reaching the benefits of better linkages between agriculture and agro-processing industry to the farmers or the agro-industry. The timely, quality and cost effective delivery of adequate inputs still remains a dream despite the marketing attempts of the corporate sector and the developmental programmes of the state. The farmers are not able to sell their produce remuneratively. There is plenty of distress among farmers both in agriculturally grown as well as backward regions manifested in farmer suicides. Agricultural markets in India which are found to be inefficient and imperfect, may not be able to ensure fair and reasonable returns to all the players. There are temporal and spatial variations in the markets and the producers' share in the consumers' rupee has been quite low in general, except a few commodities. In fact, in some commodities like potato in some regions in India, producers end up making net losses at the same time when traders make substantial profits from the same crop (Mitra and Sarkar, 2003). In the environment liberalisation and globalisation policies, the rôle of the state in agricultural marketing and input supply is being reduced, and an increasing space is being provided to the private sector to bring about better marketing efficiency in input and output markets. On the other hand, proces-

sors and/or marketeers face problems in obtaining timely, cost effective, and adequate supply of quality raw materials.

5.1 Corporate-led Contract Farming

Contract farming in India is currently being practised by multinational firms like Cadbury (cocoa), Pepsi (potato, chillies, groundnut), Unilever (tomato, chicory, tea, and milk), ITC Ltd. (tobacco, wood trees, and oilseeds), Cargill (seeds), domestic corporates like Ballarpur Industries Limited (BILT), JK Paper, and Wimco (in eucalyptus and poplar trees), Green Agro Pack (GAP) Ltd., VST Natural Products, Global Green, Interrgarden India, Kempscity Agro Exports, and Sterling Agro (all in gherkins), United Breweries (UB) (barley), Nijjer Agro (tomato), Tarai Foods (vegetables), A M Todd (mint in Punjab), McCain India (potato in Gujarat), (Singh, 2000a; Rangi and Sidhu 2000; Subrahmanyam, 2000; Dileep et al, 2002; Saigal and Kashyap, 2002; Grewal, 2003), Namdhari Seeds (seeds), and various government and semi-government agencies, especially in seed production and perishables like vegetables and fruits, with varying degrees of success with individual farmers. There are many banks which provide finance for contract farming. These include NABARD, SBI, ICICI Bank and UTI Bank. Contract farming in India by the corporate sector has so far been more of a case of buy back, and input supply (Figure 1) and/or credit supply or linkage as depicted in Figure 2.

Figure.1: **Bi-partite contract farming model**

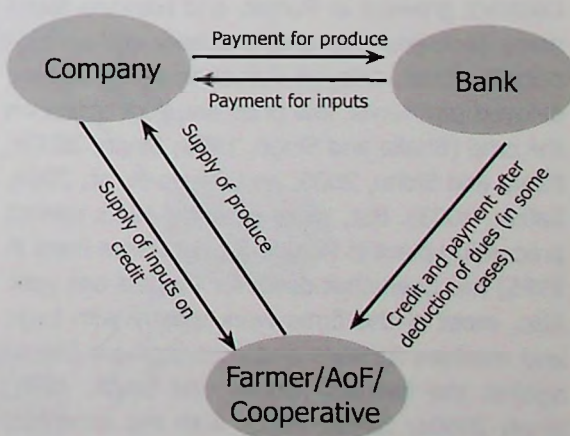


In Tamil Nadu, Appachi Cotton Company (ACC) has undertaken contract cotton farming with eight farmer groups from 32 villages in Coimbatore district for bringing 1050 acres under cotton contract farming. The contract growers form an Association of Persons (AoP). The major features of the model adopted by ACC are: one village – one SHG, one village – one variety of cotton, cotton crop insurance, door delivery of agricultural inputs, crop loans at 12 percent rate of interest, farm service centres, assured buy back from farmers though farmers are free to sell elsewhere if they find prices higher than contract price, contamination control from farm to factory and synchronised sowing of crop (ITCOT, 2004). The Cotton Corporation of India (CCI) has gone in for group contracts in Nagpur district of Maharashtra wherein an Association of Farmers (AoF) signs a MoU with the CCI which promises improved yield and lower cost. It promotes single crop or a variety for a village, especially in cotton, to take care of the problem of admixture of different varieties. It is also popularising concepts like hand picked cotton to improve quality of produce. The farmer representatives will monitor cultivation of contracted cotton in the villages. In 2002, the CCI worked with 3500 cotton farmers in four states and achieved an average profitability of Rs. 25000 per hectare in Bharuch district of Gujarat and Rs. 10000 per hectare in Andhra Pradesh. In M. P., it was only able to lower the cost by about Rs. 2000 per hectare (Deshpande, 2003).

Marico Industries has a tie up with oilseed co-operatives in Maharashtra for safflower oilseeds

wherein it provides working capital, infrastructural facilities, managerial inputs, and job work of crushing the oilseeds to these co-operatives. In turn, the co-operatives are responsible for getting contract produced for the company the oilseeds by their members (Bharadwaj and Palan, n.d.). In tea, some small companies have undertaken contract farming under the Tea Board-UPASI (United Planters Association of South India) project where they work with Self-Help Groups (SHGs) of women who supply tea under contracts to the companies and the extension support is provided by the UPASI. One such company procures 90 percent of its total tea leaves for processing into tea from 30 SHGs (Hayami and Damodaran, 2004). Ion Exchange Enviro Farms Ltd., a subsidiary of Ion Exchange India Ltd. undertakes contract farming with Community Grower Groups (CGGs) having large acreage, on a profit-sharing basis. Prime Bio Products (India) Ltd., Coimbatore has a programme wherein 10-15 cotton farmers form a SHG which has office bearers who work with company under contract and various other agencies like banks and monitor the performance of the group as far as contract is concerned. The National Dairy Development Board (NDDB, a development agency's) Fruit and Vegetable project, now under the Mother Dairy Fruits and Vegetables Limited ('Safal' brand), procures fresh produce directly from 75 Growers' Associations, with 15000 growers in north Indian

Figure.2: **Tri-partite contract farming model**



states and provides all inputs and information (Chopra, n.d.).

5.2 Practice of Contract Farming in India

There have been some studies of the contract farming system in India recently. But, besides describing the contract system and operations of the companies, most of them look at the economics of the contract farming system in specific crops, compared with that of the non-contract situation and/or competing traditional crops of a given region, e.g. in gherkins (hybrid cucumber) in Tamil Nadu (Chidambaram, 1997), Karnataka (Subrahmanyam, 2000) and Andhra Pradesh (Haque, 1999; Dev and Rao, 2004) and in tomato in Punjab (Bhalla and Singh, 1996; Haque, 1999; Rangi and Sidhu, 2000), Karnataka (Subrahmanyam, 2000), and Haryana (Dileep et. al., 2002). It is found that contract production gave much higher (almost three times) gross returns compared with that from the traditional crops of wheat, paddy and potato in case of tomato (Bhalla and Singh, 1996; Rangi and Sidhu, 2000), and tomato and onion in the case of gherkin (Chidambaram, 1997) due to higher yield and assured price under contracts. The studies of tomato contract production in Punjab and Haryana (Haque, 1999; Dileep et. al., 2002) and of gherkins in Andhra Pradesh (Haque, 1999; Dev and Rao, 2004) also found the net returns from these crops under contracts being much higher than those under non-contract situations though production cost was also higher under contract system (Dileep et. al., 2002). Contract growers in Punjab and Haryana faced many problems like undue quality cut on produce by firms, delayed deliveries at the factory, delayed payments, low price and pest attack on the crop (Bhalla and Singh, 1996; Singh, 2000a; Rangi and Sidhu, 2000; and Dileep et. al., 2002; Satish, 2003). But, more recently, HLL's tomato processing plant in Punjab (bought from Pepsi in 1995) has been shut down for the last one year. Also, most of the firms work mostly with large and medium farmers and contracts are biased against the farmers (Bhalla and Singh, 1996; Singh 2000a; Satish, 2003) with the exception of firms in Andhra Pradesh and Karnataka which

worked with small and marginal farmers due to the nature of the crop (gherkin) itself (Haque, 1999; Dev and Rao, 2004). Breach of contracts by farmers as well as firms has been reported (Bhalla and Singh, 1996; Singh 2000a).

Some of these studies recommend further expansion and promotion of contract farming system due to its benefits (Bhalla and Singh, 1996; Chidambaram, 1997; Rangi and Sidhu, 2000; Subrahmanyam, 2000, and Dileep et. al., 2002; Sidhu, 2002). The contract tree farming schemes also did not do well for many reasons which were mainly related to the design of contract farming schemes and the management of the projects by the companies and their partner institutions (Saigal and Kashyap, 2002). Further, there are issues of monopsony of the processing/marketing firm and its disinterest in more backward areas where farmers need such interventions, besides the more crucial question of sharing of value added surplus in processing and marketing which are at the centre of whether contract farming can contribute to more broad-based agricultural development (Gill, 2004).

5.3 Changing Dynamics of Contract Farming in India: The Consortium Approach

Recently, several agribusiness companies have made forays into the farm service sector, which is being seen as private sector participation in agricultural development. They are facilitators of contract farming systems most of the time. One such model is that of Mahindra Shubhlabh Services Limited (MSSL) which has an agreement with the Government of Punjab to facilitate contract farming of maize in one lakh acres for diversification for supply to AGS of Indonesia through PAFC. It plans to capture 16 percent of the agri input market by 2005 and increase farmer profitability by 35-60 percent by better and cost effective input supply and better value realisation from farm produce by finding better markets. For this, it will leverage its tractor brand, strong customer base, dealer network and first mover advantage. Its product portfolio includes seeds, pesticides, fertilisers, irrigation systems, equipment rentals, post harvest services, information provision, and finance. For this purpose, various partners

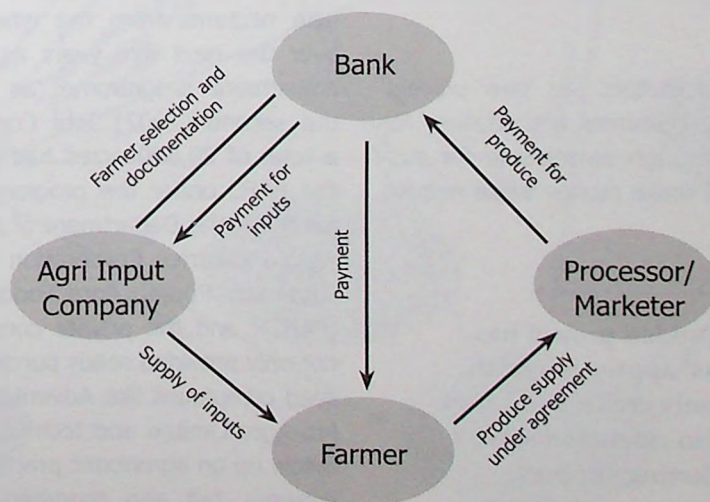
i.e. retail chains, NGOs, agri input companies, logistics companies, farm equipment companies, food companies, and agri finance corporations and banks, besides agricultural universities and research centers are networked into the project. The company offers extension services to farmers for a fee but ensures a certain level of yield. If farmers get lower than the assured level of yield, then they need not pay the fee. This experiment of the company in Madurai in Tamil Nadu, where farmers had to pay Rs. 500 per acre, achieved assured yield in 75 percent of the cases in the first year, which increased to 80 percent in the second year, despite drought conditions. This ensures that the yield risks are low, and therefore, insurance scheme can be implemented (Naik, 2002; Sulaiman et. al. 2004). The MSSL plays the role of an integrated farming solutions provider. Other crops planned under the company's operations in the state are mustard, castor, pulses and vegetables.

This is similar to what has already been implemented by Rallis India in M.P., Maharashtra, Karnataka and Haryana. The company provides all the inputs, technical support and finance to the registered growers for a specific crop and facilitates the sale of produce at reasonable price. The company follows a consortium approach (Figure

3). It has tied up with banks like ICICI and SBI and with buyers of produce like HLL, Picric and Cargill. The system is run through a network of 10 Rallis Kissan Kendras (RKKs) across the country. For example, a farmer can avail of a loan upto Rs. 6500 per acre for basmati cultivation in Panipat for a six-month period at a rate of interest of 13 percent per annum. In addition, every member farmer has accident insurance coverage of Rs. 1 lakh.

The RKK has trained farmers to harvest basmati when moisture levels are at 16 percent as harvesting at lower levels can lead to more broken basmati grains during milling. The farmers are paid prevailing market prices. The Rallis and the ICICI bank deduct the cost of inputs and the loan amount from the proceeds before paying the farmer on the spot (Karunakaran, 2002). The bank has been able to get 10 percent loan guarantee from the buying company in case of default by the company. Encouraged by this project, the company has set up new projects in fruits at Bangalore, and vegetables at Nasik. The ICICI bank collaborated with the company as they benefited from the rural penetration of Rallis, and the HLL gained as it could get good quality wheat for processing it into wheat flour (Subrahmaniam, 2002).

Figure 3 : The Quad-partite contract farming model



The ICICI Bank lays down pre-set criteria for farmer selection and informs input companies. The input companies/bank officials do the documentation, input companies supply the inputs and send detailed accounts to the bank, which debits farmer account and credits input company account. At the time of harvest, the processing/marketing company collects produce and pays the bank its dues and rest to the farmer. The bank credits the farmer's account and the account is closed. An MoU among the bank, the input company and the output company is signed for the above arrangement. An undertaking from the farmer to supply produce under this scheme to the output company is taken by the bank. The ICICI Bank prefers four sector projects as against tri-partite projects as it considers inputs service very crucial for cost reduction and quality enhancement leading to better value realisation for the farmer. The bank provided a total of Rs.180 crore as loans for various contract farming projects during 2002-2003. The bank-funded project has a 'credit plus' approach which involves not only credit and input supply but also extension service and marketing support. The bank also funded projects in basmati rice, chillies, potato and cotton besides wheat. It aims at raising prices of agriculture produce and lowering cost to make farming viable for the growers (Sabarinath, 2003). The Rallis' joint venture project with the Government of Madhya Pradesh, in which ICICI Bank is involved, started three years ago with 250 acres of wheat with 50 farmers. Now, there are 15000 acres under wheat cultivation.

The agribusiness facilitators are 'new players' with knowledge and resources and strategy for sustained growth through partnership for sustainability. They will make money while helping

others, including farmers, make money. Their strategies involve bundling of inputs and linking up of credit with input supply which is the agribusiness of the 21st century (Boehlje et al, 1995). But what is wrong with it if it can provide what state and co-operatives have not been able to provide for so long, i.e., timely and cost effective supply of quality inputs and finance and even tractors, and combine harvestors etc. on hire basis and assured market for produce? Unfortunately, what local panchayats and farmer groups could not do (e.g. custom hiring out of tractors) is being done by agribusiness companies. They focus on more efficient use of modern inputs with a two-pronged strategy, i.e., yield increase or cost reduction through inputs and value addition (market improvement). This is a must for competitiveness whether domestic or international where quality and cost effectiveness are the driving forces. More recently, the facilitator model has been modified with the inclusion of a local *arthiya*/commission agent/input dealer as a franchisee for the agri facilitator (Figure. 4; also Sulaiman et al, 2004). It is more of a case of an inter locking of factor markets coming back in another form. But, this model also does not seem to be working well as there are many problems in this model in Punjab though it has worked well in some other states like Tamil Nadu.

5.4 State-led Contract Farming

The contract-farming programme launched by the Punjab Government in October 2002 (for the rabi season) was aimed at taking away 10 lakh hectares from the wheat-paddy rotation over the next five years as part of the crop adjustment programme, as recommended by the second (2002) Johl Committee. In 2002, a total of 29,000 acres had been proposed by the PAFC under the programme, implemented jointly by the Department of Agriculture, Punjab Agro Industries Corporation (PAIC through its subsidiary Punjab Agro Foodgrains Corporation (PAFC)) and the private companies. The PAFC not only provided seeds purchased from reputed seed companies like Adventa India Limited and Pro-Agro Limited and technical supervision, and follow up on agronomic practices to the contract growers, but also promised to buy back the

The bank-funded project has a 'credit plus' approach which involves not only credit and input supply but also extension service and marketing support.

entire produce at pre-agreed prices through a tri-partite agreement involving PAFC, seed company through its dealer, and the farmer (Figure 5).

The tri-partite agreement specifies the fixed price and bonus to be paid by the PAFC to farmer for the produce (bonus only if the PAFC is able to sell the produce at a higher price), type and quantity of seed to be supplied by the seed company at a given price for given acreage, farmer's responsibility of delivering the quality produce (produced by making use of recommended inputs bought from outlets prescribed by the PAFC) at a specified place, payment within two days after delivery and PAFC being the sole decider of weight of produce and the sole and only arbitrator in case of dishonouring of the contract by any of the parties. The contract is signed by the three parties in the presence of two witnesses for the farmer.

Towards the end of harvesting season for the contracted crops, the programme had run into

rough weather. The contracted winter maize and hyola crops failed almost completely due to inclement weather and poor quality seeds (Grewal, 2003). In case of green peas, the contract growers were forced to dump their produce in open market, after being rejected by the PAIC on quality ground as per the contract specification, as there had been fungus infection due to inclement weather which was marked by heavy rains in winter season and then sudden rise in temperature. An area of 500 acres under contract production of green peas in Patiala and Fatehgarh Sahib districts had been affected. Some farmers found fault with the fungicide supplied by the contracted company in this regard. The dumping of contract-produced crop in open market led to fall in local market prices and it was being sold at Rs. 3 per kg. now as against a promised price of Rs. 5 per kg. by the PAIC (Singh, 2003; Rangi and Sidhu, 2003). In general, across crops and regions, the contract farming programme could not achieve the stated area goal. Not only it fell short in terms of contracted area being less than

Figure 4: The five-partite CF in India

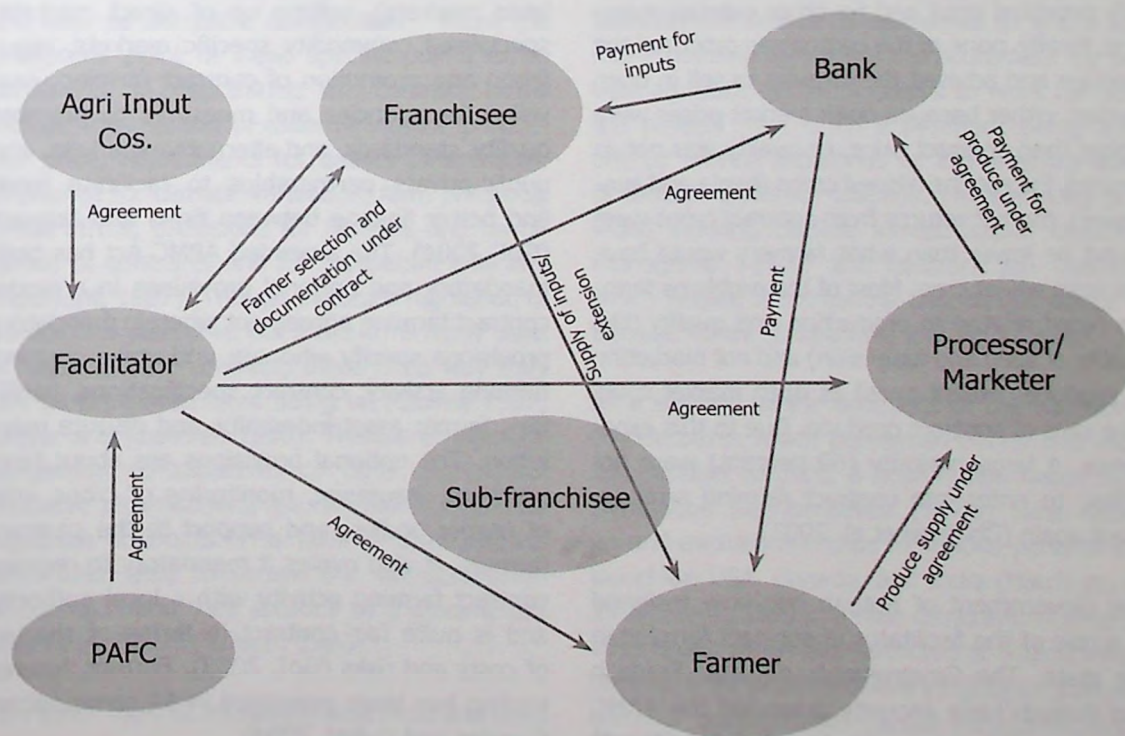
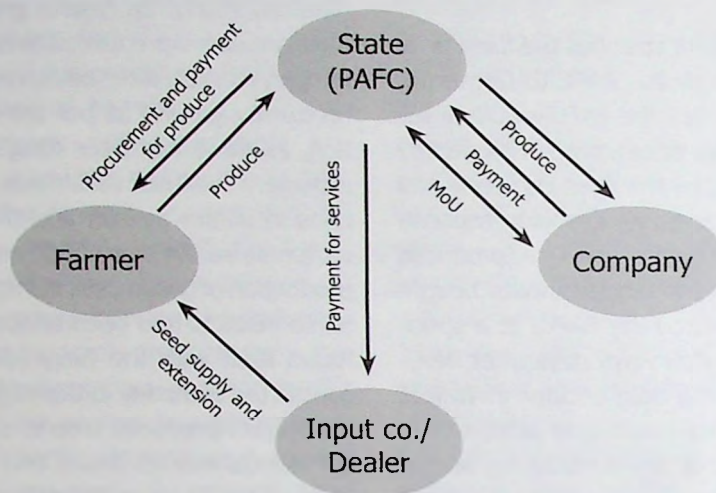


Figure.5: **State-led contract farming system in Punjab (Tri-partite agreement among farmer, seed company/dealer and PAFC)**



that stated by the agency, but also the farmers did not plant the entire contracted area with the contract crops. The gap was much larger in latter case and even as high as 50 percent in winter maize in Ludhiana and 20 percent in hyola in both Ludhiana and Patiala. There was a different private seed company for each crop and they only provided seed and no other extension service. Finally, none of the companies procured the produce and advised the farmers to sell in open market, either because open market prices were higher than contract price, or quality was not as desired. Except the oilseed crops (hyola and sunflower), the net returns from contract crops were found be lower than what farmers would have got from wheat crop. Most of the problems farmers faced related to production and quality (like quality of seed and extension) and not marketing of produce (except peas) as open market could take care of contract produce. Due to this experience, a large majority (60 percent) were not willing to enter into contract farming arrangement again (Dhaliwal et al, 2003).

The Government of Punjab has now resigned to a role of the facilitator of contract farming in the state. The Governments of Uttar Pradesh and Punjab have recently amended the APMC Act which did not permit farmer level (direct)

procurement by companies. This legal reform process is being accelerated by the Indian government with the enactment of the amended State Agricultural Produce Marketing (Development and Regulation) Act, 2003 which now permits setting up of private markets, selling of produce by growers outside the APMCs (regulated markets), setting up of direct markets, specialised commodity specific markets, regulation and promotion of contract farming, provision for agencies and measures to promote quality, standards, and alternative markets, and public-private partnerships to facilitate more and better linkage between firms and farmers (GoI, 2004). The amended APMC Act has both mandatory and optional provisions in a model contract farming agreement wherein mandatory provisions specify who can undertake contract farming activity, contract specifications, liabilities, farmer asset indemnity, and dispute resolution. The optional provisions are about farm practices, insurance, monitoring of crops, role of farmer bodies, and support to the contract farmers. It also makes it mandatory to register contract farming activity with a local authority and is quite fair contract in terms of sharing of costs and risks (GoI, 2003). Further, futures trading has been permitted in 54 commodities (Landes and Gulati, 2004).

6. Conclusions and Policy Suggestions

Given the nature of modern farming involving tremendous amount of technological input and market orientation which require capital resources, it is but inevitable to involve private corporate business interests in agricultural development through contract farming system. The above discussion suggests that it is not the contract *per se* which spells hardship or doom for small growers as a system, but how it is practised in a given context. In fact, all over the world, contracting of some kind is a necessity for many or most forms of modern commercial agriculture. Though there are some scholars who caution about the widespread applicability of contract farming as a development tool (Glover, 1987), if there are enough mechanisms to monitor and use the contract for developmental purposes, it has the potential to lead to a betterment of all the parties, especially the small and marginal farmers (Table 1).

Contracts require frequent and independent scrutiny so that they remain competitive both with similar contracts and with open market transactions. Wide publicity of contract terms will help to stimulate competition. From the producers' point of view, specific points to be considered in negotiating the contract terms include the method of determining the producers' price, adjustments for quality differentials, allowance for climatic variations, farm practices, credit terms, provisions for renewal and termination of contracts and for arbitration (Hill and Ingersent, 1987). Though the state regulation of contracts is desirable, but if the firms really want to sabotage the contract, there is no way they can be prevented from doing so (Glover, 1987; Glover and Kusterer, 1990). Therefore, vigorous bargaining co-operatives or other agricultural producer organisations are needed to negotiate equitable contracts. This kind of organisations have been able to secure the standardisation of contracts and their scrutiny by a government agency in the US (Wilson, 1986).

The other tools of mitigating loss of control used

by farmers in the first world have been the petitioning of the state for intervention to regulate the contracts, the formation of producer bargaining units, and the formation of farmers' markets (Welsh, 1997). The difficulty in collective action arises due to the heterogeneity of farmers and the conflict between the self-interest and the collective interest. Each farmer views his relationship with the company as an individualised one (Glover, 1987; Kirk, 1987; Rickson and Burch, 1996).

The social divisiveness of contract farming would be lessened if more of the 'contractors' were agricultural co-operatives or other producer-oriented organisations. However, it has to be recognised that agricultural co-operatives may be deterred from attempting to integrate forward into processing and distribution, both by financial constraints and by the managerial problem of making a success of unfamiliar activities in the face of strong competition (Hill and Ingersent, 1987). There have also been experiences of complete failure when co-operatives or state agencies were contractors (White, 1997). Working with farmer co-operatives for better and more sustainable contract procurement by private agribusiness firms seems to work for both the parties. This is an experiment being tried out by Marico Industries in Maharashtra state of India in safflower oilseeds. The company provided working capital, infrastructural facilities, managerial inputs, and contract job crushing which helped the crushing unit co-operatives to become viable (Bharadwaj and Palan, n.d.).

As a solution to the problems of the traditional co-operatives which performed poorly and were not member-focused, a new variant called New Generation Co-operatives (NGCs) have come up and evolved overtime in various parts of the world like USA, Canada, and India (Harris et. al. 1996; Singh, 1997). A New Generation Co-operative is one which has restricted or limited membership, links product delivery rights to producer member equity, raises capital through tradable

Table 1: Relative benefits of alternative marketing structures for small farmers

Structure	Sales position of small farmers (SF) vis-a-vis large farmers (LF)	Sales position of SF vis-a-vis buyer	Input facilities/ Technical assistance	Government support required
Private local firms (Nijjer in Punjab)	Can be against SFs due to bargaining power	Advantage of access to alternative outlets	May be available/ based on local experience	Provision of market infrastructure, information, ensuring competition, price stabilisation
MNCs/large firms (Pepsi, HLL)	Equitable prices through contract	Dependent but secure if supplies quality	Direct supply on credit/ direct and intensive	Should negotiate prices and participation for SFs
Co-operatives (Amul)	Equal if co-operatives are successful	Favourable if co-operatives are efficient	May arrange	Financial support
State boards/ bodies (PAFC/HPMC)	Equal prices if official buying position could be reached	May be exploited	Rare/left to other govt. agencies	Insist on reaching small farmers
Development agency (NDDB)	-- do --	Protected if meets quality	Direct supply on credit	Financial support required

Source: Adapted from J.C. Abbott (1993).

equity shares among membership, enforces contractual delivery of produce by members, distributes returns based on patronage, goes for value addition through processing or marketing, and makes use of information efficiently throughout the vertical system. However, it retains one member-one vote principle for major policy decisions. This kind of restructuring helps co-operatives to tackle problems; of free riding by membership, of horizon which is at the root of financial constraint, and that of opportunism, both of the members as well as of the co-operative. This arrangement by co-operatives has helped them become economically efficient, financially viable, and obtain member loyalty wherever it has been tried (Harris et.al., 1996). Additionally, non-member procurement and quantity or acreage contracts have been also used by co-operatives to tackle supply side problems (Hinman and Ricks, 1993). Some of the co-operatives like those dealing with sapota (chickoo) in south Gujarat have also attempted quality based grading and pooling system, and contractual relations with members for procurement, along

with market orientation strategies like multiple outlets, and efficient use of market information to achieve better business performance (Singh, 1997).

Though the amended APMC Act recognises contract farming system now and has some provisions to regulate it, a legal protection to contract growers as a group is a must to protect them from ill-effects of contracting (Wilson, 1986). There are cases of legal protection given to sub-contracting firms in Japan in their relations with large firms. This set of laws specify the duties (to have a written clear terms contract with the sub-contractor) and forbidden acts for the large parent firm. The forbidden acts include refusal to receive delivery of commissioned goods, delaying the payment beyond agreed period, discounting of payment, returning commissioned goods without good reason, forced price reduction, compulsory purchase by sub-contractors of parental firm's products, and forcing sub-contractors to pay in advance for materials supplied by the parent firm. And, these provisions are monitored

by the Fair Trade Commission. Interestingly, most of the violations by parent firms were on the written form of contracts and clear terms of the contracts (Sako, 1992). If contract farming is nothing but the flexible production systems prevalent in industry applied to farming, then it is only logical to extend the legal provisions with necessary modifications to farming contracts.

In some situations, it is not possible and easy to build immediate partnerships. Therefore, there can be a quasi-judicial system at the local level (panchayat, district administration) to monitor the contracts and resolve any conflict with appropriate penalties to any of the defaulting parties. There has to be a general code of conduct for both the parties in order to avoid conflicts and breaking down of contracts. There should also be incentives for better quality, timing, and care of the crop (Glover and Kusterer, 1990). But, contracting as a mechanism is desirable only if the crop is perishable, non-bulky, perennial in nature, needs heavy processing and strict quality adherence (Goldsmith, 1985), credit market is in a state of failure or there is a need to encourage new crops. But, still there are other options which should be tried out i.e. state, NGOs for credit and other inputs, and if contracting is a must, then it should be regulated and monitored (Grosh, 1994).

The important question is that of the division of value added between the firm and the farmers which is based on the relative bargaining power of the parties involved (White, 1997). Therefore, it is important to examine carefully and design the pricing and other aspects of the contracts. There is a role for the state agencies and the NGOs to intervene in contract situ-

Though the amended APMC Act recognises contract farming system now and has some provisions to regulate it, a legal protection to contract growers as a group is a must to protect them from ill-effects of contracting.

ations as intermediaries to protect the farmer and broader local community interests. The NGOs can also play a role in information provision, and in monitoring and regulating the working of contracts. Better co-operation and co-ordination between companies and co-operatives for agricultural development also needs to be encouraged. Further, both companies and state should promote group contracts with the intermediation of local NGOs and other organisations and institutions so that contractual relationships are more durable, enforceable, and fair. An insurance component in farming interventions is a must to protect the farmer interest and it is noted that some companies are already doing it. But, the most important thing is to ensure market for the farmer produce at better price under these agribusiness projects. What is also required is marketing extension in terms of better product planning at the farmer level, provision of market information, securing/accessing markets for farmers, provision of alternative markets and market orientation in terms of improved marketing practices at the farmer level (Patnaik, 2003). Government should also play an enabling role by legal provisions and institutional mechanisms, like helping farmer co-operatives and groups, to facilitate smooth functioning of contract system.

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