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"Characterizing the Agricultural Distribution Sector in India: A Literature Review"

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Abstract: This literature review provides a comprehensive analysis of the agricultural distribution sector in India by synthesizing findings from previous studies. The agricultural marketing landscape in India is portrayed as a multifaceted and disjointed system, highlighting the need for a structured examination. The paper explores various models aimed at addressing market integration and price correlations, underlining the critical importance of applying these methodologies to assess distinct commodity markets within the nation.Drawing from existing literature, this review delves into several key issues that significantly impact the agricultural distribution sector. These issues encompass price margins, the presence of monopoly power in agricultural distribution, challenges related to transportation and infrastructure, and the role of technology in modernizing the sector. Through a comprehensive analysis of these factors, the paper sheds light on dynamics that shape the Indian agricultural distribution the complex landscape. Furthermore, this review identifies prominent research gaps within the field and offers recommendations for future investigations. By addressing these research gaps, scholars and policymakers can enhance their understanding of the agricultural distribution sector in India and develop more effective strategies to promote its growth and sustainability.

Keywords: Agricultural Distribution, commodity markets, transportation, infrastructure, growth and sustainability

1.1- Introduction

The paper discusses the significant role of rural Indian women in agriculture and the impact of global trade policies, particularly those under the World Trade Organization (WTO), on women in the agricultural sector. Here are some key points and themes:

- Diverse Roles of Rural Indian Women: Although rural Indian women engage in a broad spectrum of agricultural activities, the type as well as degree of their involvement differ depending on things like their landowner status. They work as laborers without land and as farm managers.
- 2. **Contribution to Agricultural Labor**: It is estimated that women contribute between 55% and 66% of all agricultural laborers on average, with even higher percentages in some regions. This highlights the significant role of women in agricultural production.
- 3. **Impact of WTO Policies**: The passage discusses how WTO rules and trade liberalization policies affect women in agriculture in distinctive ways:
 - TRIPS Agreement: It affects women's control over seeds and their knowledge of seed-saving practices.
 - Agreement on Agriculture: Along with possible side effects like an increase in violence against women, it affects the livelihoods and financial security of women.
 - Sanitary and Phytosanitary Agreement: Women's roles in agricultural processing are directly impacted by this.
- 4. **Health Hazards and Displacement**: As agriculture becomes more capital and chemical-intensive due to globalization, women bear a disproportionate burden of health hazards and displacement.
- 5. **Economic Inequality**: Women often receive lower returns for their agricultural work due to gender discrimination. When WTO policies negatively impact rural livelihoods, women are particularly vulnerable to income loss.
- 6. Violence against Women: The passage highlights how the erosion of rural livelihoods and income can lead to increased violence against women. This includes forms of violence such as rape, female foeticide, trafficking, and the burden of farm suicides.
- 7. **Agricultural Landscape in India**: The passage provides statistics about India's agricultural landscape, including the distribution of land holdings, the predominance of small and marginal farms, and the unequal distribution of income in the agricultural sector.
- 8. **Subsistence Farming**: It is reported that small and marginal farmers who mainly farm for self-consumption make up a sizable portion of the Indian agricultural sector. Due to financial difficulties, a few of these cultivators are compelled to sell their generate for a low price after harvest and purchase the same goods at a higher price later. Overall, the passage underscores the vital role of rural Indian women in agriculture, their vulnerability to the impact of global trade policies, and the need to address gender disparities and inequality in the agricultural sector.

1.2-Objectives:

- 1-To know about the agriculture sector in India.
- 2-Understanding about the diverse role of Indian rural women.
- 3-To aware about the state wise poverty data.
- 4-To know about the census data.
- 5-Understanding of the composition of rural households, income levels and regional variation.

1.3-Research Methodology:

There are mainly two types of data:

Primary data: The information obtained straight from the researcher is considered primary data. Forexample the questionnaire by the respondenthrough the researcher.

Secondary data:Those data which are collected by another source such as through newspapers, magazines, journals, etc known as secondary data.

1.4-Results and Discussions

The paper provides information about the characteristics of the labor market in agriculture in India, based on theinformation from the 55th National Sample Survey (NSSO) and the Census of India in 2001. Here are the key characteristics and findings:

Composition of Rural Households:

- Agricultural labor households constituted approximately 32.2percent of the overall number of rural homes.
- In the rural areas, 32.7percent of households were headed by self-employed farmers. In 1993–1994 and 1999–2000, the share of households with agricultural laborers had been 30.3percent and 32.2percent,

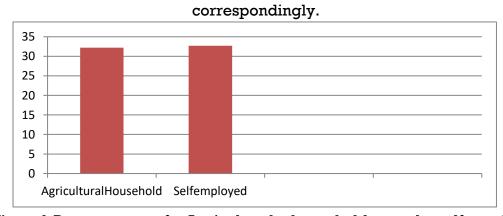


Figure 1: Percentage of Agricultural households and self-employed individuals

- From 37.8percent in 1993to1994 to32.7percent in 1999to2000, fewer households were cultivating (self-employed).
- From 9.7% in 1993to 1994 to 10.4% in 1999to 2000, more households were headed by women.

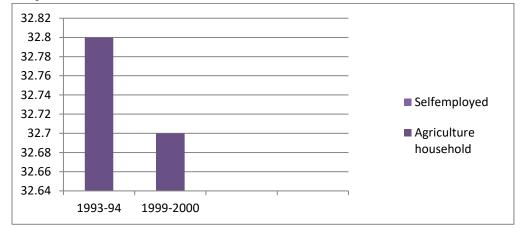


Figure2:Cultivating (self-employed) households decreased from 37.8percent in 1993-94 to 32.7percent in 1999-2000

• Income Levels:

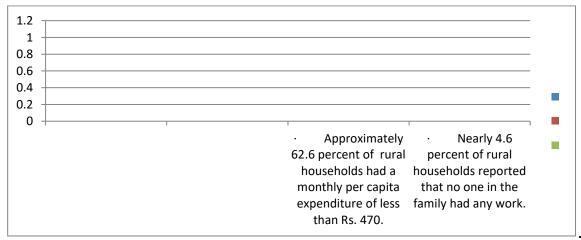


Figure3:Percentage of rural households

Land Ownership:

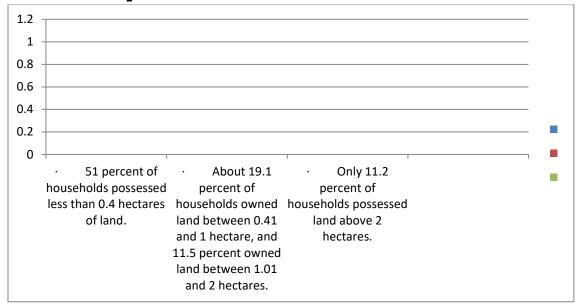


Figure 4: Percentage of land owned by households

Small and Marginal Farmers:

 Because the majority of households in India owned small plots of land, small as well as marginal farmers predominated in the farming industry.

• Regional Variation:

 States varied in the proportion of households employed in agriculture and without land; states with comparatively high percentages of these households were Bihar, Maharashtra, Karnataka, and Tamil Nadu.

• **Census Data** (2001):

- A significant portion of agricultural laborers were male(61.9 percent)while 38 percent were female.
- Among livestock, forestory, and plantation workers the majority were male (78.3 percent).
- The vulnerability of the labor force is demonstrated by the fact that nearly 99.2 percent of agricultural workers had been reported to be disorganized as well as unprotected.

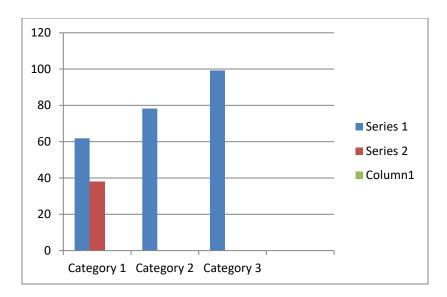


Figure 5: Percentage of male and female of agriculture labourers, among livestock forestry and plantation majority were male and percentage of agricultural worker reported to be disorganized as well as unprotected.

Overall, the data highlights the prevalence of small and marginal farmers, gender disparities in agricultural labor, and the relatively low-income levels of rural households in India's agricultural sector. It also underscores the need for addressing issues related to land distribution, labor rights, and social protection for agricultural workers.

The paper provides information about the status of plantation workers in India, particularly in tea, coffee, rubber, cardamom, and other plantations. Here are the key points regarding the status of these workers:

1. Employment in the Plantation Sector:

• Most of these workers were employed in tea plantations (10.2 lakh), with smaller numbers in coffee (30,680), rubber (27,302), cardamom (3,463), cinchona, and other plantations.

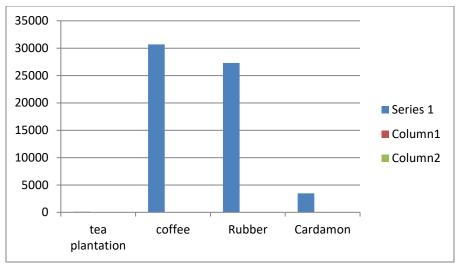


Figure 6: Workers employed in tea plantation, coffee, rubber and cardamon

2. Gender Composition:

- In the plantation sector, gender disparities in employment are notable:
 - 50% of workers in tea &coffee plantations are women.
 - 34% of workers in rubber plantations are women.
 - 62% of workers in cardamom plantations are women.
 - Women also make up a significant percentage of workers in palm oil and cinchona plantations.

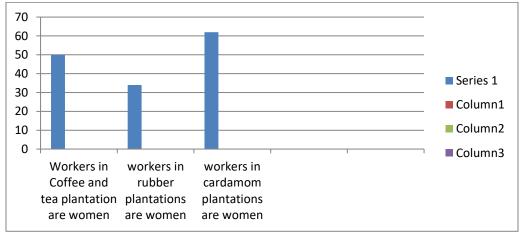


Figure 7: Percentage of women workers in coffee & tea plantation, rubber plantation and cardamom plantation.

3. Smallholders:

- Approximately 80 percent of plantation owners in the sector are smallholders who own<20acres of land each.
- Compared to those in larger plantation estates, workers in smaller estates are typically less organized and have lower employment levels.

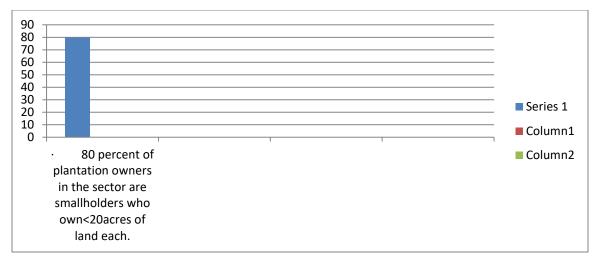


Figure8: Approximately 80 percent of plantation owners in the sector are smallholders who own<20acres of land each.

4. Wage Disparities:

- The passage notes that there are wage disparities between workers in small and large plantation estates.
- Workers in small plantation estates in states like Kerala and Karnataka receive lower wages, with some earning Rs. 10-20 less/day in contrast to those who are working in larger estates.

5. Lack of Benefits:

 Benefits like bonuses and minimum wages, as well as other amenities like housing, health insurance, and maternity leave, may not be sufficiently provided to employees in smaller estates.

Overall, it highlights the significant presence of women in plantation work and the challenges faced by workers in smaller plantation estates, including wage disparities and a lack of access to various benefits and facilities. These issues indicate the need for labor reforms and improved working conditions for plantation workers in India.

Was this response better or worse?

The Government of India has enacted several laws to establish and promote labor standards in the agricultural sector. These laws are aligned with various International Labor Organization (ILO) Conventions to ensure fair and just working conditions for agricultural laborers. Here is an overview of some of the key laws governing labor standards in agriculture in India:

 Minimum Wages Act, 1948: To guarantee that agricultural laborers are fairly compensated for their labor, this Act establishes the minimum wage rates that must be given to them. It seeks to guarantee a respectable standard of living and stop exploitation.

- 2. **Equal Remuneration Act, 1976**: This Act forbids gender-based wage discrimination. It guarantees that in agriculture and other industries, men and women are paid equally for doing equal work.
- Child Labor (Prohibition and Regulation) Act, 1986: While not specific to agriculture, this Act governs the hiring of the children and prohibits their engagement in hazardous occupations, which can include certain types of agricultural work.
- 4. **Bonded Labor System (Abolition) Act, 1976**: The objective of the Act is to eradicate bonded labor, which is a form of forced labor. It ensures that agricultural workers are not subjected to exploitative practices and debt bondage.
- 5. **Factories Act, 1948**: While primarily applicable to industrial establishments, this Act includes provisions related to the health, safety, and welfare of the workers. It can be relevant to agricultural settings where certain processing activities occur.
- Plantations Labor Act, 1951: This Act specifically addresses labor standards in plantation agriculture, including tea, coffee, rubber, and other plantations. It covers various aspects of labor welfare, including working hours, wages, and living conditions.
- 7. Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979: The Act governs interstate migrant workers' employment and terms of service, including those who work in agriculture.
- 8. **The Maternity Benefit Act, 1961**: This Act offers maternity benefits to female agricultural workers to ensure their well-being during pregnancy and childbirth, although it is not limited to the agricultural industry.
- 9. **The Unorganized Workers' Social Security Act, 2008**: Through the establishment of numerous welfare programs, this Act seeks to provide social security benefits to unorganized workers, including agricultural laborers.
- 10. The Occupational Safety, Health, and Working Conditions Code, 2020: This all-inclusive code, which covers a variety of industries, including agriculture, aims to harmonize and modify the laws about working conditions, occupational safety, and health.

These laws collectively work to establish labor standards, protect the rights of agricultural workers, and ensure their safety and welfare. They are in alignment with relevant ILO Conventions to uphold international labor standards in the agricultural sector in India.

The data on poverty levels in rural India is based on various rounds of the National Sample Survey. Here are the key points from the passage:

1. Trends in Rural Poverty:

- The absolute number of rural poor individuals increased from 232 million in 1987-88 to 244 million in 1993-94.
- However, it then declined to 193 million in 1999-2000.

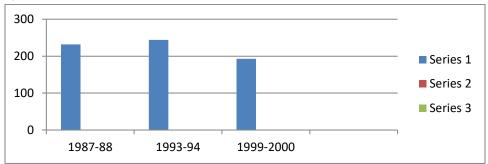


Figure 9: The absolute number of rural poor individuals increased from 232 million in 1987-88 to 244 million in 1993-94, it then declined to 193 million in 1999-2000.

2. Current Poverty Incidence:

• Despite the decrease, about 27 percent of rural people were reported to be below the poverty line in 1999-2000.



• Figure 10: about 27 percent of rural people were reported to be below the poverty line in 1999-2000.

3. Regional Disparities:

- Poverty incidence varies significantly across states and regions in India.
- In several states, involving Orissa (48.0%), and Bihar (44.3%), as well as North Eastern states, the incidence of rural poverty is higher than the national average.

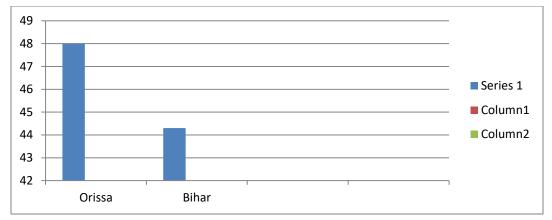


Figure 11: The incidence of rural poverty is higher than the national average in Orissa (48.00%), Bihar (44.3%) and in North Eastern states

4. High Poverty Among Landless Agricultural Laborers:

• It highlights that among landless agricultural laborers, poverty incidence is notably high in various regions, such as Jharkhand, Bihar, Chhattisgarh, Orissa, and Uttar Pradesh.

Conclusion:

In this paper, the researcherhighlights the significant presence of women in plantation work and the challenges faced by workers in smaller plantation estates, including wage disparities and a lack of access to various benefits and facilities. These issues indicate the need for labor reforms and improved working conditions for plantation workers in India. The text highlights the numerous laws that govern labor standards in India, including the Equal Remuneration Act of 1976, the Minimum Wages Act of 1948, the Maternity Benefit Act of 1961, the Unorganized Workers' Social Security Act of 2008, the Child Labor (Prohibition and Regulation) Act of 1986, the Factories Act of 1948, the Plantations Labor Act of 1951, the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act of 1979, as well as the Factories Act of 1948.

References:

- 1. Amborsino, D, SentellaM.G.,(2004), Distribution networkdesign: New problems and related models, European journal of operation research,
- Celebi, D;(2015) Inventory Control in Centralized DistributionNetwork Using Genetic Algorithms: A case Study. JournalComputer and Industrial .Engineering, 87, 532-539
- Charlle Sy,(2016), A policy development model for reducing bullwhips in hybrid production-distribution system, International journal of production economic.

- 4. Chotithammaporn w, Sannok R, Mekhun W, RungsrisawatS, Pronpetpun, Wongledee K, (2015), The development of physical distribution Center in marketing for small and micro community enterprise (SCME) product in Bangkontee, SamutSongkran, Procedia Journal sosial and behavioral science.
- 5. Couglan AT, (2006), Marketing Channel, Pearson EducationSystemAdvances in Social Science, Education and Humanities Research, volume 4,1064
- 6. Daskin, M.S., Coullard. C.R and Shen Z.J.M. (2002), An inventorylocation model formulation, solution algorithm and computational results, annals of operation research, 110:83-106
- 7. Dorch, J, Michaelet, (1998), Inter-organizational ethical perceptions and buyer-seller relationship, Journal of Businessto-business
- 8. Fritz,M, Schiefer G, (2008), Tracking, Tracing, and businessprocess in food commoditiesn: a multi decision complexity,International journal production economics,
- 9. F.Zanjirani.R, Elahipanah, M, 2(006), A genetic Algorithm tooptimize the total cost and service level for just-in-timedistribution in supply chain, International journal productioneconomics.
- 10. Handayati, Y, Simatupang, M, T, Perdana T, (2015) Agri-foodsupply chain coordination the state-of-the-art and recentdevelopment.
- 11. Hesse M, Rodrigue J.P, (2004), the transport geography oflogistic and freight distribution, Journal of transport geography.
- 12. Isbandi & Rusdiana, S. (2014). Strategi tercapainyaketahananpangandalamketersediaanpangan di tingkat regional, Jurnal Agriekonomika 3, 2,121-136.
- 13. Jalbar, D , Gutierrez, J, Puertob and Sicilia, J(2003), Policies for inventory distribution system: the effect of centralization vsdecentralization, International Journal of production rconomics, 81-82: 281-293
- 14. Jazuli, (2011), Optimalisasi system persediaan dan distribusipadapusatdistribusi minimarket berjaringan , Seminar Nasional Teknologi dan komunikasiterapan (semantic), ISBN-979-26-0255-0
- 15. Klibi, W, Martel A, Guitoni A(2010), The design of robustvalue creating supply chain networks: a critical review, European journal of operation research, 203(2):283-293
- 16. Lorentz, H, Wong C.Y, Hilanolao.p,(2007), Emerging distribution system in control and eastern Europe international jurnal of physical distribution & logistic management, vol 37, no: 8, pp 670-697
- 17. Manzini, R,(2012), A top-down approach and a decision supportsystem for the design and management of logistic network, Journal transportation research part E

- 18. Martikainen, Petri N, Petra P (2013), Development a serviceoffering for a logistical service provider-case of local food supplychain,internationaljourna/multi retailer supply chain,International Journal of production economics,114:119-133
- 19. Perdana, R,Y,(2011), Pengembangan Model Tracking dan Trracingdalamdistribusikomoditipertanian, Jurnalilmiahteknik industry,Vol.10, No.1, ISSN-1412-6869
- 20. Perdana, T., Kusnandar, (2012), The Triple helix model for fruitsand vegetables supply chain management development involvingsmall farmer in order to fulfill the global market demand: a casein "value chain center (VCC) Universitas Padjadjaran" Procedia: Jurnal Social and Behavioral science, 52:89-89
- 21. Regattieri A, Gamber M, and Manzini, R, (2007), Tracebility of food product, general framework and experimental, Journal of food engineering, 81
- 22. Rene (M)B, M.de Koster, (2003), Distribution Strategi for onlineretailer, Journal IEEE Transaction on Engineering management, Vol. 50 No. 4, November 2003.
- 23. Sheresheva, M.Y., Kolesnik, N.A., (2011), Stochastic perspektifofindustrial distribution network process, Journal Industrial Management.
- 24. Smith D.L.G, Sparks L, (2006), The transformation of physical distribution in retailing: the example of tesco plc, Theinternational review of retail distribution and consumer research.
- 25. Sun, H,Z, Gao dan J.Wu,(2008), A bi level programming modeland solution algorithm for the location of logistics distributioncenter, Applied mathematical modeling 32(4): 610-616
- 26. Suryanto, M, H, (2016), SistemOperasionalManajemenDistribusi, Edisi 1, Gramedia JakartaAdvances in Social Science, Education and Humanities Research, volume 4,1065