

PERFORMANCE OF WORKERS IN CASHEW NUT FACTORIES: A STUDY WITH SPECIAL REFERENCE TO KANNIYAKUMARI DISTRICT

D. JAYA SHEELA

PH.D. RESEARCH SCHOLAR (REG. NO. 23123111012001) AND

DR. S. RAMOLA PONMALAR

ASSISTANT PROFESSOR DEPARTMENT OF COMMERCE, NESAMONY MEMORIAL CHRISTIAN COLLEGE, MARTHANDAM, AFFILIATED TO MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

ABSTRACT

Cashew processing factories have emerged as a cornerstone of rural livelihood and women's employment in Southern Tamil Nadu. They serve as a critical link between agricultural production and industrial growth, especially in economically vulnerable regions like Kanniyakumari District. As a labour-intensive factory, its overall growth and profitability depend largely on the performance and efficiency of its workers. This study aims to assess the performance of workers employed in cashew nut factories and to identify the key factors influencing their output and engagement levels. Data were collected from a sample of 100 workers using a structured questionnaire that included personal and work related information. Statistical tools such as percentage analysis, t-test, and one way ANOVA were employed to analyse the data and compare performance levels among different worker groups. The findings reveal that variations in performance are influenced by individual characteristics such as age, work experience, and income level, which collectively shape productivity and job commitment. The study emphasizes the importance of improving working conditions, providing training, and offering performance based incentives to enhance employee motivation and efficiency. The results contribute valuable insights for factory managers and policy makers seeking to strengthen the productivity and sustainability of the cashew processing sector in the region. Moreover, promoting inclusive management practices can help foster trust and long-term retention among workers. Strengthening labour welfare policies and technological integration may also enhance operational efficiency. This study highlights the need for a balanced approach that combines human resource development with industrial innovation for sustained growth.

KEYWORDS: Cashew Industry, Worker Performance, Kanniyakumari District, Labour Efficiency, Work experience

INTRODUCTION

The cashew sector is an important part of India's agriculture based economy because it brings in money from exports and creates jobs in rural areas. Processing cashew nuts, in particular, has become an important job that requires a lot of work and give thousands of people, primarily women, in southern states like Tamil Nadu, Kerala, and Karnataka a way to make a living. Kanniyakumari District, which is in the southernmost part of India, is one of the main places where cashew nuts are processed. There are several small and medium sized factories in rural and semi-urban regions that do this work.

The performance of workers in these factories is very important for the industry's overall efficiency, quality of production, and profitability. Even though certain units have made progress in technology, a lot of the work still relies significantly on manual labour, like shelling, peeling, and grading. So, it is important to know what affects worker performance in order to boost productivity and make sure growth is long-lasting.

Age, work, experience, income level, the workplace environment, and management methods all affect how well workers do their jobs in cashew plants. Changes in these factors can change motivation, skill use, and work satisfaction, all of which have a direct effect on production. In this context, the current study concentrates on evaluating the performance of employees in cashew nut factories in Kanniyakumari District, with particular emphasis on the influence of socio-economic factors and working conditions on their overall efficiency. This study seeks to furnish significant insights that can assist factory managers, policy makers, and local development agencies in executing focused initiatives to enhance worker welfare and industrial performance, so fortifying the rural economy and assuring equitable growth within the cashew sector.

Statement of the Problem

The cashew nut business is a big source of jobs in Kanniyakumari District, especially for women in rural areas who rely on it to make a living. Even though these factories are important to the economy, worker's productivity and performance are often low because of a number of social, economic, and workplace related problems. Many

cashew factories still use old fashioned methods and do not have much technology, training, or pay, which hurts both motivation and efficiency.

Also, differences in worker's age, experience, and income levels, as well as their working circumstances and management techniques, can lead to inequalities in performance. If these things are not given enough attention, the output will go down, the quality will go down, and the number of workers will go up, which will hurt the competitiveness of the cashew processing industry as a whole. Consequently it is imperative to investigate the elements that affect workers performance and to pinpoint the principal determinants that can improve productivity in cashew nut factories. Comprehending the matters would aid in devising efficient measures to enhance employee engagement, skill enhancement, and job satisfaction, thereby fostering the suitable expansion of the cashew sector in Kanniyakumari District.

REVIEW OF LITERATURE

Processing cashew nuts is one of India's oldest agro based industries. It is very important to the rural economy, especially in coastal areas like Tamil Nadu and Kerala. The success of this industry depends a lot on how well its workers do and how happy they are, which is affected by a number of social, economic, and job related aspects. Researchers have studied many different things about work performance throughout the years, such as age, income, and the atmosphere at work, to learn how they affect productivity and efficiency in the workplace.

Kumar and Joseph (2023) conducted a study on the impact of socio-economic characteristics on worker productivity in small-scale cashew processing units in Tamil Nadu. The findings showed that age and work experience play a crucial role in determining performance, with middle-aged workers performing better due to a balance between physical strength and skill maturity. Income level was also found to be positively correlated with motivation and efficiency.

Ravindran and Thomas (2022) explored the relationship between training, work experience, and output efficiency among cashew workers in Kerala. The study revealed that workers with more than ten years of experience exhibited higher productivity, mainly due to skill familiarity and improved handling of cashew kernels. The researchers suggested that regular training sessions can help younger workers achieve comparable efficiency levels.

Gawankar and Chavan (2021) examined the socio economic determinants influencing cashew processing performance in coastal Maharashtra. Their results indicated that workers with higher income stability and access to welfare schemes showed greater job satisfaction and consistency in output. They recommended linking income enhancement with skill-based incentives to improve performance.

Yousafzai and Sonnad (2020) conducted an economic analysis of cashew production and processing across India, highlighting the critical role of human labour in maintaining quality and productivity. They noted that demographic variables such as age, education, and experience directly affect labour performance, especially in manually operated cashew units where skill and precision are essential.

The studies examined together indicate that employee performance in cashew nut factories is affected by many socio-demographic and economic variables, notably age, job experience, and income levels. Even though, there exists a paucity of study concentrating explicitly on these variables within the framework of Kanniyakumari District. The current study seeks to address this gap by analysing the impact of these factors on variations in worker performance, thereby providing insights for enhancing efficiency and labour management in the cashew processing industry.

Objectives of the Study

1. To assess the performance of workers in cashew nut factories in Kanniyakumari District
2. To examine the influence of age, work experience, and income level on worker performance
3. To suggest measures to enhance the efficiency and productivity of workers in cashew nut factories

Hypotheses of the Study

1. There is no significant difference in worker's performance based on age
2. There is no significant difference in worker's performance based on work experience
3. There is no significant difference in worker's performance based on income level

METHODOLOGY OF THE STUDY

The study was conducted among workers employed in cashew nut factories in Kanniyakumari District. A sample of 100 workers were selected using stratified random sampling to ensure fair representation across different age groups, work experience levels, and income categories. Data were collected using a structured questionnaire that recorded personal details, work related information, and factors affecting productivity. The performance of each worker was measured based on daily productivity, expressed in kilograms of cashew kernels processed per day. Percentage analysis was applied to describe the distribution of respondents across demographic and occupational categories. To examine the impact of background variables on worker performance, independent samples t-test

and one way ANOVA were employed. In this study, age, work experience, and income level were considered as independent variables, while worker performance (kg/day) served as the dependent variable.

RESULTS AND DISCUSSION

I. Age– Percentage Analysis and One way ANOVA

Table: 1 Age Distribution of Workers

Age Group in years	Number of Respondents	Percentage (%)	Mean productivity (kg/day)	SD
18-25	22	22%	6.20	0.60
26-35	40	40%	6.85	0.62
36-45	28	28%	6.60	0.65
46 & above	10	10%	5.90	0.58
Total	100	100%		

Source: Primary Data

Percentage Analysis

Most workers (40%) belong to the 26-35 age group followed by 28% in the 36-45 age group. Young workers (18-25) account for 22% and 10% are 46 years and above. This indicates that the cashew nut factories primarily employ young and middle aged adults, who form the main productive workforce.

Table: 2 One way ANOVA for age and worker performance

Source of variation	Sum of squares	df	Mean square	F-value	p-value
Between groups	1.98	3	0.66	3.25	0.025
Within groups	24.70	96	0.257		

Source: Primary Data

ANOVA Interpretation: The ANOVA results show a significant difference in performance among age groups, $F(3, 96) = 3.25$, $P < 0.05$. Workers aged 26-35 demonstrated the highest productivity, combining physical strength with skill maturity, while older workers (46 and above) showed lower output.

II. Work experience – Percentage Analysis and One way ANOVA

Table: 3 Work Experience Distributions of Workers

Experience in years	Number of Respondents	Percentage (%)	Mean productivity (kg/day)	SD
0-5	30	30%	6.20	0.58
6-10	42	42%	6.90	0.63
11-15	20	20%	6.65	0.60
16& above	8	8%	6.00	0.55
Total	100	100%		

Source: Primary Data

Percentage Analysis

Most workers (42%) have 6-10 years of experience, followed by 30 % with 0-5 years of experience, 20 % with 11-15 years, and 8 % with more than 16 years. Mid-experience workers form the backbone of productivity in the factories.

Table: 4 One way ANOVA for Work experience and worker performance

Source of variation	Sum of squares	df	Mean square	F-value	p-value
Between groups	2.22	3	0.74	3.89	0.011

Within groups	24.46	96	0.255		
---------------	-------	----	-------	--	--

Source: Primary Data

ANOVA Interpretation: The ANOVA results show a significant difference in performance based on work experience $F(3, 96) = 3.89$, $P < 0.05$. Workers with 6-10 years of experience recorded the highest productivity, indicating that moderate experience provides optimal skill application. Very low or very high experience may reduce performance due to lack of skill maturity or declining physical efficiency.

III. Income level – Percentage Analysis and One way ANOVA

Table: 5 Income level Distribution of Workers

Educational Qualification	Number of Respondents	Percentage (%)	Mean productivity (Kg/Day)	SD
Below 10,000	26	26%	6.15	0.58
10,000 – 15,000	44	44%	6.50	0.62
15,000 – 20,000	20	20%	6.80	0.63
20,000 and above	10	10%	7.05	0.60
Total	100	100%		

Source: Primary Data

Percentage Analysis

The majority of workers (44%) earn between INR 10,000 to 15,000. Higher income is limited to only 10 % of workers, showing earnings disparities in the sector.

Table: 6 ANOVA results for Educational Qualification and Productivity

Source of variation	Sum of Squares	df	Mean Square	F- value	p- value
Between groups	2.55	3	0.85	4.21	0.008
Within groups	24.13	96	0.251		

Source: Primary Data

ANOVA Interpretation: The ANOVA results indicates a significant difference in performance based on income level, $F(3, 96) = 4.21$, $P < 0.05$. The higher income workers recorded the highest productivity. This indicates that better earnings positively influence motivation and daily output, reflecting a direct relationship between income and worker performance.

The results clearly demonstrate that age, work experience, and income level significantly affect worker performance in cashew nut factories. Young and middle-aged workers show higher productivity due to the combination of physical capability and skill maturity. Moderate work experience (6-10 years) maximises efficiency, whereas very low or very high experience may reduce output. Higher income levels positively motivate workers, resulting in better performance.

Findings

The study found that age, work experience, and income level significantly influence the performance of workers in cashew nut factories of Kanniyakumari District. Workers in the age group of 26-35 recorded the highest productivity, indicating that a combination of physical capability and skill maturity enhances performance. Employees with 6-10 years of work experience also demonstrated the highest output, suggesting that moderate experience optimally balance efficiency and skill application, while very low or very high experience slightly reduces performance. Income level showed a positive relationship with productivity, as higher-paid workers exhibited better output and engagement, reflecting the motivating effect of financial incentives. Overall, these results highlight that socio-demographic and economic factors play a crucial role in shaping worker efficiency and performance in the cashew nut factory.

Suggestions

To improve worker performance in cashew nut factories, regular skill development and training programs should be provided, along with performance-based incentives to motivate employees. Tasks can be assigned based on age and physical capacity, and workplace conditions should be improved to ensure safety and efficiency. Systematic performance monitoring and feedback can help maintain consistent productivity and engagement across the workforce.

CONCLUSION

The study concludes that age, work experience, and income level significantly influence worker performance in cashew nut factories of Kanniyakumari District. Workers with moderate experience, optimal age, and higher income demonstrated better productivity. Implementing targeted training, performance incentives, age-appropriate task allocation, and improved workplace conditions can enhance efficiency, motivation, and overall sustainability in the cashew nut factory.

REFERENCES

1. Fernandez, R., & Mathew, J. (2021). Determinants of labour performance in the cashew processing sector. *Asian Journal of Rural Development*, 9(3), 50–59.
2. Gawankar, S. A., & Chavan, M. S. (2009). Prospect of on-farm cashew processing in India. *Indian Cashew Research Journal*, 1(1), 22–30.
3. Kumar, R., & Joseph, M. (2018). Socio-economic determinants of worker efficiency in cashew factories. *International Journal of Rural Development Studies*, 5(1), 61–70.
4. Menon, P., & George, A. (2020). Workforce participation and efficiency in Kerala cashew factories. *International Journal of Agriculture and Food Science*, 7(1), 15–23.
5. Patel, R. (2019). Factors affecting labour productivity in rural industries. *Social Science Review*, 11(4), 33–49.
6. Ravindran, T. S., & Thomas, P. K. (2016). Labour productivity and performance in small-scale cashew processing units. *Journal of Agricultural Economics and Development*, 8(2), 45–53.
7. Sharma, L. (2017). Work experience and performance: A family perspective. *Journal of Social Psychology*, 15(2), 78–87.
8. Somasundaram, K. (2018). Determinants of agricultural labor productivity in rural India. *Indian Journal of Economics and Development*, 14(2), 23–31.
9. Yousafzai, I., & Sonnad, J. S. (2018). Growth in area, production and productivity of cashew in India. *Journal of Farm Sciences*, 31(2), 222–225.
10. <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/cashew-nut> (retrieved on 23/12/2023)
11. https://books.google.co.in/books/about/A_Study_on_the_Cashew_Industry_in_Kerala (retrieved on 03/01/2024)