Bulletin of Environment, Pharmacology and Life Sciences Bull. Env. Pharmacol. Life Sci., Vol 11 [8] July 2022 :185-191 ©2022 Academy for Environment and Life Sciences, India Online ISSN 2277-1808 Journal's URL:http://www.bepls.com CODEN: BEPLAD REVIEW ARTICLE



# Scope of Contract Farming in India

A.K. Yadav\*, Heena, Amit Kumar, Praful Kumar, Ranjana

<sup>1</sup>Associate Professor, Department of Horticulture, Faculty of Agricultural Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana, India

 <sup>2</sup>Assistant Professor, Department of Agricultural Economics, Faculty of Agricultural Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana, India
 <sup>3</sup>Assistant Professor, Department of Agricultural Extension, Faculty of Agricultural Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana, India
 <sup>4</sup>Department of Agriculture, Sanskriti University, Mathura, Uttar Pradesh, India
 <sup>5</sup>Department of Agriculture, Sanskriti University, Mathura, Uttar Pradesh, India
 Email Id-1ashok\_fasc@sgtuniversity.org

#### ABSTRACT

Contract farming is becoming popular nowadays all over the world due to its adaptability in numerous states that is a suitable solution tothe current agricultural system and is needed to develop an agricultural economy to ensure food stability for a nation that includes over a million inhabitants, coking coal for a growing manufacturing economy, deficits for exporting, and a fair and egalitarian leadership style for the rural community. Few Indian and international corporations have already launched contract farming projects across India as well as they are highly successful, according to prior studies. It has been discovered that such a huge success is reliant on a lucrative industry, a favorable individual and economic ecosystem, and state assistance. Even so, efforts must be taken to minimize the detrimental consequences of contract farming through the direct participation of organizations that control the contract cultivation industry. Due to the extremely growing trend of the retail industry between India's emerging middle classes as well as the consumer safety standards of the international marketplace in various developed nations, contract cultivation in India has a positive outlook. This paper provides a detailed overview of contract farming and its benefits for farmers to improve the production rate of crops.

KEYWORDS: Agriculture, Contract Farming, Farmers, Food, Cultivation, Production, Market, India.

Received 104.2022

Revised 11.06.2022

Accepted 25.07.2022

# INTRODUCTION

India's agro-food environment is rapidly changing, so there are substantial pieces of evidence that contract farming can play an essential and key role in such transition [1],[2]. Though "front end" practices such as wholesale business, manufacturing, transportation, including general merchandise are increasingly growing as well as centralizing in Indian cultivation, the "back end" practices of development cultivation have been gradually disintegrating [3],[4]. This difficulty is to connect the two sides as well as ensure that both peasants and multinational corporations have viable market opportunities [5],[6]. Setting up farm-firm interconnections entails not just having secure networks, lowering hazards, and maintaining "financially rewarding" rates, but also essential resources like financing, security, ranking including examination, technological expansion, and business intelligence [7],[8]. These organizational resources may help small farmers work at a wider level, maximize production as well as revenue, and reduce the costs of investing in high-value cultivation, and poultry, including fishing industry markets[9],[10].

This huge growth is new and diversifying of customers' requirements in India, including this expansion of integrated cultivation processing or the large marketing projects, comprising the ability to increase business opportunities, production, or incomes for peasants, particularly small farmers. For achieving such objectives, but, government frameworks and technologies would probably be needed to establish distribution networks and promote interconnections among producers, distributors, manufacturers, and merchants. Different versions of contract farming, such as those headed by enterprises, producer associations, or various forms of private enterprise asset securitization that create outdated links to farmers, are one such organizations and initiatives[11],[12].

#### Yadav *et al*

Throughout the integrated food manufacturing market, a significant amount of new capital has been introduced [13],[14]. The development of integrated food production and grain or supermarket retail outlets is generating more competitiveness between stakeholders in the industry, leading to a vicious process of development, restructuring, and globalization, absorbing economic benefits in response to increasing consumer spending. Companies have been under strain to shorten distribution networks, slash prices, and boost their performance within domestic and international markets as a result of this consolidation. Contract farming frameworks are one of the frameworks for simplifying production and transportation facilities which integrated distributors and agro-processors were looking towards[15],[16]. Figure 1 shows the centralized model of contract farming. Contract farming is becoming more and more popular across India.

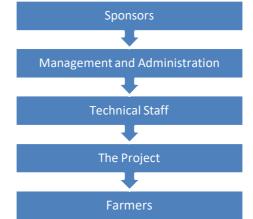


Figure 1: Illustrates the centralized model of contract farming. Contract farming is becoming more and more popular across India

Because of the growing requirement for large-value cultivation, poultry, and fish species and the agriculture industry have started to expand, but possible sources of farm production appear gradually from its high-value Sector whereas the possible advantages of this huge agriculture sector, such as additional revenue as well as jobs, are important, and core obstacles namely addressing producer capital needs and reducing the production and marketing threat must be addressed [17],[18]. This challenge is finding appropriate approaches which are both cost-effective, as well as 'equitable' concerning partnering with small farmers on a long-term plan, likely stated in contract farming systems[19],[20].

The agricultural connection can take many types, from very simple marketing arrangements to hazard exchange, advance advertising, or futures contracting. Manufacturers including distributors can opt to import raw substances from govt. markets yard, smaller businesses, or directly from producers to maintain the production lines running [21],[22]. Despite the processing fees as well as value difficulties related to obtaining through govt. industries, local purchasing could be favored (mandis). There is no commercial tie-up with peasants under such a deal, and everyone can market their stuff according to certain standards of quality. Figure 2 shows the contract farming model developed in India by researchers.

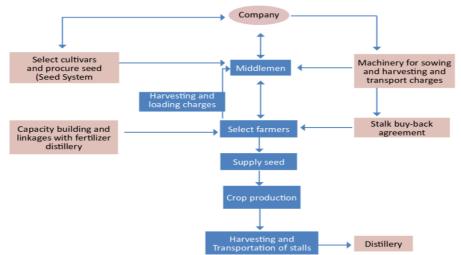


Figure 2: Illustrates the contract farming model developed in India by researchers[23]

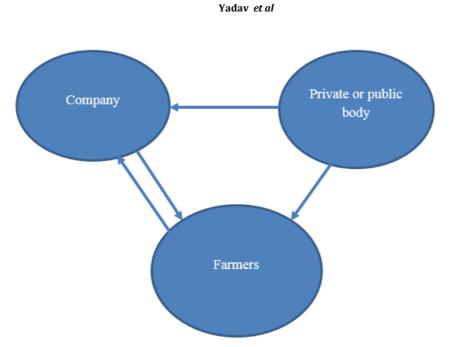


Figure 3: Illustrates the general concept of contract farming. This diagram clearly shows how companies are linked with farmers and private or public bodies in contract farming

Contract cultivation procedure has become a more attractive element of food production market dominance around the globe [24],[25]. This growth of contract cultivation has been fueled by trade liberalization as well as the globalization of foreign markets. Urban expansion as well as wages, developments in logistics services, and advancements in digital technologies are all significant influences that either explicitly or implicitly cause contract cultivation. Figure 3 shows the general concept of contract farming [26],[27]. This diagram clearly shows how companies are linked with farmers and private or public bodies in contract farming.

# **Contract Cultivation**

Contract cultivation is a form of a joint venture in which peasants and agricultural companies work together. This is utilized by agricultural companies as a distribution partnership to ensure access to desirable manufactured goods. Where there are no internally or externally favorable conditions for full joint ventures, where the company owns one's farmland for delivery of the product, or where costs and uncertainty associated with free or instant markets acquisitions of the agricultural products are strong, it is typically favored. Small producers profit from contract cultivation in many ways[28]. Peasants will be able to generate agricultural products that can be sold as raw resources to manufacturing units or as agricultural exports thanks to agribusiness companies. Contracting cultivation improves the use of enhanced farming methods and new cultivation materials to greater technological expertise as a tool for industrial development. As a result, local producers have easier access to the latest farm production, enhancing farming technology, finance, and credit facilities. The peasants are required to readily follow technologies aligned with the contract scheme because there is a huge and secure demand for farm goods under contract cultivation[29]. Figure 4 shows the difference in labor requirements between households without and with contracts. Figure 5 shows the % of the overall CSP acres enrolled through the beginning as well as socially disadvantaged farmers and ranchers by the year 2014.

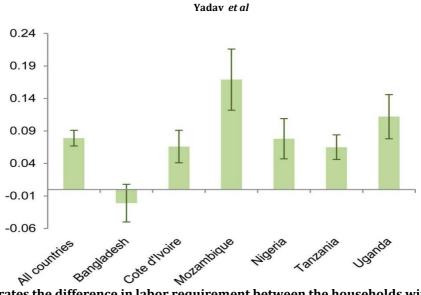


Figure 4: Illustrates the difference in labor requirement between the households without and with contracts[30]

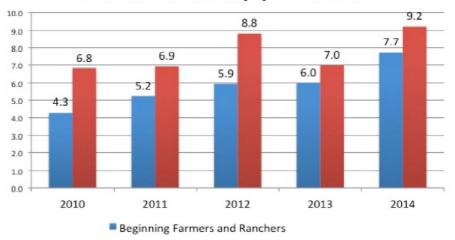
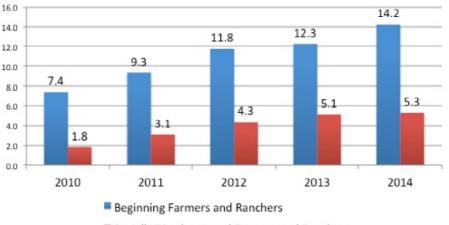
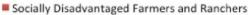
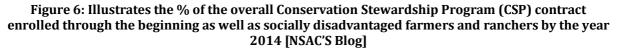




Figure 5: Illustrates the % of the overall Conservation Stewardship Program (CSP) acres enrolled through the beginning as well as socially disadvantaged farmers and ranchers by the year 2014 [NSAC'S Blog]







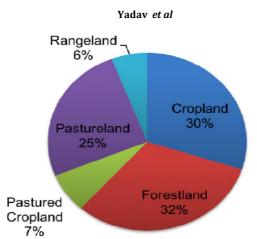


Figure 7: Illustrates the contracts under the \$1500 by land utilization. These figures showcase various % of the cropland [NSAC'S Blog]

# **Contract Farming**

Contract farming has been defined by multifarious researchers during the last decade and a lot of research has been carried out to resolve the problems of the farmers and to offer them maximum benefits in comparison to other methods. Contract cultivation refers to crop output that is taken out under the contractual obligation between a purchaser as well as peasants that specifies the requirements for the manufacturing and sales of some types of agricultural products or goods. Usually, the producer offers to supply specified amounts of a given agricultural commodity while adhering to the recipient's quality requirements including the distribution plan. As a result, the consumer agrees to buy the goods at a specified price[31], [32].Figure 6 shows the percentage of the overall Conservation Stewardship Program (CSP) contract enrolled through the beginning as well as socially disadvantaged farmers and ranchers by the year 2014. Figure 7 shows the contracts under \$1500 by land utilization. Thesefigures showcase various % of the cropland. Figure 8 shows the benefits of contract farming in India in comparison to other farming methods.

# Advantages of the contract farming

- Inputs, as well as various services, are supplied through a sponsor.
- This is generally finished over credit by the advances via any sponsor.
- Such farming is very beneficial for the farmers as it enables farmers to use the technologies as well as provides opportunities to the farmers for learning new skills.
- Guaranteed marketplace for the crop.
- It can open uncertain new markets.
- Crop price risk can be minimized efficiently.
- More beneficial in comparison to conventional farming.
- Higher productivity.
- Fewer laborers are required.
- More advanced and comfortable farming.



Figure 8: Illustrates the benefits of contract farming in India in comparison to the other farming methods [Tractor Junction/Blog/Contract Farming]

#### Yadav *et al*

# CONCLUSION AND IMPLICATION

Contract farming is becoming more popular across the globe to resolve existing problems of the farmers encountered by various researchers during the last decade. Contract cultivation is one of the pragmatic solutions nowadays for improving the overall productivity of the crops as this farming utilizes various types of advanced technologies that work in a faster manner and reduces the overall cost of the labor that is difficult to manage and time-consuming as well. The smart farming concept is not very much new it started during the last century in numerous foreign countries and various farmers got benefits from this type of farming. In this paper, the authors provide a detailed overview of contract farming scope and future in India in comparison to last years and how farmers are getting benefits from this concept because the investment in crops is continuously increasing which is a huge problem.

# ACKNOWLEDGEMENTS

Authors acknowledge the immense help received from the scholars whose articles are cited and included in references to this manuscript. The authors are also grateful to authors/ editors / publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed.

### **CONFLICT OF INTEREST**

The authors have no conflict of interest

# AUTHOR CONTRIBUTIONS

Dr. A.K. Yadav conducted the research, analyzed the data, proposed the methodology, and wrote the initial draft; Dr. Heena modified and supervised the initial draft; Dr. Amit Kumar has supervised the research and written the final version of the manuscript. All authors had approved the final version.

### REFERENCES

- 1. I. Scoones, B. Mavedzenge, F. Murimbarimba, and C. Sukume (2018), "Tobacco, contract farming, and agrarian change in Zimbabwe," *J. Agrar. Chang.*, vol. 18, no. 1, pp. 22–42, doi: 10.1111/joac.12210.
- 2. M. F. Bellemare and J. R. Bloem (2018), "Does contract farming improve welfare? A review," *World Dev.*, vol. 112, pp. 259–271, doi: 10.1016/j.worlddev.2018.08.018.
- 3. M. F. Bellemare (2018), "Contract farming: opportunity cost and trade-offs," *Agric. Econ. (United Kingdom)*, vol. 49, no. 3, pp. 279–288, 2018, doi: 10.1111/agec.12415.
- K. Musa, P. Van Niekerk, and C. P. Retief (2018), "Challenges of contract farming among small-scale commercial vegetable farmers in Eastern Cape South Africa," *J. Agric. Ext.*, vol. 22, no. 3, p. 195, doi: 10.4314/jae.v22i3.19.
  A.-G. Poku, R. Birner, and S. Gupta (2018), "Making Contract Farming Arrangements Work in Africa's
- A.-G. Poku, R. Birner, and S. Gupta (2018), "Making Contract Farming Arrangements Work in Africa's Bioeconomy: Evidence from Cassava Outgrower Schemes in Ghana," *Sustainability*, vol. 10, no. 5, p. 1604, doi: 10.3390/su10051604.
- 6. A. K. Mishra, A. Kumar, P. K. Joshi, and A. D'Souza (2018), "Production Risks, Risk Preference and Contract Farming: Impact on Food Security in India," *Appl. Econ. Perspect. Policy*, vol. 40, no. 3, pp. 353–378, doi: 10.1093/aepp/ppy017.
- C. Ragasa, I. Lambrecht, and D. S. Kufoalor (2018), "Limitations of Contract Farming as a Pro-poor Strategy: The Case of Maize Outgrower Schemes in Upper West Ghana," *World Dev.*, vol. 102, pp. 30–56, doi: 10.1016/j.worlddev.2017.09.008.
- 8. A. Gramzow, P. J. Batt, V. Afari-Sefa, M. Petrick, and R. Roothaert (2018), "Linking smallholder vegetable producers to markets A comparison of a vegetable producer group and a contract-farming arrangement in the Lushoto District of Tanzania," *J. Rural Stud.*, vol. 63, pp. 168–179, doi: 10.1016/j.jrurstud.2018.07.011.
- 9. A. Mary(2017), "Contract farming in sustainability of medicinal plants in India: Review article," *Int. J. Econ. Res.*, vol. 54, p. 45.
- 10. M. F. Bellemare and S. Lim (2018), "In All Shapes and Colors: Varieties of Contract Farming," *Appl. Econ. Perspect. Policy*, vol. 40, no. 3, pp. 379–401, doi: 10.1093/aepp/ppy019.
- 11. Singh Randhir, Kumar Anuj, Verma R.P.S., Chand Ramesh, Kumar Ajay, Riar A.B.S., Singh S.S (2011), "Scope of malt barley cultivation through contract farming in Punjab," *Progress. Agric.*, vol. 5, p. 10.
- 12. E. Rehber and C. J. Zwick (2018), "Contract Farming in Practice: An Overview," *Outlook Agric.*, vol. 90, p. 23.
- 13. G. Soullier and P. Moustier(2018), "Impacts of contract farming in domestic grain chains on farmer income and food insecurity. Contrasted evidence from Senegal," *Food Policy*, vol. 79, pp. 179–198, doi: 10.1016/j.foodpol.2018.07.004.
- 14. A. Dubb (2018), "The value components of contract farming in contemporary capitalism," *J. Agrar. Chang.*, vol. 18, no. 4, pp. 722–748, doi: 10.1111/joac.12260.
- I. Hossain, A. D. Muhammad, B. T. Jibril, and S. Kaitibie (2019), "Support for smallholder farmers through Islamic instruments," *Int. J. Islam. Middle East. Financ. Manag.*, vol. 12, no. 2, pp. 154–168, doi: 10.1108/IMEFM-11-2018-0371.
- 16. I. B. Lambrecht and C. Ragasa (2018), "Do development projects crowd-out private sector activities? Evidence from contract farming participation in Northern Ghana," *Food Policy*, vol. 74, pp. 9–22, doi:

10.1016/j.foodpol.2017.11.001.

- 17. B. A. Addisu (2018), "Malt barley commercialization through contract farming scheme: A systematic review of experiences and prospects in Ethiopia," *African J. Agric. Res.*, vol. 13, no. 53, pp. 2957–2971, doi: 10.5897/AJAR2018.13071.
- A. Kumar, D. Roy, G. Tripathi, P. K. Joshi, and R. P. Adhikari (2018), "Does contract farming improve profits and food safety? Evidence from tomato cultivation in Nepal," *J. Agribus. Dev. Emerg. Econ.*, vol. 8, no. 3, pp. 603–624, doi: 10.1108/JADEE-09-2017-0095.
- 19. N. binti Man, Z. R. Kadhim, I. b A. Latif, and K. W. K. Seng (2017), "The Role and Importance of the Transactions Costs Theory in Agricultural Contracting Area: an Appraisal of Selected Empirical Studies," *IOSR J. Bus. Manag.*, vol. 19, no. 01, pp. 79–89, Feb. 2017, doi: 10.9790/487X-1901057989.
- H. A. Ba, Y. de Mey, S. Thoron, and M. Demont (2019), "Inclusiveness of contract farming along the vertical coordination continuum: Evidence from the Vietnamese rice sector," *Land use policy*, vol. 87, p. 104050, doi: 10.1016/j.landusepol.2019.104050.
- 21. [21] J. Kanburi Bidzakin, S. C. Fialor, D. Awunyo-Vitor, and I. Yahaya (2019), "Impact of contract farming on rice farm performance: Endogenous switching regression," *Cogent Econ. Financ.*, vol. 7, no. 1, p. 1618229, doi: 10.1080/23322039.2019.1618229.
- 22. T. Q. Nhan and T. Yutaka (2019), "Contract Farming and Profitability: Evidence from Rice Crop in the Central Mekong Delta, Vietnam," *Agris on-line Pap. Econ. Informatics*, vol. 11, no. 01, pp. 83–91, doi: 10.7160/aol.2019.110109.
- 23. B. Z. Zemadim (2015), "Contours of a success story: Expanding contour bunding technology for improved livelihood benefits ," vol. 90, no. April, p. 67.
- 24. M. Vicol, "Potatoes (2019), Petty Commodity Producers and Livelihoods: Contract farming and agrarian change in Maharashtra, India," *J. Agrar. Chang.*, vol. 19, no. 1, pp. 135–161, doi: 10.1111/joac.12273.
- 25. C. Dubbert (2019), "Participation in contract farming and farm performance: Insights from cashew farmers in Ghana," *Agric. Econ.*, vol. 50, no. 6, pp. 749–763, doi: 10.1111/agec.12522.
- 26. M. A. Miranda-Ackerman, C. Azzaro-Pantel, A. A. Aguilar-Lasserre, A. Bueno-Solano, and K. C. Arredondo-Soto (2019), "Green Supplier Selection in the Agro-Food Industry with Contract Farming: A Multi-Objective Optimization Approach," *Sustainability*, vol. 11, no. 24, p. 7017, doi: 10.3390/su11247017.
- 27. A. H. M. Isa, M. M. Ismail, N. S. Samsuddin, and I. Abdurofi (2019), "Profitability of broiler contract farming: A case study in johor and sabah," *Int. J. Bus. Soc.*, vol. 69, p. 78.
- 28. K. Narendran and T. T. Ranganathan (2015), "Agripreneurship for Rural Youth," IJMSS Int. J. Manag. Soc. Sci. Included Int. Ser. Dir. Int. J. Manag. Soc. Sci., vol. 11, p. 23.
- 29. J. O. Sodipo, D. C. Lee, and L. E. Morris (1975), "Cardiac output response to altered acid-base status during diethyl ether anaesthesia," *Can. Anaesth. Soc. J.*, vol. 22, no. 6, pp. 673–679, doi: 10.1007/BF03013315.
- 30. E. M. Meemken and M. F. Bellemare (2020), "Smallholder farmers and contract farming in developing countries," *Proc. Natl. Acad. Sci. U. S. A.*, vol. 117, no. 1, pp. 259–264, doi: 10.1073/pnas.1909501116.
- 31. M. K. Awasthi (2009), "Dynamics and resource use efficiency of agricultural land sales and rental market in India," *Land use policy*, vol. 26, no. 3, pp. 736–743, doi: 10.1016/j.landusepol.2008.10.001.
- 32. B. S. Suran and P. Satish (2005), "Marrying Microfinance to Small-Holder Agriculture A Conceptual Framework for Involving Small and Marginal Farmers in Agricultural Diversification," *SSRN Electron. J.*, vol. 12, p. 3, doi: 10.2139/ssrn.1342172.

### CITATION OF THIS ARTICLE

A.K. Yadav, Heena, Amit K, Praful K, Ranjana . Scope of Contract Farming in India. Bull. Env.Pharmacol. Life Sci., Vol 11 [8] July 2022 :185-191