



DYNAMICS OF EMPLOYMENT IN THE AGRICULTURAL SECTOR: TRENDS AND CHALLENGES

MS JYOTI. T. TUPE

Assistant Professor

Department of Accountancy

B.K.Birla College, Kalyan, Thane, Maharashtra

Abstract

Agriculture, the cornerstone of the Indian rural economy, plays a important role in sustaining livelihoods and connecting with the secondary and tertiary sectors. Despite its essential contribution to food security and employment, the sector faces several challenges such as low productivity, dependence on monsoons, limited market access, and declining profitability. Post-independence efforts to boost agricultural development and create employment have met with limited success, green revolution and white revolution had its impact on particular resgions only it fails reach entire India as evidenced by agriculture's diminishing its share in GDP, which fell from 51.9% in 1951 to around 18% by 2023.

This paper aims to address these challenges in agricultural employment and explore untapped opportunities in agriculture employment. The sector offers diverse employment avenues across its value chain, including crop production, food processing, marketing, and support services such as agricultural research, financing, and agri-tourism. Technological advancements and sustainable practices hold immense potential to transform agriculture into a viable employment generator.

The study analyzes employment trends, the impact of mechanization, and the role of government policies in shaping agricultural employment. It also evaluates challenges faced by workers and explores strategies for improving job security, wages, and working conditions. The findings highlight agriculture's potential to drive economic growth and propose actionable recommendations for enhancing employment opportunities in the sector.

Keywords

Agriculture, Rural economy, Food security, Employment, Green Revolution, White Revolution, GDP, Agricultural development, Agricultural employment, Value chain, Food processing, Marketing, Support services, Agricultural research, Agri-tourism, Sustainable practices, Government policies.

Introduction:

Agriculture is primary sector and consider as a backbone of Indian rural economy. Directly and indirectly, it touches all other sectors like secondary and tertiary sectors. The survival of rural population is mainly on agriculture and allied activities. As we know manpower is the prerequisite of any industry either of primary or secondary or tertiary, all human being on the earth require food to alive, every day for working actively and ultimately for survival. That's why agriculture is considered as the motherhood sector who takes care of all. You may need a doctor, CA, Engineer, carpenter sometimes but indirectly you require a farmer every day. That is why taking care of this sector and exploring employment opportunities in this sector is a must. After independence lots of effort has been made to improve the performance of this sector also



efforts have been made to create employment opportunities in this sector. Unfortunately, in both agricultural development and employment creation all governmental efforts are not converted in desirable result. A major percentage of the population is today also banking on agriculture for their main source of income. Half of the population still continuing with the agricultural profession but the productivity is very low, it is hard not to neglect the fact that agriculture is very less profitable sector.

The share of agriculture industry gradually declines in GDP especially after globalization. Agriculture's share in India's economy has progressively declined from 51.9 % in GDP in 1951 to less than 15% in 2019, undoubtedly due to the high growth rates of the industrial sector and service sector. A change from an agrarian-centric economy to an industry-centric and service -centric economy is inevitable with the advent of industries and services. In India with today's fast-growing economy and in the globalized competitive world, agriculture sector also changed but, not as per expectation. Still this sector suffers from inherited limitations such as dependance on monsoon, low productivity, dependance on middleman because of low market access, etc. the objective of writing this research paper is find out ways to reduce these problems and to tap unfold opportunities in this sector.

Agriculture offers various kinds of employment opportunities in various stages of the agricultural value chain such in production, processing, marketing, and support services. Like in production, growing crops, dairy farming, poultry, etc in food processing industries to produce sugar, jams, pickles, chips and frozen food, etc. marketing and support services like manufacturing quality seeds, pesticides, fertilizer, agricultural equipment, tractors and other tools in agricultural research, Developing improved crop varieties, pest-resistant plants, and sustainable practices, Educating farmers about advanced techniques and technologies. banks and financial institutions are also playing very important role by offering credit and loans to farmers, crop insurance and providing other services. Now a days agricultural tourism also increases so there are ample employment opportunities in agriculture some are tap some are yet to explore but these opportunities overall highlight agriculture's potential as a vast employment generator, offering roles across traditional farming, modern technology, and sustainable practices.

Objectives of Study:

1. To analyse past and current employment trends in the agricultural sector.
2. To identify the important factors influencing employment patterns in agriculture.
3. To examine the impact of mechanization and technological advancements on agricultural employment.
4. To explore the role of policy frameworks and government initiatives in shaping employment in agriculture.
5. To evaluate the challenges faced by agricultural workers in terms of wages, job security, and working conditions.
6. To examine the potential of sustainable agricultural practices in creating new employment opportunities.
7. To propose strategies and policy recommendations for enhancing employment opportunities in the agricultural sector.



Purpose of the study:

The purpose of this study is to investigate and analyze the changing patterns of employment in the agricultural sector, focusing on trends, challenges, and influencing factors. This aim is to comprehensive understanding of how economic, technological, social, and environmental changes are shaping employment dynamics in agriculture also try to understand various issues in agriculture such as labor migration, mechanization, seasonal employment, and gender disparities, the study seeks to highlight the challenges faced by agricultural workers and propose actionable recommendations. Ultimately, the study objective is to contribute to the formulation of policies and strategies that enhance employment opportunities, ensure sustainable livelihoods, and promote equitable development within the agricultural sector.

Literature Review:

Aliber, M., Baipheti, M., & Jacobs, P. (2009): "Agricultural Employment Scenario described in their research paper potential scenarios for agricultural employment, particularly in the context of rural development and poverty reduction. They said the role of agriculture as a critical sector for job creation in developing economies, with a focus on subsistence and smallholder farming. They explored factors such as land availability, labor intensity, and market access, emphasizing the need for supportive policies to enhance productivity and employment. The study also highlights the challenges posed by structural changes in the economy, urbanization, and climate impacts, advocating for integrated strategies to ensure sustainable agricultural employment growth.

Key findings underline the importance of investing in rural infrastructure, skills development, and access to technology to maximize agriculture's employment potential while addressing inequality and food security.

Hypothesis:

H1: Technological advancements and mechanization have a significant impact on reducing manual labor in agriculture, leading to changes in employment patterns.

H2: Government policies and initiatives significantly influence employment generation in the agricultural sector.

H3: Sustainable agricultural practices have the potential to create new and diverse employment opportunities in rural areas.

Research Methodology

The research methodology for this study is a combination of qualitative and quantitative approaches to gain comprehensive insights into the dynamics of employment in agricultural sector in India as challenges face and opportunities to explore.

The primary data collected from farmers in all over India by framing structured Questionnaire as well as personal interview of few farmers. The 26 responses collected from farmers all over India of different categories like educated, illiterate, marginal land holding and landlord, totally depends on agriculture income and multiple sources of income earning farmers The primary research assist in understanding the employment dynamics in agricultural employment in context to opportunities to explore and challenges to overcome.

Secondary data collected from the following sources: -

1. Books
2. Research papers



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3. Research journals.
 4. Newspapers.
 5. Online resources
 6. Online database and
 7. Government websites

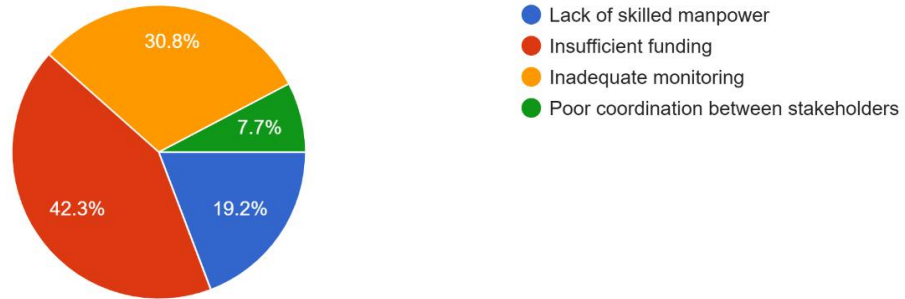
Analysis and Interpretation

Data has been collected from 26 farmers in India of different characteristics in structured google form. 15 questions asked to the farmers in which the first five questions were about demographic information of farmers like Name, State of residence, Age, Education and area of land holding. Remaining questions were regarding to understand impact of technology on employment pattern of agriculture in India, How government policies influence the employment in agriculture and whether the Sustainable agricultural practices has potential to create new and diverse employment opportunities in rural areas these three parameter were tested to find out challenges to overcome and opportunities to tap in agriculture sector in India. While collecting data in questionnaire The three questions were asked to check technology impact the questions were asked such as: Do you think technology in agriculture impact agricultural employment pattern? A maximum 96% respondent agree that yes definitely technology impacted employment pattern in agriculture. The response to the question likes in what way it affected agricultural employment? There is mix response for 46% respondent agrees that it will create demand for both manual as well as mechanical work and same percent say it will decrease remand for manual labour.

The question ask What is the primary benefit of adopting modern agricultural technologies? Most around 54% of farmers said they increase agricultural productivity. Three questions were ask on Governments efforts ad initiative like Do you think government can play very important role in creating employment opportunities and reducing challenge's in agricultural employment? Maximum 77% respondent said yes government playing very important role in framing and implementing policies regarding employment in agriculture the response to the question What is the biggest challenge in implementing employment-oriented agricultural policies? 53.8% said lack of awareness among the farmers, financial constraint and poor infrastructure are all reasons are responsible for failure of policies in this lack of awareness among the farmers i.e. 30% respondent strongly believe as biggest challenge for implementing employment-related policies. Responses to few more questions are presented graphically as follows.

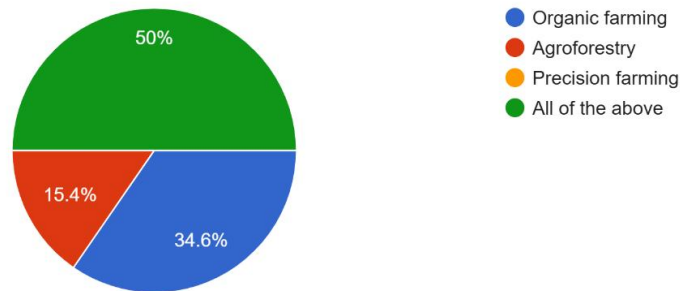
What is the primary gap in agricultural policy implementation?

26 responses



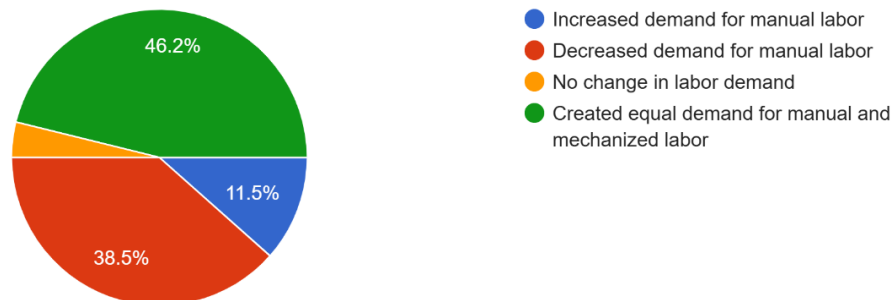
Which sustainable agricultural practice creates the most employment opportunities?

26 responses



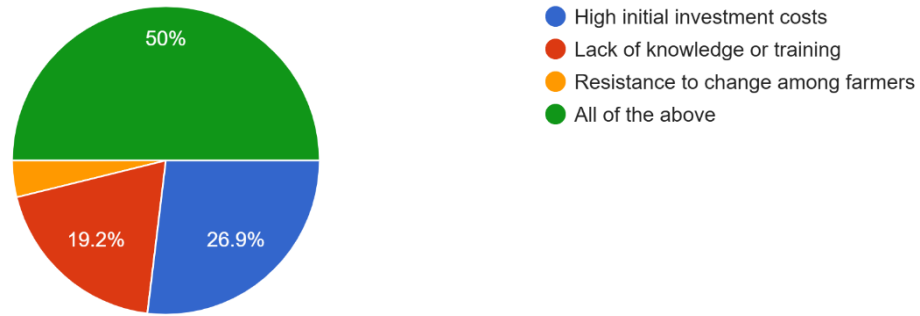
In what way it affected agricultural employment?

26 responses



What is a common barrier to adopting sustainable agricultural practices?

26 responses



Limitations of the study

1. The area of study is very vast so able to focus only on three parameters of use of technology in agricultural employment, government role in meeting challenges and providing opportunities in agricultural employment and sustainable and new age employment potential in the agriculture sector
2. The study is restricted analysis of 26 questionnaires only.

Significance of the study:

The research would explore the possible areas of the selected region to show practical pictures of the selected region and to help for further research in the same line. This would help the government to understand the practical problems of farmers to avail benefit of such facilities. It would also help the government to understand the problem related to ignorance of uneducated and less educated farmers as well as marginal farmers to avail benefit of such facilities.

Lastly recommendations suitable to each region will be made according to the characteristic of that particular region.

Conclusion:

Agriculture is all time important sector in India, to progress rural economy and overall socio-economic development of nation. However, the contribution in GDP has continuously and significantly declined over the decades, it reflects that its inability to fully adapt to the changing economic landscape. In this research paper identifies various challenges face in agriculture sector such as low productivity, heavy reliance on monsoons, limited market access, and declining profitability that hinder agricultural growth.

Despite these challenges, in the agricultural sector, focus on employment opportunities in agriculture lot of new age as well as technology base employment generated through in this sector, government also taking efforts to provide employment through various policy decisions



like job security, minimum wage, upgraded working condition, various schemes, etc. But due to lack of awareness among people benefits not reaching to farmers. Diversified employment options, ranging from crop production and food processing to agri-tourism and agricultural research, can act as key drivers of rural development. technological advancements, promoting sustainable farming practices, and improving infrastructure can transform agriculture into a more dynamic and inclusive employment generator.

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