



Title

**THE IMPACT OF HYGIENE AND MOTIVATIONAL FACTORS ON
JOB PERFORMANCE OF CITRUS FARM WORKERS IN SARAH
BAARTMAN DISTRICT, EASTERN CAPE PROVINCE**

Maluleke Khanani Karen

Student number: 231238312

Tel: 071 6806 145

Orcid number: 0000-0002-6379-3875

Email: khananimaluleke1@gmail.com

Supervisor:

DR. TM Seti

Cape Peninsula University of Technology

September 2025

TABLE OF CONTENTS

DECLARATION.....	iv
DEDICATION.....	v
ACKOWNLEDGEMENT	vi
ABSTRACT	vii
CHAPTER 1: INTRODUCTION.....	1
1.1. Purpose of the study	1
1.2 Context of the study	1
1.3 Problem Statement	2
1.4. Main objective.....	3
1.4.1 Specific objectives	3
1.4.2 Research questions	4
1.5. Limitations and Delimitation of the study	4
1.6. Significance of the study	4
1.7. Definition of concepts	5
1.7.1. Job Performance.....	Error! Bookmark not defined.
1.7.2. Hygiene Factors	Error! Bookmark not defined.
1.7.3. Motivation Factors	Error! Bookmark not defined.
1.7.4. Farm workers	5
1.8. Assumptions	5
CHAPTER 2: Literature Review.....	7
2.1. Introduction.....	Error! Bookmark not defined.
2.2. Conceptual definitions	Error! Bookmark not defined.
2.2.1. Hygiene Factors	Error! Bookmark not defined.
2.2.2. Motivation Factors	Error! Bookmark not defined.
2.2.3. Employee performance	Error! Bookmark not defined.
2.3. Theoretical literature	Error! Bookmark not defined.
2.3.1. Maslow’s Hierarchy of Needs.....	Error! Bookmark not defined.
2.3.2. Vroom’s Expectancy Theory	Error! Bookmark not defined.
2.3.3. Adams' Equity Theory of Motivation	Error! Bookmark not defined.
2.3.4. Taylor’s Motivation Theory.....	Error! Bookmark not defined.
2.3.5. Herzberg’s Two-factor Theory	Error! Bookmark not defined.
2.6. Empirical Literature	Error! Bookmark not defined.

CHAPTER 3: RESEARCH METHODOLOGY	Error! Bookmark not defined.
3.1. Introduction	Error! Bookmark not defined.
3.2. Description of the study area.....	Error! Bookmark not defined.
3.3. Research Design.....	Error! Bookmark not defined.
3.4. Population and sample	Error! Bookmark not defined.
3.5 The research instrument	Error! Bookmark not defined.
3.6 Procedure of data collection.....	Error! Bookmark not defined.
3.7 Data analysis and interpretation.....	Error! Bookmark not defined.
3.8 Limitations of the study	Error! Bookmark not defined.
3.9. Research Validity	Error! Bookmark not defined.
3.9.1 External validity	Error! Bookmark not defined.
3.9.2 Internal validity	Error! Bookmark not defined.
3.10. Reliability.....	Error! Bookmark not defined.
3.11. Ethical Consideration.....	Error! Bookmark not defined.
3.11.1. Informed consent and voluntary participation	Error! Bookmark not defined.
3.11.2. Confidentiality, Privacy and Anonymity	Error! Bookmark not defined.
CHAPTER 4: RESULTS AND DISCUSSION	Error! Bookmark not defined.
4.1. Introduction	18
4.2. Socio-economic Characteristics of Farm workers	18
4.2.1. Age group.....	18
4.2.2. Gender	19
4.2.3. Marital status	19
4.2.4. Household size	20
4.2.5. Disability	21
4.2.6. Educational level.....	21
4.2.7. Working experience	22
4.2.8. Work position.....	23
4.3. Farm Workers' ratings of Hygiene and Motivational Factors in their Organisations..	23
4.4. Ratings of Motivational Factors:.....	23
4.4.1. Perception of Farm Workers on Workload	23
4.4.2. Perception on Recognitions for Best Performing Employees.....	25
4.4.3. Perception on Decision Making Process.....	26
4.4.4. Perception on working environment being enabling	27
4.5. Ratings of Hygiene Factors	28
4.5.2. Perception on conflicts between employees being easily resolved.....	29

4.5.3. Perception on methods used to deliver training being clear.	30
4.5.4. Perception on compensation (bonuses) for employees.	31
4.5.5. Perception on equipment being safe to use.	32
4.5.6. Perception on Sense of Belonging	33
4.6. Ordinal Logistic Regression analysis of factors affecting farm workers' performance	34
CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	38
5.1. Introduction	38
5.2. Summary of the Main Findings.....	38
5.3. Implications of the Findings	Error! Bookmark not defined.
5.4. CONCLUSION	39
5.5. Recommendations	39
5.6. Suggested Areas for Further Study	41
4. RESEARCH PLANNING	54
5. REFERENCES.....	42
LIST OF TABLES	
Table 1: Showing frequency table for Gender	19
Table 2: Showing farm workers' marital status	20
Table 3: Showing farm workers' with disability	21
Table 4: Showing Education levels of farm workers.....	21
Table 5: Showing farm workers' positions	Error! Bookmark not defined.
Table 6: Showing farm workers' perception on equipment used	32
Table 7: Showing an Ordinal logistic regression analysis of factors affecting farm workers' performance	34
LIST OF FIGURES	
Figure 1: Pie chart showing Age group of farm workers.....	18
Figure 2: Pie chart showing farm workers' household size.....	20
Figure 3: Showing Working Experience of farm workers	22
Figure 4: Showing perception on Workload	24
Figure 5: Bar Chart showing perception on recognition.....	25
Figure 6: Bar Chart showing perception on decision-making process	26
Figure 7: Bar Chart showing perception on working environment.....	27
Figure 8: Bar chart shoeing perception on wages	28
Figure 9: Bar chart showing perception on conflict resolution.....	29
Figure 10: Bar Chart showing perception on training.....	30
Figure 11: Bar Chart showing perception on bonuses	31
Figure 12: Bar Chart showing perception on sense of belonging	33

DECLARATION

I, Khanani Karen Maluleke (231238312), hereby declare that this proposal for Masters in Agriculture, submitted to the Department of Agricultural Management, at Cape Peninsula University of Technology has not been submitted previously for any degree at this or another university. It is original in design and in execution, and all reference material contained therein has been duly acknowledged.

Signature Date

Name of Student: Ms KK Maluleke

DEDICATION

I dedicate this study to myself. There were a lot of ups and downs in the process of getting the research done but I never gave up. Other people that I dedicate this study to is my mom who from the first day was very supportive either emotionally or financially. The Lord, Almighty as well was really there for me leading the way and strengthening me whenever I felt like giving up.

ACKNOWLEDGEMENT

Firstly, I would like to thank my Supervisor Dr T.M Seti, who was immensely involved and highly dedicated in assisting me with this study. If it weren't for him this study wouldn't have been a success thus for all his input and assistance, I am really grateful. Secondly, I would like to thank Prof Fanadzo who was fully involved in the process of getting ethical clearance. Without his involvement it wouldn't have been possible for me to collect data and complete my study.

I would also like to thank our department leaders for all the efforts they made in order to give me clarity and proper understanding of how I were to conduct my study through regular workshops. Furthermore, I would like to thank all the people who were willingly participative in this study, the study couldn't have taken place without participants.

Lastly, I thank my mom and friends for all the moral support they offered throughout the process of my study. Without the help from any of these people, my study would have been a failure. I am really grateful to God that He was there for me and helped me not lose hope or give up whenever I stumbled across challenges.

ABSTRACT

This study examined the impact of Herzberg's hygiene and motivational factors on the job performance of citrus farm workers in the Sarah Baartman District of the Eastern Cape Province, South Africa. The primary objective was to assess whether the working environment influences employee performance within farm organizations. A questionnaire was administered to collect data through face-to-face interviews with 160 farm workers, utilizing a convenience sampling technique, and a logistic regression model to assess the magnitude of the relationship between employee performance and selected exploratory variables. The results of the study revealed that hygiene and motivational factors positively influenced farm workers' performance. Participants generally reported satisfaction with their working conditions, involvement in decision-making, harmonious employer-employee relationships, and fair wages. However, some expressed dissatisfaction with aspects of work dynamics, which could be mitigated through enhanced management practices.

Key findings indicated a strong correlation between a supportive work environment and improved employee performance. Positive factors such as employee involvement in decision-making and fair compensation were linked to higher job satisfaction. Nevertheless, issues such as inadequate training, ineffective performance feedback, and insufficient flexibility in the work environment were identified as barriers to optimal performance. The study recommends increasing employee consultation in decision-making, implementing comprehensive training programs, ensuring equitable compensation, addressing personal biases, and fostering a supportive work culture. It also emphasizes the importance of effective workload management, recognition of high performance, and ensuring safety and clarity in training methods.

Future research should explore similar studies in different districts and types of produce to validate these findings and examine the broader implications of improved working conditions on organizational benefits. By addressing the identified issues and following the recommendations, organizations can enhance worker satisfaction and productivity, contributing to the overall success and sustainability of the citrus industry in the region.

CHAPTER 1: INTRODUCTION

1.1. Purpose of the study

Citrus production in South Africa is one of the most important sectors that has a positive impact on rural employment, gross value production, and rural livelihoods. Thus, maintaining an efficient labour force in this sector is critical. This study's main purpose of this study is to investigate the relevance of the Herzberg motivational theory in association with citrus farm workers (Herzberg, 1959). The outcome is to identify important factors that contribute to employee performance and use this information to improve employer and employee relationships, increase production, and enhance employee retention.

1.2 Context of the study

The citrus industry is a vital component of South Africa's agricultural economy, contributing significantly to foreign exchange earnings and national GDP. The country is currently ranked as the second-largest exporter of citrus fruits globally, after Spain (Jones, 2020; Citrus Growers' Association of Southern Africa [CGA], 2023). Citrus is cultivated across several provinces, notably the Western Cape, Eastern Cape, Limpopo, and Mpumalanga (Chisoro-Dube et al., 2018; CGA, 2024).

Historically, citrus farming in South Africa began in the 1650s with the arrival of orange and lemon trees from St. Helena, which were planted in the gardens of the Dutch East India Company (SA Fruit Journal, 2007). By the 1890s, South African citrus was being exported to European markets, signalling the start of a lucrative trade (Brown, 2018).

Today, the citrus industry supports approximately 100,000 jobs, most of which are seasonal (De Beer, 2019; CGA, 2023). Citrus farm workers play a vital role in all aspects of production, including planting, irrigation, pest and disease management, and harvesting (Oliver, 2020). These responsibilities require not only physical labour but also technical skills, making worker performance a crucial determinant of farm productivity.

One of the critical challenges facing citrus farm workers is the seasonality of employment, which can result in income insecurity and reduced job satisfaction. In addition, workers often contend with suboptimal working conditions, limited access to training, and insufficient recognition of their contributions (ILO, 2022). These issues reflect a broader

concern in agricultural employment and directly link to Herzberg's classification of hygiene and motivational factors.

According to Herzberg (1959), job satisfiers (motivators) are intrinsic aspects such as achievement, recognition, and responsibility, while job dissatisfiers (hygiene factors) relate to extrinsic conditions like supervision, pay, and working environment. When these factors are not adequately addressed, they may negatively impact employee performance.

A closer examination of day-to-day farm operations highlights the pivotal role that workers play in maintaining productivity. Tasks such as planting citrus trees require precise spacing and watering techniques, while effective pest and disease control demands knowledge of treatment protocols and safe application methods (Shingie & Simon, 2021). Irrigation management is also essential, with workers needing to monitor soil moisture and ensure the appropriate use of water-saving technologies such as drip irrigation (Oliver, 2020).

Despite the essential nature of these tasks, there is limited research in South Africa that specifically examines how workplace environmental factors influence farm worker performance within the citrus sector. More recent assessments, including those by the Food and Agriculture Organization (FAO, 2023) and the International Labour Organization (ILO, 2022), confirm that agricultural labourers, including citrus farm workers, continue to face significant workplace challenges such as limited job security, wage disparities, and insufficient workplace support structures.

Therefore, this study investigates whether Herzberg's motivational and hygiene factors continue to affect citrus farm worker performance in 2025. It responds to a notable gap in the literature, especially in the context of South Africa's evolving labour policies and economic shifts following the COVID-19 pandemic and recent labour reforms (Department of Employment and Labour, 2023).

1.3 Problem Statement

Recent studies continue to highlight the significant impact of workplace conditions on job satisfaction and performance. For instance, study by Koekemoer and Masenge (2023) examined the relationship between decent work and job satisfaction among South African blue-collar workers. The study found that job satisfaction mediates the relationship between decent work and outcomes like subjective career success and turnover intention,

underscoring the importance of decent working conditions in enhancing employee satisfaction and performance.

Despite these insights, challenges persist, particularly in the agricultural sector. A 2023 report by the South African Department of Employment and Labour revealed that many agricultural workers still face issues such as unsafe working environments, lack of social dialogue, and inadequate representation. Specifically, the study found that 19.6% of agricultural workers had experienced workplace fatalities, and 77.7% were not union members, indicating a lack of worker representation.

These findings suggest that, even in current year, many of the issues identified in earlier studies remain relevant. Farm workers continue to face challenges related to hygiene and motivational factors, such as poor supervision, low wages, and lack of recognition, which can negatively affect their performance. Moreover, the fear of job loss or being blacklisted may prevent workers from voicing concerns about workplace conditions, further exacerbating these issues.

In pursuit of developing a policy framework to enhance the employer–employee relationship, this study seeks to investigate the hygiene and motivational factors influencing the performance of citrus farm workers in South Africa. The study aims to identify specific areas of worker concern that employers need to address to boost and increase the overall performance of citrus farm workers.

1.4. Main objective

The main objective of the study is to investigate Hygiene and motivational factors that influence the performance of citrus farm workers in Eastern Cape Province, Western District. The main objective will be achieved from a list of specific objectives detailed below:

1.4.1 Specific objectives

- To describe the socio-economic characteristics of citrus farm workers.
- To identify factors that positively influence the performance of citrus farm workers.
- To determine whether the physical work environment has an influence on employees' performance.

- To examine whether supervisor support contributes towards employees' performance.
- To examine the relationship between employee feedback and workers' performance.
- To determine the relationship between worker performance and language usage.

1.4.2 Research questions

- What are the socio-economic characteristics of citrus farm workers?
- Which factors can positively influence the farm workers' performance?
- Does the physical work environment have an influence on employees' performance?
- Does a supervisor's support contribute towards employees' performance?
- What is the relationship between employee feedback and workers' performance?
- What is the relationship between worker performance and language use?

1.5. Limitations and Delimitation of the study

The delimitation of the study is that the researcher will only focus on both seasonal and permanent workers. The criteria that will be used in selecting season workers is a maximum of two years' experience in the citrus industry. This will allow the study to collect rich information from the unit of analysis.

1.6. Significance of the study

A study of this nature, on the impact of workplace hygiene and motivation factors on employee performance is very important as it will give citrus farm workers of Sarah Baartman Western District, an opportunity to share their feelings or perspectives on different factors that affect their overall performance at work. The outcomes of this study may also help farm managers anticipate the elements that impact farm labourers' performance and implement the necessary changes to potentially enhance worker productivity. It is anticipated that the data generated by this study will provide policymakers and decision-makers with some useful information about the variables influencing workers' performance. Furthermore, the study provides a deeper understanding of the elements influencing employees' performance by serving as a resource for academics to expand their knowledge and information on the subject. In order to maximize its advantages, the study will assist the involved company in re-evaluating its current procedures and placing fresh attention on this neglected but essential human resource planning.

Besides just getting feedback from the farm workers, the findings of this study may also assist the extension workers of the Department of Agriculture to find ways in which they can assist farmers in creating a positive working environment for their citrus farm workers for the improvement of their performance and increase the productivity of their respective citrus farm organizations.

Ultimately, the results of this study will also help citrus farm groups handle concerns related to workers and the workplace. With the contribution that the citrus industry has on South Africa's economic growth, such a study must be conducted to find ways to ensure that the workers are comfortable to improve their performance and increase productivity. Besides improving the citrus farm workers' performance, this study will aim at assisting the citrus farm workers of Sarah Baartman Western District to also consider their well-being in order to work effectively.

1.7. Definition of concepts

1.7.1. Job Performance

It is defined as the entire expected value, over a standard period of time, that an individual's discrete behavioural episodes are expected to bring to the organisation (Motowidlo, Borman, & Schmit, 1997).

1.7.2. Hygiene Factors

These elements define the setting or context in which an individual works (Alshmemri et al., 2017).

1.7.3. Motivation Factors

These are any factors, whether emotional, spiritual, psychological or otherwise, which propel an individual forward in exercise or activity (Sam, 2013).

1.7.4. Farm workers

The term "farm workers" often refers to anyone who work on farms, planting, tending, and harvesting crops as well as taking care of livestock; however, it also encompasses anyone engaged in agricultural activities for pay (Schotte, 1996).

1.8. Assumptions

The key assumption of the study is that some of the respondents will complain about the treatment that they experience at the workplace and complain about unfair salaries. These

assumptions are most likely to be just assumptions and nothing close to the reality of things in some farm organisations. If a researcher conducts a study with such assumptions, they are most likely going to be biased and that will affect the reliability of the results.

1.9. Conclusion

In conclusion, this chapter outlined the background, rationale, and scope of the study on hygiene and motivational factors influencing job performance among citrus farm workers. It introduced the research problem, objectives, and key questions guiding the study. These foundational elements establish the context for exploring relevant theories and past research in the next chapter.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

Numerous theoretical writings have long existed to clarify the correlation between Herzberg's theory and employee performance. This section introduces pertinent theoretical literature and empirical literature concerning the factors influencing employees' performance. The headings to be discussed in this section are: conceptual definitions, theoretical framework, hygiene factors, motivational factors and empirical literature.

2.2. Conceptual definitions

To support the analysis of Herzberg's theory, the following conceptual definitions are provided.

2.2.1. Definition of Motivation

Motivation refers to the internal or external drive that stimulates an individual to take action toward achieving specific goals. Robbins and Judge (2021) define motivation as the set of forces that initiate, direct, and sustain goal-directed behaviours. Motivation may be intrinsic (e.g., personal growth, achievement) or extrinsic (e.g., pay, recognition), both of which are essential in shaping workplace performance.

2.2.2. Hygiene Factors

Hygiene factors refer to the environmental and organisational aspects of a job that do not necessarily motivate employees but, when absent or inadequate, cause dissatisfaction (Herzberg, 1959). These include salary, job security, working conditions, company policies, and interpersonal relationships. According to Alshmemri et al. (2017), while hygiene factors are critical to preventing dissatisfaction, their presence alone does not guarantee increased motivation or performance.

2.2.2. Motivation Factors

Motivational factors are intrinsic elements of work that can significantly enhance job satisfaction and employee commitment. These factors include achievement, recognition, the nature of the work itself, responsibility, and opportunities for advancement and growth (Herzberg, 1959). Grant (2008) explains that motivated employees are more persistent, productive, and committed to their roles. More recently, Deci and Ryan (2020) emphasised

that fostering intrinsic motivation through autonomy, competence, and relatedness is key to sustained performance.

2.2.3. Employee performance

Employee performance refers to the effectiveness with which job responsibilities are carried out. It encompasses both the quality and quantity of work produced. Tripathy (2014) defines performance as the output of an individual in terms of meeting specific organisational objectives. This definition aligns with the study's aim and will be used to evaluate the performance of citrus farm workers. According to Armstrong and Taylor (2023), performance is influenced by various factors including motivation, working conditions, and management practices.

2.3. Theoretical Framework

Numerous scholars have developed theories regarding the concept of employee motivation in an organisation based on their extensive research on the factors impacting employee performance. Herzberg's two-factor theory, McGregor's theory X and Y, Taylor's productivity theory, Vroom's Expectancy theory, and Maslow's Hierarchy of Needs theory are well-known classical theories that address the variables influencing employee performance. All of these theories were extensively reviewed and discussed in the following subsections. This was done to draw attention to key ideas and identify contradictions and convergences in the literature.

2.3.1. Maslow's Hierarchy of Needs

According to Maslow's 1943 theory, it is stated that the wants of human beings can be divided into five groups and ranked in a hierarchy based on priority. These needs fall into the following categories: physiologic, security, social, esteem, and self-actualisation demands. This theory holds that motivation is a prerequisite for meeting physiological needs. This might be clarified further by saying that, despite their dissatisfaction, workers might only be sufficiently motivated to satisfy their own needs. After their physiological demands are met, workers climb the need hierarchy in an attempt to meet their security needs. According to the notion, this process keeps going until the demands of the employees for the fulfilment of their potential are met as well. Maslow argues that the reasoning is

plain: sick and hungry employees will not be able to contribute significantly to productivity, which will make it impossible to achieve organisational objectives.

2.3.2. Vroom's Expectancy Theory

According to Vroom's (1964) "expectation theory," people are driven by their level of desire and their perception of their chances of achieving their goals. According to the theory, a person's ability to act in a certain way depends only on how strongly they expect a certain outcome to follow their actions and how appealing that outcome is to them (Bushiri, 2014). To put it another way, an employee is more likely to feel motivated to put in more effort if they believe that their better work would lead to a positive performance assessment and perhaps even some incentives that will enable them to accomplish their goals on a personal level. The theory is concerned with the relationship between employee performance and personal goals (Salaman et al., 2005).

2.3.3. Adams' Equity Theory of Motivation

Adams (1965) argues that when people earn awards for exceptional achievement, they are driven to achieve social equality. The theory states that a job's benefits include rewards, social ties, recognition, money, and getting promoted. Employees are supposed to apply inputs such as patience, knowledge, work, devotion, and education in order to reap these rewards. Adam goes on to say that individuals like to see their inputs and outputs as ratios, compare them to those of others, and get motivated if the ratio is high.

2.3.4. Taylor's Motivation Theory

Taylor's motivation theory (1911) claims that money is the major force that encourages individuals to work in a company. According to the principle, employees should be paid based on their performance rather than receiving a fixed income to inspire them. Taylor came up with the statement "a fair day's pay for a fair day's work". Taylor thought that by using this tactic, employees would be inspired to put forth more effort and perform better even in the absence of supervision.

2.3.5. Herzberg's Two-factor Theory

According to Frederick Herzberg's 1959 two-factor hypothesis, some aspects of a job contribute to job satisfaction. Motivation and cleanliness are two categories of variables that

Herzberg identified as determining employees' work attitudes and performance levels. The theory states that hygiene factors are external variables that are thought to keep workers happy, whereas motivation factors are internal factors that are thought to increase workers' job satisfaction (Ibrahim et al., 2023). Herzberg went on to say that job happiness among employees does not always follow from having an abundance of hygiene factors. Employee motivational elements need to be addressed in order to improve their performance or productivity. Organisations should concentrate on providing intrinsic or motivating aspects in order to motivate employees (Robbins, 2009). This indicates that an employee becomes motivated and performs better when the motivational variables are met.

2.4. Hygiene factors that influence workers' performance

2.4. Hygiene Factors that Influence Workers' Performance

This section builds on the conceptual definitions outlined earlier by integrating them with empirical studies to explore how specific hygiene factors, such as the working environment, organisational culture, quality of supervision, and employee-employer relationships influence farm workers' performance. Herzberg's theory underscores that hygiene factors do not necessarily motivate employees but can reduce dissatisfaction when adequately addressed.

2.4.1. Working Environment

According to Robbins and Judge (2021), both the physical and psychosocial aspects of the work environment significantly affect worker productivity and satisfaction. Skilled employees are attracted and retained by conducive workspaces (Alomari et al., 2023; Msengeti & Obwogi, 2015). Quandt et al. (2020) confirm that environmental exposures such as pesticides or lack of shade impact mental well-being and job satisfaction among citrus farm workers. Additionally, Al-Sarayreh et al. (2022) found that workspace design, cleanliness, and ergonomic factors contribute significantly to employees' psychological comfort and productivity.

2.4.2. Organisational Culture

Bakker et al. (2011) found a strong relationship between employee engagement and performance. Farm workers who are emotionally and cognitively engaged in their roles tend to show higher levels of motivation and output. More recent work by Martins and Nienaber (2021) emphasises that a supportive organisational culture enhances employees' sense of belonging, leading to improved job performance. Likewise, Afsar et al. (2022) suggest that inclusive and ethical organisational cultures are critical in building trust and commitment among employees.

2.4.3. Quality of Supervision

Supervision, defined by Northouse (2007) as influencing a group to achieve goals, remains essential in performance management. Armstrong and Murlis (2004) and Cronje et al. (2001) argue that leadership styles either encourage or hinder performance. Harris et al. (2019) highlight how miscommunication between supervisors and employees leads to task misalignment. More recent findings by Kim and Beehr (2021) show that participative and transformational leadership styles correlate positively with employee motivation and task efficiency. Similarly, Lee et al. (2023) find that supervisors who engage in regular, constructive feedback sessions foster greater accountability and morale.

2.4.4. Employee-Employer Relationship

Adu-Oppong and Agyin-Birikorang (2014) emphasize that transparent and open communication improves performance. Their findings are echoed by Rees and Smith (2021), who found that psychological safety in communication correlates with increased innovation and efficiency. Zhang and Liu (2022) found that organisations with supportive and respectful relationships between management and workers saw higher productivity and reduced turnover.

2.5. Motivational Factors that Influence Workers' Performance

This section integrates the conceptualisation of motivational factors previously outlined and provides an empirical understanding of how specific motivators—such as rewards, training, and the nature of the work itself—directly influence employee performance in agricultural settings. Herzberg's theory posits these as intrinsic drivers of satisfaction.

2.5.1. Incentives/Rewards

Salah (2016) found that reward systems are positively linked to employee performance. Torrington and Hall (2008) argue that while financial compensation remains central, non-monetary rewards like recognition and career advancement also play crucial roles. Dewhurst et al. (2010) list praise, challenging assignments, and leadership attention as effective motivators. Recent studies by Putra et al. (2022) and Rajan and Mathur (2023) support this by showing that blended reward structures—monetary and non-monetary—are most effective in sustaining high performance, particularly in labour-intensive industries like agriculture.

2.5.2. Training

Guest (1997) and Purcell & Boxall (2003) argue that training improves employees' knowledge and skills, which boosts organisational productivity. Swart (2005) extends this to include motivation, stating that targeted training helps workers align their competencies with organisational goals. More recently, Khan and Abdullah (2021) demonstrated that skill-focused training leads to measurable gains in productivity. Similarly, Bhebhe et al. (2023) found that agricultural training programs improve both performance outcomes and retention rates among farm workers.

2.5.3. The Work Itself

Rosen et al. (2010) and LePine & Podsakoff (2005) illustrate the dual impact of job demands: while high expectations may stimulate performance, they can also induce stress. Gilboa et al. (2008) reveal mixed empirical results regarding the relationship between job characteristics and performance. Newer research by Bakker and Demerouti (2021) and Rahmadani et al. (2022) argues that job meaningfulness, autonomy, and task variety are strongly associated with higher levels of motivation and performance, particularly when stressors are managed effectively.

2.6. Empirical Literature

Several prior studies provide useful insights into this area of research. For instance, Tamtekin (2012) explored how motivation and hygiene factors influence research

performance among 150 academics. The study revealed two key outcomes: first, most hygiene factors such as salary, job security, organisational policies, supervision, interpersonal relations, and working conditions were positively perceived in relation to research performance, with the exception of status. Second, motivational factors, including growth opportunities, the nature of the work, responsibility, achievement, advancement, and recognition were also found to positively influence performance.

Pham and Nguyen (2020) investigated motivation in a sample of 200 employees from 15 enterprises, using surveys and analysing the data through descriptive statistics, factor analysis, and regression techniques. Their findings suggested that company policies play a significant role in shaping employee motivation, while job characteristics had little to no effect. The researchers concluded with practical recommendations for firms seeking to enhance their overall performance.

Kaur (2022) focused on the impact of hygiene and motivational factors on employee performance, using a sample of 100 respondents and employing a T-test for analysis. The results indicated that recognition and achievement awards were particularly effective in driving motivation. In a related study, Basril (2022) examined both job satisfaction and employee performance, also through the lens of Herzberg's two-factor theory. The study highlighted that hygiene and motivator factors each affect job satisfaction and, in turn, both categories of factors have a direct influence on employee performance.

Ahmed et al. (2010) investigated the connection between motivational factors and job satisfaction, applying SPSS for their analysis. While the results partially challenged Herzberg's theory, they suggested that intrinsic motivators are strongly linked to job satisfaction, whereas extrinsic hygiene factors show no significant association. Furthermore, variations in job satisfaction were observed across demographic and job-related characteristics such as gender, qualifications, and work experience.

Finally, Hong and Waheed (2011) studied employee motivation and satisfaction in the retail sector, applying Herzberg's framework. Their findings revealed that hygiene factors, particularly working conditions, were the strongest drivers of job satisfaction among sales staff. Recognition, organisational policy, and salary followed in importance. Interestingly, the study also found that employees with a strong preference for financial rewards were

more likely to report satisfaction when their salaries increased, suggesting that attitudes toward money mediate the relationship between pay and job satisfaction.

2.7. Chapter Summary

Farm worker performance is influenced by a range of factors, which may include productivity, quality of work, working conditions, training, management practices, reliability, and adherence to safety standards (Moyce & Schenker, 2018). It is usually up to the managers or employers to evaluate and improve farm workers' performance by making use of different methods that are found useful. It is believed that for farm workers to perform exceptionally well in their tasks, they need to be trained, but it is evident that training alone does not have such a great impact on farm workers' productivity. Other researchers, however, believe that employee performance is dependent on how interested they are in the job.

Findings from the literature above suggest that many factors influence employee performance. A significant observation from the studies reviewed is that most of them emphasise environmental factors as key contributing factors to employee performance. Less of these studies focus on hygiene and motivation factors. Another significant observation from the literature survey is that there are fewer studies focusing on the agricultural sector. Thus, there is a gap in the literature which this study aims to address.

2.8. Conclusion

In conclusion, this chapter outlined the background, rationale, and scope of the study on hygiene and motivational factors influencing job performance among citrus farm workers. It introduced the research problem, objectives, and key questions guiding the study. These foundational elements establish the context for exploring relevant theories and past research in the next chapter.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

This chapter looks at the methods that were used in this study. It explains the research design and the methods used to conduct the study. It gives a discussion of how the study was approached in terms of data collection, tools used, sampling techniques and data analysis.

3.2. Description of the Study Area

The study was conducted in the Sarah Baartman District, located in Eastern Cape Province. This was the perfect study area due to the richness in citrus production, making it relevant to the topic of this study.

3.3. Research Design

A mixed-method approach was used in this study. For the Quantitative data, information was collected using structured questionnaire and analysed using statistical methods. For Qualitative data participants were interviewed and focus group discussion with a small group of the workers took place to make sure that there is alignment in the responses given. This design was most useful in combining the data to make sure that the findings are useful (Creswell & Plano Clark, 2017).

3.4. Population and Sample

The farm workers who participated in this study were from five citrus farms in the Sarah Baartman District. They were sampled purposely, where the 160 participants were selected based on their availability and how relevant they are to the study. These workers were both seasonal and permanent workers.

3.5. Data Collection Tools

The tools used to collect this data were a structured questionnaire and interview schedule. These tools helped to measure qualitative data and quantitative data. The questionnaire looked at demographic information of the farm workers and their view on hygiene and motivational factors. The interview schedule guided in-depth interviews and focus group discussions to understand detailed worker experiences.

3.6. Data Collection Procedure

Face-to-face interviews were conducted using the structured questionnaire, enabling collection of numerical data. Additionally, three focus group discussions and several semi-structured interviews were held with selected participants to deepen understanding of workplace dynamics. Participation was voluntary and informed consent was obtained from all respondents.

3.7. Data Analysis

Quantitative data was analysed using SPSS, including descriptive statistics and ordinal logistic regression. Qualitative data from interviews and focus groups was transcribed and thematically analysed to identify recurring themes and validate quantitative trends. However, in this dissertation, primary emphasis is placed on the quantitative findings.

3.8. Limitations of the Study

Limitations included restricted access to some farms and potential reluctance of workers to speak openly. Measures such as anonymised data and permission from farm owners helped mitigate these risks.

3.9. Validity and Reliability

Validity was ensured through pilot testing of the questionnaire and expert review. Reliability was established using Cronbach's alpha. The integration of qualitative data strengthened internal validity by offering explanatory insights.

3.10. Ethical Considerations

All ethical protocols were followed. Participants gave informed consent, and confidentiality was assured. Identities were anonymised and participation was entirely voluntary.

Variable	Unit	Description	Expectation
Dependent Variable			
Y ₁	Ordinal scale with Responses: (1) poor, (2) fair, (3) good, (4) very good, (5) excellent	Employee Performance	
Independent Variables			
X ₁	Dummy (1=male, 0=female)	Gender	+/-

X ₂	Continuous variable (Years)	Age	+
X ₃	Categorical (Single = 0, Married = 1, Divorced = 2, Widow = 3)	Marital Status	+
X ₄	Categorical variable (primary = 0, secondary = 1, tertiary = 2)	Level of Education	-
X ₅	Dummy	Working Conditions	-
X ₆	Dummy variable (yes = 0, no = 1)	Supervision	+/-
X ₇	Dummy variable (yes=0, no=1)	Training	+
X ₈	Dummy	Rewards	+
X ₉	Dummy	Employee-Employer Relationship	+
X ₁₀	Categorical	Organisational culture	-
X ₁₁	Continuous (years)	Work experience	+

3.11. Conclusion

In summary, this chapter explained the mixed-methods research design adopted to explore the effects of hygiene and motivational factors on farm workers' performance. Both quantitative (questionnaires) and qualitative (interviews, focus groups) techniques were employed, and the methodological rigour was ensured through sampling strategies, ethical compliance, and reliability testing. This comprehensive approach enhances the credibility of the findings discussed in the next chapter.

CHAPTER 4: RESULTS AND DISCUSSION

4.1. Introduction

This chapter presents the analysis and interpretation of various data collected through the use of a semi-structured questionnaire as per objectives of the study. The overall number of farm workers who participated in this study are 160. One hundred and sixty (160) questionnaire forms were printed and distributed to the participants to fill in for the purpose of collecting data. The total number of questions was 45 and below is the analysis, interpretation and discussion of the collected data.

4.2. Socio-economic Characteristics of Farm workers

These socio-economic characteristics included the following: Age group, gender, marital status, household number, educational level, working experience, work position and disability.

4.2.1. Age distribution

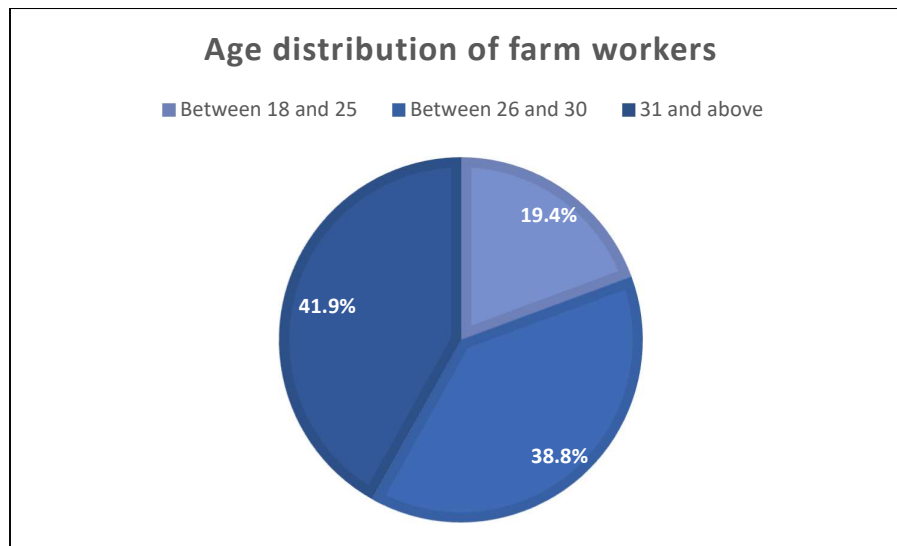


Figure 1: Pie chart showing Age distribution of farm workers

Source: Survey results (2024)

The above figure.1 shows the results of the respondents' age groups. The importance of investigating the age groups of the farm workers was to understand their behaviour better with regards to their ages. Sometimes one's ages affects how productive they can be. In a study about age and individual productivity, Skiebekk (2004) confirms that there is a strong reduction of productivity at older ages. The results of the study found that 19.4% of the farm workers are between the age of 18 and 25, 38.8% are at between the age of 26 and 30 and lastly, 41.9% of them are 31 years and above.

4.2.2. Gender Distribution

Table 1: Showing frequency table for Gender

Gender	Frequency	Percentage
Male	68	42.5
Female	92	57.5
Total	160	100

Source: Survey results (2024)

Table 1 above presents the gender distribution among farm workers in the sample. The results indicate that 42.5% of the farm workers are male, while 57.5% are female. This gender distribution suggests a higher representation of women in farm labor within the sample. Several factors could contribute to this finding. Traditionally, in many agricultural settings, women often take on roles that involve manual labor on farms, particularly in tasks such as planting, harvesting, and processing crops (Peterman et al., 2010). This trend may be influenced by socio-economic factors where women, especially in rural areas, seek employment in farming due to limited access to alternative job opportunities.

These findings highlight the significant role of women in the agricultural sector, and further exploration of the socio-economic and cultural dynamics could provide a deeper understanding of the gendered patterns of labour in this context.

4.2.3. Marital status

Table 2: Showing farm workers' marital status

Marital status	Frequency	Percentage
Single	130	81.3
Married	30	18.8
Total	160	100

Source: Survey results (2024)

The table above presents the marital status of the participants, showing that 81.3% are single and 18.8% are married. However, the results do not provide conclusive evidence that marital status impacts individual productivity among farm workers.

4.2.4. Household size

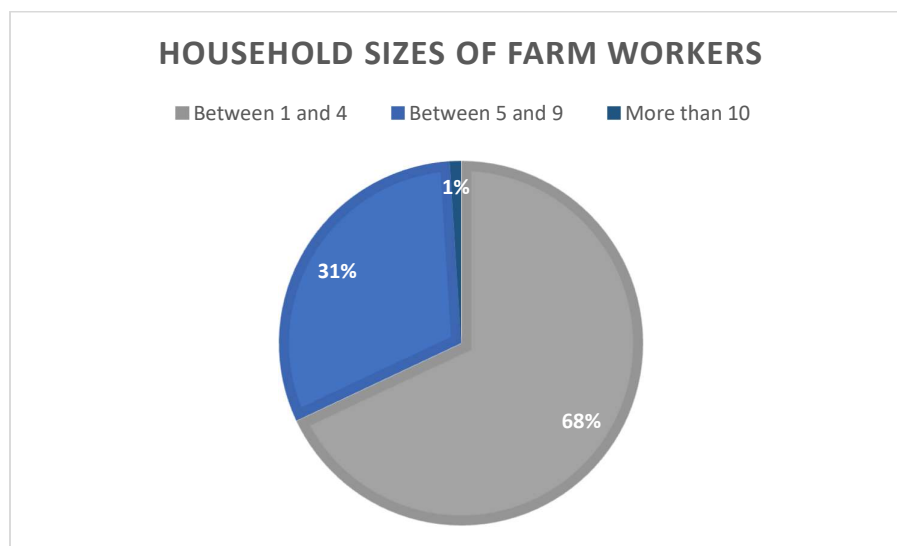


Figure 2: Pie chart showing farm workers' household size

Source: Survey results (2024)

The results in depicted in figure 2 above show that from the participants, 68% of them have a household size of between 1 and 4 people, 31% have between 5 and 9 people in their household, and lastly 1% has over 10 people in their household. With a larger household size the responsibilities are higher, more especially for women because they are responsible

for most house chores. This could affect their productivity at work. According to Galperin and Burke (2006) workers who take care of many children and have bigger families are expected to be always exhausted from house chores and it may be a bit difficult for them to still have to perform more demanding and exhausting tasks at work.

4.2.5. Disability

Table 3: Showing farm workers' with disability

Disability	Frequency	Percentage
Yes	1	1.0
No	159	99.0
Total	160	100

Survey results (2024).

Having farm workers with disability can be seen as a setback in certain organisations because there are some tasks/activities that are too demanding and could be uncomfortable for disabled farm workers, depending on the kind of disability they have. However, a study by Lindsay et al., (2018) states that some businesses reported that employees with disability are more punctual, reliable and conscientious in their work. This may mean that disability may not entirely affect productivity. Table 3 above shows the results of the percentage of workers with and without disability from our sample. 1% of the respondents was found to be disabled while the remaining 99% does not have any disability. These results could mean that farm employers believe that disability could affect the productivity of their organisation, thus they tend to hire less people with disability.

4.2.6. Educational level

Table 4: Showing Education levels of farm workers

Education level	Frequency	Percentage
Formal education	20	7.5
No formal education	140	92.5

Total	160	100
--------------	-----	-----

Source: Survey results (2024).

Table 4 presents the educational background of the farm workers, indicating that only 7.5% of participants have received formal education, whereas 92.5% have no formal educational qualifications. This suggests that most individuals in the study area who are employed as farm laborers lack formal education. The lack of formal education among the majority of farm workers could influence their job performance in several ways. Workers without formal education might face challenges in understanding and implementing advanced agricultural techniques or using modern technology, which can impact productivity and efficiency (Johnson & Adams, 2020).

4.2.7. Working experience

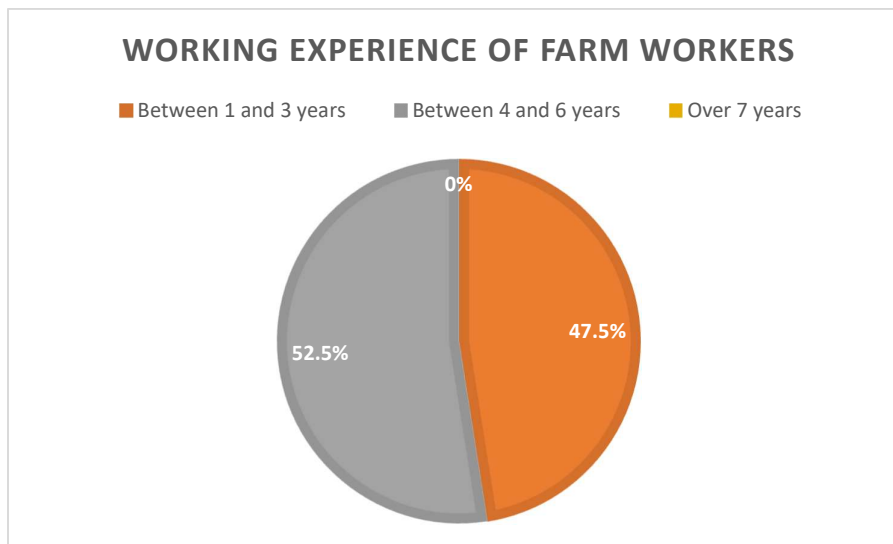


Figure 3: Showing Working Experience of farm workers

Source: Survey results (2024).

Figure 3 illustrates the participants' work experience. Approximately 47.5% of the participants have been working on the farm for 1 to 3 years, while 52.5% have been employed for 4 to 6 years. Generally, workers with more years of experience tend to be more productive, likely due to increased familiarity with tasks and greater efficiency in their roles, as supported by research indicating that job experience is positively correlated with productivity (Jones & Smith, 2020).

4.2.8. Work position

Table 5 Frequency table representing Farm workers' positions

Work Position	Frequency	Percentage
Full-time	6	3.8
Part-time	154	96.3
Total	160	100

Source: Survey results (2024).

Table 5 above shows results farm of workers' working positions. Majority of participants with the percentage of 96.3 were found to be working part-time (seasonal worker) in the farms, while 3.8% of the participants were permanent workers. These results suggest that most farms require more casualties than permanents due to the changing seasons and the amount of work available. This employment pattern can have several implications for worker performance. Part-time workers might experience lower job security, which can lead to reduced motivation and engagement compared to permanent employees. The uncertainty of continued employment may cause stress or a lack of long-term commitment to the job, potentially impacting their overall productivity and quality of work (Smith & Roberts, 2019).

4.3. Farm Workers' ratings of Hygiene and Motivational Factors in their Organisations.

Participants were asked questions with regards to how they feel about their workplace dynamics (Hygiene and Motivational Factors). They had to choose between: Strongly satisfying, satisfying, neutral, dissatisfying and strongly dissatisfying. A descriptive analysis was then performed to better understand the findings.

4.4. Ratings of Motivational Factors:

4.4.1. Perception of Farm Workers on Workload

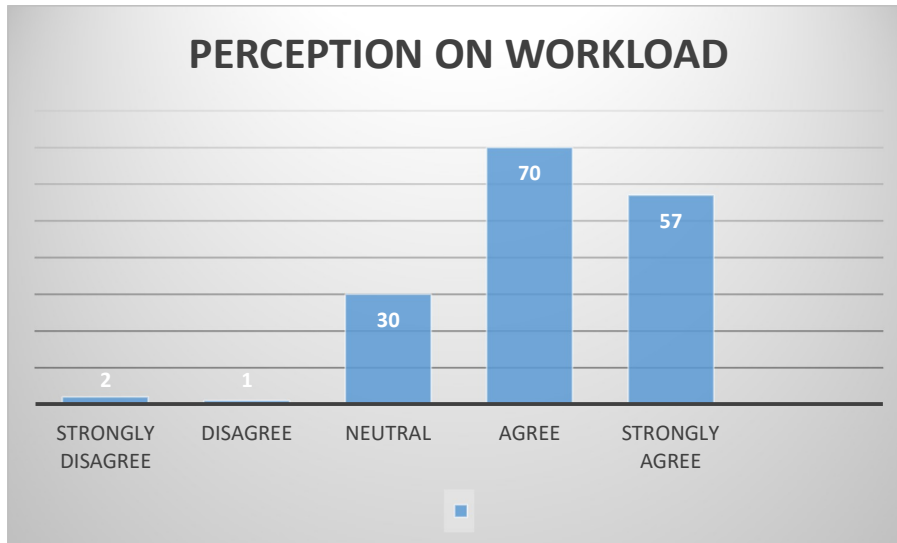


Figure 4: Showing perception on Workload

Source: Survey results (2024)

Figure 4 above presents results of farm workers' perception on workload using a frequency table. Majority of the participants agreed (70) that the workload they get is manageable, 57 participants chose strongly agree, this means that they strongly agree that their tasks are fair and doable, followed by 30 respondents who were neutral, 2 who chose strongly disagree and 1 respondent agreed.

4.4.2. Perception on Recognitions for Best Performing Employees

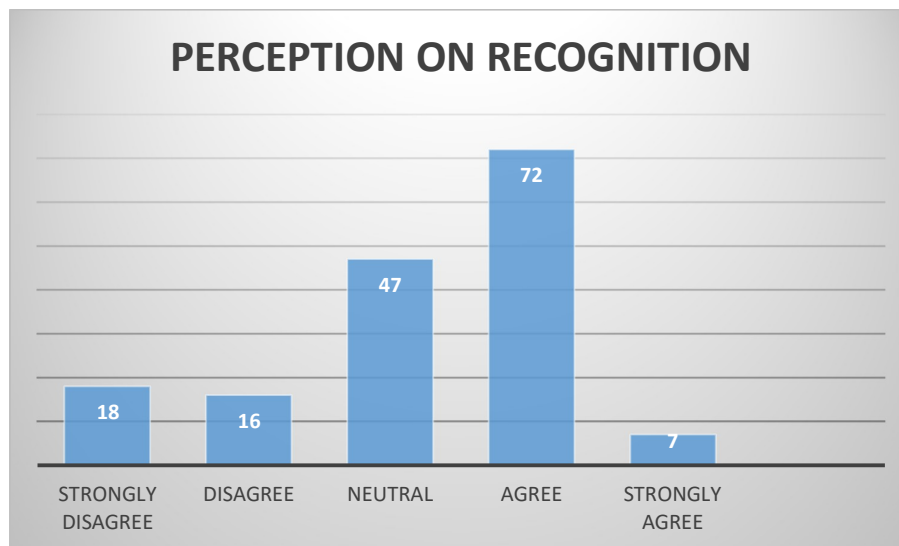


Figure 5: Bar Chart showing perception on recognition

Source: Survey results (2024).

Figure 5 above show results of farm workers' perception on Recognition for best performing employees using a frequency table. Majority of respondents (72) agreed that indeed workers who perform well are recognised, followed by 47 participants who were neutral. While 18 of workers strongly disagreed to the question so is 16 of the employees who disagreed, lastly 7 of the employees strongly agreed that the workers are recognised. These results mean that majority of farms in the Eastern Cape province, in Sarah Baartman District take highly the work that their employees do and they see the need to show their workers that they're seen and valued in order to motivate them to keep performing well in their tasks. Choi (2012) discussed in a study that recognition from employer can have a very positive impact in the attitude that employees have towards their work.

4.4.3. Perception on Decision Making Process

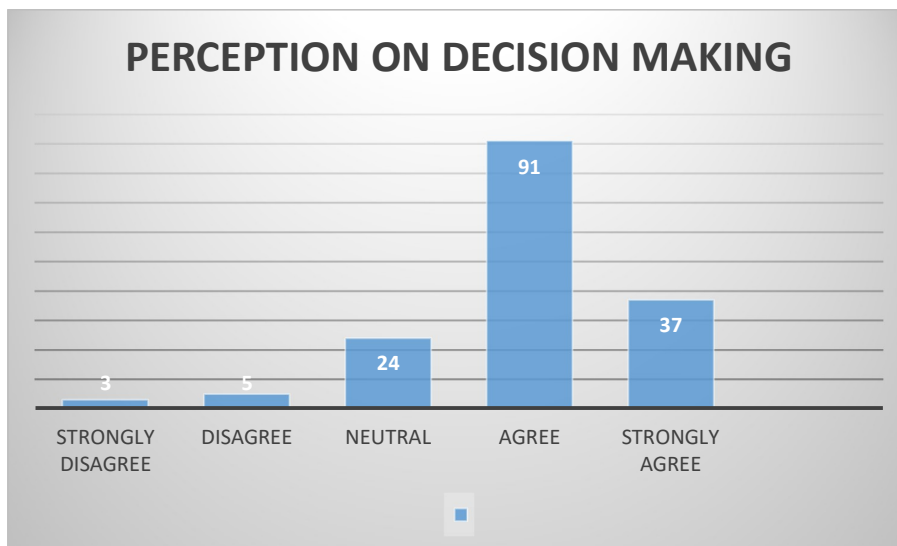


Figure 6: Bar Chart showing perception on decision-making process

Source: Survey results (2024)

Figure 6 above shows the results of the participants on their perception on decision making process in the farm. The participants' results show that 91 of them agree that they get involved in the decision-making process, 37 of these workers strongly agree, whereas 24 are uncertain, 5 however disagree and 3 of the participants strongly disagree to being involved in the decision-making process. Every employee in any organisation appreciates having their opinions being considered by their manager in the decision-making process. These results clearly show that one of the reasons why the citrus industry in the Eastern Cape Province is performing well it's due to involved employees are in the decisions that leaders of the farm organisations make. From the follow-up questions, most farm workers were saying that they are never made to feel less important and their leader respect their opinions, that motivates them to give their A-game in the tasks that they perform. Involving workers in the decision-making process in the farm is essential because it encourages an exchange of ideas between employer and employees that could improve productivity.

4.4.4. Perception on working environment being enabling

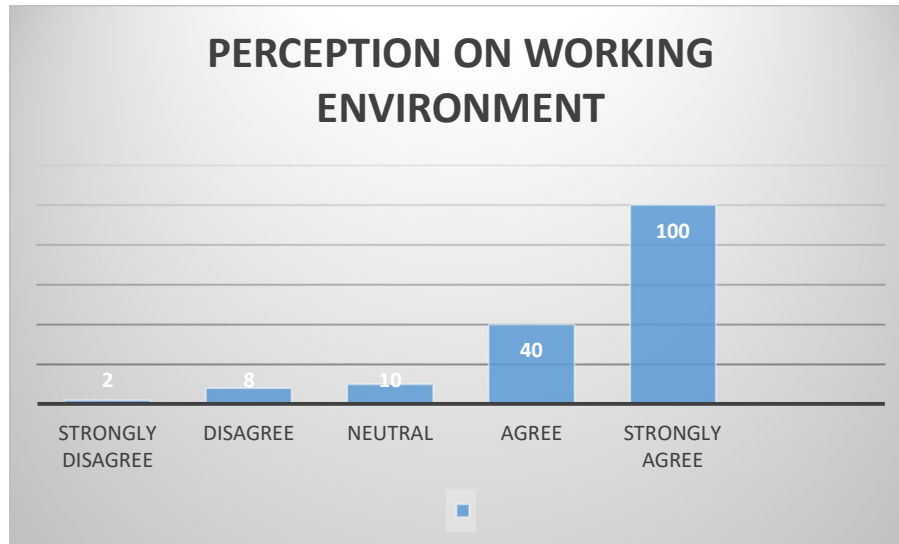


Figure 7: Bar Chart showing perception on working environment

Source: Survey results (2024).

The survey results on employees' perceptions of their working environment reveal that 100 of respondents strongly agreed that their working environment is supportive and conducive to productivity, while 40 agreed with this assessment. Conversely, 10 participants were neutral, 8 disagreed, and 2 workers strongly disagreed that the environment was enabling. These results indicate a generally positive perception among the majority of employees, suggesting that a supportive working environment is prevalent in the Sarah Baartman region. Respondents who had a negative view of their environment noted that a toxic atmosphere significantly impacts their performance by affecting their emotions, which aligns with existing research that highlights the critical role of a positive work environment in enhancing employee productivity and job satisfaction (Smith, 2020). The high percentage of positive responses suggests that many farms in the region effectively create motivating work conditions that contribute to employee productivity and a strong sense of belonging.

4.5. Ratings of Hygiene Factors

4.5.1. Perception on the wages earned matching the workload

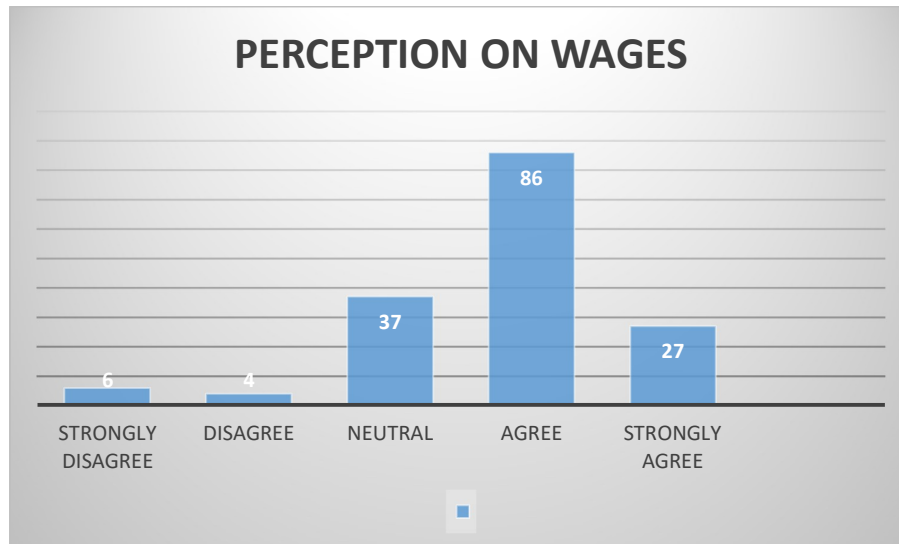


Figure 8: Bar chart showing perception on wages

Survey results (2024)

Figure 8 illustrates the results of participants' perceptions regarding their weekly wages, as summarized in a bar graph. The majority of respondents, 70, reported that they feel their wages align with their workload. This is followed by 57 of employees who were uncertain about the correspondence between their wages and workload. Additionally, 30 of employees strongly agreed that their wages reflect their workload, while 2 strongly disagreed and 1 disagreed with this assessment. Follow-up questions revealed that employees generally do not feel overworked and appreciate the flexibility to rest when workload is light, yet they continue to receive their full pay. According to Harpen et al., (2005), there is a positive relationship that exists between wages and employee performance. If the workers are happy with their wages, they are most-likely to enjoy doing their tasks.

4.5.2. Perception on conflicts between employees being easily resolved.



Figure 9: Bar chart showing perception on conflict resolution

Survey results (2024).

Conflicts between employees can act as a delaying factor to completion of tasks in an organisation, more especially when the people who are not in good terms have to be working on the same tasks. This is the reason why it is important for the manager to teach their employees how to resolve issues immediately before matters get worse and productivity is affected. Figure 9 above shows how farm workers feel about the conflict resolution process in their organisations. Majority of the employees agree that conflicts are usually easily resolved in their organisations, with 91 employees of them who agreed and 37 employees who strongly agreed, followed by 24 of employees are uncertain, 5 who disagreed and 3 who agreed. On the follow-up questions, the employees expressed how their respective organisations don't condone conflict and that has helped in them maintaining positive relationships with their fellow farm workers. Those that didn't agree did not comment on the follow-up questions.

4.5.3. Perception on methods used to deliver training being clear.

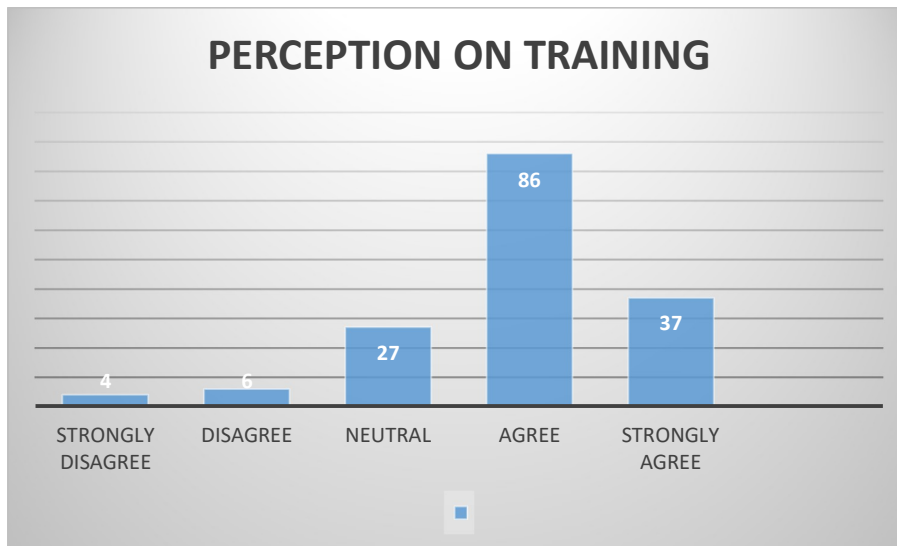


Figure 10: Bar Chart showing perception on training

Source: Survey results (2024).

For employees to perform tasks according to the requirements they need to have had some form of training. Without proper training, employees are most-likely to make mistakes or not complete their tasks thus it is important that the methods used by the supervisor to deliver training or inductions are clear for the employees to follow/understand. Figure 10 above represents the results of the participants' (farm workers) perception on the methods used to deliver training where 86 agreed to training methods being clear, 37 strongly agreed, 27 were uncertain, 6 disagreed and 4 strongly disagreed. From the follow-up questions, participants who said the training methods are not clear stated that they never really get trained for their duties and that sometimes affects the pace in which they do tasks because they are never really sure of how to their tasks and it ends up taking long for them to master the skill.

4.5.4. Perception on compensation (bonuses) for employees.

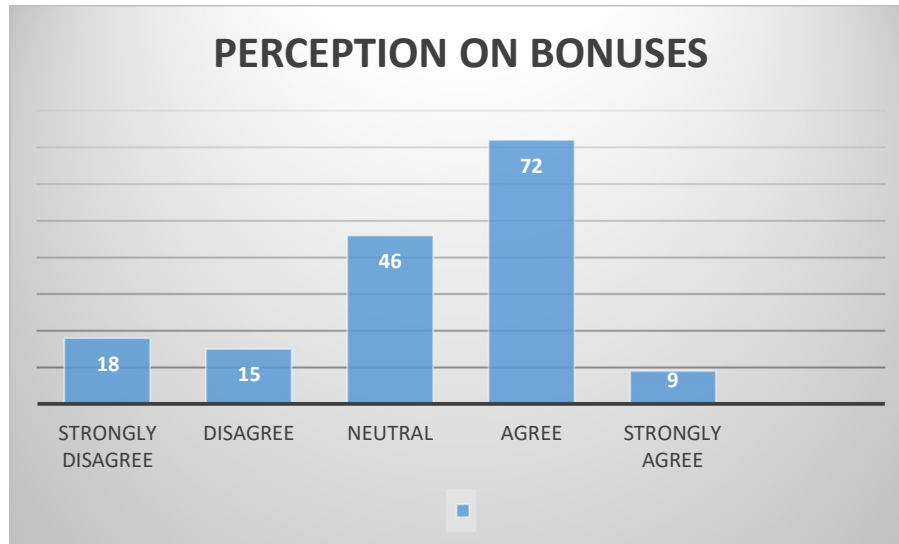


Figure 11: Bar Chart showing perception on bonuses

Source: Survey results (2024).

In most cases rewards are the main factor that makes employees want to improve their performance. Employees tend to love their jobs when they see more income. Figure 11 show the results of the participants' view about bonuses in their respective organisations. 72 of the farm workers said they get bonuses in their organisations, 46 also strongly agreed to this, 18 however were uncertain while 15 strongly disagreed with 9 that disagreed. Most participants supported their responses by saying that they get bonuses in December and also sometimes get an opportunity to receive crates of oranges around May to enjoy with their families. They further explained that this is one of the things that makes them love their jobs and continue performing well.

4.5.5. Perception on equipment being safe to use.

Perception on Equipment	Frequency	Percentage
NEUTRAL	8	5
AGREE	86	53.8
STRONGLY AGREE	66	41.3
Total	160	100

Table 5: Showing farm workers' perception on equipment used

Source: Survey results (2024)

The safety of employees is very important and if the equipment that they are using on a daily basis to perform tasks is unsafe or is in a bad condition then the tasks performed by the employees will not be of satisfactory. The table above shows results from the participants regarding the equipment they use in the farms. None of the employees said the equipment is not safe and only 5% of them is uncertain. 53.8% of the employees agreed that the equipment is safe and 41.3% strongly agreed to this. The 5% participants supported their responses by saying that they don't get to use any form of machinery thus their response is neutral.

4.5.6. Perception on Sense of Belonging

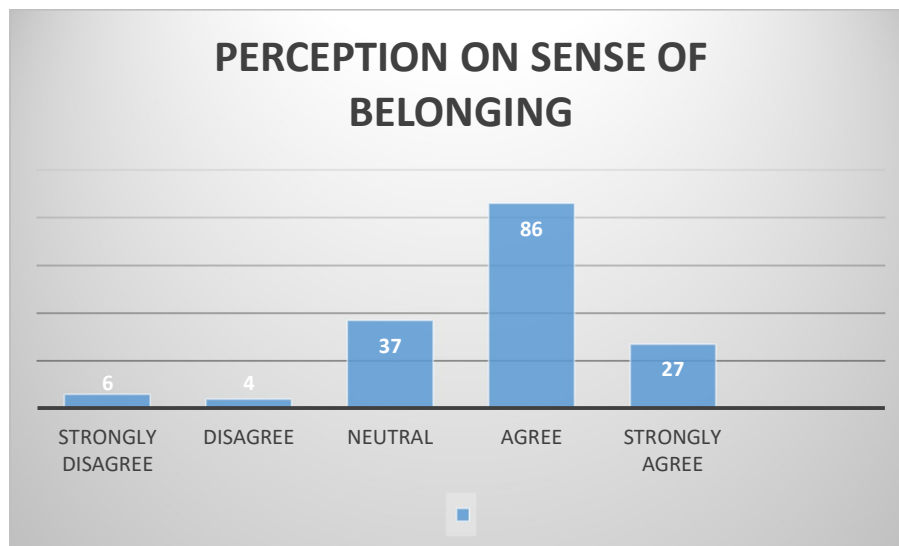


Figure 12: Bar Chart showing perception on sense of belonging

Source: Survey results (2024)

The results reveal that 37 of respondents were neutral about their sense of belonging within the farm organization, while 4 disagreed and 6 strongly disagreed with the notion of feeling a sense of belonging. In contrast, 86 agreed, and 27 strongly agreed that they felt a strong sense of belonging.

The data suggests that a majority of employees feel a sense of belonging, which is crucial for fostering job satisfaction and responsibility. Employees who are actively involved in organizational activities are more likely to view their jobs as their own responsibility and strive to enhance their skills. This aligns with research indicating that employee involvement in organizational processes contributes to a greater sense of belonging and improved performance (Smith, 2020). When employees feel integrated into their work environment, they are more motivated to perfect their skills and take ownership of their roles, which positively impacts their overall performance and commitment to the organization.

4.6. Ordinal Logistic Regression analysis of factors affecting farm workers' performance

Questions were asked regarding factors that are believed to affect employees' overall performance and an ordinal logistic regression analysis was ran to find the relationship that exists between the selected variables/factors and farm workers' performance.

Table 6: Showing an Ordinal logistic regression analysis of factors affecting farm workers' performance

Variables	Estimate	Std. Error	Sig.
Age	-0.118	0.221	0.020**
Gender	-0.231	0.319	0.017**
Work Experience	-1.3	0.36	0.001**
Position	-0.683	0.846	0.419
Workload	0.957	0.389	0.014**
Working environment	-1.01	0.607	0.096
Incentives	1.955	0.469	0.001**
Number of Observations	160		
R ²	0.667		
Adjusted R ²	0.637		

**p<0.05;

Source: Survey (2024)

Table 7 above shows the results of the ordinal logistic regression analysis that was performed to check the relationship that exists between employee performance and a number of factors in a farm organisation. The results of the model, presented in Table 7, includes data from 160 farm workers. The R² value is 0.467, indicating that approximately 46.7% of the variance in the dependent variable (e.g., worker performance) is explained by the independent variables in the model. The Adjusted R² value is 0.437, which accounts for the number of predictors and provides a more accurate measure of model fit. This suggests that the model has a moderate level of explanatory power, though some variability in worker performance remains unexplained by the included predictors.

The value of the age coefficient is negative (-0.118), this suggests that as the farm workers get older their performance tend to decrease. Therefore, age has a negative impact on performance. The value of gender also shows a negative coefficient of -0.321. These results indicate that the higher the gender (male) the more their performance tends to decrease. In simple terms, females tend to be more productive as compared to males, this is due to the fact that the study shows a greater number of female participants (farm workers) as compared to male participants.

With work experience, the coefficient is also negative (-1.330). These results show that when the work experience is less the performance of the farm workers decreases. Thus, the lower the years of experience in citrus farming, the lower the performance of the employees. The results also show that work experience is statistically significant ($p\text{-value} < 0.001$). Therefore, there is a positive relationship that exists between work experience and employee performance. The higher the experience the higher the performance of employees. The value of coefficient of position is also negative (-0.683). These results can be interpreted by saying that an increase in the number of full-time farm workers doesn't result in an increase in performance. From the findings of this study, majority of employees are part-time thus it is not expected for fewer permanent employees to be the drive of high performance in the organisation.

Workload shows a positive coefficient value of 0.957. As per the question that was asked the participants, they had to answer whether or not the workload makes them less productive. The coefficient value tells us that workload does not make the employees less productive, thus it has a positive impact on performance. In simple terms, the more the employees find workload manageable the higher their performance rate. The p-value of workload is statistically significant ($p\text{-value} = 0.014$). Thus, there is a positive relationship that exists between a manageable workload and employee performance.

Then we have working environment which has a negative coefficient value of -1.010. With the question being asked of whether or not the working environment is enabling, the results show that with an increasing number of employees that find the working environment enabling, there is an increase in employee performance. Working environment's p-value also shows that it is statistically significant at 0.096.

Lastly the results show a positive coefficient value of incentives. Participants were asked whether or not they receive incentives in the organisation. With the responses that they gave, the results can be interpreted by stating that when there is an increase in incentives the performance of farm workers also increases. Incentives' p-value is also statistically significant ($p\text{-value} < 0.001$). This can be interpreted by saying that a positive relationship exists between incentives and employee performance. When there is an increase in incentives the employees may improve and increase their performance.

4.7 Chapter summary

This chapter presents the analysis of data collected from 160 farm workers through questionnaires, focusing on various socio-economic characteristics and their impact on productivity. The data collection involved 45 questions, with a notable emphasis on the age distribution, gender composition, marital status, household size, disability, education level, work experience, and work positions of the participants. The analysis reveals that the majority of farm workers are aged between 26 and 30, with a higher percentage of females (57.5%) compared to males (42.5%). A significant portion of the workforce is single (81.3%) and lacks formal education (92.5%), while most work part-time (96.3%) with 1% reporting disabilities.

Further examination of farm workers' perceptions regarding workplace factors reveals insights into their satisfaction with hygiene and motivational aspects. The majority of participants find their workload manageable and recognize that their contributions are acknowledged, which positively influences their motivation. The involvement in decision-making and a supportive working environment also play critical roles in enhancing job satisfaction and productivity. Notably, factors such as fair wages, effective conflict resolution, clear training methods, and safe equipment use are positively perceived by most workers, contributing to their overall sense of belonging and performance.

The ordinal logistic regression analysis highlights several key factors affecting farm workers' performance. It indicates that older age and lower work experience negatively impact performance, while a manageable workload and incentives have a positive effect. The study finds that while gender and work position do not significantly influence performance, the positive relationship between incentives and productivity underscores the

importance of motivation in enhancing farm workers' performance. This comprehensive analysis offers valuable insights for improving farm operations and addressing factors that influence employee effectiveness.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This section presents the key findings of the research along with the conclusions drawn and recommendations for further inquiry. The study examined the influence of hygiene and motivational factors on the job performance of citrus farm workers in the Sarah Baartman District of the Eastern Cape. Its central focus was to determine whether the working environment contributes to employee performance within farm organisations.

Data for the study were obtained from both primary and secondary sources. Questionnaires were used as the primary data collection tool, as they enabled respondents to express their views on the subject. A convenience sampling approach was applied, with 160 farm workers participating in the survey. The data collected were analysed using SPSS. The results indicated that both hygiene and motivational factors play a significant role in influencing employee performance. In this particular case, these factors were found to have a positive effect on farm workers' productivity, largely because organisations in the area maintain a balance between ensuring worker satisfaction and fostering high levels of performance.

5.2. Summary of the Main Findings

The study revealed that the hygiene and motivational factors had an impact on citrus farm workers' performance as far as respondents are concerned. The study found that, majority of the employees are actually happy with the working environment in their organisation. They feel a sense of belonging due to their involvement in the decision-making process. The study also found that most farms in the study area believe in harmonious relationships between employees and the employers, that's the reason why most participants show that they are comfortable with their jobs.

Most workers also showed that they are pleased with their wages, of which is not always the case with farm workers. This information proved that farm workers can still earn what they deserve as long as their employers are considerate. Also, on a follow up question about their satisfactory with the wages they earn the participants stated that with respect to the workload they receive on a daily basis, the income matches the work.

It was also found that, the organisations to some extent have fairly treated employees by rewarding them for performing well, giving them an opportunity for growth by promoting them from seasonal workers to full-time employees. These findings suggest that there are

many ways to motivate employees to perform well and rewarding employees can also benefit the organisation because every employee will always work hard to get rewarded.

Although there is a greater number of employees who are satisfied with their work, there is a generous amount of those who aren't really satisfied with their work dynamics. By the look of things and the responses received, employees will improve their performance if the problems identified during the research are tackled by the management. Some of the problems that were identified were flexibility of working environment, supervisor's interpersonal relationship with the workers, presence of job aid, the use of performance feedback and improve of work incentives in the organisations so that to motivate employees to perform well. These problems aren't too hard to solve because already we have a high number of employees who are satisfied therefore it is possible for other organisations to also prioritise their employees' needs for the improvement of performance and productivity.

5.3 Conclusion

The working environment is a critical factor in encouraging employees to deliver on their responsibilities. While financial incentives remain important, they are often insufficient on their own to sustain the level of performance required in today's highly competitive business context. For organisations, the ability to attract, retain, and motivate high-performing staff has therefore become increasingly essential. Findings also suggest that employee performance can improve when management actively addresses workplace challenges highlighted through research. As a result, both hygiene and motivational factors were found to have a positive impact on workers' productivity and performance. This puts a responsibility on organisations to create supportive working environments that promote comfort and efficiency, and therefore improve the overall task performance.

5.4. Recommendations

According to the findings of this study, a number of recommendations are required to help improve the performance and satisfaction of citrus farm workers in the Sarah Baartman District. Firstly, management should allow employees to consult and be involved in the decision-making processes. When workers are allowed to share their opinions before organisational decisions are made, they can then feel a sense of ownership and belonging,

and this can encourage them to share more ideas. Additionally, involving employees in decision-making can help them feel satisfied and be productive.

Another area that needs improvement is training and development. The study shows that there's still more work in needed to be done in training although high-performance is expected and therefore full training programs should be introduced to better workers' skills. Regular and targeted training will help workers perform their tasks better and adapt to new technologies or methods. The employees' wages need to match their work experience and the amount of work the put in. Recognition in terms of incentives can also go a long way. This can motivated workers to keep improving their productivity and they will in turn feel satisfied with their jobs.

In addition, management must consider starting to look into different ways in which they can solves issues and address complaints that may come from the employees, whether it's personal issues or conflicts with their colleagues.

It is also very important to create a supportive working environment. Management has to focus on making the working environment adaptable so that the workforce may have their needs met. Building a culture of trust and respect, avoiding micromanagement, and maintaining professionalism will improve employee commitment and performance. The study also highlights the impact of age and work experience on performance. Given that performance seem to weaken with age while less experienced workers have lower performance rate, management need to try to implement specific solutions or strategies for different age groups and experience levels. Considering mentorship programs could help with bridging the gaps in experience and improving performance as a whole.

It is highly important to effectively manage the workload of employees in order to maintain productivity. Management has to make sure that the amount of work given to employees is manageable and fairly distributed. Providing enough support and resources to help workers handle their tasks efficiently will help to improve productivity.

Workers can never be as productive if the equipment they are using is not safe for them, hence it is very important the machinery is constantly checked to ensure the safety of the workers. To add to that, training methods should be clear and effective to help workers perform their tasks correctly. Lastly, allowing workers to feel a strong sense of belong is very important for job satisfaction and performance. Management should create an inclusive

and supportive work culture that puts employees into organizational activities and make sure that their contribution is seen.

In conclusion, addressing these recommendations can lead to a great improvement in the performance and satisfaction of farm workers in the citrus industry. By focusing on enhanced consultation, effective training, fair compensation, supportive work environments, and recognition, organizations can have a more motivated and productive workforce. Putting these kind of measures into place can significantly improve the sustainability of the citrus industry.

5.5. Suggested Areas for Further Study

This study doesn't look at all the citrus farms in the Eastern Cape province, let alone the country. Other researcher could try to look at other provinces and districts that produce citrus, not just in the Eastern Cape but in other provinces too. It would also be great to hear of the workplace dynamics of other produce too. Such research would really help with the farm business development of our country.

REFERENCES

- Acharya, A.S., Prakash, A., Saxena, P. & Nigam, A., 2013. Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), pp.330–333. <https://doi.org/10.7713/ijms.2013.0032>
- Ahuja, R., 2010. *Research Methods*. New Delhi: Rawat Publications.
- Alfes, K., Arslan, A., Buil, I., Dhir, A., et al., 2022. Employee performance: quantitative and qualitative outcomes. *SA Journal of Human Resource Management*.
- Alshmemri, M., Shahwan-Akl, L. & Maude, P., 2017. Herzberg's two-factor theory. *Life Science Journal*, 14(5), pp.12–16.
- Bakker, A.B., Albrecht, S.L. & Leiter, M.P., 2011. Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), pp.4–28.
- Bhandari, D., 2020. Designing and analyzing a Likert scale: Guide and examples.
- Bhardwaj, P., 2019. Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, 5(3), p.157. https://doi.org/10.4103/jpcs.jpcs_62_19
- Bryant, M.T., 2004. *The Portable Dissertation Advisor*. Thousand Oaks, CA: Corwin Press.
- Bryman, A., 2016. *Social Research Methods*. 5th ed. Oxford: Oxford University Press.
- Brown, A., 2022. South African citrus industry: Strategies for growth and sustainability. *Journal of Agricultural Economics*, 74(3), pp.456–471.
- Brown, J.D., 2001. *Using Surveys in Language Programmes*. Cambridge: Cambridge University Press.
- CACADU Development Agency, 2022. *Economic Investment Opportunity Portfolio in the Sarah Baartman District*.
- Calabrese, R., 2006. *The Elements of an Effective Dissertation and Thesis: A Step-by-Step Guide to Getting It Right the First Time*. Lanham, MD: Rowman & Littlefield Education.
- Carroll, A.B. & Brown, J.A., 2018. Corporate social responsibility: A review of the literature and research agenda. *Business & Society*, 57, pp.87–136.
- Chisoro, S. & Roberts, S., 2021. Industry associations as growth coalitions: Lessons from South Africa's citrus industry.
- Chisoro-Dube, S., Paremoer, T., Jahari, C. & Kilama, B., 2018. Growth and development of the fruit value chain in Tanzania and South Africa. *CCRED Working Paper* 2018/5.
- Cole, M.M., 1954. The growth and development of the South African citrus industry. *Geography*, 39(2), pp.102–113. Available at: <http://www.jstor.org/stable/40564572> [Accessed 28 Sept 2025].

- Creswell, J.W., 2013. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 3rd ed. Thousand Oaks, CA: SAGE Publications.
- Creswell, J.W. & Creswell, J.D., 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Thousand Oaks, CA: SAGE Publications.
- De Beer, J., 2019. The role of farm workers in the South African citrus industry. *Agrekon*, 58(2), pp.138–154.
- D'Eredita, M.A. & Barreto, C., 2006. How does tacit knowledge proliferate? An episode-based perspective. *Organization Studies*, 27(12), pp.1821–1841.
- Dörnyei, Z., 2007. *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Dul, J. & Ceylan, C., 2011. Work environments for employee creativity. *Ergonomics*, 54(1), pp.12–20.
- Fife-Schaw, C., 2006. Questionnaire design. In Breakwell, G.M. et al. (eds.) *Research Methods in Psychology*. 3rd ed. London: Sage.
- Galperin, B.L. & Burke, R.J., 2006. Uncovering the relationship between workaholism and workplace deviance: An exploratory study. *International Journal of Human Resource Management*, 17, pp.331–347.
- Ghafari, M., Cheraghi, Z. & Doosti-Irani, A., 2017. Occupational risk factors among Iranian farmworkers: A review. *Epidemiology and Health*, 39, e2017027.
- Grant, A.M., 2008. Does intrinsic motivation fuel the prosocial fire? *Journal of Applied Psychology*, 93(1), pp.48–58.
- Herpen, M.V., Praag, M.V. & Cools, K., 2005. The effects of performance measurement and compensation on motivation: An empirical study. *De Economist*, 153(3), pp.303–329.
- Herzberg, F., 1959. *The Motivation to Work*. New York: John Wiley & Sons.
- Ibrahim, I.W., Ghazali, I.M., Abdullah, S.A.S., Rahmat, N.H., Hamid, M.H.A. & Azhari, S.H.A., 2023. Exploring motivation for learning using Herzberg's Two Factor Theory. *International Journal of Academic Research in Business and Social Sciences*, 13(3), pp.1065–1083.
- Johnson, M., 2019. Challenges facing the South African citrus industry. *Journal of Crop Improvement*, 33(2), pp.123–136.
- Jones, R., 2020. South Africa's citrus exports to Asia on the rise. *FreshFruitPortal.com*, 16 September. Available at: <https://www.freshfruitportal.com/news/2020/09/16/south-african-citrus-exports-to-asia-on-the-rise> [Accessed 28 Sept 2025].
- Kabir, S.M.S., 2016. *Methods of Data Collection: Basic Guidelines for Research*.
- Kemp, S., Hollywood, T. & Hort, J., 2009. *Sensory Evaluation: A Practical Handbook*. Oxford: Wiley-Blackwell.

- Merriam, S.B., 2009. *Qualitative Research: A Guide to Design and Implementation*. San Francisco: Jossey-Bass.
- Miles, D.A. & Scott, L., 2017. Workshop: Confessions of a Dissertation Chair Part 1: The six mistakes doctoral students make with the dissertation. *5th Annual Black Doctoral Network Conference*.
- Moyce, S.C. & Schenker, M., 2018. Migrant workers and occupational health. *Annual Review of Public Health*, 39, pp.351–365.
- Neuman, W.L., 2013. *Social Research Methods: Qualitative and Quantitative Approaches*. 7th ed. Boston: Pearson.
- Oliver, J., 2020. UGA citrus greening survey results (Spring 2019).
- Pandey, P. & Pandey, M.M., 2015. *Research Methodology: Tools and Techniques*. Bridge Center.
- Pearson, D. & Vossler, A., 2016. Methodological issues in focus group research. *Counselling Psychology Review*, 31, p.1.
- Quandt, S.A., Arcury, T.A., Austin, C.K., Cabrera, L.F., Chen, H., Galván, L., ... & Laurienti, P.J., 2020. Occupational health outcomes among farmworkers. *Journal of Occupational and Environmental Medicine*, 62(6), pp.425–432.
- Rahi, S., 2017. Research design and methods: A systematic review. *International Journal of Economics & Management Sciences*, 6(2), pp.1–5. <https://doi.org/10.4172/2162-6359.1000403>
- Richard, A., 2012. *Job Satisfaction from Herzberg's Two Factor Theory Perspective*. Munich: GRIN Verlag GmbH.
- SA Fruit Journal, 2007. History of citrus in South Africa: Dates of interest. *SA Fruit Journal*, October/November.
- Samwel, 2018. Performance appraisals and meeting job expectations.
- Sapada, T., 2017; Sarini, Y., et al., 2020. Definitions of employee performance in terms of quality and quantity.
- Schotte, B.R.J., 1996. Farm workers and alcohol use or misuse. University of Cape Town.
- Silverman, D., 2010. *Qualitative Research*. London: Sage.
- Smith, J., 2020. *The Importance of a Positive Work Environment*. London: Academic Press.
- Smith, J., 2021. History of the South African citrus industry. In: Singh, M.K. (ed.) *Citrus Production: Global Perspectives and Future Challenges*. Cham: Springer, pp.45–57.
- Singh, S., 2003. Simple random sampling. In: *Advanced Sampling Theory with Applications*. Springer, pp.71–136.
- South African Department of Agriculture, n.d. *Citrus*. Available at: <https://www.daff.gov.za/daffweb3/> [Accessed 28 Sept 2025].

- South African Revenue Service (SARS), 2021. *Taxation of the Agricultural Sector*. Pretoria: SARS.
- Taherdoost, H., 2021. *Handbook on Research Skills*.
- Munzner, T., 2018. Process and pitfalls in writing information visualization research papers. Available at: www.cs.ubc.ca [Accessed 28 Sept 2025].
- Thomas, L., 2023. Stratified sampling: Definition, guide & examples. *Scribbr*, 22 June.
- Tripathy, S.P., 2014. Impact of motivation on job performance. *Paripex-Indian Journal of Research*, 3(5), pp.1–5.
- Tshuma, M.C., 2014. Understanding the small-scale agricultural sector as a precondition for rural development. *African Journal of Agricultural Research*, 9, pp.2409–2418.
- University of Pretoria, 2014. *Citrus*. Available at: https://www.up.ac.za/faculty-of-natural-and-agricultural-sciences/news/post_2052688-citrus [Accessed 28 Sept 2025].
- Vartanian, T.P., 2010. *Secondary Data Analysis*. Oxford: Oxford University Press.
- Yost, M.A., Kitchen, N.R., Sudduth, K.A., et al., 2017. Long-term impact of a precision agriculture system on grain crop production. *Precision Agriculture*, 18, pp.823–842. <https://doi.org/10.1007/s11119-016-9490-5>

APPENDIX

6. LETTER OF CONSENT

Department of Agriculture
Cell: 0716806145
E-mail: khananimaluleke1@gmail.com

TO WHOM IT MAY CONCERN

I, Khanani Karen Maluleke of student number 231238312, a Master of Agriculture student at Cape Peninsula University of Technology have completed my research proposal on **“THE IMPACT OF HYGIENE AND MOTIVATIONAL FACTORS ON JOB PERFORMANCE OF CITRUS FARM WORKERS IN SARAH BAARTMAN DISTRICT, EASTERN Cape Province”** As such, I am ready to collect data in your area, that is, Sarah Baartman Municipality. The University is in support of my request and hoping for the participation of your farm organization. Commencement of data collection is February until July 2024. This study is important for me to complete my Master’s degree in Agriculture this year, that is, 2024 academic year.

13/01/2025
Khanani Karen Maluleke

Farm manager’s signature:

7. CONSENT FORM

CONSENT FORM TO BE COMPLETED BY ALL THE RESPONDENTS.

CONSENT FORM		
Cape Peninsula University of Technology		
Department of Agriculture		
Topic: THE IMPACT OF HYGIENE AND MOTIVATIONAL FACTORS ON JOB PERFORMANCE OF CITRUS FARM WORKERS IN SARAH BAARTMAN DISTRICT, EASTERN Cape Province		
The consent form is designed to check that you understand the purposes of the study, that you are aware of your rights as a participant, and to confirm that you are willing to take part. Should you be unhappy about how the study is conducted, you can report the case to CPUT research ethic chair: Prof Sjirk Geerts (geertss@cput.ac.za).		
Please tick as appropriate		
	YES	NO
The nature of the study has been described to me.		
I have received sufficient information about the study for me to decide whether to take part.		
I understand that I am free to refuse to take part if I wish		
I understand that I may withdraw from the study at any time without having to provide a reason		
I know that I can ask for further information about the study from the research team.		
I understand that all information arising from the study will be treated as confidential.		
I know that it will not be possible to identify any individual respondent in the study report, including myself.		
I agree to take part in the study		

Signature:	Date:		
Name in block letters, please:			
I confirm that quotations from the interview can be used in the final research report and other publications. I understand that these will be used anonymously and that no individual respondent will be identified in such report.			
Signature:	Date:		
Name in block letters, please:			

8. QUESTIONNAIRE

Cape Peninsula University of Technology

Department of Agriculture

Faculty of Applied Science

SECTION A: SOCIO-ECONOMIC FACTORS.

A1. Age group:

18 – 25		26 - 30		31 - above	
---------	--	---------	--	------------	--

A2. Gender

Male	
Female	

A3. Marital status:

Single	
Married	

A4. Household number:

1 – 4		5 – 9	
-------	--	-------	--

10 – More	
-----------	--

A5. Any Disability:

Yes	
No	

A6. Educational level:

Formal Education:

No Formal Education:

A7. Working experience:

1- 3years		4-6year		7-More	
-----------	--	---------	--	--------	--

A8. Position:

Full-time	
Part-time	

SECTION B: FARM WORKERS’ Opinion on factors that affect performance.

- B.** For each of the following questions in this section, please put a cross (x) on the number that represents your choice of level of agreement or disagreement.

Strongly Disagree = 1, Disagree= 2, Uncertain= 3, Agree= 4, Strongly Agree=5

	MOTIVATION					
No.	Statements	1	2	3	4	5
1	Your wages match your experience					

2	Recognitions are there for best performing employees					
3	Compensation (bonuses) are available for employees					
4	Opportunities such as promotions exist for employees					
	WORKING ENVIRONMENT					
1	My working environment gives me sense of belonging					
2	My working environment makes me feel free to share ideas on improving productivity					
3	The emotional climate of the organization is generally positive and supportive					
4						
	TRAINING					
1	We attend orientation when we're still new at the job					
2	We get trained on how to use new equipment					
3	The methods used to deliver the training are clear					
4	Fellow employees who are incompetent are identified and given special training					
5	Competent employees are offered trainings that give them the opportunity to get promoted					
	SUPERVISION					
1	I am comfortable with the supervisor's leadership style					
2	The supervisor is patient with employees when teaching them a new skill					
3	The supervisor makes time to resolve conflicts between employees					
4	The supervisor motivates employees by being clear with his/her instructions and guidance					
	ORGANIZATIONAL CULTURE					
1	I am happy with how decisions are made in the organisation					
2	I am comfortable with the communication style of the organisation					

3	The employees in the organisation are involved in decision making process					
4	I am comfortable with how we are treated as employees					

SECTION C: FACTORS THAT INFLUENCE THE PRODUCTIVITY OF FARM WORKERS IN THE FARM ORGANISATION.

C. Below are questions on factors that influence farm workers productivity.

C1. Do you think certain factors have an impact on your productivity?

Yes	0
No	1

If yes, proceed to C2.

C2. Are the daily tasks you are given easy to do?

Yes	0
No	1

C3. Do you think the workload makes you less productive?

Yes	0
No	1

C4. If yes, how does it make you less productive?

C5. Are you satisfied with how the transportation works?

Yes	0
No	1

C6. If no, do you think it somehow affects your productivity? If Yes, proceed to C8.

Yes	0
No	1

C7. If yes, in which way does it affect your productivity?

C8. Are there good communication channels in the organisation?

Yes	0
No	1

C9. Are you able to communicate your concerns with your leader?

Yes	0
No	1

C10. If yes, how does that positively affect your productivity?

C11. If No, how does it negatively affect your productivity?

C12. If you stay in the farm, are you happy with the living conditions?

Yes	0
No	1

C13. Do you think the living conditions somehow affect your productivity in the farm?

Yes	0
No	1

C14. If yes, how so?

C15. Do inductions and trainings have an impact on your productivity?

Yes	0
No	1

C16. If yes, what kind of impact does it have?

C18. Is the working environment enabling?

Yes	0
No	1

C19. Does the state of your working environment affect your productivity in any way?

Yes	0
No	1

C20. Are there incentives in your organisation?

Yes	0
No	1

C21.1. If yes, do they have a good impact on your productivity?

Yes	0
No	1

C21.2. If no, do you think they would positively influence your productivity if they were there?

Yes	0
No	1

C22. How would you rate your overall performance in the past year?

Poor	1
Fair	2

Good	3
Very good	4
Excellent	5

4. RESEARCH PLANNING

Table 7: Time-plan for completion of research report by Khanani Karen Maluleke

	Date	Date	Date	Date	date	Date	Date
Finalise proposal	01 January 2024						
Gain approval							
Gather data		30 March 2024					
Do data analysis			31 April 2024				

Write report					30 June 2024	12 July 2024	
Finalise report							27 August 2024

4.2. Consistency Matrix

Table 8: Consistency matrix

Research problem stated here					
Sub-problem	Literature Review	Hypotheses or Propositions or Research questions	Source of data	Type of data	Analysis
Actual sub-problem 1 stated fully as in the text	List the most important references that you referred to when writing the literature review for sub-problem 1.	Actual Hypothesis 1 OR proposition 1 OR research question 1 stated here in exactly the same words as in the text of the proposal, and based on the literature that you reviewed in the previous step	Actual interview / questionnaire questions that will provide the data, preferably in words Or other specific sources of data, eg stock exchange	Note the type of data, eg nominal, ordinal, etc	Describe the specific analysis method you will use
Actual sub-problem 2 stated fully as in the text	List the most important references that you referred to when writing the literature review for sub-problem 2.	Actual Hypothesis 2 OR proposition 2 OR research question 2 stated here in exactly the same words as in the text of the proposal and based on the literature that you reviewed in the previous step	Actual interview / questionnaire questions that will provide the data, preferably in words Or other specific sources of data eg stock exchange	Note the type of data, eg nominal, ordinal, etc	Describe the specific analysis method you will use.
So on if more sub-problems					

