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# Applicability & Effectiveness of Contract Farming in India

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#### Introduction

This signature contribution is the highest in terms of its gross domestic product and supplier livelihood for millions of people approved by India's agriculture sector. Agriculture is not only a means of trade and a source of livelihood, but is fundamentally linked to culture. But today, farmers are turning away from farming activities and looking for other opportunities as incomes have fallen. These new developments will prepare the departure of villages to cities.

Alternatively, in the hope of making money from their agricultural land quickly, farmers will be willing to donate their land on contract basis. Contract farming will prove disastrous for the lives of millions of people in India who are associated with the agriculture sector

Contract farming will give corpo rates an entry into the agriculture sector. They will proceed to aggressively capture new lands, thereby rendering many farmers penniless.

Recently, a provision made in Gujarat allows non-farmers to be given the status of a 'farmer', resulting in the possible misuse of this law. In India, agriculture and animal husbandry are complementary activities. Our economy, especially, the rural economy, is dependent upon both, agriculture and animal husbandry.

India has been a predominantly agrarian economy since the first human settlements on the subcontinent. While development efforts over the last four decades have doubtlessly strengthened India's industrial base, agriculture continues to be a significant pillar of the economy, contributing nearly 14 percent to GDP and representing approximately 11 percent of India's national exports<sup>1</sup>

# Key Words: Contract farming, Exploitation, Small scale farmers, Agricultural marketing, Low productivity, Sustainable development, incentive support.

Liberalization, privatization and globalization of the post WTO regime have created new market opportunities and challenges. The agriculture sector, like any other sector of the <sup>2</sup>economy, must evolve a response mechanism to face these new realities. This requires reforms in agricultural marketing in order to bring about the requisite changes and to push the agriculture sector to take-off from its current low growth rate of 2-3 per cent to a healthier 4-5 per cent. Wide support for contract farming under the Structural Adjustment Programme (SAP) and liberalization policies and its promotion by the international development agencies such as the World Bank, the USAID, the IFC and the CDC has further supported the development of contract farming in India, which in turn helps reform agriculture marketing practices indeed.<sup>2</sup>

The first known evidence of contract farming in India dates back to the British colonisation; The East India Company had contractual farming arrangements in the coffee and tea estates. As such, the concept of contract farming is not new to India but there are new forms and models of contractual arrangements which have prevailed post-independence.<sup>3</sup>

Agriculture is an age-old tradition and the main source of livelihood for about 58% of India's population. It holds a pivotal position and contributes almost 17-18% of India's economy. Rapid development and globalization have paved the way for contract farming and it has now attained an important place in the agriculture industry. Though contract farming is not new to India, it was prevalent during British rule; cash crops such as indigo, cotton, opium, tobacco, tea was always grown through this

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<sup>&</sup>lt;sup>1</sup> Government of India (2012-13) State of Indian Agriculture 2012-13, Ministry of Agriculture, Department of Agriculture and Cooperation, New Delhi

<sup>&</sup>lt;sup>2</sup> Ghosh J. (2003) Corporate Agriculture: The Implication for Indian Farmers.

http://www.macroscan.org/fet/dec03/pdf/Corp\_Agri.pdf

<sup>&</sup>lt;sup>3</sup>Singh S. (2000) Indian Journal of Agricultural Economics, 56 (3),283-294.

system and it has also been in practice for at least 2 decades in many states of India but no absolute and nationwide Act was formed for it, until September 2020.

The introduction of privatization in agriculture and the process of trading, export, and low-cost production for maximum profits gave a commercial outlook to farming. It has grown dramatically during the last few years but it has also given rise to the issues to focus on such as; impact on small farmers, women, labourers, soil fertility of agricultural land, local markets.

Pastoralists do not have their own farms for grazing their flocks and herds. They usually take their animals to the grazing lands of the village, vacant lands or farms owned by farmers.

Arrangements exist in many places where cattle graze in farms and fertilise them with their dung. However, if farmers were to entrust their lands to somebody on a contract basis, what will livestock feed on?Next, the agricultural practice of cultivating more than one food grain in a single farm for retaining fertility of the land has been followed through generations.<sup>4</sup>

But a corporate that only intends to maximise profits and is engaged in contract farming, would least likely be interested in the preservation of land and soil. Sustainable development is not on the corporate agenda. Contract farming could entail foreign varieties being grown in India's fields. For millions, locally grown varieties of crops have provided nutrition and sustenance for centuries. If such varieties are gone, the population will suffer from malnutrition, as is the case in many places today.<sup>5</sup>

Farms cannot operate without labour. However, mechanised farming will receive enhanced importance in contract farming, resulting in a decrease in the numbers of farm labourers.

Presently, the deployment of machinery in small-sized farms is uneconomic. But it would be the obvious option for a contractual farming agency possessing larger lands. Increasing rural unemployment would be the consequence. Contractual companies come only for profit. Farming becomes a business, not a way of life or a baseline that maintains the welfare and dignity of the family.<sup>6</sup>

The Indian farming market was worth INR 18,367 billion in 2019. The farming sector constitutes one of the most important areas of the Indian economy. India currently represents the world's largest producers of many fresh fruits and vegetables, major spices, selected fibrous crops such as jute, several staples such as millets, and castor oil seed. India is also the second-largest producer of wheat and rice, the world's major food staples. Currently, India ranks within the world's five largest producers of over 80% of agricultural items, including many cash crops such as coffee and cotton.<sup>7</sup>

Crop yields in India have also increased significantly over the last several decades. Factors such as farm mechanization, increasing usage of fertilizers, improving irrigation techniques, better seeds and easy availability of credit can regard as the major drivers of the Indian farming industry. Looking forward, IMARC Group expects the Indian farming market to exhibit strong growth during 2020-2025.

<sup>3</sup>Contract Farming is fast evolving as a mechanism of alternative marketing in the country. Punjab, Karnataka, Maharashtra, Madhya Pradesh, and Tamil Nadu have been the front runners in this regard. The experience of contract farming in India shows that there is a considerable saving in the consumption of inputs due to the introduction of improved technology and better extension services. Contract farming has usually allowed the farmers some form of credit to finance the use of production inputs

For example, contract farming in wheat has practice in Madhya Pradesh by Hindustan Lever Ltd (HLL), Rallis, and ICICI. Under the system, Rallis supplies agri-inputs and know-how, and ICICI finances (farm credit) the farmers. HLL, the processing company, which requires

the farm produce as raw material for its food processing industry, provides the buyback arrangement for the farm output.

In this arrangement, farmers benefit through the assured market for their produce in addition to timely, adequate, and quality input supply including free technical know-how; HLL benefits through supply-chain efficiency; while Rallis and ICICI benefit through assured clientele for their products and services. The consortium is also planning to rope in other specialist partners including insurance, equipment, and storage companies.

#### Need for contract farming in India

As with the time, we upgraded our telephone to smartphones, we also need to upgrade our conventional way of farming to modern contract farming. Though contract farming is not new to India, it was prevalent during the British era but was very exploitative. India has also witnessed contract farming in many states during the last 3 decades but it was not legally implemented all over India.

As per the 2019 National Crime Records Bureau Report: 1, 39,516 people committed suicide in India, out of which 10,821 were farmers that constituted 7.4% of the total no. of suicides. India is a developing nation, it needs to address issues of farmers and change the agriculture process, and therefore contract farming becomes the need of the hour.

#### The following reasons have been stated to emphasise the need for contract farming:

Due to contract farming the risk of farmers is reduced at 80% whenever there is a pest attack, production got destroyed by rain and because of any other reason the company will bear it not the farmers, in fact, they will get their compensation hence 0% risk. The best part of contract farming is that there is no middleman in this contract the farmers will get to pay at the market selling

price. Contract farming us that there is no middleman in this contract the farmers will get to pay at the market selling price. Contract farming was introduced for the benefit of the farmer so they can get reasonable profits from their production. It is important to set a predefined amount of the production, to be paid to the farmers. Through Contract Farming the farmers get seeds

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<sup>&</sup>lt;sup>5</sup>https://agritech.tnau.ac.in/agricultural\_marketing/agrimark\_contract%20farming.html

<sup>&</sup>lt;sup>6</sup>https://vikaspedia.in/agriculture/market-information/contract-farming-a-mechanism-of-alternative-marketing <sup>7</sup>https://www.manage.gov.in/pgdmABM/spice/March2k3.pdf

and proper pieces of equipment to produce the crop. Through Contract Farming the farmer's knowledge increases and their production market value increases.

- To have access to modern technology and management skills,
- Adequate infrastructure and new markets,
- Ample amount of capital for the production,
- Assurance of the prefixed price can provide the defined income and safety that can control the suicides by farmers,
- Increase in private sector investment,
- Generate employment and double the earning source,
- It will strengthen the rural areas and will reduce the migration of farmers from rural to urban.
- In September 2020 President R.N. Kovind gave his assent to 3 Farm bills with the name: <sup>4</sup>

#### Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020, Farmers (Empowerment and Protection) Agreement on Price Assurance,

# Farm Services Act, 2020, and Essential Commodities (Amendment) Act, 2020.

The First Act allows the farmer to sell their products anywhere in the country, outside the jurisdiction of the Agricultural Produce Market Committee (APMC) and the Third Act allows the hoarding of certain essential items which was earlier forbidden but restrictions can be imposed in the extraordinary conditions of war, famine, natural calamity, and the higher inflation.

The 'Second Act' seeks to create the legal and national framework for Contract Farming wherein farmers and buyers can mutually enter into a written Agreement for a period of one to five (1-5) years before the sowing period at a predetermined price. The Act opens the door to sell the produce to the international companies, gives the assurance of the prefixed price, with the flexibility of changing the price after entering into the contract on some conditions.

These 3 farm bills faced great resentment and hatred by the farmers of India; the Supreme Court in January stayed the implementation of these controversial bills and also drafted the committee to review the same.<sup>8</sup>

#### **Case studies**

#### 1. Case study of Pepsi foods Ltd.

Pepsi Foods Ltd. (hereinafter referred to as PepsiCo) has been allowed to do business in India, in 1989 on a condition to bring the new technologies and uplift the position of farmers through contract farming.

PepsiCo saw the need for tomatoes in the market and installed a 22-crore processing plant at Zahura in Hoshiarpur District of Punjab for the plantation of Tomato on the contract. It was difficult but still, they were able to increase the income of farmers at a lower price to the Consumer. By 2001, PepsiCo entered into the contract with the potato farmers of Punjab on a large basis and gradually took it to the State of Uttar Pradesh, Karnataka, Rajasthan, and West Bengal, and this doubled the income of the farmers, reduced their debts, and also gave them the safety of work for the next sowing season.<sup>9</sup>

#### 2. Case study of SAB Miller India

SAB Miller India is a subsidiary of the global beer group and in collaboration with other popular brands such as Haywards 500, Knock-Out, Miller High Life, and Peroni Nastro Azzurro, able to influence the Indian market and become the largest brewer in the country.

Around 2007, they required 75,000 tons of barley a year for their brewing operations, but India was deficient in it and grew only to meet the requirement for animal feed. The local variety grown was not suitable for extracting malt, a key intermediate step in brewing beer. Although, SAB started procuring the same from different regions; Rajasthan, Uttarakhand, Uttar Pradesh, and Haryana. They found out that the lack of uniformity in grain size and mixing of different varieties of barley resulted in higher processing costs and low-quality beer.

In response, SAB Miller came with the solution of Contract Farming, in which they will supply the certified seeds, training, advice, regular inspection by the experts, and other extension services, and in return, the farmer will supply the exact quantity of the barley, as agreed in the contract.

Corporates neither look after the farmers' interests nor are interested in increasing the fertility of the soil. We have reliable scientific evidence that shows chemical fertiliser-based farming is harmful to health and causes tremendous damage to farmland.

This development runs contrary to the attempts to maintain or switch to conventional or organic farming or cattle-based farming. In a democratic country, a farmer has the right to offer his land on contract basis. So, why are there concerns regarding farmland usage? The reason is that today, the government, by focusing on corporate expectations and interests, has ignored the rest of the country.

Feeding India is a national and political obligation. However, the government has failed to recognise the importance of maintaining the quality of soil, traditional farming techniques and the social and economic fragility of communities operating on the margins of society.

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 <sup>&</sup>lt;sup>8</sup>Principles and Practices in Contract Farming by K. R. Ashok, Professor, Dept. Of Agri. Economics, TNAU, Coimbatore-3.
<sup>9</sup>The One-Straw Revolution: An Introduction to Natural Farming (New York Review Books Classics) Paperback – 2 June 2009 by Masanobu Fukuoka (Author, Afterword), Larry Korn (Editor), Wendell Berry (Preface), & 1 More

#### **Contract Farming Models**

There is a wide range of organizational structures that are embraced by the term `contract farming'. The choice of the most appropriate one to use depends on the product, the resources of the company, the social and physical environments, the needs of the farmers and the local farming system (Eaton and Shepherd, 2001). Some of the contract farming models practiced in India are presented below.

#### I. Private – Farmer Model

Poultry sector in Tamil Nadu made an impressive mark in promoting contract farming as an effective institutional alternative for promotion of broiler production. Suguna Poultry Farm Ltd, has emerged as one of the leading integrated broiler producers in the country, with contract farming. Contract poultry farming managed to free the small farmers from the worries of production and market planning of the poultry products. At present, nearly 90 per cent of the poultry farming in Tamil Nadu has come under the contract farming concept.<sup>10</sup>

#### 2. Public-Private-Farmer model

State Department of Agriculture under 'tripartite public-private partnership' proposed contractual cotton cultivation programme in Thanjavur, Nagapattinam, Tiruvarur (coastal), 'Tirunelveli, Salem, Erode and Namakkal Districts. The farming focus will be on cluster villages in these districts and the contract farming facilitation will be through supply of credit-linked quality inputs to the farmers enrolled under the project which will be organised through the agricultural extension centres. The model to be followed will involve banking and insurance companies for credit input and loss guarantee and the choice of the cotton and their quality parameters would be decided in consultation with the Tamil Nadu Agricultural University and the textile mills in the State through Southern India Mills' Association. The farming model would also receive incentive support from various State and Central Government schemes.<sup>11</sup>

#### 3. Private-Community Grower Group-Farmer Model

Ion Enviro undertakes contact farming with Community Grower Groups (CGG) having large acreage, on a profit-sharing basis. Farmers are trained in-house in scientific organic farm management and certification. Community Grower Groups are promoted through non-governmental-organisation or sell-help group or registered association. They follow fair trade practices wherein middlemen are eliminated, child labour is banned, men and women are given equal status, and transparency in trade is maintained. In the process, they bring to rural areas the best of organic processes and water management techniques, thereby educating and empowering farmers. Production is executed in accordance with protocol requirements as per EEC 2092/91 standards. Written and documentary accounts are recorded to trace the origin, nature and quantities of raw materials procured and their usage (Ion exchange Enviro farms, 2005). The crops cultivated include Banana, Wheat, Cotton, Papaya, Pineapple, Basmati, Mango, Soybean, Tur, Black Gram, Green Gram, Turmeric, Grapes, Bengal Gram, Groundnut, Sesame and Cashew.<sup>11</sup>

#### 4. Private Consortium - Farmer model

Hindustan Lever Ltd (HLL), Rallis and ICICI jointly promote contract farming in wheat in Madhya Pradesh. Under the system, Rallis supplies Agri-inputs and know-how, ICICI provide farm credit to the farmers and HLL buys back the farm output. In this model, farmers benefit through the assured market for their produce in addition to timely, adequate and quality input supply including free technical know-how; HLL benefits through supply-chain efficiency; while Rallis and ICICI benefit through assured clientele for their products and services. The model can he extended by including insurance firms, warehouses and manufacturers of equipment's and machinery.<sup>11</sup>

#### 5. Industry - Research Institute- Farmer model

Pepsi Foods Ltd. entered India in 1989 by installing a tomato processing plant at Gahura in Hoshiarpur district of 'Punjab to produce aseptically packed pastes and purees for the international market. Grower plants the company's crops on his land, and the company provides selected inputs like seeds/saplings, agricultural practices, and regular inspection of the crop and advisory services on crop management. The PepsiCo model of contract farming, in terms of 'new options for farmers, productivity increases, and the introduction of, modern technology, has been an unparalleled success. Another important factor in PepsiCo's success is the strategic partnership of the company with local bodies like the Punjab Agricultural University (PAU) and Punjab Agro Industries Corporation Ltd. PepsiCo is successfully emulating the above model in food grains (13asinati rice), spices (chillies) and oilseeds (groun(nut) and vegetable crops like potato. It also brings in the state of art technology. At Sonepet, the company has a ISO 9002 and Hazard Analysis Critical Control Point (LIACCP) certified Rice Mill. Belgaum (Karnataka)-based Ugar Sugar Works Ltd., which established a successful backward linkage with farmers of Northern Karnataka for supply of barley for its malt unit.<sup>12</sup>

#### 6. Grading House - SHG - Farmer model

Appachi Cotton Company (ACC), the ginning and trading house in Pollachi under the name Integrated Cotton Cultivation (ICC), established backward and forward integration between the `grower' (farmer) and the `consumer' (textile units). The contract assured the farmers easy availability of quality seeds, farm finance at an interest rate of 12% per annum, door delivery of unadulterated fertilisers and pesticides at discounted rates, expert advice and field supervision every alternate week, and a unique selling option through a MoU with ACC. The core principle of the formula lies in the formation of farmers' Self- Help Groups (SHGs).<sup>13</sup>

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The cases discussed here are a few among several such successful ventures by corporates involved in food processing, agrocommodity and food products exports. The demonstrated successes of gherkin exporters of Southern India, which is over 90% based on contract learning, and that of Marico's safflower procurement through a successful backward linkage model, are also worth mentioning.

#### **Contract categories**

1) Marketing Contract.

2) Production Contract

- 3) Basis Contracts.
- 4) Technology License Agreements

Contract farming is no doubt a viable alternative farming model in India, which can provide assured and reliable input services to the farmers and desired farm produce to the contracting firms. Several Indian and multinational companies have already begun such initiatives in India and have demonstrated repeated success. The successful cases of contract farming should provide a blueprint for further expansion of contract farming in order to increase the quality of agricultural produce as well as to increase the incomes of rural farm communities. It is important to note that the success of contract farming depends on a profitable market, the physical and social environment and government support. The contracting firms must consider physical infrastructure, telecommunications infrastructure, land availability and tenure, input availability, and social considerations.

An implication from the pre-existing literature suggests that contract farming has both positive and negative aspects but benefits overweigh the negative effects which can be addressed through the involvement of institutions related to the governance of the contract farming business. However, in the present context, contract farming is clearly a win -win situation for both the companies and the farmers. The future of contract farming in India is quite promising due to increasing consciousness about food safety and quality among the rising middle-class population and the quality demands of the export market in the developed countries.

#### The Future Prospects of Contract Farming

The future of contract farming in India is quite promising, thanks to the increasing awareness about food quality and safety among the rising middle-class population coupled with rising domestic disposable income and the stringent food safety requirements of the export market of the developed countries. As the Indian economy grows, there will be an increase in the number of people with high disposable income and consciousness about quality and health who will demand food products of certain specifications.<sup>13</sup>

Further, developed countries prescribe exacting standards of quality for imports of agricultural commodities and processed food from developing countries. The WTO agreements on Sanitary and Phytosanitary (SPS) measures are in accordance with food safety and food standards set by the Codex Alimentarius Commission (CAC). An important component of the CAC guidelines is the implementation of a food safety system called Hazard Analysis and Critical Control Points (HACCP). This needs to be incorporated in the food quality system of the food processing units; otherwise, the SPS agreement can act as a non-tariff barrier for exports. Contract farming enables firms to have control over production of agricultural commodities at various stages of growth, thus making it possible to meet such standards of food safety<sup>14</sup>

Contract production tends to shift farm 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 labour households who do not benefit from higher incomes attained by contract farming. Even regional differentiation tends to increase as the firms choose relatively better-off areas for implementing contract farming schemes.<sup>15</sup>

#### Conclusion

Contract farming evolved the typical way of farming by introducing the farmers with modern technology, inputs, technical advice, management techniques and connectivity to the various markets. Contract farming got nationwide importance in September 2020. It will act as an elevator to tackle the problem faced in farming and move upwards to growth, development, and recognition.

As two-thirds of the farmer's population doesn't even know they receive subsidiaries on the fertilizers, the introduction of contract farming at a large scale can affect the small and marginal farmers.

The involvement of corporations should be regulated and supervised by the government so that the entire privatisation of agriculture can be controlled. The lacuna in the Farm Act can be removed by the interference of the authorities and understanding of interdependence, coordination and cooperation between both sponsor and farmer.

India, given the diverse agro climatic zones, can be a competitive producer of a large number of crops. Need to convert our factor price advantage into sustainable competitive advantage. Contract farming offers one possible solution. Contract farming provides farmers with access to markets that would not otherwise have been available to them. Without the quality control and tight coordination offered by contract farming, it is frequently unlikely that smallholders would be able to sell perishable goods overseas through open market sales. The most significant income increases have been generated from contract farming.

Contract farming could reduce food production if a new contract cash crop displaced a previously grown food crop. Evidence suggests that such displacement does not frequently occur when farmers are allowed to make their own decisions. In such cases, the contract crop tends to displace a less profitable cash crop rather than a food crop. Local governments often favour contract farming in the belief that it will produce greater spill over or linkage effects

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### References

https://agritech.tnau.ac.in/agricultural\_marketing/agrimark\_contract%20farming.html

https://vikaspedia.in/agriculture/market-information/contract-farming-a-mechanism-of-alternative-marketing

https://www.manage.gov.in/pgdmABM/spice/March2k3.pdf

https://www.pakissan.com/2018/12/12/women-in-pakistan-agriculture

http://bepls.com/feb\_2019/2.pdf

https://www.downtoearth.org.in/blog/agriculture/cheers-agriculture-is-finally-a-political-agenda-in-india-74788

https://psmag.com/news/ag-census-finds-more-female-farmers-than-ever

https://www.downtoearth.org.in/blog/agriculture/is-contract-farming-in-india-really-worth-it-74939

http://agmarknet.nic.in/ConFarm.htm

https://www.tractorjunction.com/blog/contract-farming-in-india-benefits-of-contract-farming/

#### Source:

• Principles and Practices in Contract Farming by K. R. Ashok, Professor, Dept. Of Agri. Economics, TNAU, Coimbatore-3.

• The One-Straw Revolution: An Introduction to Natural Farming (New York Review Books Classics) Paperback – 2 June 2009 by Masanobu Fukuoka (Author, Afterword), Larry Korn (Editor), Wendell Berry (Preface), & 1 More

- Farmers Handbook on Basic Agriculture Author(s): National Institute of Agricultural Extension, Ministry of Agriculture, India
- Agriculture and Animal Husbandry Author(s): The National Institute of Open Schooling
- Economics of Agricultural Marketing Author(s): Anton Beckerman
- Government of India (2012-13) State of Indian Agriculture 2012-13, Ministry

of Agriculture, Department of Agriculture and Cooperation, New Delhi.

• Ghosh J. (2003) Corporate Agriculture: The Implication for Indian Farmers. http://www.macroscan.org/fet/dec03/pdf/Corp\_Agri.pdf

- Singh S. (2000) Indian Journal of Agricultural Economics, 56 (3),283-294.
- Dileep B.K., Grover R. K. and Rai K. N. (2003) Indian Journal of Agricultural Economics, 57(2), 197-210.
- Paty B.K. (2005) Journal on Agricultural Marketing, 48(1), 13-20.
- Baumann P. (2000) ODI Working Paper, 139.

• Minot N. (1986) Contract Farming and its Effect on Farmers in Less Developed Countries. Department of Agricultural Economics, Michigan State University. Food Security International Development Working Papers Series Number, 54740.

- Eaton C. and Shepherd A. (2001) FAO Agricultural Services Bulletin, 145, Rome.
- Sita Ram and Kumawat R.C. (2013) Popular Kheti, I(2),49-52.
- Bijman Jos. (2008) Working Paper. Wageningen: Wageningen University.
- Singh S. (2005) Economic and Political Weekly, 40(53), 5578-5586.
- Prasad Varun (2013) CCS working Paper, 293.
- Simmons P.R. (2003) Food and Agricultural Organization, Working Paper, Rome.
- Williamson O.E. (1979) Journal of Institutional and Theoretical Economics, 149 (1), 36-63.

• Little P.D. and Watts M.J. (1994) Living under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa. Madison, University of Wisconsin Press.

• White B. (1997) The Journal of Peasant Studies, 24 (3), 100-136.

• Velusamy, R. "Problems And Prospectus Of Gherkin Cultivation Through Contract Farming In Tamil Nadu." International Journal of Agricultural Science and Research (IJASR) 8.1, Feb 2018, 35-40

• De, Lakshman Chandra. "Horticulture Scenario in NE region of India." International Journal of Agricultural Science and Research 7.2 (2017): 243-254.

• Suseela, K., and M. Chandrasekaran. "Crop Diversification in Andhra Pradesh-Regional and State Level Analysis." International Journal of Agricultural Science and Research 6.3 (2016): 187-193.

• Ingale, S. M., et al. "Constraints Faced By The Farmers In Adoption Of Recommended Soil Reclamation Practices For Salt Affected Soils In Purna Valley." International Journal of Applied and Natural Sciences (IJANS) 6.4: 41-46.