SHIV SHAKTI
International Journal in Multidisciplinary and Academic Research (SSIJMAR)
Vol. 1, No. 3, September-October (ISSN 2278 - 5973)

Corporate Initiatives in Indian Agriculture and an Impact on inclusive Growth: An Assessment

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Abstract:

This paper aims to evaluate the impact of contract farming in India on inclusive and sustainable growth. We use Examples from case studies on various corporate initiatives in rural India such as Mahindra Subhalabh, ITC e - choupal, PepsiCo, etc. We clarify the nature of contract farming in an Indian context and then, focus on contrasts between a transactional approach with a transformational strategy geared to deliver a more equitable and inclusive set of benefits to all actors from end-to-end of the trading network. This paper breaks new ground to shift the emphasis from better, cheaper and faster ways of leveraging contract farming from a shareholder to a stakeholder perspective.

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Introduction

Global population is moving from 6 billion to an estimated 9 billion by 2050 and various commentators highlight that this will translate into the need for an increase in global food production from 60 to 70 per cent. This demographic explosion, the accelerated depletion of scarce resources and, environmental impacts is forcing the pace of implementation of a range of ideas such as contract farming as well as an examination of assumptions that were shaped by the developed world. (Bell, 2010) Above all, the global push for better, cheaper and faster supply chains - of which contract farming is an essential part - is challenged by notions of inclusivity and, human values over value and the race to the bottom price. (Bell, 2010)

Essentially, the contract farming business model has been developed to guarantee improved productivity and yield at farm level with improved market access served by know-how, modern technology and transportation. Contract farming sees the contractor supplying all the inputs required for cultivation, while the farmer supplies land and labour. However, the terms and nature of the contract differ according to variations in the nature of crops to be grown, agencies, farmers, and technologies and the context in which they are practised. The Literature takes up contrasting positions in response to the paradox of Indian Agriculture – up to 40 per cent of the harvest rots on the way to market and, there are many instances where produce cannot find buyers. Some see this drive for growth riding rough shod over local farming communities already ravaged by growing crops in high risk conditions reflected in suicide statistics and migration to the cities.

Many commentators see this in the context of Indian Agricultural Policy (Balakrishnan, 2007) and the drive to improve on the fact that whilst Agriculture accounted for 17.8 per cent of GDP 2007-8 it generates over 52 per cent employment. The Corporatization of Agriculture (Singh, 2006) states the challenge as being between those that see the need to enhance agricultural productivity at all costs with those who see this in the wider context of sustaining the livelihood of resource poor farmers at the margin as well as increase jobs for farm workers.

The nature of power in the relationship between the contractor and the grower varies from a market specific contract whereby the buyer provides a market for the sellers output to a production management contract resulting in more control over operating practice and, a third option, resource providing contracts where the contractor exerts significant control over all aspects from farm to fork (Singh, 2009).

Malcolm Harper's Inclusive Value Chains (2009) uses a series of case studies to highlight the lack of an effective interface between the informal and the formal economies – hotels lacking fresh fruit whilst street hawkers offer it in abundance outside – and, a number of illustrations of how conventional supply chain thinking falls short. A case study from ITC highlights a project integrating small farmers in Punjab with Spencers – a new format retailer. Another, illustrates how the traditional company Namdharis with its proud philanthropic traditions has developed its seed production business to link small farmers in Karnataka to markets abroad.

There can be no doubt that there is a need to develop optimal business models within agriculture to ensure food security for a population of 1 billion as well as a secure livelihood for the farming community. Some see improvements in agricultural as a social imperative and, others see the shift from public to private standards as key to a sustainable solution (Reardon et al, 2009). This paper explores on the ground realities seeing contract farming as part of the solution but, challenging the David and Goliath tendencies that emerge if equitable and inclusive arrangements are not put into practice.

Indian Agricultural Evolution and Emergence of Corporate Farming

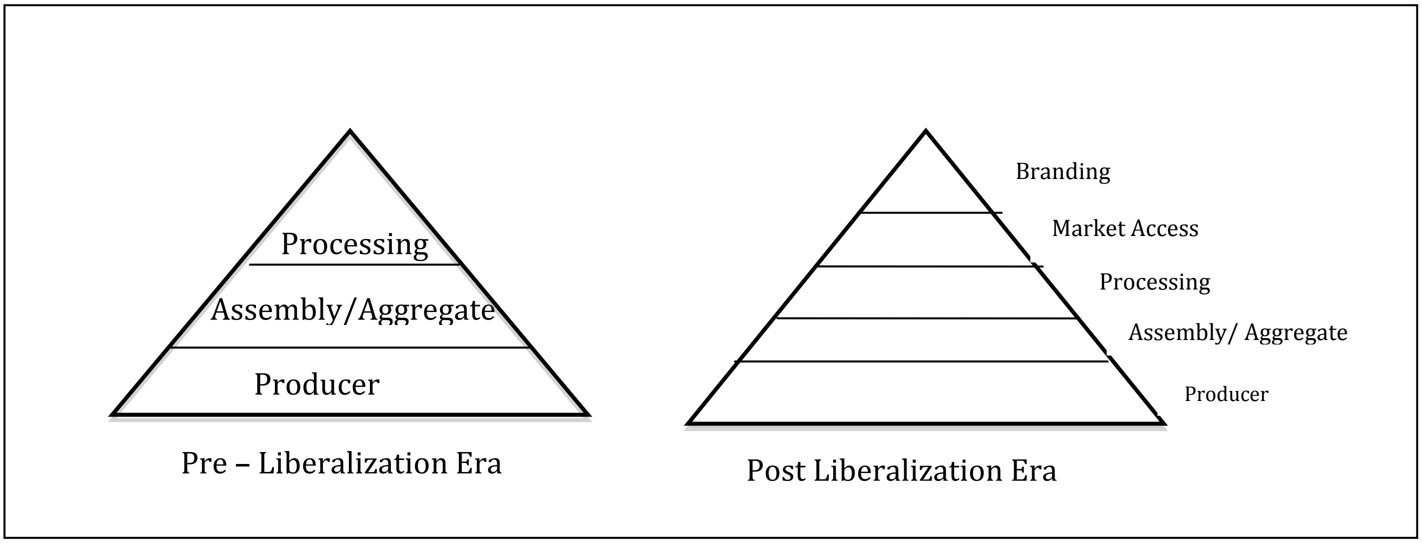

Figure 1: Evolution in Indian Agribusiness Model

Figure 1 depicts the shift in agro business from pre liberalization characterized by local; community based micro or small enterprises with agents playing a key role in market access and, a reliance on local or district level mandis restricting scale. Then the post liberalization shifts the agro business model to aggregate capacity either through cooperatives or, through contract farming and focuses on increased volume, standardization and quality. This shift meant that supply chains went beyond local geography and with the onset of modern retail, were able to expand to national markets. There have been three main shifts since 1991: (P.S.Birthal et al, 2009)

- A Shift in consumption pattern away from staple food grains towards high value foods such as vegetables, fruits, etc.
- Diversification of farming from traditional crops to horticulture crops.
- A transition in the food marketing system from traditional 'mandi' intermediary based distribution / supply system towards modern retail.

This paradigm shift is characterized by a demand rather than a supply driven supply chain and, whilst pre liberalization initiatives were led by government – resulting in a disappointing 'Hindu growth rate' – the post reform era has opened the door to the corporate world through a set of policy changes designed to boost agro industry growth(Alternative Survey Group, 2007):

- The Agricultural Produce Marketing Committee (APMC) promoted direct and free marketing of agricultural produce
- Agricultural and waste lands are now being allowed to be bought /leased to the private sector
- Entry of FDI in food processing and marketing up to 100 percent equity.

On May 25th 2007, Prime Minister M Singh – who was Finance Minister in 1991 – emphasized the following point to industry leaders:

'Indian industry must, therefore, rise to the challenge of making our growth processes both efficient and inclusive. If those who are better off do not act in a more socially responsible manner, our growth process may be at risk, our policy may become anarchic and our society

may get further divided. I invite corporate India to be a partner in making ours a more humane and just society'

In the modern era, supply chains compete not individual companies (Christopher, 2004) and, with these reforms the opportunity and impetus to create integrated networks of suppliers, producers, marketers and retailers became a reality. However, with this comes the responsibility to ensure that all actors are able to benefit either through increased margins and, for the farming community, by access to markets, know how, more effective inputs and improved yields and productivity. Contract farming plays a key role in this process.

Contract Farming and Indian Experience

As we have seen, liberalization cleared the ground for large Corporates to scale up their operations and this necessitated greater emphasis on sourcing capacity and performance to generate increased volumes and consistent quality. This operational imperative met with the reality of an isolated, fragmented, informal, badly equipped farming community in dire need of market access and, the means to improve performance.

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). (National Institute of Agricultural Extension Management, 2003) It is often referred to as outgrower scheme, and satellite farming. Corporate farming is characterized by various forms of vertical exchanges to minimize transaction costs (Singh,2004).

Corporate farming is not a single homogenous model. Mighell and Jones (1963), classify contracts into three broad categories:

- Market specification contract: represent an agreement by a buyer to provide a market for a seller's output.
- Production- management contract: Entails more buyer control, allowing the buyer to specify and /or monitor production practices, input usage etc.
- Resource – providing contracts: represent the greatest level of control for buyers, who provide a market outlet, supervise production practices and supply key inputs.

The differences in the above versions of Corporate Farming arise because of significant diversity, in the type of firms, nature of contracts and socioeconomic environment. (Singh, 2001)

In India, a number of corporate such as Mahindra, Pepsi Foods, ITC and others are involved in contract farming. The below matrix summarizes the strengths and weaknesses of contract farming in an Indian context.

Internal Factors: Local	External factors: Market
Strengths Source of capital Price Certainty Access to Technology Leap in income and employment levels Better Skills Co-ordination of local production activities Decreased transaction cost and cost of cultivation	**Opportunities** Remove Market Imperfection Low Cost produce Inclusive growth Integrated vertical co-ordination Market access
Weakness Loss of independence experienced by farmers Dependence on companies for finance Delayed payments Reject low quality products without compensation Favor large famers over small farmers	**Threats** Capitalist penetration of agriculture for capital Accumulation Misjudgment of market requirements by the firm

Figure 2: SWOT analysis of contract Farming

Source: Adapted from S.Singh, 2005

In theory a number of mutual benefits are to be gained by the farmer and the corporate. However closer inspection of the above SWOT highlights a significant anomaly in the relationship between the supply chain actors. The Corporate firm is the strongest link in the supply chain and, there is potential for abuse.. There is a clear need to ensure that a more equitable and inclusive relationship between growers and the buyers are based not on power but on a common and mutually beneficial agenda. Exploiting power may work in the short run but it is self –defeating in the long run. (Kumar, 1996)

Evaluation of Indian Case studies: Contract Farming

Figure 2 highlights the reasons for a number of Indian corporate to have entered into collaborative partnerships through vertical coordination in the form of contract farming. We now evaluate three such corporate Initiatives: Pepsi Co's contract farming in Punjab, ITC's e- choupal and Mahindra Shubhlabh extension services. Following is a comparative analysis of the three mentioned corporate initiatives:

	ITC's e-Choupal, Choupal Sagar, Choupal Fresh	Mahindra Shubhlabh Services Limited	Pepsi Co Contract Farming
Commencement	2000	2000	1990
States Covered	MP, Haryana, Uttaranchal, Karnataka, AP, UP, Maharashtra, Rajasthan and Kerala	Tamil Nadu, Andhra Pradesh, West Bengal and Orissa	Punjab, Bihar,Jharkhand Kolkatta and Orissa
Objectives	ITC e choupal objective is to create an electronic market place for agricultural commodities. Choupal Sagar is a rural shopping mall where farmers can buy and sell various commodities	The company aims to manage deficiencies in the farm sector, including low consumption of quality inputs, lack of mechanization, scarcity of financial security and low awareness of technology.	PepsiCo aims to produce export-quality, value-added produce.
Business Model	VSAT connection with the sanchalak Sanchalak bears extra costs, compensated with higher commisions Has the obligation to serve the community at large Farmers track closing prices, global price trends either directly or through the sanchalak Can order seeds, fertilisers etc from ITC Learn new farming techniques Sanchalak aggregates prices for products demanded and transmits order to ITC representative At harvest time, ITC offers to buy crop from farmers at previous day's closing price	MSSL has initiated the 'hub and spoke model' through which each district is expected to have 25 outlets to service the farmer's needs. Shubhlabh model was to provide: (1) Arrange all agri-inputs such as seeds, fertilizers, and pesticides and so on to farmer (2) Rent out farm machinery like tractors, transplanters and other special machinery that helps to reduce the cost to the farmer, (3) Provides commercial agricultural extension by bi-weekly visits to the farms, (4)Offer crop spraying, harvesting and post harvesting services (5)Provide commodity trading in final produce of the farmers.	Pepsi Co's collaboration with Punjab Agricultural University provides them with the knowledge of horticulture with special focus on Punjab. Their model was a mix of technology transfer of an integrated spectrum of horticultural services with a focus on farmer economies and competing crops.

Figure 3: Understanding corporate Initiatives in Indian Agribusiness sector.

Evaluation of the three Indian Corporate Initiatives:

Findings from research conducted by the researchers on the above three corporate initiatives infer that firms use one or more contracting approach based on the needs raised above. (Singh, 2001) However the socioeconomic, environmental as well as regulatory and technological environment shapes the way for the types of the vertical coordination.

Mahindra Subhalabh has been following a business model, which does not take into account the socio – political reality of rural India. The E- agri trading was unplanned and the channel conflict was quite natural as inputs trading in India operate with huge credit offerings and the channel is characterized as being highly push oriented. Any other model should take these realities into consideration and then design an alternate distribution channel. One important indicator of development is where the man becomes costlier and the materials become relatively cheaper. (Balakrishnan, 2010)

From Amartya Sen to Jeffery Sachs, economists have been trying to find a way to pull Indian farmers out of a lifetime of debt. Ironically a cigarette company stumbled on the way forward (Deveshwar Y and Sivakumar, 2007). ITC's e-choupal service is based on assigning a computer terminal in remote rural areas. This connectivity provides information on weather and a wide range of issues of use to local communities.

ITC e choupal initiative enhanced the ease of replicability and scalability, developed local leadership, provided farmers with latest know-how, developed shared ownership of assets and importantly created a win -win situation for business and farming community. Such interventions have helped transform village communities into vibrant economic organizations, by enhancing incomes and creating markets. (Balakrishnan, 2010)

As India is increasingly integrating with global markets this initiative provides an important window of opportunity to ensure that small holders are included in the process (Harper, 2009) Significantly, this approach strengthens local self esteem and reduces the dependence on outside intermediaries to deliver the market access and revenues that were the exclusive preside of traditional agents or, more recently, contract farming.

However Indian Agriculture unlike the developed agriculture does not enjoy the level of development as well as infrastructure to make specification, production management contract as well as resource provision contract to work independently. (Singh, 2004)

Such hybrid models are aimed to provide standardized, volume and quality produce and also upskill the farmers with regards to production know how, use of specialized inputs and provides them with easy access to markets at low transaction costs.

These case studies also point out that through contract farming, corporates also provide the farmers with extension services. As such inadequacy and inefficiency of the public sector towards offering extension services led to the corporate entry into this sector whereby these firms offered information on weather, market prices, a recommended package of practices for crop production and also arranging supply of inputs, technology and finance. For instance, Mahindra and Mahindra Ltd. opened its Mahindra Krishi Vihar in Tamil Nadu; Rallis started Rallis Kissan

Kendra for wheat, soya bean, vegetables and fruit crops; and ITC established ‘e-choupals’. (Balakrishnan, 2010)

The GMED India Deputy Chief of Part, Deo Dutt Singh said,

> *“The farmers did not understand the concept of free extension services. They were so used to bad quality government extension services or to private services, which were conditional on input purchases. After one season however the trust grew. Extension services became the key incentive for farmer loyalty.”(Harper, 2009)*

Transactional Behavior to Transformational Relationship.

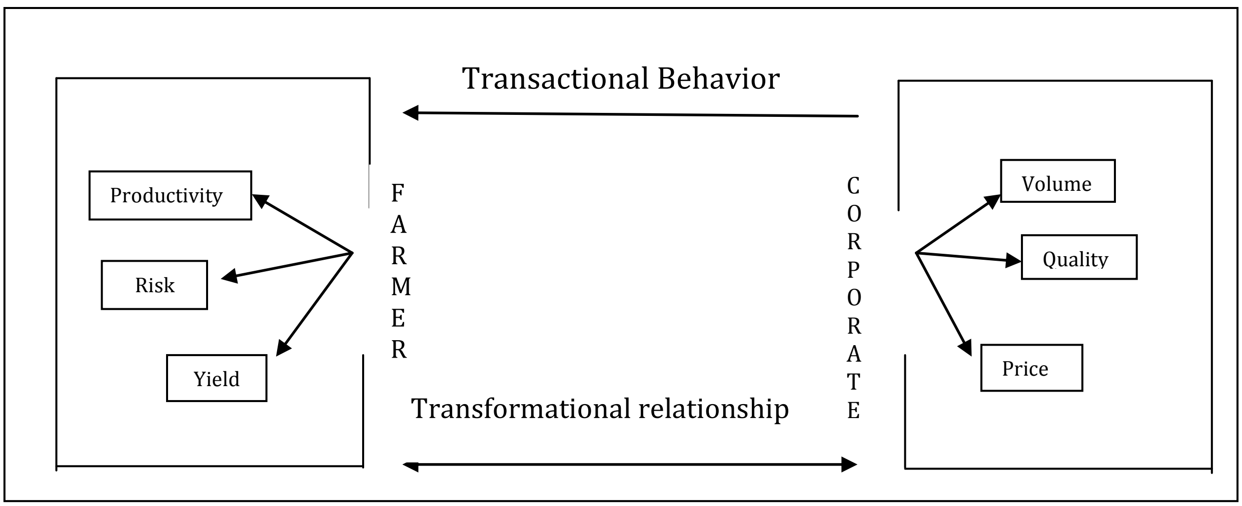

Figure 4: Transactional – Transformational Model

The focus is on the supplier delivering at lowest cost whilst value is added closer to the consumer either by the FMCG company or the Retailer. This is not an inclusive or equitable relationship and is all too often based on captive supply chains that give very little long term security to the supplier. (Altenburg, 2007)

Pre-liberalization, the power was invariably in the hands of government agencies or local agents. Then, post 1991, we see the opening up of the market and the introduction of contract farming as a means to increase productive capacity and impose standards. In terms of assets and resources, these supply chains are asymmetrical with low-tech and fragmented growers at one end dealing with high-tech and increasingly consolidated firms at the other holding control over multiple distribution channels (Bell, 2010). In fact, the term supply chain is a misnomer as the relationship between supplier and buyer is demand driven. In other words – a demand chain. We can go further and challenge this balance of power with inclusive value chains (Harper, 2009) and the notion of partnership and collaboration.

Knowledge is power, and so this makes the corporates the strongest link in the supply chain. Given the existence of asymmetric nature of power, it is essential for all supply chain actors to comprehend the position of power and the division of roles inorder to define the collaboration process and determine the most appropriate future measures. (Gattorna et al, 2006)

Failure to do so result in increased complexity of the value chain. Misleading and misrepresenting and exhibiting inconsistency in behavioral attitudes can be the way towards the failure of collaborations. (Mentzer, et.al 2001)

Transformational value chain governance is thus based on relations value chains whereby, in these networks, we see a complex interaction between buyers and sellers, which often created mutual dependence and high levels of asset specificity. (Altenburg, 2007) Strategic execution of transformational relationship in the agri business sector would thereby lead to product innovation, reliable and timely delivery and short time to market.

However, as illustrated above, the term ‘chain’ does not reflect the essential informal, fragmented and asymmetrical nature of the farming sectors of the emerging and developing economies and the key to improving relationships and performance along the supply chain comes through better understanding of how to work together (Gattorna et al, 2006) Supply chain coordination addresses risk control and a range of policies from procurement to production and replenishment. Collaboration is multi-faceted and, operates at different levels of intensity over time. In the initial stages of the business relationship between supplier and buyer, behavior is at arms-length. Full partnership is only reached when other transitional behaviors are navigated over time.

The way Ahead

The corporate initiatives in Agri Business sector play a key role in dissemination of right information and knowledge to the small/marginal farmers so that a win win situation is created for all the supply chain partners. Today, the collaborative transformational relationship between Corporate and the Producers would eventually lead to the emergence of farmer service centers.

Privatization of farm extension services also assumes great significance as it aims to fill the gaps found in the present system. As such the extension personnel must act as a two way channel for communicating with the farmers and getting their feedback. The concept of ‘precision farming’ which is backed by ‘knowledge intensive’ farming practices will provide an ideal platform for launching the extension services. However it remains to be seen whether Indian firms understand the power of collaboration and accordingly put their act together. (Singh, 2004)

Conclusion

We believe that the modern retailing in India is growing at a compounded rate of 40% annually (Harper, 2009) and with an increased demand for fruits and vegetables which provides a huge opportunity for contract farming given the low country risk and growing wealth in India. Though growth in modern retail drives the need for contract farming (one best way') by corporate, it would be incorrect to view contract farming as operating on automatic pilot. This paper concludes that if corporate are to adopt contract farming as an initiative, we need to ensure and embed transformational behavior rather than to be content with the transactional relationship incapable of sustainable and inclusive growth.

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