

Contract farming and Indian Agriculture:

Potential and Challenges

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Contract farming has the potential to get product differentiation and value addition in agriculture. To coordinate the production and sustain the producers in the fold of contractual arrangements is dependent on extent of value creation and its transmission towards producers. Hence it becomes essential to design optimal contractual arrangements with full understanding and consent of the producers and other stakeholders. According to Agriculture Produce Market Committee (Development and Regulation) Act 2003, the first sale of agricultural produce will be in territorial jurisdiction of market yard of APMC only. But the implementation of Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act 2020, would provide not only additional channel to existing marketing channels but also allow hassle free interstate movement of agricultural produce. Additional marketing channel will be for quality attributes in the produce. Such marketing channel is known by modern marketing channel. These acts are meant to change the nature of trade in Indian agriculture.

Keywords: Company, Consumer, Contract farming, Private trading arrangements, Producer

BEFORE rolling out any program/policy in the field for intended beneficiary, there is a need to generate enough evidences on pros and cons of the policy reforms besides discussion with stakeholders. This knowledge would help in implementation of policy reform for its smooth transition in the society. Hence enough information should be there through economic analysis to guide policy makers. A food processor or contractor is interested in specific quality attribute in its raw inputs. In open market, delivery of genuine commodity is a big challenge due to rare availability of a unique quality attributes in food product. The mode to get a unique quality in raw material is through contract farming. Contract farming in trading environments differ with change of an iota of circumstances and lead to infinite numbers of dispute and infinite numbers of solution. Therefore, contracts are private trading arrangements and

need to be customized to fit specific economic circumstances with economic logic in other settings. The crucial point is that processor might design a contract to provide adequate incentives for quality production.

Contract farming is defined as formal agreement between farmers and buyers as partners in business. Legally farming contract involves the sellers (farmers) obligation to supply the pre-specified volumes and qualities, and buyers obligation to off take the goods and make payments as agreed. The essence is production and supply of agricultural produce under advance contract in which supplier has agreed to produce certain agro-processing produce quantity under pre-decided price. Prices are fixed at planting time and firm provides proper supervision over the production process to the farmers. Generally, contracts provide benefits to both the firm and contracted growers particularly with respect to risk of crop failure

conditions. On the other hand, firm also takes advantage like quantity and quality of the product. In this manner relationship between the firm and farmer is very close.

In free economy, three players of contract farming are producer, consumer and company. The value of the product in relational production has increased when these actors work in unison. The plus point of producer is that he has land, labour, knowledge and understanding of production of crops in his field and prevailing agro-climatic conditions but he wants more income/profits. The plus point of company is that it has strong capital and business management format. The product of the company should be successful in market so that the company could reap sustainable profit out of this venture. The plus point of discerned consumer is that he is willing to pay more for quality product that fulfills his demand. The strengths of these players are added and value is created in relational

production. Maintaining the balance of interests of all stakeholders is a daunting task. If interest of any of the party is not fulfilled, contract farming will crumble imminently. Contract farming is always for win-win situations for all players. The success of contract farming depends on prevalence of extent of niche market of the product. The theory of contract farming depends on two premises: (i) when market is underdeveloped or missing but demand of product is more than supply, (ii) contract farming is meant for speciality product, not for normal product. The market structure of contract farming is monopsony. Here buyer of the produce is one contractor/ company and suppliers/ sellers (producers) of produce are many.

The number of factors like, nature of commodities, regional agro-climatic situations and level of standards and extent of compliance of package of practices, level of infrastructure, investment and support commitments, socio-economic-legal environment etc., come to play important role for success and failure of contract between sowing to harvest of crop. Moreover, there are unforeseen circumstances which create inefficiencies in agricultural contract are beyond the contemplation of stakeholders.

There are several threads of literature (theories) that are useful for identifying various inefficiencies created by contracting imperfections. Likewise, transaction cost approach assumes that the combination of incomplete contracts and relationship specific investment can create distortions, known as rent seeking or post contractual opportunism. Incomplete contracts may be silent on a number of important contingencies and or have components that are not enforceable by third party. For instance, silent on timely delivery of produce, it becomes difficult how to develop reward punishment system. To produce unique traits, the seller has to invest in specific housing facilities. Under relationship specific investment, assets increase earnings

but lose considerable value outside the relationship. Once the product is delivered, the buyers can decide whether to honor the original agreement or attempt to negotiate a lower price and extract same quasi-rents. Because the seller has fewer outside opportunities for the assets, the seller will likely accept a lower price so long as per profit does not fall below the scrap value of the assets. The buyer has a number of non-contractible (even ex-post) decision rights that can be used to extract quasi-rents. Sometimes, the buyer resorts to rent seeking tactics like use biased method of measuring quality, claim that the seller failed to meet implicit understand or use other influential activities derived from sequence of information or ability to negotiate to justify a lower price. Similarly, ownership of assets is important that it confers a bundle of decision rights to the owner. These decision rights provide more leverage during bargaining or renegotiation of terms of trade ex-post.

Theory of relational contracts assumes that contractible parties are able to self-police their relationship, possibly mitigating some of the distortions. In course of a contractual relationship, parties will receive information that will enable them to adapt to changes in the economic environment. This allows for the emergence of informal enforcement mechanisms that can support powerful incentives even when the explicit contract is incomplete. As such they are frequently called self-enforcing contracts and are based on the notion that in repeated relationship, the promise of future pay offs can sustain performance today i.e. the threat of termination can partially substitute for explicit incentives in disciplining, rent seeking, holds up and underinvestment problems. The optimal contract design must entail all possible ingredients for mitigating not only moral hazards but also be consistent with real world agriculture.

The transaction cost in contract governance could be reduced by innovative institution and policy. Courts and legislations can fill gaps or at least reduce the transaction

costs of negotiating contract in several ways. These can supply common vocabulary. The vocabulary on the way trade associates use phrases. This reduces writing costs because private parties need not spend as much time haggling over precise vocabulary. The second possibility is for courts or legislature to supply default rule which fill gaps in contracts. If a non-contractually specified contingency arises, then parties will have to allocate the losses and there will be dispute. If the parties go to trial, the court would have to allocate the losses to the parties i.e. the court would have to create a term that will specify how losses are to be allocated. A court or legislature might create a default rule using the guiding principle that the party who is in the best position to bear the risk should bear it. Hence the optimal relational contract would emerge with some form of government intervention.

Government of India (GoI) envisions that contract farming will accelerate the process of commercial agriculture and improve farmers' access to credit, input and extension services. Both National Agricultural Policy 2000 (GoI) and National Policy for Farmers, 2007 (National Commission on Agriculture), emphasized to promote contract farming as a way to accelerate technology transfer, secure capital inflows, and ensure access to markets for agricultural products. Once the requisite infrastructure is put in place, there is need to provide a level playing field to operate free and fair market. To ensure this, in September 2020, the Union Government enacted two new farm Acts—Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020; and Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020 for transformation and modernization of agricultural sector and amended the Essential Commodities Act, 1955 to provide an enabling environment for accelerating agricultural development. These legislative measures aim to create a value system for efficient agricultural marketing, improving

trade related infrastructure and strengthening supply chains of the agricultural commodities. These Acts are expected to accelerate the large scale adoption of contract farming in India, already evolving quickly as an alternative marketing mechanism. Hence it becomes essential to understand carefully pros and cons of contract farming.

Potential incentives of contract farming

These are few monetary and non monetary benefits available to farmers as per evidences in literature. Contract farming has the potential (i) to increase the income of farmers, to provide farmer more stability in production and marketing risks; (ii) to reduce input costs due to economies of scale through bulk purchase and sale; (iii) to improve liquidity because of pre-financing of input delivery/services etc; (iv) to reduce credit risk since agreement can serve as collateral kind of guarantee; and (v) to provide financial support for food safety and certification. Apart from these marketing benefits, contract farming has potential to provide many non-monetary benefits: (i) to provide reliable and stable market access; (ii) to improve access to technology, extension, training, skill up-gradation; (iii) to reduce market and production risks; (iv) to enable them of going for risky but high income potential of crops; (v) to improve food and nutritional security. The prerequisite to sustain contract farming is to keep all players in fold of contract farming through mutual trust, and transparency in distribution of incentives according to verifiable performance parameters.

Negative aspects of contract farming

Contract farming has potential to generate apprehensions in the mind of farmers: (i) chances to lose autonomy in decision making due to unequal level playing field; (ii) to lead to weak bargaining power of a farmer; (iii) to weaken claim position in case of buyer default; (iv) to reinforce mismatch between long term commitment requirement and short term purchase commitments; (v) to generate imbalance between food crops for home consumption

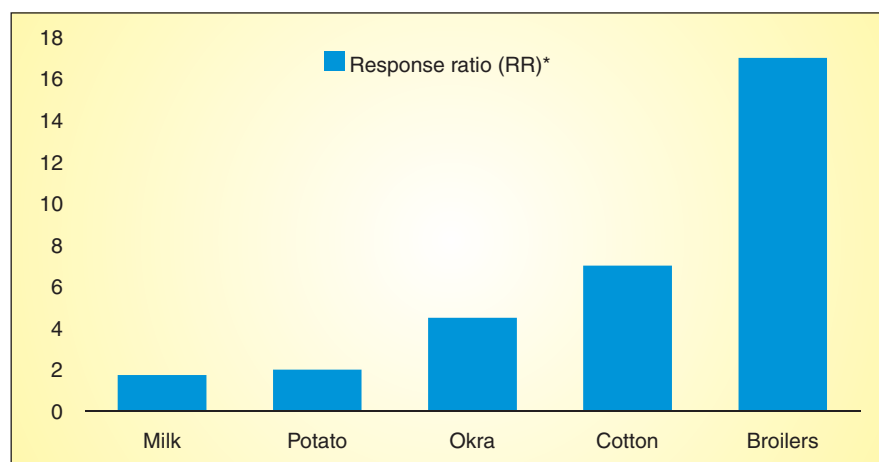


Fig. 1. Impact of contract farming in India. *If RR is more than 1, income enhanced.

and cash crop to supply to contractor from a small land parcel.

Contract farming has also potential to breed tension in the mind of buyers: (i) to deal a large number of farmers from distant markets, (ii) to lead to high risk in organizing supply from scattered producers; (iii) to incur transaction cost; (iv) to reduce yield due to diversion of inputs provided by buyers; (v) to induce moral hazards; (vi) to face a threat from competitors and side selling of contracted produce by farmers.

Analysing the contract farming

We need to look contract farming from the lens of marginal and small farmers (86% less than 2 ha land). Contract farming mechanism has the power to strengthen the strengths and weaken the weaknesses of food production system.

1. The first point to consider is – Are smallholders included or

excluded from contract farming arrangements? The concerns of smallholder in agriculture are lack of information about production methods, market opportunities, inadequate access to financial services, risk averse largely due to subsistence farming, low capacity etc. Contract farming has the potential to address these constraints consistently in group action mode (cooperative, FPOs, etc) if there is strong arrangement and compliance from all partners. Perusal of literature reveals that contract farming enables small farmers to achieve higher yields, diversify into new crops, increase and stabilize income, and improve quality and food safety attributes of the produce. In Indian agricultural context, GoI has taken some initiatives like formation of 10,000 Farmer Producers Organizations, creating enabling legal business environment to flourish agribusiness and value chain development etc;

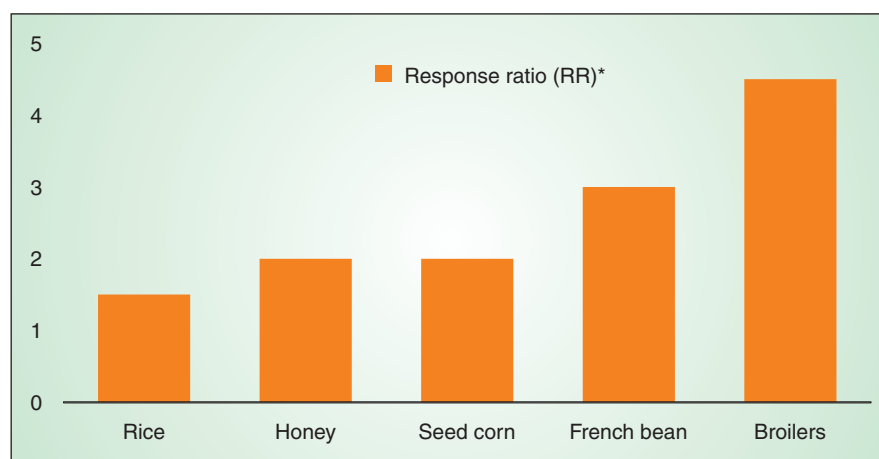


Fig. 2. Global impact of contract farming. *RR is more than 1, income enhanced.

through legislative measures. These measures will enable smallholders economically feasible to avail benefits of innovative institutions like contract farming.

2. The second point to ponder over is – What impact does contract farming have on smallholders' income? Perusal of survey results reveals that the impact of contract farming on farm income varies across nature of commodities, geography, regions, climate etc. Impact is not always on profit/income but also enabling development of capacity, business acumen of farmers etc. One lesson is evident that contract farmers earn significantly more than independent farmers. The recent evidences from studies on milk, potato, okra, cotton and chicken broilers is depicted in form of Response Ratio (RR) as an impact of contract farming on income/profit. Response ratios are expressed as the difference in mean outcome in the intervention group (contract farmers) as a proportion of the mean outcome in the comparison group (non-contract farmers). RRs have the advantage of being easy to interpret. Values above and below one indicate proportionate changes in the income of contract farmers over the non-contract farmers. If the response ratio is more than 1, then contract farming is profitable/generating more income. All outcomes were measured on a continuous ratio scale with a natural zero point. Response ratio (Fig. 1) in milk, potato, okra, cotton and chicken broiler is more than 1. It means contract farming is income enhancing in these commodities. It ranges from 2 to 17 times and is maximum in broiler chicken (17). The response ratio of global impact of contract farming is shown in Fig. 2 and indicates tremendous increase in income due to contract farming. The empirical evidences at global and

Indian levels infer the similar findings. Moreover, there are instances of increase in employment, food security, quality and safety compliance due to contract farming. Hence the smallholders and large farmers tend to become part of contract farming.

3. The research on negative aspects of contract farming under these rules is not part of this article because these are yet to be implemented to leave any foot prints. The anecdotes on the problems and constraints of contractual farming based on earlier rules revealed that the biased nature of the firms against the small holders had a negative effect. These biased contracts created the social problems in the society. These types of contracts also created social differentiation and unrest. The capacity of small scale farmers to participate in the commercial market is much different than large scale farmers especially in labour and knowledge intensive enterprises. There are instances as the farmers generally find that the contracts are biased and enforced strictly, firms provide poor extension service, overprice their services, pass on the risk to the producers, offer low prices of the produce, favors large farmers, delay payments, do not provide compensation for natural calamity loss, and do not explain the pricing method. On a larger level, the farmers felt that they had little bargaining power compared with that of the company which they perceived benefited more than the farmers. They had become dependent on the firms for credit and other inputs. Under conditions of anti-farmer contract terms and limited market choices, contracting tends to reinforce itself over time. Due to these constraints, the companies find difficulty to work with small scale farmers. But in spite of these, contract farming has maintained its

interaction and advantages for both buyers and consumers.

For successful implementation of contract farming, there should be proper co-ordination between farmers and firm to work in organized manner and win-win for all stakeholders.

CONCLUSION

The three latest farms laws along with Contract Farming Act (Model Agriculture Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act, 2018) will provide adequate confidence to farmers and incentives to the sponsors to enter into a contract. These legislative measures create legal environment to flourish contract farming. Out-scaling by the sponsor is going to have a share profit in contract farming to establish a tradeoff between incentive and risk sharing. The proliferation of global standards in food production systems may also be a chance for farmers who do not intensify their production (e.g. by using herbicides, pesticides and other chemicals). These standards enable farmers to adjust their products (product upgrading) and production methods (process upgrading) to sustainable standards, may be able to find a niche market. As the consumer prices for sustainable specialty product are usually higher than for conventional products, sustainable production may even bear the potential to increase income. As the expansion of contract continues due to growing demand for quality food, the distribution for niche market may become similar to conventional distribution system.

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Know Krishi Unnati Yojana

The *Krishi Unnati Yojana*, a central sector scheme, is envisaged as umbrella programme for focusing on food security, by merging schemes on Soil-health Card, Integrated Scheme on Agricultural Co-operation and Agricultural Marketing, National Mission on Agriculture Extension, Horticulture Development, Price Stabilization Fund, National Mission on Sustainable Agriculture and other programmes.