

PERCEPTIONS OF SMALLHOLDER AND COMMERCIAL FARMERS TOWARDS THE
2018 AGRICULTURAL MINIMUM WAGE: A CASE STUDY IN BUSHBUCKRIDGE
MUNICIPALITY OF MPUMALANGA PROVINCE

By

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DECLARATION

I, Future Kubayi confidently declare that the mini-dissertation hereby submitted to the University of Limpopo (UL), for the degree of Master of Science in Agriculture (Agricultural Economics) is the result of my own work in design and execution and all the sources or materials contained herein have been duly acknowledged. I declare that this mini-dissertation has never been submitted previously by me for the award of a degree, diploma or certificate at this or any other university.

Surname & initials (title)

Date

DEDICATION

I dedicate this research project to my entire family.

ACKNOWLEDGEMENTS

Firstly and foremost, I would love to extend my sincere gratitude to my creator (GOD), by his grace I am.

I sincerely dedicate this to my supervisors Prof A. Belete and Mr L.J. Ledwaba for their exquisite and inexorable enthusiasm, guidance and patience.

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ABSTRACT

The President of South Africa signed the National Minimum Wage Act, the amendment of both the Basic Conditions of Employment Act and Labour Relations Act on Friday, 23 November 2018. These Acts, which were with effect from 1 January 2019, oblige all employers to pay at least the national minimum wage of R20.00/hr. and the agricultural sector has been given an exemption to pay 90% respectively of the national minimum wage (Truter, 2018). Employers in the farming sector are expected to pay at least R18.00 per hour to farm workers. However, farmers are different in terms of their characteristics and farming capacities, and they hold different perceptions towards the revised 2018 agricultural minimum wage. According to Sechaba (2017), it is believed that there will always be different views on what constitutes a decent and acceptable minimum wage.

This study investigated the perception of both smallholder and commercial farmers towards the 2018 agricultural minimum wage in Bushbuckridge Local Municipality of the Mpumalanga Province, South Africa. The study had three objectives; the first objective was to identify and describe the socio-economic characteristics of farmers, the second one was to assess the perception of farmers on the 2018 agricultural minimum wage and the third one was to analyse socio-economic factors influencing the perception of farmers towards agricultural minimum wage in Bushbuckridge Municipality. Purposive sampling was used to collect primary data from 160 smallholder and commercial farmers (Crop and Livestock) in Bushbuckridge Local Municipality (BLM). For empirical analysis the Multinomial Logistic Model was applied for data analysis based on information generated using the Likert scale and the two formulated assumptions; firstly, farmers do not have negative perceptions towards the 2018 agricultural minimum wage and lastly socioeconomic factors do not influence farmers' perception towards the 2018 agricultural minimum wage. For empirical analysis, Multinomial logistic regression model was run on spss and the descriptive statistics was used to analyse the perception of famers based on the rank data from the Likert scale. Results from Multinomial regression analysis indicated that demographic factors such as number of hectares, household size, age, farming experience, marital status, and labour productivity were found to be significant

(at 1, 5 and 10%) in distinguishing between pairs of groups and contribution, which they make to change the odds of being in one dependent variable group rather than the other.

About 48.8% sampled farmers in Bushbuckridge Local Municipality showed negative perceptions towards the 2018 agricultural minimum wage and were not likely to comply with the 2018 agricultural minimum wage legislation in a sense that they had not been paying the prescribed agricultural minimum wage to farm workers. Those who had positive perceptions and were willing to comply were only 15.0% and those who were uncertain on whether to comply or not comply with the 2018 agricultural minimum wage were 36.2%. Therefore, it can be concluded from results that smallholder and commercial farmers perceive the agricultural minimum wage differently and with majority of them not willing to comply or pay the prescribed amount. Additionally, several factors influences the perception on whether farmers were likely to comply or not to comply by paying the prescribed minimum wage to farm workers, based on the 2018 agricultural minimum wage. Variables: number of hectares, household size, age, experience, marital status and minimum wage were found to be significant (at different significant levels 1, 5 and 10%) in determining whether farmers were more likely or less likely to comply and pay the 2018 agricultural minimum wage. These variables plays a key role in determining farmers' decision to comply or not to comply with the 2018 agricultural minimum wage.

However, gender, minimum wage for farmers, distance to market, access to mechanisation, co-operative membership, access to news, pensioner and educational status were found to be insignificant (at different significant levels 1%, 5% and 10%) at determining whether farmers were likely to comply or not comply with the 2018 agricultural minimum wage. Thus, it is recommended that farmers, regardless of their production scale should be consulted and given a fair platform to articulate their views during the process of policy formulation. Policy makers and government should refrain from using a blanket approach when formulating a policy and taking into consideration the issue of disparities in the agricultural sector, subsectors, regions and operational scale of farmers when discussing the agricultural minimum wage policy.

Keywords: Bushbuckridge Municipality, Minimum Wage, Farmworker, Perception

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LIST OF ACRONYMS AND ABBREVIATIONS

A-H	Agri-Hub
ALA	Agricultural Labour Act
BCEA	Basic Conditions of Employment Act
BFAP	Bureau for Food and Agriculture Policy
BLM	Bushbuckridge Local Municipality
BRICS	Brazil, Russia, India, China and South Africa
COSATU	Congress of South African Trade Unions
COVID	Corona Virus Diseases
DAFF	Department of Agriculture, Forestry and Fisheries
DARDLEA	Department of Agriculture, Rural Development, Land and Environmental Affairs
DoL	Department of Labour
DPRU	Development Policy Research Unit
ESTA	Extension of Security of Tenure Act
GDP	Gross Domestic Product
GNP	Government Nutrition Programme
HRSA IIA	Human Resource Service Administration Independent of Irrelevant Alternatives
ILO	International Labour Organization
LED	Local Economic Development
LFS	Labour Force Survey
Lima	Lima Rural Development Foundation
LRA	Labour Relations Act
MEGA	Mpumalanga Economic Growth Agency

MNLM	Multinomial Logistic Regression
MNPM	Multinomial Logistic Regression Model
NDP	National Development Plan
NEDLAC	National Economic Development and Labour Council
NFI	Net Farm Income
NMW	National Minimum Wage
PHI	Post-Harvest Innovation (Program)
SARD	Sustainable Agriculture and Rural Development
SDs	Sectoral Determinations
SDF	Spatial Development Framework
SPSS	Statistical Package for Social Sciences
StatSA	Statistics South Africa
TREC	Turfloop Research Ethics Committee
UIA	Unemployment Insurance Act
UK	United Kingdom

CHAPTER 1

INTRODUCTION

1.1 Background

It is an undisputed historical fact that the transition from the Apartheid era to democratic state by South Africa has left the democratic government to inherit an economic state associated with triple social ills of unemployment, inequality and poverty. The explicit goals of the South African government are attaining both maximum employment and fair wage rates. These goals are paramount, however, trade-offs exist between these two goals and thus a fine balance has to be made between the two, ensuring that workers receive a decent wage whilst ensuring long-term financial sustainability of agribusiness, investment and ensuring a conducive environment for maximum employment (Bureau for Food and Agricultural Policy, 2018). As a member state of ILO (International Labour Organization), South Africa is compelled to implement policies addressing decent work and poverty. In order to ensure the provision of decent work to all workers as required by ILO, South Africa has decided to impose the national minimum wage.

Labour law was one of the key areas to be transformed after democratisation in order to achieve this goal. Four key aspects of legislation were put in place that aided the strengthening of workers' rights. These aspects are as follows; the South African constitution which outlines the rights of workers under section 23; the Labour Relations Act of 1995 which promotes economic development, social justice, labour peace and democracy in workplace (Department of Labour, 2015); the Basic Conditions of Employment Act 75 of 1997 (which regulates the employment conditions such as leave, termination and employment contracts as well as the Extension of Security of tenure Act 62 of 1997 which outlines procedures and limitations of eviction of workers occupying land (Bhorat *et al*, 2014).

Agricultural sector is the most prominent source of employment and earning foreign exchange in South Africa despite its meagre contribution of 2.5% to the national Gross Domestic Products (GDP). Considering the overall agricultural value chain, it is estimated

that the sector contributes 12% to the national GDP (DAFF, 2013). South Africa is the third largest agricultural producer after Nigeria and Egypt in the African continent and has by far the most productive labour force (which constitutes of owners, managers and workers at all levels). Additionally, the value added per worker is almost four times the global average, higher than any other African country and only second to Brazil amongst the BRICS countries (Brazil, Russia, China and South Africa) (ILO, 2017). In 2018, agricultural sector was the key contributor to overall Gross Domestic Products (GDP) decline for South Africa in the second quarter, where agriculture output shrank by 22.2% and decreased GDP by 0.08%. However, the sector managed to bounce back in the third quarter and recorded a 6.5% rise. In addition, the overall South African GDP also showed growth of 2.2 percent in this quarter.

Investment towards the agricultural sector is a key prerequisite in achieving several goals, which includes amongst others food security, job creation, wealth creation, and alleviation of poverty. However, South Africa is a semi-arid country ranked as the 30th driest country in the world, making the lack of enough water a key counter production towards achieving agricultural development. About 1.051 million people were employed in the commercial agricultural sector and supported four million dependents by 1992 in South Africa (Newman, Ortmann and Lyne, 1997). Moreover, the National Development Plan (NDP) (2011) of South Africa states that the agricultural sector has the potential to create further 1 million jobs of the planned 11 million by the year 2030, which is necessary to reduce poverty and social inequality. However, due to numerous external factors, the agricultural sector's contribution towards the GDP is declining, which impedes the prospect of job creation as the National Development Plan articulates it. Unfortunately, according to Visser and Ferrer (2015), only 51% of workers in the agricultural sector are permanently employed and 25% have limited-duration contracts.

Due to unprecedented unrest and strike by farm workers in the Western Cape Province towards the end of the year 2012, both employment and living conditions have received an overwhelming attention. Resulting from labour unrest, the minimum wage of farm workers was hiked from R1 503.90 to R2 273.52 in March 2013 (Department of Labour 2013), which depicts an increase of 51.26% (as per Sectoral Determination 13, as

amended). In similar fashion, minimum wage increased further to R2 420.1 in 2014, to R2 606.78 in 2015, to 2 778.83 in 2016, and to R3 001.13 in 2017 (Department of Labour 2018). These figures simply imply a cumulative wage increase of 110% from 2013 to 2018.

In South Africa, wage formation is implemented in two major ways, besides private negotiations. Firstly, wages are determined via collective bargaining that is done by bargaining councils consisting of one or two registered trade union/s and or one or more registered employer organisation/s representing a specific sector. Amongst other things, bargaining councils have the power to impose and enforce collective agreements (written agreements regarding workers' terms and conditions of employment, including wages). Secondly, in circumstances where workers are vulnerable and the collective bargaining councils have no capacity to protect farm workers due to disorganised workforce, the government can interfere by imposing a legal minimum wage (and often other conditions of employment, such as hours of work or contract requirements) at the sectoral level. Minimum wages are governed by the Employment Conditions Commission and have the explicit intention of ensuring that workers in low-paid, vulnerable occupations are guaranteed a basic subsistence income and are in some way protected in the working environment.

In March 2003, the first agricultural minimum wage was implemented in the agricultural sector in a form of Sectoral Determination 8 (changed to be Sectoral Determination 13 in 2006). According to (Merten, 2018), National Economic Development and Labour Council (NEDLAC) representing government, business and labour, reached consensus on setting national minimum wage of R20 per hour for all domestic and farm workers. However, exemption has been offered to the farming/forestry and domestic sectors for a period of two years, which allows the sector/s in question to pay 90% (for agricultural and forestry sector) and 75% (for domestic sector), respectively of the national minimum wage (DoL, 2018).

According to BFAP (2018), there are five agricultural subsectors contributing drastically towards employment of workers, these are citrus, sugarcane, grape, tomato and potato production, of which all are susceptible to the change in the minimum wage. Collectively,

these subsectors employ approximately 267 000 workers and out of this number 189 000 are seasonally employed and approximately 77 000 are permanent workers (Agriorbit, 2018).

1.2 Problem Statement

The President of South Africa signed the National Minimum Wage Act, the amendment of both the Basic Conditions of Employment Act and Labour Relations Act on Friday, 23 November 2018. These Acts, which were with effect from 1 January 2019, oblige all employers to pay at least the national minimum wage of R20.00/hr. and the agricultural sector has been given an exemption to pay 90% respectively of the national minimum wage (Truter, 2018). Employers in the farming sector are expected to pay at least R18.00 per hour to farm workers.

Bureau of Food and Agricultural Policy (2012), advocates that an increase in the minimum wage will result to a situation whereby majority of typical farms will be unable to cover their operating expenses, and hence not able to pay back borrowings or to afford entrepreneurs remuneration. It is also evident that an increase in the minimum wage may result to Negative Farm Income (NFI) and structural adjustment needs to be adopted to offset the higher wage rate. The structural adjustment may be in a form of mechanisation and consolidating farming units to become efficient.

However, farmers are different in terms of their characteristics and farming capacities, and they hold different perceptions towards the revised 2018 agricultural minimum wage. According to Sechaba (2017), it is believed that there will always be different views on what constitutes a decent and acceptable minimum wage. Hence, this study is intending to analyse the perceptions of both commercial and smallholder farmers towards the 2018 agricultural minimum wage in Bushbuckridge Local Municipality. To date there is little literature existing with regard to this problem and therefore the study intends to fill this knowledge gap.

1.3 Aim and Objectives

1.3.1 Aim of the study

The aim of the study was to determine the farmers' perceptions towards the 2018 agricultural minimum wage in Mpumalanga Province under Bushbuckridge Municipality.

1.3.2 Objectives

The objectives of the study were to:

- i. Identify and describe the socio-economic characteristics of farmers in Bushbuckridge Municipality.
- ii. Assess the perception of farmers on agricultural minimum wage in Bushbuckridge Municipality.
- iii. Analyse socio-economic factors influencing the perception of farmers towards agricultural minimum wage in Bushbuckridge Municipality.

1.3.3 Hypothesis

- i. Farmers in Bushbuckridge Municipality do not have negative perceptions towards the 2018 agricultural minimum wage.
- ii. Socio-economic factors do not influence farmers' perceptions towards the 2018 agricultural minimum wage.

1.4 Justification of the study

Understanding how farmers perceive the agricultural minimum wage is imperative in order to improve the process of policy formulation and enhance a comprehensive consultative approach, which benefits both farmers and farm workers while ensuring agricultural sustainability. The findings of the study are anticipated to educate various stakeholders and policy makers by enlightening them about the inequalities and farming disparities farmers have and the importance of agricultural farm workers in the sector. Additionally, the study would assist in terms of elucidating factors, which influence the perceptions of farmers towards agricultural minimum wage. The

study will contribute to the existing limited literature with regard to perceptions of farmers towards agricultural minimum wage in South Africa and abroad.

1.5 Outline of the study

Relevant previous studies in line with the current study are reviewed and discussed in Chapter 2. Thorough detailed description of study site, research methods and variables used for the study's objectives are outlined in Chapter 3. Chapter 4 deals with the descriptive statistics of farmers and Chapter 5 discusses empirical findings of the study using the multinomial logistic model. Finally, in Chapter 6, empirical findings are discussed and the policy recommendations are outlined.

The following chapter represent the literature review about the effects of minimum wage towards employment and farmers' perception towards it from both local and international researchers.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews different literatures concentrating on the effect of the minimum wage and the perceptions farmers have towards it in South Africa and other countries, exhibiting theories and empirical findings. In addition, this segment of the study defines the key concepts used in the study, impact of agricultural minimum wage on farmworkers' employment and the perception towards minimum wage.

2.1.1 Definition of Concepts

Farm Workers- comprises of individuals whose main employment is in agriculture or are actively engaged in the farming activities, as well as the domestic workers who work in the house in the farm. This workforce is considered underprivileged, vulnerable, least organised into trade unions, employed under poorest health, safety and environmental conditions, and the recipient of non-effective social security and protection. Additionally, they are usually hired labours who are paid piecework, hourly or daily wages (HRSA, 2015).

Perception –it refers to an opinion made concerning a matter or attribute on reception of a stimulus (Schiff, 1970).

Minimum Wage- according to International Labour Organization (1970), minimum wage refers to the “ the minimum amount payable to a worker for work performed or service rendered, within a given period which may not be reduced either by individual or collective agreement and which is safeguarded by the law ”.

2.2 Preamble

South Africa is rated among the countries where primary agriculture is still relatively labour intensive, but where the process of substituting labour by machines is already far advanced, especially in the last few years where spikes in commodity prices have boosted the profitability of crop production (BFAP, 2018). However, majority of labourers in the agricultural sector per se, are to date subjected to ill-treatment such as unfair

treatment, poor working conditions and low wages, despite the Sectoral Determination outlined to protect them. The national minimum wage is associated with merits and demerits towards the labour market in the South African economy. Thus, this chapter outline the history of South Africa's Labour Legislation, state of the agricultural sector and, both the perception and impact of minimum wage.

2.2.1 History of South Africa's Minimum Wage

The minimum wage policy was hotly debated prior its induction in the United States, rating at R0.25c/hr. in 1983. In South Africa the debate is a recent one, whilst the international literature dates as far back as the theoretical works of economists such as Stigler (1946) and Lester (1947), ensuing to the dawn of new minimum wage literature (Card, 1992; Card and Krueger, 1994, 1995; Neumark and Wascher, 1992). Post the colonisation era, the majority of the African countries introduced some of the minimum wage legislations. By the year 2008, 37 out of 50 African countries had already imposed the minimum wage framework. Historically, labour relations in South Africa were partially administrated by the Master and Servant Act (1896) and the Industrial Conciliation Act (1924) which later became the Labour Relations Act (1956).

Minimum wage in South Africa was introduced after the apartheid era by the year 1999 in the contract-cleaning sector, followed by sectoral minimal for both civil engineering and private security in 2001. Varying with other countries, South African minimum wage differs with regard to each sector, thus there is no single minimum wage. The imposed minimum wage can vary by occupation type, number of hours worked, or geographical location even within a particular sector and is well outlined in the Sectoral Determination including regulations on working hours, overtime pay and written contracts (Stanwix, 2013).

The two-tier minimum wage system was originally legislated in March 2003; the higher which was binding only for wine farmers (Conraide, 2004). Farmworkers' initial minimum wages were set at R 650pm (per month) for workers in rural areas and at R 800pm (per month) for Urban areas with plans to revisit and adjust the minimum wage upwards each year. Post introduction of the 2003 minimum wage, over 80% of farm workers were earning less than the urban minimum and over 60% were earning less than the rural minimum (Development Policy Research Unit, 'n.d.').

The agricultural minimum wage has increased by 52% from R69 per day to R105 per day ensuing major strikes and protests among farm workers across the Western Cape ten years later (Van Der Zee, 2017). Additionally, the minimum wage for farm workers moved from R1 503.90 to R2 273.52 in March 2013 (Department of Labour, 2013), which depicts an increase of 51.26% (as per Sectoral Determination 13, as amended). Following similar route, minimum wage has increased further to R2 420.1 in 2014, R2 606.78 in 2015, 2 778.83 in 2016, and R3 001.13 in 2017 (Department of Labour, 2018). These figures imply cumulative wage increase of 110% from 2013 to 2018. The minimum wage has been gradually adjusted or inflated since its inception, and in 2007 the rural minimum wage was R949pm and R1 041pm for urban areas (Stanwix, 2013). The nearly two years of negotiations by parties and stakeholders at the National Economic Development and Labour Council (NADLEC) reached a consensus that set the national minimum wage to R20 per hour with effect from 1 March 2018 (Fakir & Abdool, 2017).

2.2.2 The South African Labour Legislation and Labour Remuneration

The crucial legislative framework which governs labour relations in South Africa to date are the Labour Relations Act and the Basic Conditions of Employment Act of 1997, which exhibit the country's two major wage setting systems:

- Collective Bargaining via bargaining council
- Sectoral Determinations (SDs) published by Ministry of Labour and permits for the determination of a minimum wage for sectors/areas.

The Labour Relation Act (1995) enacted a voluntary system that stimulated a centralised bargaining while extending collective bargaining rights for both private and public sector employees. The Basic Conditions of Employment Act (1997) permits for both minimum floor of rights for all employees and, the Minister of Labour to establish Sectoral Determinations, which dictates the conditions of employment, minimum wages for vulnerable workers in a specific sector. However, the bargaining council framework has encountered several discrepancies similar to its predecessor law concerning its effectiveness and its potential to represent and cover a wide spectrum of workers and

business, enforce compliance, and manage the trade-offs between employer and employee interests (Cassim, Jourdan & Pillay, 2015).

South Africa's agricultural workers were protected initially under common legislation until the early 1990s. Later, the Extension of Tenure Act 62 (ESTA) of 1997 and the Basic Conditions of Employment Act 75 (BCEA) of 1997 were extended to cover the agricultural sector (Creamer Media, (1997), cited in Roberts & Antrobus, 2013).

In 1993, both the Basic Conditions of Employment Act 3 of 1938 (BCEA) and the Unemployment Insurance Act of 1966 (UIA) were stretched to the agricultural sector with some revisions. These Acts were followed by the amendment of Agricultural Labour Act 147 of 1993 (ALA). The BCEA (Basic Conditions of Employment Act) specifies the minimum conditions governing working conditions, hours, leave, overtime, etcetera, though the UIA (Unemployment Insurance Act) requires contributions to the Unemployment Insurance Fund. The Agricultural Labour Act (ALA) combines the BCEA (as amended for agriculture) with the agricultural amendments of the Labour Relations Act 28 of 1956 LRA.

Table 2.1: The minimum wage in the agricultural sector from 2017 to 2020.

The binding agricultural minimum wages to be paid to farm workers are outlined in Table 2.1 in these subsequent years starting from the year 2017 to 2020.

Date of Inception	Monthly	Weekly	Daily	Hourly	% Increase
28/02/2017	2778.83	641.32	128.26	14.25	
01/03/2018	3169.19	731.41	146.28	16.25	14.0
01/01/2019	3499.20	810.00	162.00	18.00	10.7
01/05/2020	3900.00	900.00	180.00	20.00	11.1

Source: Department of Labour (2018)

Table 2.2: Top ten highest employing industries in South African agricultural sector

	Permanent	Seasonal	Total
Citrus	10 200	75 000	85 200
Sugar Cane	7 560	70 875	78 435
Grapes (Table & Dry)	20 478	18 903	39 381
Tomatoes	33 284		33 284
Potatoes	5 972	24 885	30 857
Wine grapes	24 136	6 034	30 170
Apples	14 248	13 152	27 400
Pineapples	15 858		15 858

Source BFAP (2012)

2.3 The State of the Agricultural Sector in South Africa

It is imperative and befitting to present a profound background of South Africa's Agricultural industry in order to have a clear understanding of the current state of the agricultural labour market, particularly with regard to the legislation. The agricultural sector is regarded as the main source of both employment and food security in the economy of South Africa in particular, and Africa as a whole. However, agriculture is the lowest paid sector in South Africa and has strongly showed adverse trends of shedding jobs, casualisation of labour, consolidating farm units into commercialisation, and decline in social wage over the past 50 years.

Sandrey *et al.*, (2011) and Visser and Ferrer (2015) have broken down the complexities of the regulatory reform system in South Africa's agricultural sector. According to Visser and Ferrer (2015), prior 1948 ample and overwhelming state support was imposed in favour of white commercial farms in South Africa. For example, Acts such as the Land Act of 1913, Natives Trust and Land Act of 1936 have left the vast majority of black South

Africans disadvantaged by confiscating their fertile and productive land, and leaving them with only 7 and 14% of the farmland. The Native Land Act has deterred Africans to engage in farming activities as well as sharecropping and cash rentals outside the designated arrears (De Villiers, 2003). Moreover, other governmental legislation and institutions were rendering support to white farmers who were occupying majority of the fertile and productive agricultural land were in existence.

Sources of both credit and financial services for white farmers in particular were made available via the Agricultural Credit Board and Land Bank of South Africa. There was also an establishment of network for primary producers' cooperatives through Cooperative Society Act, bargaining for relatively cheap inputs and services, such as transport and storages for the industry. Finally, the Agricultural Marketing Act permitted the Controlling Boards to regulate the movement, price setting, monitoring, quality standards and trade of agricultural products. These boards were imperative in the export of agricultural product, particular by also setting high export prices deliberately (Visser and Ferrer, 2015).

Thus, it is evident that there was an overwhelming state support and protection for commercial farming in the 1970s, which was highly and racially segregated and benefiting mostly the whites (Sandrey *et al.*, 2011). Early in the 1980s, the state began to recede its support for commercial farmers and the industry was experiencing unprecedented changes in terms of market regulation. The market deregulation process was therefore powered by the dawn of a new democratic era in 1994, and the state support for white farmers vanished. South Africa's protectionist tariffs reduced drastically following the 1994 Uruguay Round of Negotiations of the World Trade Organization, where tariffs declined below that which was required by the Uruguay Round Agreement. Furthermore, the scrapping of the General Export Incentive Scheme by the government in 1997 has resulted in the demise of many agricultural subsidies (Visser and Ferrer, 2015).

While existed an ongoing major withdrawal of protection in the farming industry by the government from 1980's, on the other hand existed a different but key intervention by the government in 1990's. Beforehand, the agricultural sector had limited labour regulations governing it, but both the Basic Conditions of Employment Act of 1983 and

Unemployment Insurance Fund in 1993 have brought about a paradigm shift to the sector as it was adopted to protect farm workers.

However, having these Acts being imposed to the agricultural sector, to date the majority of farm workers do experience ill-treatments and exploitation rather than protection by the labour legislation. The establishment of the Basic Conditions of Employment Act 75 of 1995 has brought about a change for farm workers, when they were covered for the first time in the labour legislation and were equally treated same as other workers in South Africa. Apart from Basic Condition of Employment Act (BCEA) covering farm workers, the Labour Relations Act of 1995 (LRA) was also extended bargaining rights for farm workers.

Nevertheless, farm workers remained disorganised at approximately 6% of workers, leaving the remaining 94% of workers with very little power to bargain for better wages and working conditions. This lack of unity from farm workers, collectively with the South Africa's history of disadvantaging African farm workers, resulted in working conditions that were (and often still are) generally poor, with farm workers earning the lowest wages amongst formally employed workers, as well as enduring high level of poverty and low level of food security (Ledger, 2016). Due to high degree of workers' vulnerability in the industry and lack on unity, the Sectoral Determination 8 (Basic Conditions of Employment Act) was legislated in 2003 outlining the minimum wage and minimum conditions of employment for farm workers. Apart from labour legislation, the government also introduced the Land Reform process and Extension of Security and Tenure Act 62 of 1997, both of which were intended to facilitate the redistribution of land back to Africans and farm workers living on the farms, and prevent evictions of farm workers without undertaking legal procedures (Visser & Ferrer, 2015; Ledger, 2016).

Hall (2014) attributed the agricultural sector as a low wage industry that has been portraying strong negative trends over the past four decades: shedding jobs, casualising labour, consolidation of small farm units into large farm units, and a decline in the social wage. Moreover, there is high variability in the agricultural employment levels, such as shedding 500 000 jobs in 2001 (two years before the adoption of minimum wage) and the increase of 181 000 jobs in 2005-2006.

2.4 Minimum Wage Theory

The debate about minimum wage effects revolves around the two schools of thoughts; the Neo-classical arguing that under competitive labour market condition application of minimum wage will result in loss of employment, but increase average earnings of those employed and that the worker's productivity determines the wage. On the other hand, the Keynesians are of the view that minimum wage effects under monopolistic competitive labour market will result in an increase in both employment and average earnings of workers (Divan, 2015). However, to date exists a mixed outcome with regard to the impact of minimum wage towards employment in different sectors of the economy and countries.

2.5 Impact of Minimum Wage on employment and Farmers' Perception towards it

2.5.1 Impact of minimum wage

The effects of minimum wage in developed and a developing countries emanating from diverse substantiating evidence from subsequent body of work appears to favour mixed versions. The minimum wage debate is pinpointed between the trade-offs associated with employment costs and the benefits associated with imposing the minimum wage in the economy. Studies conducted around the world focusing on the impact of the minimum wage have produced mixed results (Masipa, 2016).

Dating as far back as the provocative work of Stigler (1946), the study discovered that the imposition of minimum wage has deleterious effect towards employment of workers under a competitive labour market. Followed by Brown *et al.*, (1982, 1983), focusing on the effect of minimum wage towards teenage employment similar results in concurrence with the aforementioned studies were attained. However, while there was evidence reflecting negative relationship between employment and minimum wage, the effect was experienced by a smaller margin, with 10% increase in the minimum resulting in reduction of teenage employment of less than 1%.

The 1990's findings paved a way for the dawn of a new stream of minimum wage literature, known as 'new minimum wage' literature, triggering a burgeoning series of various studies concerning minimum wage literatures. Gowers and Hatton (1997) concluded that the regulation substantially raised wage rates and adversely reduced farm

employment. The minimum wage reduced poverty among those farm workers who remained employed and reduced the income of farmers, particularly in large farms. Trant *et al.*, (2018), concluded that there is negative impact of minimum wage increase towards farmworkers' employment and wage compression ensuing from minimum wage increase. The farmers' anticipated adjustments were motivated by both the goal of reducing overall labour hours and the desire to maintain the relatively higher wages of their most experienced workers.

Conradie (2004), on wage and wage elasticities for wine and table grapes of farmers in the Western Cape Province of South Africa, is of the view that after the imposition of the national minimum wage, there has been employment decline between 3 and 6% as a result of an increase by 10% in the minimum wage.

In a case study of 103 famers in the sugar industry, the study has found a meagre decline in employment resulting from minimum wage imposition. However, farmers have reduced the number of working hours to offset the higher labour costs (Murray & van Walbeeck, 2007). Garbers (2015), concur with the findings of Bhorat *et al.*, (2012) while using fixed approach, analysing the impact of minimum wage on the employment of farmworkers in South Africa. The study has revealed that there has been a decline in employment of unskilled farmworkers roughly by 16% with 6.5% associated with the effect of the legislation on increasing unskilled farm wages. In addition, there has been 6% increase in skilled farmworkers minimum wage employment following the change in opportunity cost resulting from minimum wage legislation and having employment elasticity sitting at 1, 3.

Bhorat, Kanbur and Stanwix (2009) revealed that farmworker wages have risen by approximately 17% and, as a result of the law and employment, has fallen significantly without the observation of adjustment at the intensive margin. Moreover, there has been decline by 13% in the probability of being employed as a farmworker in the post-law period. Ranchhod & Bassier (2017), following an increase in the agricultural minimum wage, recorded that there has been a decline in employment of both permanent and seasonal rural farm workers, where the decline was severe on the side of the seasonal rural farm workers compared to the permanent ones. However, the mean real wage has

increased from R1580 to R1880pm between 2013 and 2014 for rural farm workers who have maintained their jobs.

Pages and Andalon (2008), examining the effect of minimum wages in Kenya where two minimum wage levels are applicable; statutory wages for unskilled workers and for stockman, herdsman and security guard and for salaried agricultural workers. It is concluded by the study concluded that there is non-visible change in terms of wage distribution for both the minimum wage levels in the formal and informal sector even though the level of compliance was high in the formal sector. Therefore, there is no significant effect of minimum wages on agricultural wages. Minimum wages have increased the wages of low educated workers and women, leading to adverse effects on formal sector employment. Finally, it is estimated that 10% increase in the minimum to median wage ratio will be associated with a decline in the share of formal employment of between 1.1-5.5% points and increase of between 2.7-9 points in the share of employment. Focusing on the sector of domestic workers, Hertz (2005) found out that both employment and working hours were reduced because of sectoral minimum wage imposition during 2001-2004. The aggregate employment on farms has been reduced by 13% in the four years following the imposition of the Sectoral Determination in 2003. In addition, all employees who retained their jobs had improved job security and had their average wages increased (Stanwix, 2013).

Piek and von Fintel (2018), measuring disemployment on both small and large firms, which is exposed to international competition (agriculture) and one that is not retail, concluded that small firms have experienced severe disemployment while, on the contrary, larger farms were experiencing influx absorption of unskilled workers due to minimum wage imposition. The use of capital-intensive production process by large firms, enables them to employ meagre number of low-skilled workers, hence the impact of minimum wage legislation was less severe compared to small firms who employ high number of low skilled, low-waged workers.

Bhorat *et al.*, (2012) using the biannual Labour Force Survey (LFS) grounded on 15 waves from September 2000 to September 2007, concluded that the probability of being employed as a farmworker has decreased by 20% or more from September 2002 to

September 2003 because of the law and showed a rapid decline from 2003 onwards without any sign of recovery. Compared to their counterparts known as the controlled group, their employment increased rapidly overtime in 2003, whereas farmworkers' probability of retaining their jobs were gradually deteriorating. However, it is evident that the minimum wage law has a concrete effect on the South African Agriculture, where the minimum wage of the farmworkers has increased by almost 17% since imposition.

Investigation of minimum wage impact on the retail, domestic workers, forestry, taxi and private security employment by Borat *et al.*, (2013) from 2000 to 2007, reveals that employment gains occurred post minimum wage implementation in the retail, domestic workers, and private security sectors whereas there was meagre change in the forestry employment. Only taxi worker employment experienced a deleterious effect caused by minimum wage.

Van Der Zee (2017), assessing the double shocks of minimum wage towards labour market response with regard to employment, wages, working conditions and farmers' adjustment in expectation of the minimum wage hike, found out that probability of a farm worker to be employed decreased drastically as a response resulting from both minimum wage shocks. However, disemployment effect were deleterious during the introduction of minimum wage than it was for the 2013 amendment. Wages increased drastically as a response to both shocks, however part-time workers lost their jobs resulting to no part time workers for the second wage shock.

In contrast to the long-held belief of deleterious effect towards employment because of minimum wage imposition, the two luminaries (Card and Krueger) have assured the dawn of new evidence of positive effects towards employment resulting from minimum wage imposition.

Card and Krueger (1994) revealed that there was no employment loss after the rise of minimum wage in both Pennsylvania and New Jersey fast-food restaurant/s in contrast with the long held belief of negative relationship between minimum wage increase and employment. This outcome contradicts with the previous findings of Stigler (1946), where the study was advocating for job loss or loss of employment resulting from rise in the minimum wage levels. Following the findings of Card (1992), Card and Krueger (1994,

1995) a series of studies unfolded focusing on the impact of minimum wage towards employment. In unison with the aforementioned studies, the result also shows no loss of employment for low-wage earners. Moreover, the study has recorded that an increase in minimum wage has risen the earnings of low-wage workers. Additionally, in the retail industry for teenagers employment population ratio increased by 4% and their hourly and weekly earnings increased by 10% (Card, 1992). Dickens *et al.*, (1995), concurring with the above findings, has found positive effects of minimum wages towards average earnings in United Kingdom's (UK) agricultural sector and insignificant effects towards employment.

According to Coleman (2014), Brazil is an epitome of a leading successful story in terms of the implementation of minimum wage in developing countries. National minimum wage imposition in Brazil resulted in a creation of 17 million formal jobs in the period of 2002 - 2011 and consequently higher levels of earning for workers. It is also thought to have led to approximately two thirds (2/3) of reduction in income inequality. Similarly, annual compound growth in Gross Domestic Products (GDP) of 3.09 % has been experienced and inflation within a narrow band of 3.14 and 6.5% (Darrol, 2014).

Vink & Tregurtha (2003), with theoretical findings looking at the effect of minimum wage towards employment effect in the agricultural sector of South Africa their argument or outcome is mirrored in the following; firstly; minimum wage cannot be disputed based on its deleterious effects on employment. Theoretically, the lack of monopsony powers will result in negative effects in the case of free market. However, the magnitude of the employment effect will rely more on the degree at which the minimum wage rate is set above the equilibrium. When the minimum wage is below the average rate in the industry, it compresses the wide range of wages found in the sector, hiking the wages of the lowest paid without shedding jobs or reducing employment.

Secondly, empirical evidence of minimum wages as a tool used to alleviate poverty is as ambiguous as the evidence towards employment effects. From the economic point of view, an advocacy for direct income transfers to the poor rather than manipulating market prices (wage) and it is believed that poverty is the result of low incomes; the relationship between income and wage rates is not necessarily direct. The existing wage differentials

in the agricultural sector can be attributed to the differences in terms of hours worked rather than by different wage rates as the sector is diversified. Thus, in South Africa, this is true, different wages are being paid in the same sector due to wide variety of employment contracts.

Concurring with Card and Krueger, Lemos (2004) find that the impact of minimum wage in developing countries tends to compress wage distribution in both public and private sectors. Minimum wage impact on both sectors is not adverse in the short run, however in the long run it reduces employment in the private sector mainly by reducing the number of working hours rather than reducing employment directly. In the private sector, there are zero adverse employment effects and suggesting an inelastic labour demand curve in public sector. Irrespective of the measureable wage effect on both public and private sectors, the effect of minimum wage towards employment has been insignificant. In comparison to the -1% (overall) employment effect in the international literature the effects are also small.

Bhorat, Kanbur and Mayet (2012), found unclear evidence with regard to minimum wage impact towards employment in the five sectors analysed namely; Retail, Domestic work, Forestry, Security and Taxi sector.

2.5.2 Perceptions of farmers towards minimum wage

The perceptions towards the minimum wage increase vary considerably and some farmers have expressed mixed attitudes towards it. Roberts and Antrobus (2013) had a mixed outcome after investigating farmers' perceptions towards minimum wage and its impact on both farm workers' wage and working condition in the Eastern Cape Province of South Africa, which were compounded by changes in the political and economic contexts. Farmers have maintained that the legislation (Basic Conditions of Employment Act 1997 (BCEA) has both merits and demerits on the effect of workers' wage and working conditions in the agricultural sector. Farmers indicated that the legislation has led to an increase in the transactional costs, and as a means of compliance to the law, farmers opted to hire farm workers who reside outside the farming unit, to reduce payments in kind, to offset labour costs and by employing casual as opposed to regular labour to reduce transactional costs. The vilifications by one third of the farmers on the legislation

was that, it leads to dis-employment especially in the case of the unskilled labour because, it was very difficult to apply incentives to differentiate wages between well performing and not well performing workers. Moreover, farmers could not profitably hire the same volume of workers.

Positive report from 15% of farmers was that, the minimum wage legislation set a standard or benchmark for a decent wage and rules out the disparities in payment made by farmers to their employees. A mutual view was expressed stating that, workers who have retained their jobs enjoy the higher wages, but many are jobless as a result and are even worse off than before. Additionally, some farmers believed that the law had no impact since, the amount of competitive wage paid to workers is being reciprocated by their hard works or skills offered.

According to Newman, Ortmann & Lyne (1997), it is advocated that farmers who pay relatively lower cash wages in return provide perquisites to farm workers of which are quite difficult to measure in monetary terms such as housing and land rights use. Farmers may start to charge for these perquisites provided, if the minimum wage required by the law of enforcement surpasses their current payment and pay farm workers the required cash wage. If the imposed minimum wage is exorbitant, farmers may opt to use mechanisation of labour and machinery contractors to replace unskilled labours. A faction of farmers suggested that it would be fair if the minimum wage could be revised and adjusted provincially through consultative and negotiation process under industrial council annually. This may be the result of the perception that a decentralised institution would recognise regional and enterprise disparity in the labour market.

In addition, the study concluded that farmers would prefer legislation that is more flexible and the imposition of the agricultural minimum wage is time consuming and costly. Farmers feel there is a dire need to consider aspects such as enterprise and regional differences when amending agricultural minimum wage policy, and to be determined by an industrial council.

From the perspective of one of the South African's labour intensive subsector, the potato industry has mirrored the issue of minimum wage increase and strike by farm workers this way; the subsector is much dependent on labour for harvest and farm workers' strike

will deter the harvest of potatoes ensuing to dire consequences for the viability of the farm operation. Farms with small component of potatoes may easily switch from potatoes operation to less labour intensive enterprise, in regions where farmers cannot switch over to other crops in the short run the consequences may result in shedding of jobs. The aforementioned scenario is applicable only not for commercial farmers but to the smallholder farmers, community projects and new initiatives to introduce aspirants to potatoes farming sector (Agriorbit, 2018).

The perception towards minimum wage is that, in general farm workers receive more than just the salary. The perception of wages for farm workers is misguided by only accounting for the monetary value of the wages given to workers rather than accounting for both monetary value in a form of wages and the benefits in kinds provided to farm workers. Both permanent and seasonal farm workers receive these benefits for free or in a form of subsidy by farmers. These benefits received by farm workers are, for example, housing with electricity, running water and flushing toilets, and so forth.

Additionally, further deterrent for a productive discussion of minimum wage and benefits is caused by the generalisation of both the scope and nature of the minimum wage for farm workers. For instance, like any other business, salaries differ in terms of occupation, responsibilities and years of services. However, looking at the nature of the agricultural sector it differs much with other sectors and differs within itself by subsectors. Wages or salaries will differ from farm to farm and region to region. In some cases, farmers are subjected to competition by other industries such as the mining industry for their labour component and forced to pay wages at par with their rivals, which are above the minimum wage recommended by the Sectoral Determination. Thus, introduction of the minimum wage in a form of a blanket approach (inclusive of benefits in kind) will have an opposite impact taking into account the intrinsic attributes of different regions.

Farmers can retaliate to minimum wage increase and strike by farm workers by reducing the number of labourers employed, and/or by introducing advanced mechanisation particularly in the packing and sorting facilities. It was estimated that about 15% of labour was to be relieved from their positions in this farming segment and on the other hand real

vegetables prices are declining three years in a row and are accompanied by the hiking of prices of the production inputs.

Farmers are struggling to cope with either severe drought circumstances or consequences thereof. The majority of farmers indicated that they would not be in a good position to pay the prescribed national minimum wage, and provision has been made for the application of exemption for the agricultural sector (Department of Labour, 2018).

A farmer around Hazyview of the Mpumalanga Province said, "Implementation of the minimum wage will be of dual impact or mixed outcomes towards both the farmer and the farm workers". In articulation the farmers said, "As a farmer I won't deploy any workers, hence I will not be able to hire new workers so that I can be able to pay the required minimum wage". Some think the minimum wage is politicised; some farmers will pay the required minimum wage but will have to cut off some of the workers to offset the costs and will fail to employ extra workers, which also hampers the employment rate (LowVelder, 2018).

During a public hearing of the year 2005 in the Eastern Cape Province, farmers elucidated concerns with regard to the disparities in the economic performances of the various subsectors. The key disadvantage of the two-tier wage system is that it is far too narrow and does not consider the depth of variation within the agricultural sector.

However, the level of compliance by farmers was very poor and they disregarded crucial provisions of the determination, such as the issuing of pays lips to workers, payment for overtime and Sundays or public holiday work, and deductions from wages. The level of compliance differs between farms and within in relation to occupation, subsectors, gender, type of employment status (for example, permanent, seasonal or temporary employment) and by geographical location. The lack of compliance by farmers is attributed to numerous interrelated factors, included amongst others are factors such as the paternalistic relationship between a farmer and worker, dependence of farmworkers on farmers for jobs and other services, limited history of institutionalised labour relations in the agricultural sector and absence of consistent labour inspection and law enforcement on commercial farms.

The Sectoral Determination has been a paradigm shift in terms of improving the wages of farm workers in the agricultural sector. Permanent male farmworkers in “core” occupations have experienced an increase of their wages. Female, both casual and seasonal workers, however continue to constitute a “peripheral” workforce with little job security, a few prospects of promotion or training, and generally poor terms and conditions of employment. However, the absence of collective bargaining, unilateral management styles and ongoing bifurcation of the workforce has given farmers an advantage to offset any increment of minimum wage costs through a process of intensification, flexible employment policies, selective compliance, adjusting non-wage variables such as working hours or fringe benefits and increased deduction for rent and amenities (Naidoo, Klerck & Manganeng, 2007).

Simbi and Aliber (2000:26), and Grub (2015), found out that farmers are aware of the minimum wage, however they are struggling to integrate it to their business management. Additionally, some farmers were prepared to act drastically in reducing work should a minimum wage be introduced since they felt they have been receiving hostile treatment from the government.

Trant *et al.*, (2018) investigated the perception of farmers towards the agricultural minimum wage increase considering their operational scale categorised as large, midsized and small farm size. For large-scale farmers, 17% had positive attitude, 17% had neutral attitude and 67% had negative attitude towards minimum wage increase. For mid-sized farmers; 40% had neutral attitude and 60% had negative attitude towards minimum wage increase. Finally, 71% of smallholder farmers had neutral attitude and negative perceptions towards minimum wage increase.

Direct market farmers’ response towards minimum wage increases in order to offset the cost it includes amongst others; the use of mechanisation, use of contract labour, changing marketing channels, reducing in farm labour hours and decreased agro biodiversity. Smallholder farmers opted not to hire high schoolers and expressed their ability to set their prices to adjust to their minimum wage increase whereas mid-sized farmers seemed to perceive great pressure from minimum wage increase, regarding themselves as price takers competing with large scale farmers who have lower costs per

unit of production due to economies of scale. Mechanisation and altering the existing infrastructure were prominent cost minimisation and labour reduction adjustments planned by mid-size producers. While mid-sized growers incur high labour cost compared to smallholder producers, they do not have some of the cost minimisation strategies in place that the larger growers already have.

According to the Congress of South African Trade Union (COSATU), the national minimum wage will result in a decline in the level of unemployment and alleviate poverty within South Africa. They further advocate for minimum wage implementation and believe that it will not increase the earnings of workers only, but also lead to job creation through the belief that the higher wages earned by workers will increase aggregate consumption and consequently lead to economic growth (Seeking's & Natras, 2015 and Coleman, 2014). However, there are fallacies with COSATU's perspective of using the Brazil's situation to draw general conclusion about the impact of minimum wage towards South Africa's economy.

COSATU is of the view that the prescribed minimum wage of R20 per hour is not ample as a decent minimum wage. They are of the view that the reluctance of businesses to increase minimum wage from 3500 to 4500 is pure immorality. Likewise, the executive committee member at the South African Reward Association argued, "the real issue to be tackled and addressed is the living wage rather than a minimum wage, and proposed ways to pay it". National Union of Mine Workers of South Africa (NUMSA) was displeased by the agreed amount of R3500 as the national minimum wage and according to the general secretary Irvin Jim: "the proposed minimum wage resembles a haven of cheap labour in South Africa as it existed during the apartheid era". Moreover, the implemented minimum wage is a final concrete nail in the coffin for the workers' struggle in South Africa, since the minimum wage starts at a rate below decent and working wage (Fakir & Abdool, 2017).

2.6 Chapter summary

The chapter looked into the history of South Africa's minimum wage and the state of the agricultural sector in South Africa. The chapter also reviewed literature from local and

from abroad focusing on the effect of the minimum wage on employment for the agricultural sector and other sectors. Lastly the chapter looked into the perception of farmers towards the agricultural minimum wage and varying results from the literature have been documented. Trant *et al.*, (2018) investigated the perception of farmers towards the agricultural minimum wage increase considering their operational scale categorised as large, midsized and small farm size. The results are of mixed outcome where farmers have showed positive, negative and even neutral perception towards the agricultural minimum wage. The following chapter represent the methodology of the research project used.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter intends to provide a detailed explanation of the research methods used in collecting data and analysing variables, which hypothesised to influence farmers' perception towards the 2018 agricultural minimum wage. The chapter indicates where and how the study was conducted using research tools. A description of the study area, sampling techniques used and data analysis are presented.

3.2 Description of the study site

The study was conducted in Bushbuckridge Local Municipality of the Mpumalanga Province, South Africa. Bushbuckridge Local Municipality (BLM) is the largest amongst the existing municipalities in the Mpumalanga Province, with a population size of 541 248 and arable land of 25 586. 76 hectares (Shabangu, 2015). The Municipality is part of the Ehlanzeni District and the vast majority of the people in the municipality are Xitsonga speaking, followed by Sepedi speaking and last by SiSwati speaking people. Bushbuckridge is bounded by Mopani District of Limpopo Province to the north, by Mozambique to the east, by Mbombela and Nkomazi Local Municipalities to the south, and by Thaba Chweu and Maruleng Local Municipalities to the west (Census, 2011).

Bushbuckridge has four main irrigation schemes which are well known and well established from the southern and central part, covering an area of about 3 600 hectares and representing allocated rights to 1 426 farmers collectively. In central Bushbuckridge there are two irrigation schemes known as Dingley Dale and New Forest, serving about 1 317 farmers and accounting for about 2 040 hectares. In the South there are two, famously known as Sabie and Hoxani, both located along the R536 from Hazyview to Kruger gate, and they service about 109 farmers and covers for about 1 520 hectares (LIMA, 2016). The smallholder irrigation schemes are supported by the Department of Agriculture, Land Affairs and Rural Development in the Mpumalanga Province.

According to Stella (2019), Bushbuckridge Local Municipality is considered as a water scarce area in the Mpumalanga Province and the problem has been escalating since in the

last decade failed to supply potable water supply to majority of its villages. Thus the four irrigation schemes under the municipality were selected due to the ample number of farmers who are located in these areas and to water availability which allows farmers to practice farming through the year.

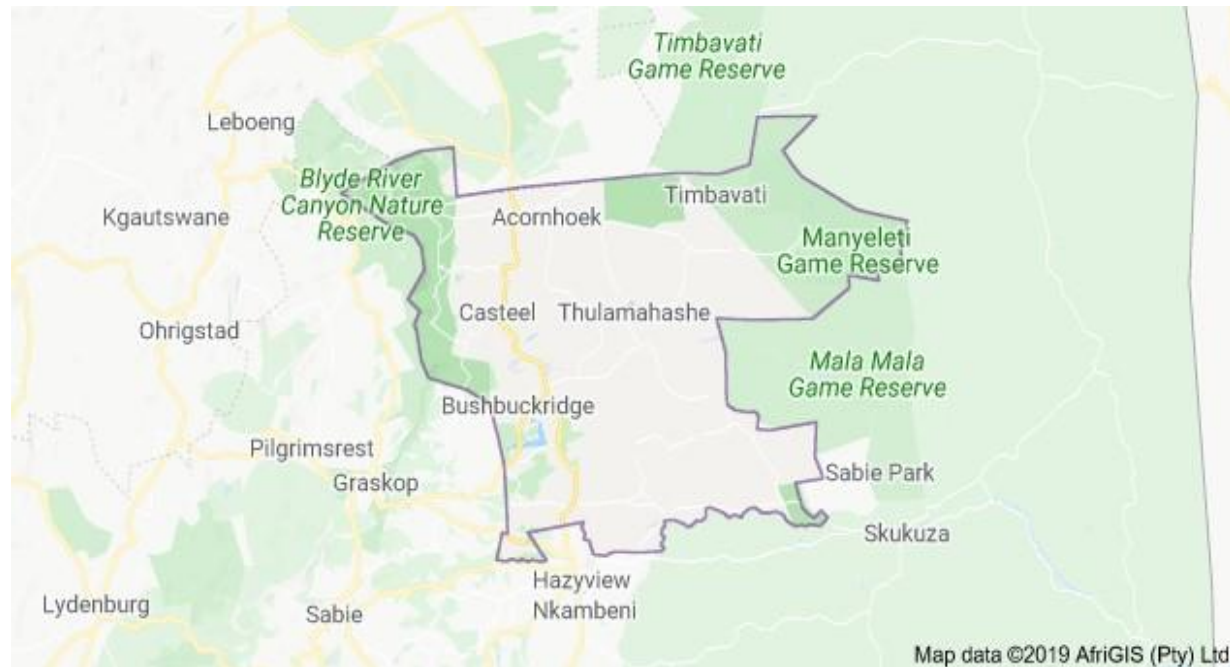


Figure 3.1 Location of Bushbuckridge Local Municipality (Census, 2011).

3.3 Climate

The Municipal area is positioned in one of the largest biome in the southern part of Africa. The savannah Biome is well developed over the Lowveld and Kalahari region of South Africa and it extends to Botswana, Namibia and Zimbabwe as a dominating vegetation. The Biome is attributed by grassy ground layer and a distinct layer of woody plants, referred to as Shrubveld, Woodland or Bushveld (Bushbuckridge SDF document, 2010). A major drawback impeding the Biome is insufficient rainfall that prevents the upper tree from dominating, coupled with fires and grazing. Most of the savannah vegetation types are used for grazing, mainly by cattle or game and in some areas crops and subtropical fruits are cultivated (Nel & Nel, 2009).

Bushbuckridge Local Municipality experiences severe temperatures in summer, most days being around 35-40° C. Temperatures can vary between -4°C to 45°C with an average of 22°C. The municipality experiences seasonal rainfall distributed mostly in summer months between November to December and April. The winter season is cool and dry. Altitude ranges from sea level to 2000 m while annual rainfall varies from 235 to 1000 mm (Bushbuckridge SDF document, 2010).

3.4 Agricultural Production and other potential sectors

Six types of primary productions characterise the agricultural sector in Bushbuckridge Municipality:

- i. Scattered micro enterprise broiler production.
- ii. Smallholder such as vegetables producers operating on the four irrigation schemes and selling their fresh produce primarily to hawkers and retail outlets.
- iii. Smallholder fruit growers - formally out growers participating in the former development corporations' irrigated orchards estates trading informally to hawkers (for hawker trade and archar).
- iv. Few smallholder macadamia growers established under the Mpumalanga Department of Agriculture's 'Greening Mpumalanga' Programme.
- v. Dry land farmers producing maize and sugar beans in dry land, with low productivity levels and primarily for subsistence purposes, but also to a certain extent for sale to the informal market.
- vi. Dry land farmers have proliferated over the years from 2008-2010, with the expansion of the Mpumalanga Department of Agriculture's 'Masibuyele Emasimini' project, and cattle farming. Majority of these farmers are operating as smallholder farmers. However, agriculture in Bushbuckridge Municipality has the potential to create 4 270 direct jobs and 10 170 indirect jobs (Bushbuckridge Local Economic Survey, 2010).

Bushbuckridge Municipality has a vast amount of prime tourism real estate based on communal and land claims areas. Included amongst others, Kruger National Park, Timbavati Game Reserve, the Sabie Sand Game Reserve, the Manyeleti Game Reserve and the Blyde Canyon Nature Reserve are the essential sites for tourism in Bushbuckridge (BLM LED, 2010). Additionally, it also offers very wide range of activities available in areas such as Hazyview, Sabie, Graskop, Pilgrims Rest, Blyde Canyon Nature Reserve, Hoedspruit and the Panorama Route (second busiest tourism in RSA).

3.5 Infrastructure and Market Access

The Department of Agriculture and Mpumalanga Economic Growth Agency (MEGA) has erected an Agri-Hub aiming to address several market challenges confronting Bushbuckridge farmers. The Agri-hub is situated at Mkhuhlu village next to the R536 road to the Kruger National Park, which is about 18 km away from the nearest town Hazyview. Bushbuckridge farmers have market access to both fresh produce (vegetables) and orchards crops (fruit and nuts), which are supplied to the Agri-Hub for Government Nutrition Programme (GNP). Bushbuckridge Local Municipality farmers will enjoy the added benefits of reduced logistics costs and possibly of previously unavailable value adding opportunities. Additionally, the Department of Agriculture Rural Land and Environmental Affairs are working coherently with farmers and various stakeholders to encourage farmers to supply their fresh produce for the Government School Nutrition Programme (GNP) (PHI, 2016).

3.6 Research Methodology

3.6.1 Research design

According to Bless *et al.*, (2014) research design is a tool used to answer research questions or hypotheses by providing a clear plan for the selection of subjects, research sites and the collection of data. In this study, a descriptive survey design was used, as this study is concentrating on the perception of farmers towards the 2018 agricultural minimum wage. Is a form of design that represent an existing conditions, practices, beliefs, attitudes or opinions held, processes going on and trend for developing interpretation of meaning (Ngau and Kumsa, 2004). Descriptive research design intends

to describe individuals, events or conditions by studying them as they are in nature. It further looks at the characteristics of the population, identify existing problems within a unit, an organization, or population, or look at the variation in characteristics or practices between institutions or countries (Siedlecki, 2020).

3.6.2 Population

The population of the study consist of all the smallholder and commercial farmers under the Bushbuckridge Local Municipality. The population size of the study consist of 1 426 farmers from the only four main irrigation schemes under the Local Municipality of Bushbuckridge.

3.7 Data Sampling

3.7.1 Sampling frame

The study applied the purposive sampling method, which is based entirely on the judgment of the researcher, in that a sample is made of attributes that contain the most characteristics of the population (Singleton *et al.*, (1993) cited in Shabangu, 2015). A sample size of 160 smallholder and commercial farmers (both livestock and crop farming) were selected and interviewed from both the Central and Southern part of Bushbuckridge Municipality. According to Lakens (2021) resource constraints is one amongst various factors which influence the choice of a sample size a researcher can collect. Thus, due to limited or resource constraints 160 farmers (smallholder and commercial) were selected for the purpose of the study.

3.7.2 Data collection

The study has used primary data, which was gathered with the use of formulated questionnaires, where farmers were interviewed face-to-face using the dominating vernacular languages within the local Municipality, which are Xitsonga and Northern Sotho.

A structured questionnaire was used to collect data on the socio-economic characteristics of households which include age, gender, marital status, household size, farm size, type of education, farming experience, access to market, access to extension services, access to information, main occupation, labour type, type of farming, use of mechanisation and opinion questions in a form of Likert-type questions.

Data collection commenced by August and was completed early September 2020 for duration of approximately 6 weeks. Adhering to the code of conduct that illustrates standards of responsibilities and ethical conducts as required by the University of Limpopo, a consent form was presented to the respondents before the interview commenced. The respondents were not obliged to take part in the interview and they had every right to withdraw from the interview at any stage.

3.7.3 Data analysis

Statistical Package for Social Scientists (SPSS) was applied to process the data gathered. Descriptive statistics such as means, minimum and maximum values, frequencies, percentages and standard deviations were used to describe the socio-economic characteristics of both smallholder and commercial farmers in Bushbuckridge Municipality of Mpumalanga Province as the first objective of the study. Multinomial Logistic Model was applied for data analysis based on information generated using the Likert scale to analyse perceptions and socio-economic factors influencing perceptions of smallholder and commercial farmers towards the 2018 agricultural minimum wage.

3.8 Justification of the models

According to Hosmer and Lemeshow (2000), Multinomial regression model are applied in analysing data where categorical response variable has more than two possible outcomes while the independent variables could be continuous, categorical or both. Multinomial Logistic Model (MNL) is found to be robust compared to Multinomial Probit Model (MNPM) even in scenarios where Independent of Irrelevant Alternatives (IIA) assumption has been violated. Basic assumptions of normality and continuous data are preconditions for most multivariate analysis techniques involving independent and/or dependent variables. This precondition is vivid also in the application of multinomial logistic model data collection and measurement steps in perception analysis, but to different degrees. Thus, though much stronger interval and ratio scales provide a substantive base for a more comprehensive multivariate analysis, most often used perception measurement scales such as five-point Likert, ordinal and nominal scales are usually considered unfit for multivariate analysis techniques due to several assumptions such as normality of independent variables, linearity of relationships, multicollinearity

among independent variables and equal dispersion matrices for discriminant analysis. Therefore, multinomial logistic regression was used when the above listed assumptions tend to be violated and it is evident in one main way in MLR analysis. Additionally, it has alternative data distribution assumptions, suggesting that it generates more appropriate and more accurate results in terms of model fittings and correctness of the analyses regardless of any assumption (Bayaga 2010, cited in Baloi 2016).

3.9 Multinomial Logistic Model

The data collected from both smallholder and commercial farmers was analysed using Statistical Packages of Social Sciences (SPSS) and Microsoft Excel, where Multinomial logistic model was used for analysis. The model permits each category of unordered response variable to be compared with the reference category, providing a number of logistic regression models. For the purpose of this study there are three categories of unordered response variables which are likely to be chosen by farmers, two logit models are computed one comparing never comply with the 2018 agricultural minimum wage (NOT COMPLY) with the reference category (COMPLY) and the other one comparing uncertain (UNCERTAIN) with (COMPLY) as a reference category. The model of perception behaviour between three options can therefore be represented using two (for example J-1) logit models.

Multinomial Logistic Regression (where Y = Perception (total Likert's type scale of each respondents). Perception will be measured on the basis of the willingness of farmers to comply with the prescribed 2018 agricultural minimum wage.

$$\text{Log} = \frac{\text{pr}(y=\text{never comply with the AMW})}{\text{pr}(y=\text{comply with the AMW})} = \alpha + \beta X_1 + \beta X_2 + \beta X_3 \dots \dots \dots \beta X_n \dots \dots \dots (1)$$

$$\text{Log} = \frac{\text{pr}(y=\text{uncertain about compliance with the AMW})}{\text{pr}(y=\text{comply with the AMW})} = \alpha + \beta X_1 + \beta X_2 + \beta X_3 \dots \dots \dots \beta X_n \dots \dots \dots (2)$$

Multinomial logit is a regression model that generalizes logistic regression by allowing more than two discrete outcomes. It is used to predict the probabilities of the different possible outcomes of a categorically distributed dependent variable, given a set of independent variables (which may be real-valued, binary-valued, categorical-valued, etcetera.).

Dependent variable = Compliance with the 2018 agricultural minimum wage (AMW).

Table 3.1: Dependent variable classified by three categories

Category	Description
0	I am uncertain
1	I would comply with the 2018 agricultural minimum wage
2	I would not comply with the 2018 agricultural minimum wage

The dependent variable outcome 0, 1 and 2 in Table 3.1 were obtained by comparing the scores of opinion questions (satisfaction or/and agreement level). These opinion questions were assigned scores 1 to 5 with 1 and 2 indicating a positive perceptions. On the other hand the scores 4 and 5 indicated negative perceptions (I will not comply) with the 2018 agricultural minimum wage, but when the scores of 1 and 2 are equal to the scores of 4 and 5 the farmer was called to be uncertain. The following Table 3.2 describe independent variables as predictors of the outcome variables: independent variables as predictor of farmers' decision to comply with the 2018 agricultural minimum wage included socio-economic factors (gender, age, farm size, marital status, educational status, experience, main occupation, household size), opinion variables (for example; the level of satisfaction with minimum wage, level of agreement about the relationship of labour productivity and minimum wage and other issues attached to the 2018 agricultural minimum wage).

Table 3.2: Model variables, description and unit of measurement used in the analysis

Variable	Description	Unit of Measure	Expected Sign
Independent variables	(Socio-economic)		
Age	Number of Years of the farmer	Continuous	+
Gender	Gender of a farmer coded, 1 = male and 0 = female	Dummy	+
Farming experience	Number of years in farming	Continuous	+
Marital status	Marital status of the farmer, 1 = married and 0 otherwise	Dummy	+
Number of farm Hectares	Number of hectares used for farming	Continuous	+/-
Educational level of the farmer	Formal education =1 Formal, 0 otherwise	Dummy	+/-
Labour Productivity	Level of satisfaction, coded 1 strongly disagree, 3 uncertain, 5 strongly agree	Categorical	+/-
Household Size	Number of household	Continuous	-
Minimum wage good for farmers	Level of satisfaction, coded 1 strongly disagree, 3 uncertain, 5 strongly agree	Categorical	+/
Mechanisation	Yes access = 1 and 0, otherwise	Dummy	+
Member of a cooperative	Yes a member =1 and 0 otherwise	Dummy	+/-
Pensioner (Grant)	Yes a pensioner =1, otherwise= 0	Dummy	-
News access	Yes =1, otherwise= 0	Dummy	+

3.10 Ethical Considerations

3.10.1 Permission

Permission to carry out the study was obtained from the Turfloop Research Ethics Committee (TREC) prior its commencement.

3.10.2 Informed Consent

The researcher notified the interviewees that the participation was voluntary and they were free to withdraw from participation at any time whenever they felt uncomfortable. The interviewees were asked to sign consent form to show that they agreed to take part in the study.

3.10.3 Confidentiality

In this study, confidentiality and anonymity of the participants were taken into consideration. The participants' real names were not disclosed in the study and information provided was used for the purpose of research only.

3.10.4 Privacy

The researcher provided one on one session with the respondents so that other people would not hear the conversation.

3.10.5 Protection from harm

The researcher protected participants from harm by providing participants with the right to withdraw from the study whenever they did not feel comfortable in answering the questions, and by not disclosing their identities.

3.10.6 Respect

The researcher respected all participants regardless of gender, belief, race, and etcetera.

3.11 Chapter Summary

This chapter showed the study area where the data was collected, the data set and the analytical procedures that were used to analyse the data. The data was analysed using Multinomial Logistic Regression model. Conclusions in the study were made based on the Multinomial logistic regression model. The study intended to identify significant factors that influenced the perceptions of smallholder and commercial farmers towards the 2018 agricultural minimum wage in Bushbuckridge Municipality. The following chapter present the research outcome from the data analysed.

CHAPTER 4

SOCIO-ECONOMIC CHARACTERISTICS OF SAMPLED SMALLHOLDER AND COMMERCIAL FARMERS

4.1 Introduction

The intention of this chapter is to exhibit some insight about the socio-economic characteristics of smallholder and commercial farmers interviewed for the purpose of the study in Bushbuckridge Local Municipality of the Mpumalanga Province. The results presented below are drawn from the data garnered as detailed in Chapter 3. Descriptive statistics including frequencies cross tabulation, standard deviation, mean, minimum and maximum values are used to describe the socio-economic characteristics of smallholder and commercial farmers in Bushbuckridge Local Municipality.

4.2 Descriptive Statistics

The study used a sample of 160 farmers in Bushbuckridge Local Municipality. A large number of farmers in Bushbuckridge Local Municipality are engaged in Crop (Coffee, Vegetables and Livestock (piggery, poultry, cattle) production and these produce are sold to the local community markets such as hawkers, supermarkets (Indlovu Spar and A1 Fisheries) and to the Agri-Hub for Government Nutrition Programme (School Feeding Scheme) in local markets. Farmers who are engaged in livestock farming majority are practising poultry farming, which is regarded as the best in comparison to cattle due to the redline (foot and mouth disease outbreak) and lack of market for red meat in the municipality. The commercial farmer is producing coffee, which is processed and sold to several business enterprises or organisations such as lodges as well as motor vehicle companies such as Mercedes, Toyota, and etcetera.

4.2.1 Socio-economic characteristics of smallholder and commercial farmers

Table. 4.1 Socio-Economic Characteristics of Farmers

Statistics						
		Age	Exper ience	Farm Hectares	Distance to Market	Household Size
N	Valid	160	160	160	160	160
	Missing	0	0	0	0	0
Mean		56,68	12,17	3,973	10,386	4,83
Std. Deviation		13,838	7,747	6,3543	6,8469	2,127
Minimum		24	1	1,0	1,0	1
Maximum		88	44	65,0	30,1	11

Source: Survey data (2020)

According to the Table 4.1, farmers in Bushbuckridge Local Municipality had a minimum of 24 years, maximum of 88 years and an average of 57 years old. These findings suggest that elderly people mostly do farming and younger farmers may perceive farming as a dirty job tailored for elders or might be migrating to urban areas in search of greener pastures (Mzuyanda, 2014). Additionally, younger farmers are more inclined to work part-time, whereas older farmers tend to specialize in farm activities (Tocco, Davidova and Bailey, 2012).

Table 4.1 further depicts experiences of farmers, which are expressed in terms of the number of years a farmer has been engaged in their respective farming subsector. The results indicates that the minimum number of years of farmer engaged in agricultural production is 1 year, with 44 years as their maximum and 12.17 as their average number of years engage in farming. According to Shabangu (2015), smallholder farmers are said to have ample amount of local and practical knowledge on aspects contributing towards successful farming practices in their localities and they are equipped with experience, collectively, for farming in their localities.

Table 4.1 indicates that the minimum number of hectare/s a farmer occupied is 1 hectare, with 65 hectares as the maximum owned by a farmer and a standard deviation of 6.3543 hectares. Land size plays a vital role in influencing household labour supply to agricultural production. However, land is shared between residential and farming purposes, thus,

arable land becomes inadequate for agricultural purposes. In addition, smallholder farmers do not own land they are utilising for agricultural purpose even though they have rights to use it (Nggangweni & Delgado, 2003).

Household size had a minimum number of one (1) household member, a maximum number of 11 household size and an average of 4.83 number of household size. StatsSA indicates that average household size in Bushbuckridge Local Municipality is 4. According to Monana (2005), smallholder farmers are labour dependent and having a large number of active household size is advantageous for them since hiring non-family labour is too expensive to the majority of these farmers, and the farm income earned is inadequate to cater for paid labour. Families with high number of active household members would then be at an advantage when it comes to utilisation of family labour. Household size plays a vital role as a source of labour to engage/work in the farm.

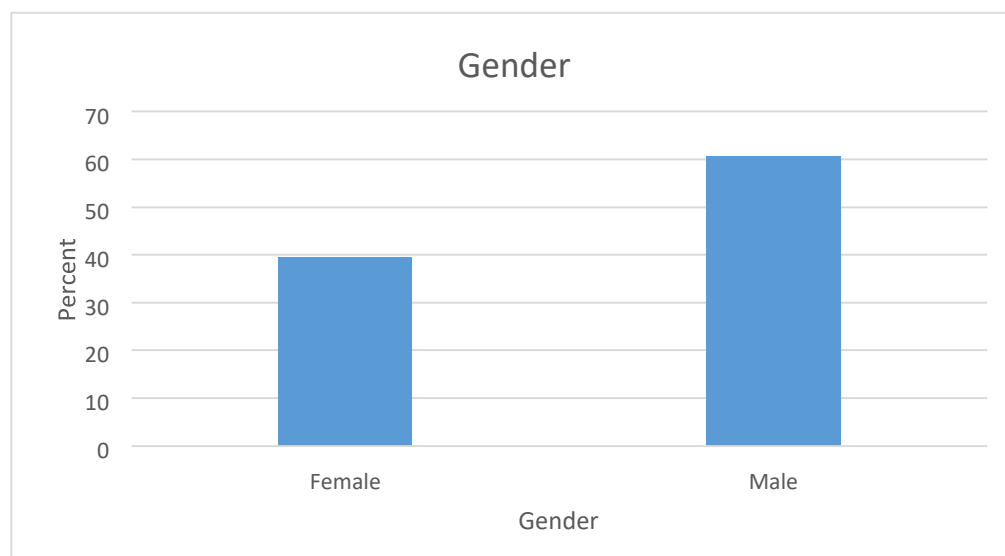


Figure 4.1 Gender of farmers

Source: Survey data (2020)

According to Figure 4.1, the majority of farmers in Bushbuckridge Municipality were headed by males at 61% and females at 39%. This is in line with the findings of Toluwase and Apata (2013), whose study found out that men dominated the agricultural sector.

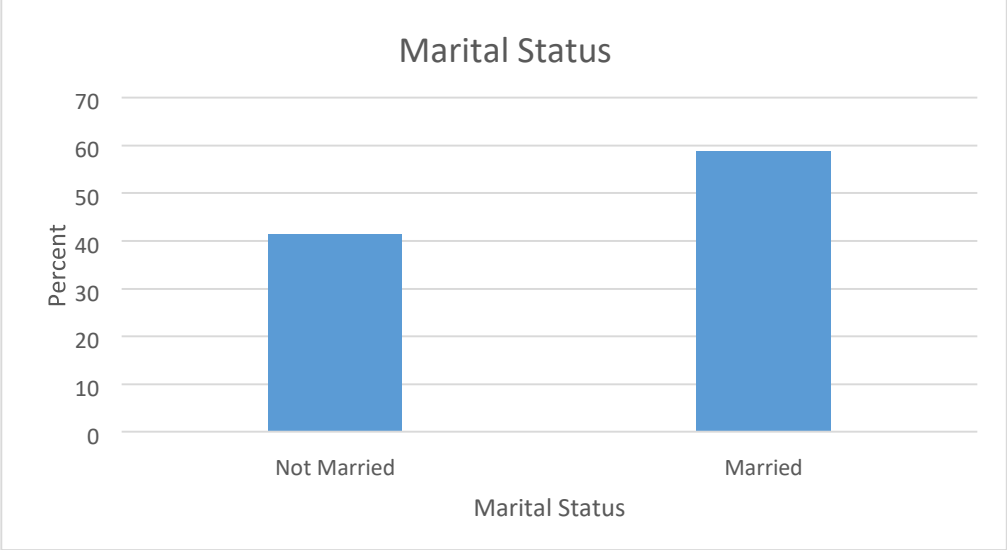


Figure 4.2 Marital Status of farmers

Source: Survey data (2020)

The marital status of farmers was expressed as a dummy predictor variables where a farmer is either married or otherwise. Figure 4.2 indicates that the majority of farmers were married (58%) and (42%) were either unmarried or divorced. These findings are similar with the one of Taw and Apawa (2013), where the majority of farmers were married, hence had family responsibilities.

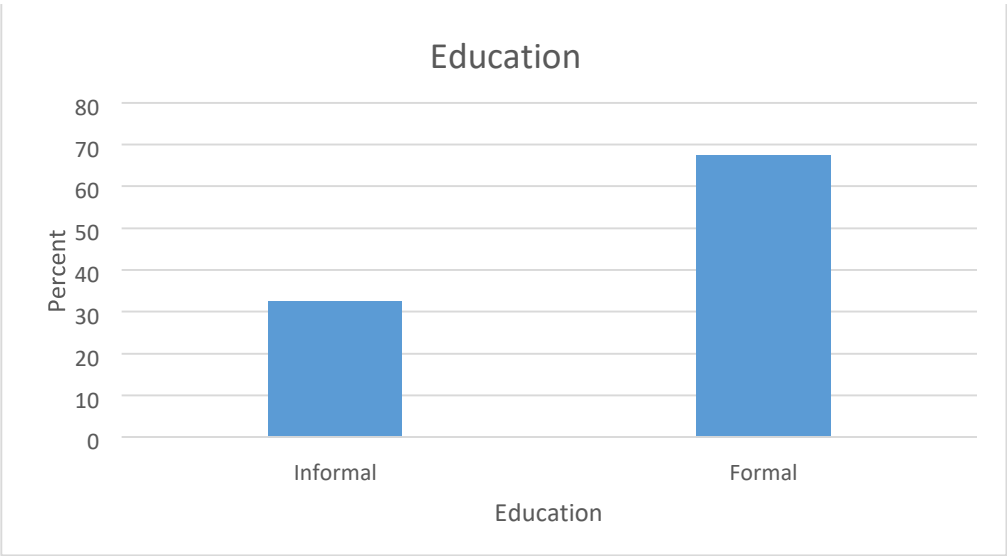


Figure 4.3 Educational Status of the farmers

Source: Survey data (2020)

Figure 4.3 indicates the educational status of the farmers in Bushbuckridge Municipality. About 67% of farmers in Bushbuckridge Municipality have received formal education and the remaining 33% were informally educated. The findings of this study concur with the outcome of Newman (1997) where the majority (90%) of farmers were formally educated. Educational level attained by a farmer is imperative in farming given that it is key in the adoption of new technologies and enhancing efficiency. People with higher educational attainment are more knowledgeable and efficient in interpreting agricultural information, and they can utilise the information effectively in their farming operations (Mather & Adelzader 1998, Manciya, 2012).

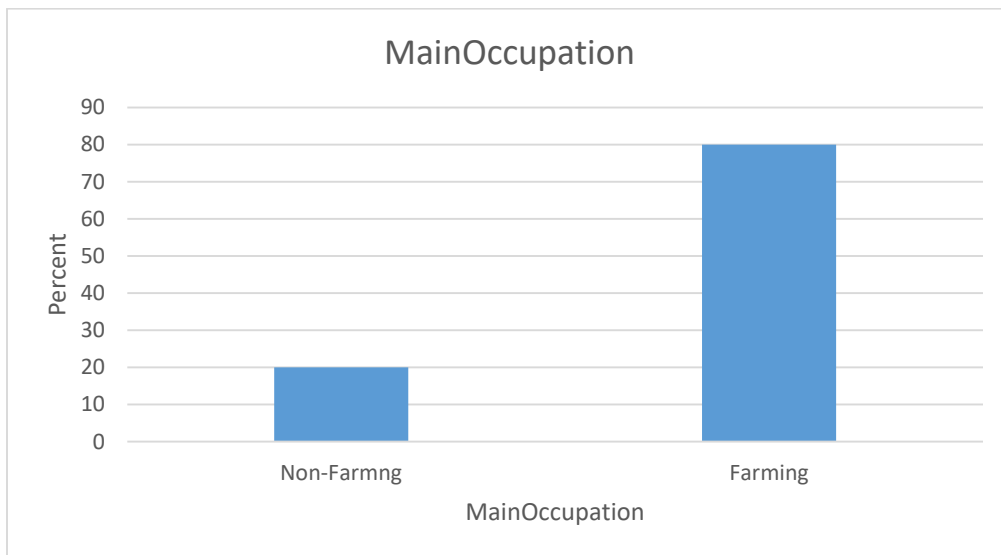


Figure 4.4 Main Occupation of the farmers

Source: Survey data (2020)

In total, 80% of the respondents were practising farming as their main source of employment or main occupation, while the remaining 20% of them were practising farming as their part-time source of employment or occupation. For this study, the majority of farmers were engaged in farming as full-time farmers meaning that most of their time and resources were dedicated to their agricultural activities.

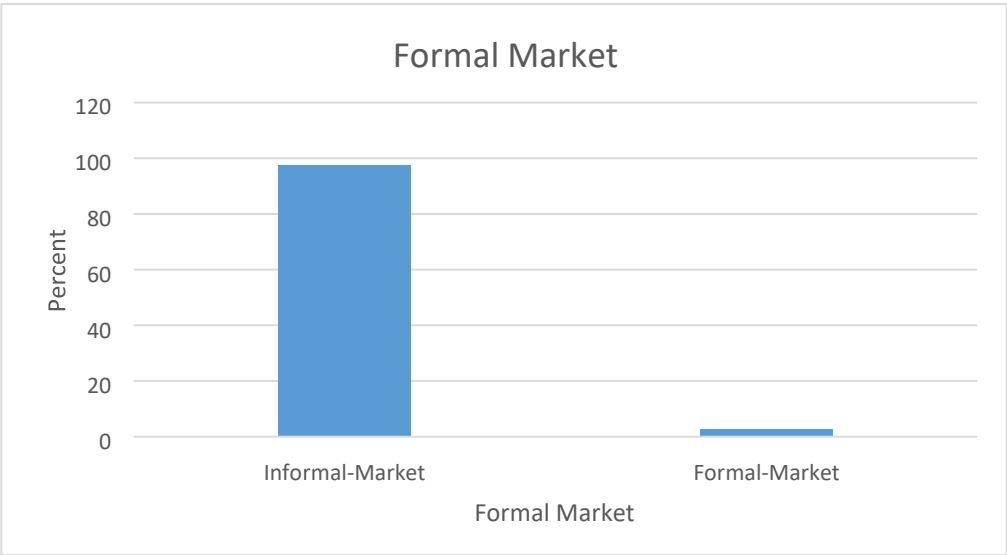


Figure 4.5 Type of market for farmers

Source: Survey data (2020)

The results on figure 4.5 revealed that the majority of farmers (98%) who were engaged in agricultural production had inadequate access to formal market and 2% were able to supply their agricultural produce to the informal markets. Majorities of farmers were supplying their agricultural produce to the informal market by selling directly from the farm or to the hawkers and a minority were able to secure formal markets where a contract between a supplier and a receiver was signed. The inability of the majority of farmers to participate in formal markets may be caused by several constraints including amongst others, lack of transport facilities, high prices of production inputs and the distance travelled to the market (Ramoroka, 2012). Bushbuckridge Local Municipality LED (2014) echoed the same sentiment with Ramoroka that Bushbuckridge smallholder farmers are highly unlikely to maintain any market penetration for a long period.

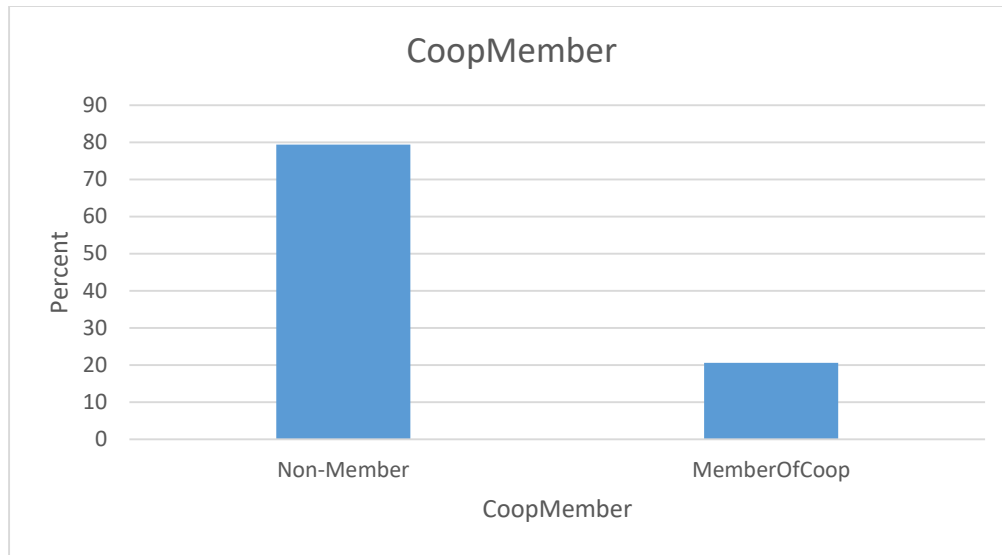


Figure 4.6 Cooperative status of farmers

Source: Survey data (2020)

The findings in figure 4.6 indicates that the majorities of farmers, 80% were practising farming as individuals and 20% were farming as members of an agricultural farming cooperatives. Conflict of interest amongst farmers may be one of the main contributing factors hindering farmers from participating in primary agricultural cooperatives. Gala (2013), echoes the same sentiments by saying that inadequate knowledge of farmers to manage a cooperative results in a lack of or poor production emanating from members and workers engaged in arguments instead of working.

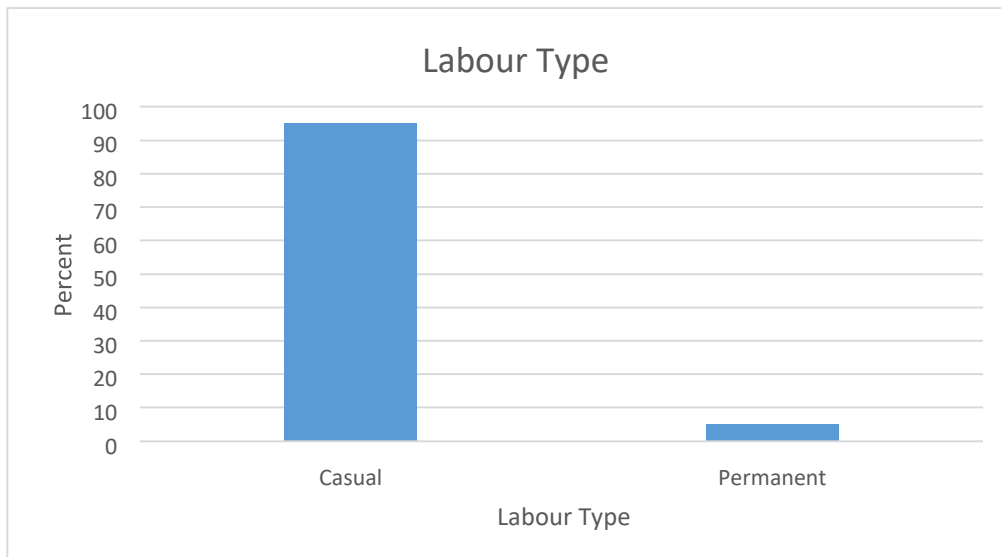


Figure 4.7 Type of labour employed by farmers

Source: Survey data (2020)

According to Figure 4.7, majority of farmers in Bushbuckridge preferred hiring casual or seasonal farm labourers and a minority hiring permanent farm labourers. Ninety-eight (98%) percent of farmers employed both casual, seasonal or temporary workers and two (2%) employed both casual and permanent workers. The reason behind this is due to the high demand of labour during planting and harvesting period since much of work by its nature is physical and demanding during land preparation and the harvesting periods.

According to Figure 4.8 a majority of farmers in Bushbuckridge are engaged in agricultural production, which is labour-intensive, thus, they tend to employ more of labour on casual or seasonal basis rather than on permanent basis due to the variety of agricultural commodities they produce and land sizes. Hurst *et al.*, (2005) has indicated that a majority of farmers in the developing and some developed countries employ waged agricultural workers on a seasonal and often a casual or temporary basis. The agricultural sector is more reliant on semi-skilled labour and relies on migrant, casual and seasonal labourers (National Treasury, 2010).

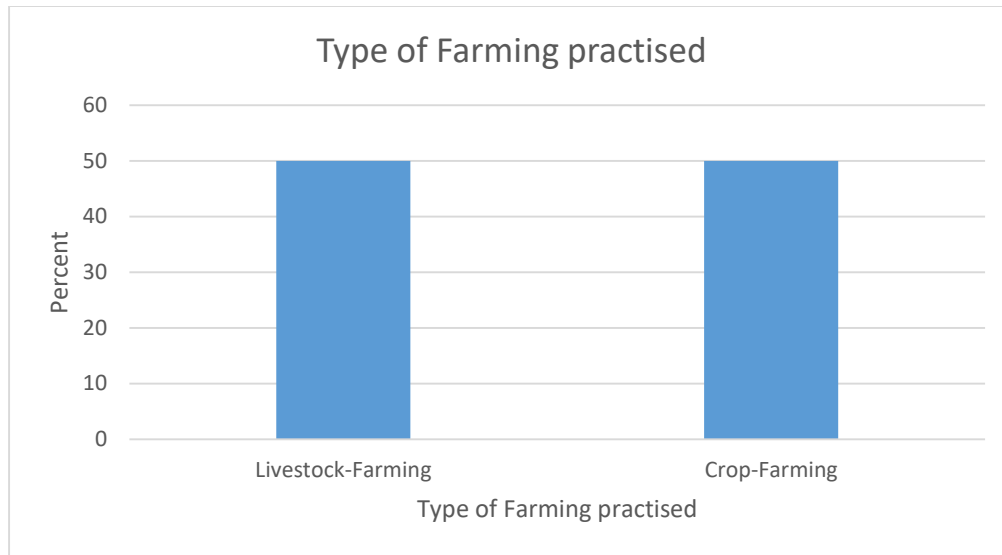


Figure 4.8 Type of farming practised by farmers

Source: Survey data (2020)

The intention of the study was to avoid partiality by engaging 50% livestock and 50% crop of both smallholder and commercial farmers. Livestock and crop production farmers were sharing equal percentages with each having 50%. Farmers in Bushbuckridge Municipality are engaged in the production of various agricultural commodities from crop, livestock and mixed farming (BLM LED 2014). To avoid the issue of partiality or biasness, both crop and livestock farmers were engaged in the study in order to garner their perceptions towards the 2018 agricultural minimum wage.

The following chapter addresses the details of the data presentation and interpretation of the outcome. The chapter analyses the research results and discussion of the findings.

CHAPTER 5

DISCUSSION OF EMPIRICAL ANALYSIS RESULTS

5.1 Introduction

Chapter 4 gave a detailed foundation for empirical analysis by presenting an overview of basic farmers' socio-economic characteristics and factors that were expected to affect the perception of smallholder and commercial farmers towards the 2018 agricultural minimum wage. This chapter tests the significance of farmers' characteristics that were hypothesised to influence the perception of farmers towards the 2018 agricultural minimum wage and to test also the significance of the hypothesised variables in influencing farmers' perception towards the 2018 agricultural minimum wage. The results of the empirical analysis are also discussed.

5.2 Multinomial logistic regression

In this study the dependent variable is "Compliance status" of a farmer, for which there are three possible outcomes. A value of 3 is given when a farmer is uncertain about the compliance with the 2018 agricultural minimum wage, a value of 1 when a farmer complies with the 2018 agricultural minimum wage and a value of 2 given when a farmer has never comply with the 2018 agricultural minimum wage.

The existence of relationship amongst the dependent variable and mixture of various predictor variables is based on the statistical significance of the final model chi-square Table 5.1. In this analysis, the probability of the model or the likelihood Chi-square of (69.458) is 0.000, less than the level of significance of 0.05 (for example $P < 0.05$). The null hypotheses therefore is rejected, which state that there was no difference between the model without predictor variables and the model with the predictor variables. The relationship between predictor variables and dependent variables was maintained.

Table 5.1 Multinomial logistic model fitting information

Model Fitting Information				
Model	Model Fitting Criteria	Likelihood Ratio Tests		
		-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	320.851			
Final	251.393	69.458	34	.000

Even though multinomial logistic regression computes correlation measures to estimate the strength of the relationship (Pseudo R square measures, such as Nagelkerke's R^2), the correlations measures do not really tell us much about the accuracy or errors associated with the model. The Pseudo R-Square values do not have an equivalent of R^2 in OLS (ordinary least squares) coefficient determination.

An imperative measure to assess the utility of a multinomial logistic model was classification accuracy, which compares predicted group membership based on the logistic model to actual, known, compliance with the minimum wage, which was the value of the dependent variable. Even if the independent variable had no correlation with the groups defined by the dependent variable, the predictions would still be expected to be correct for group membership some percentage of the time. This is referred to as chance of accuracy, which is computed by summing each squared percentage of cases in each group.

Table 5.2 Case Processing Summary of multinomial logistic model.

Case Processing Summary			
		N	Marginal Percentage
MNW compliance Status	Comply	24	15.0%
	Uncertain	58	36.2%
	Never comply	78	48.8%
Valid		160	100.0%
Missing		0	
Total		160	
Subpopulation		160a	
a. The dependent variable has only one value observed in 160 (100.0%) subpopulations.			

The proportion by chance accuracy rate was computed by calculating the proportion of cases for each group based on the number of cases in each group and then squaring (in the Case Processing Summary Table 5.2), and summing the proportion of cases in each group ($0.15^2+0.363^2+0.488^2=0.392$). The proportional by chance accuracy criteria is 49, 1% ($1.25 \times 39.2 = 49\%$). The classification accuracy rate was 62.5% (C.f table 5.3) which is greater or equal than the proportional by chance accuracy criteria of 49%, which means suggesting the model was useful. The criteria for classification accuracy is satisfied.

Table 5.3 Classification of Multinomial Logistic model

Classification				
Observed	Predicted			
	Comply	Uncertain	Never comply	Percent Correct
Comply	13	5	6	54.2%
Uncertain	8	28	22	48.3%
Never comply	3	16	59	75.6%
Overall Percentage	15.0%	30.6%	54.4%	62.5%

The classification accuracy was 62.5 % (Table 5.3) which was greater than or equal to the proportional by chance accuracy criteria of 49%. The criterion for classification model was satisfied in this model.

5.3 The relationship of individual independent variables and the dependent variable

The interpretation of an individual independent variable relies on its strength to differentiate between pairs of groups and the influence it has in changing the odds of being in one dependent variable group rather than the other. The significance of independent variables' role in differentiating between pairs of groups is not interpreted unless independent variables also have an overall relationship with the dependent variable in the likelihood ratio test.

Table 5.4 indicates that all other variables were significant except distance to the market, gender, and educational status, and main occupation, access to news, mechanisation, and being a member of a cooperative, pensioner and labour productivity. The interpretation of an independent variable's role in differentiating dependent variable is the same as the one used in binary logistic regression. The main difference in multinomial logistic regression is that we can have several interpretations for an independent variable in relation to a pair of groups.

Table 5.4 Likelihood ratio test of multinomial logistic model

Likelihood Ratio Tests				
Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	251.393	.000	0	.
Farm Hectares	264.017	12.624	2	.002***
Household Size	257.843	6.450	2	.040**
Distance to Market	254.503	3.110	2	.211
Age	259.341	7.948	2	.019**
Experience	260.535	9.142	2	.010***
Gender	254.673	3.280	2	.194
Education	255.567	4.174	2	.124
Marital Status	256.687	5.294	2	.071*
Main Occupation	251.880	.487	2	.784
Labour Productivity	270.108	18.715	4	.001***
Access to News	253.427	2.033	2	.362
Mechanisation Access	254.922	3.529	2	.171
Coop Member	254.253	2.860	2	.239
Pensioner	252.650	1.257	2	.533
MNWGood for Farmers	252.252	.859	4	.930
Note: ***, **, and * are significant at 1%, 5%, and 10% significant levels, respectively				
The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.				
a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.				

Table 5.5 depicts that all variables are significant in distinguishing the first category group (Uncertain) of the dependent variable at different levels 1%, 5% and 10%, excluding household size, gender, education, marital status, main occupation, minimum wage productivity, access to news, member of a cooperative, pensioner and minimum wage good for farmers.

For Never Comply Group, the table depicts that all variables are significant in distinguishing the first category group (never comply) of the dependent variable at different levels 1%, 5% and 10%, excluding distance to market, gender, education, main occupation, minimum wage productivity, access to news, member of a cooperative, pensioner and minimum wage good for farmers (Looking at the significance levels of 1%, 5% and 10%).

5.4. The relationship of individual independent variables and the dependent variable (Never comply with the reference category COMPLY)

Table. 5.5 Model parameter Estimates

Compliance Status		B	Std. Error	Wald	Sig.	Exp(B)
Uncertain	Intercept	-2.019	2.256	.801	.371	
	Farm Hectares	-.188	.067	7.913	.005***	.829
	Household Size	-.149	.154	.926	.336	.862
	Distance to Market	.086	.051	2.762	.097*	1.089
	Age	.099	.038	6.837	.009***	1.104
	Experience	-.188	.068	7.612	.006***	.829
	[Gender=0]	.431	.662	.424	.515	1.539
	[Education=0]	.860	.821	1.097	.295	2.362
	[Marital Status=0]	.750	.699	1.148	.284	2.116
	[Main Occupation=0]	.019	.804	.001	.981	1.019
	Labour Productivity =1]	1.460	1.357	1.158	.282	4.307
	Labour Productivity =2]	-.828	.930	.792	.373	.437
	[Access to News=0]	2.129	2.180	.954	.329	8.405
	[Mechanisation Access=0]	-.591	.636	.863	.353	.554
	[Mechanisation Access=1]	0b	.	.	.	.
[Coop Member=0]	-1.182	.860	1.890	.169	.307	

	[Coop Member=1]	0b	.	.	.	.
	[Pensioner=0]	1.059	1.037	1.044	.307	2.883
	[Pensioner=1]	0b	.	.	.	.
	[MNW Good for Farmers=1]	.531	1.090	.237	.626	1.701
	[MNW Good for Farmers=2]	.623	.932	.447	.504	1.865
	[MNW Good for Farmers=3]	0b	.	.	.	.
Never comply	Intercept	-1.365	2.254	.367	.545	
	Farm Hectares	-.101	.048	4.325	.038**	.904
	House hold Size	-.344	.158	4.732	.030**	.709
	Distance to Market	.067	.051	1.703	.192	1.069
	Age	.091	.037	5.858	.016**	1.095
	Experience	-.109	.060	3.230	.072*	.897
	[Gender=0]	-.349	.672	.270	.604	.705
	[Gender=1]	0b	.	.	.	.
	[Education=0]	-.133	.814	.027	.870	.875
	[Marital Status=0]	1.391	.692	4.038	.044**	4.018
	[Main Occupation=0]	-.322	.803	.161	.688	.724
	[Labour Productivity =1]	2.730	1.344	4.127	.042**	15.337
	Labour Productivity =2]	-.593	.934	.404	.525	.552
	[Labour Productivity=3]	0b	.	.	.	.
	[Access to News=0]	2.331	2.118	1.211	.271	10.289
	[Access to News=1]	0b	.	.	.	.
	[Mechanisation Access=0]	.192	.627	.094	.760	1.211
	[Mechanisation Access=1]	0b	.	.	.	.
	[Coop Member=0]	-1.338	.852	2.466	.116	.262
	[Coop Member=1]	0b	.	.	.	.
	[Pensioner=0]	.565	1.012	.312	.576	1.760
	[Pensioner=1]	0b	.	.	.	.
	[MNW Good for Farmers=1]	.269	1.098	.060	.806	1.309
	[MNW Good for Farmers=2]	.651	.941	.479	.489	1.918
	[MNW Good for Farmers=3]	0b	.	.	.	.
a. The reference category is: Comply.						

Note. Note: ***, **, and * are significant at 1%, 5%, and 10% significant levels, respectively.

5.4.1 Uncertain vs Comply as the reference category

Intercept Multinomial logistic estimate for Uncertain relative to Comply when the predictor variables in the model are evaluated to zero. For being uncertain with all predictor variables with zero scores, the logit for likelihood of being uncertain to comply is -2.019.

Farm Hectares Holding other variables constant, one unit increase in the hectares owned by farmers multiplies the log odds of being uncertain by 0.829 ($0.829 - 1 = -0.171$ see Table 5.5). This finding indicates that the respondents who have more units of hectares were less likely to be in the category of being uncertain than the group who would comply with the 2018 agricultural minimum wage.

Distance to Market Holding other variables constant, one unit increase on the distance travelled by farmers to the market multiplies the odds of being uncertain than complying with the 2018 agricultural minimum wage by 1.089 (specifically $1.089 - 1 = 8.9\%$ see table 5.5). This outcome implies that farmers who travel longer distances to the market are more likely to be in the group of being uncertain than in the group of farmers who would comply with the 2018 agricultural minimum wage.

Age This predictor variables express the number of years a farmer has been alive to date and is measured in years. Given that other variables are held constant, for a one unit increase in the variable age of a farmer multiplies the odds of being uncertain versus complying with the 2018 agricultural minimum wage by 1.104 (specifically $1.104 - 1 = 10.4\%$). The implications of the outcome is that farmers who were older were more likely to be in the category of being uncertain than those in the category of complying.

Experience Holding other variables constant, one unit increase in the experience of a farmer multiplies the odds of being uncertain than complying with the 2018 agricultural minimum wage by 0.829 (specifically $0.829 - 1 = -0.171$). This survey implies that farmers who are more experienced in farming were less likely to be in the category of being uncertain than those in the group that would comply with the 2018 agricultural minimum wage.

5.4.2 Never Comply vs Comply as reference category

Intercept this is the multinomial logit estimate for never comply relative to comply when the predictor variables in the model are evaluated with zero. For Never comply with all predictor variables with zero scores, the logit for preferring not to comply to comply is -1.365.

Farm Hectares Holding other variables constant, one unit increase in farm hectares multiplies the odds of never comply than comply with the 2018 agricultural minimum wage by -9.6% ($0.904 - 1 = -0.096$). The odds of a farmer with more farming hectares under the category of never comply rather than complying were 9.6 times (more than) the group that would like to comply. The results imply that farmers with more farming hectares were less likely to be in a group of never comply than the group that would like to comply with the 2018 agricultural minimum wage. The results concur with the findings of Piek and Von Fintel (2018) who found out that larger farms have the potential to retain workers after a one unit increase in the minimum wage. The probability of being a farm worker increased by roughly 4% in response minimum wage increase.

Household size this is multinomial logit estimate for a one unit increase in the size of household for never comply relative to comply, given other variables are held constant. For a one unit increase in the household size the odds of never comply group were 0.709 times (29.1% less than) the odds of a farmer who would comply with the 2018 agricultural minimum wage.

Age This predictor variable represent the number of years that a farmer has been alive to date and is measured in number of years. Holding other variables constant, one unit increase in the age of a farmer multiplies the odds of never comply group rather than comply with the 2018 agricultural minimum wage by 1.095 ($1.095 - 1 = 0.095$). It implies that a farmer who are older were more likely to be in the group of not comply rather than the group that would comply.

Experience Holding other variables constant, one unit increase in the experience of a farmer multiplies the odds of never comply group in the 2018 agricultural minimum wage by 0.897 ($0.897 - 1 = -0.103$). This implies that farmers who have more experience were

less likely to be in the group of never comply rather than the group who would comply with the 2018 agricultural minimum wage.

Marital status this predictor variable is included in the study to determine the impact marital status has towards decision making in complying with the 2018 agricultural minimum wage. Holding other variables constant, the relative log odds of an unmarried farmer who is in the group of never comply in the 2018 agricultural minimum wage versus uncertain will increase by 0.750.

Labour Productivity Holding other variables constant, one unit increase in labour productivity multiplies the odds of being in the group of never comply increased by 14 33.7% ($15.337 - 1 = 14.337$). Survey respondents who agreed that agricultural minimum wage increases labour productivity were more likely to be in the group of survey respondents who would not comply with the 2018 agricultural minimum wage rather than the survey group who would comply.

5.5 Factors influencing the Likelihood of farmers on whether to comply with the 2018 agricultural minimum wage.

The previous section discussed in detail the statistical relationship between the predictor variables and dependent variable. From this analysis, it can be concluded that the statistical significant predictor variables influence farmers' likelihood to decide on whether to comply or not to comply with the 2018 agricultural minimum wage. In this section only the variables that distinguished the likelihood of never comply in relation to comply as a reference category were discussed as it is very challenging to make conclusions with uncertainty category. Farm hectares, household size, age, experience, marital status and opinion questions of farmers (check their likelihood odds) who think minimum wage increases labour productivity all influenced farmers' decision to comply with the 2018 agricultural minimum wage.

5.5.1 Farm hectares

Farm hectares have been found to be negatively significant in distinguishing never to comply category and comply. The outcome of the study depicts that those who had more farming hectares were less likely to be in the group of never comply rather than those in

the comply group. The outcome is in line with the findings of Piek and Von Fintel (2018), where it was found that large farms had the capacity to pay the prescribed minimum wage even before the imposition of minimum wage policy. This outcome might be emanating from the fact that large farmers have small gaps to reach minimum wage levels compared to the small ones, since they are more likely to use capital-intensive, skilled labourers and had the ability to exploit economies of scale.

5.5.2 Household size

Household size has been found to be negatively significant in distinguishing Never Comply in relation to Comply category. In distinguishing never comply from comply, household size was found to be negatively significant implying that a farmer with more units of household size was less likely to be under the group of never comply rather than those who would comply with the 2018 agricultural minimum wage. The results are in contrast with the findings of Trant (2018), as one of their cost-minimisation adjustment response towards minimum wage increase, direct market farmers would reduce hired labour costs by substituting increased family labour.

5.5.3 Age

Age has been found to be significant in distinguishing Never Comply in relation to Comply as a reference category. This outcome implies that one unit increase in the age of a farmer, the higher the odds of the farmer to be in the group of Never comply rather than those complying with the 2018 agricultural minimum wage.

Given a hectare of land to grow a crop with a given yield, it is clear that this can be done at the expense of little labour and much energy, or the other way around: the non-tradable resource labour may be replaced by the tradable resource energy without changing the yield. Thus, farmers who are older can substitute labour with the use of machinery or employ little labour during peak seasons. Additionally, labour and machinery used for fieldwork may be substituted for each other (De Wit, 2003).

5.5.4 Farming Experience

Farming experience has been found to be negatively significant in distinguishing Never comply with comply. The results means that the more the units of experience a farmer

has, the lower the odds of a farmer to be in a group of Never comply rather than comply with the 2018 agricultural minimum wage. It is echoed by other studies that farmers' experience is tied to action rather than being a mental capacity but it also carries elements of practical and physical skills (Scott, 1998 cited in Stuver *et al.*, 2004). Experience of an elder farmer leads to more efficient combination of inputs, which makes a unit of labour effective. It is stated by Guo *et al.*, (2015), that knowledge and skills garnered by farmers assist in terms of maximizing the efficient use of agricultural input, such as pesticides and fertilizers as well as labour input.

5.5.5 Marital status

Marital status has been found to be positively significant in distinguishing Never Comply with comply. These findings imply that farmers who are not married were more likely to be in the group of Never comply rather than those who would comply with the 2018 agricultural minimum wage.

Married farmers are less likely to participate in the agribusiness unlike non-married farmers. Married individuals have more responsibilities that may reduce the resources (financial or time) that can be available for venturing into additional farm activities such as minimum wage legislation, which is perceived to be time consuming and costly (Magagula & Tsvakirai, 2019).

5.5.6 Labour Productivity

Labour Productivity was found to be significant in distinguishing Never comply and comply. These findings state that farmers who are of the view that minimum wage increases labour productivity are more likely to be in the group of Never comply rather than those complying with the 2018 agricultural minimum wage. In contrast with Grub (2015), workers' productivity have been increased post the introduction of minimum wage legislation, since less productive or unskilled farm workers were laid off and the remaining few were skilled, having to perform hard duties and extra workload. Simbi & Aliber (2008) and DoL (2001b) stated that farmers who are engaged in mixed farming or labour-intensive farming were forced to mechanise in order to reduce cost of inputs and keep up their productivity.

5.5.7 Perception towards the 2018 agricultural minimum wage

Labour productivity was positively significant in distinguishing Never comply group in relation to comply as a reference group. Labour productivity variable represented opinion question where farmers agreed that agricultural minimum wage increases labour productivity. Therefore, farmers who are of the view that minimum wage increases labour productivity were more likely to be in the Never comply group. These results contrast with findings by (Simbi & Aliber, 2008; DoL, 2001b), which state that higher wages that rise income above basic subsistence levels also assist in reducing low productivity emanating from poor nutrition. Additionally, findings by Newman (1997), says that commercial farmers were of the perception that productivity may increase or be stimulated because earnings act as incentive, which stimulates the investment of the workers in themselves and their children, and employers will substitute unproductive workers with more productive ones.

5.6 Summary

Considering the results of empirical models, several factors influenced whether farmers were likely or not likely comply with the 2018 agricultural minimum wage and these are: age, household size, marital status, farm hectares, farming experience and labour productivity were found to be significant in distinguishing both categories (never comply and uncertain) of the dependent variable at different levels (specifically at 1%, 5% and 10%) to comply with the 2018 agricultural minimum wage. However, few independent variables such as gender, pensioner status, cooperative member, access to news and minimum wage good for farmers were found to be insignificant.

CHAPTER 6

SUMMARY, CONCLUSION AND RECCOMENDATIONS

6.1 Introduction

This chapter summarises the research findings and concludes based on empirical results. The chapter further discusses how the objectives and hypotheses aforementioned in chapter one were addressed. Recommendations based on the findings of the research are also discussed in this chapter.

The main aim of the study was to articulate the perceptions of both smallholder and commercial farmers towards the 2018 agricultural minimum wage in Bushbuckridge Local Municipality of Mpumalanga Province. The study had three objectives; the first objective was to identify and describe the socio-economic characteristics of farmers, the second one was to assess the perceptions of farmers on agricultural minimum wage and the third one was to analyse socio-economic factors influencing the perceptions of farmers towards agricultural minimum wage in Bushbuckridge Local Municipality. The study also had two hypotheses; the first hypotheses was that farmers do not have negative perception towards the 2018 agricultural minimum wage and the second one was that socio-economic factors do not affect farmers' perceptions towards the 2018 agricultural minimum wage.

6.2 Summary

This section provides a summary of some of the imperative sections included in the study. The study was conducted in Bushbuckridge Local Municipality of Mpumalanga Province. For the purpose of the study, 160 both smallholder and commercial farmers (livestock and crop) were selected using purposive sampling method. In organising and analysing data, multinomial logistic regression model was applied. Multinomial logistic model was used to analyse the perceptions of farmers and factors influencing their perception towards the 2018 agricultural minimum wage. Independent variables, which were significant in distinguishing between groups of outcome variables from the reference group, were; farm hectares, distance to market, age, experience, marital status, household size and labour productivity.

6.3 Conclusion

The problem investigated in the study was to assess the perception of farmers towards the 2018 agricultural minimum wage in Bushbuckridge Local Municipality. The analyses made in this study were intended to answer the following objectives:

(i) Identify and describe the socio-economic characteristics of farmers in Bushbuckridge Municipality, (ii) Assess the perception of farmers on agricultural minimum wage in Bushbuckridge Municipality, (iii) Analyse socio-economic factors influencing the perception of farmers towards agricultural minimum wage in Bushbuckridge Municipality.

Responding to the first question, from our descriptive statistics the study found that men were dominating farmers in Bushbuckridge Local Municipality and majority of them were married. Majority of these farmers had received formal education and they practised agricultural production as their main occupation. Additionally, the minimum age of farmers was 24 years, average of 57 and the eldest farmer was 88 years old.

Looking into the second objective, the study has successfully proved that smallholder and commercial farmers have mixed emotions towards the 2018 agricultural minimum wage. Majority of farmers (48.8%) had negative perception (attitude) towards the 2018 agricultural minimum wage, followed by 36.2% of uncertainty and with 15% with positive attitude towards the 2018 agricultural minimum wage. Therefore, it can be concluded from results that majority of smallholder and commercial farmers in Bushbuckridge Local Municipality were not willing to comply or pay the prescribed 2018 agricultural minimum wage.

Considering the last objective, factors such as farm hectares, distance to the market, household size, age, experience, marital status and labour productivity were likely to have influenced compliance of farmers with the 2018 agricultural minimum wage. The findings of the study indicate that both hypotheses formulated in chapter 1 are rejected and the null hypothesis stated that, (i) farmers do not have negative perceptions towards the 2018 agricultural minimum wage and (ii) Socio-economic factors do not influence farmers' perceptions towards 2018 agricultural minimum wage.

Hypothesis one: farmers do not have negative perceptions towards the 2018 agricultural minimum wage. The hypothesis was therefore rejected since the Multinomial Logistic Regression Model revealed that the majority of farmers (48.8%) have perceived the 2018 agricultural minimum wage negatively and 36.2% were uncertain.

Hypothesis two: Socio-economic factors do not influence farmers' perceptions towards 2018 agricultural minimum wage. The hypothesis was therefore rejected since the results have showed that certain factors such as farm hectares/size, distance travelled to the market, household size, age, experience, marital status and labour productivity were likely to influence the perception farmers have towards the 2018 agricultural minimum wage. Significant variables such as farm hectares and farming experience had negative relationship with farmers who are uncertain about complying with the 2018 agricultural minimum wage.

6.4 Policy implications and recommendations

Given the findings from the perceptions of the farmers in Bushbuckridge local municipality, several recommendations can be made. These recommendations will be an eye opener and relevant input in assisting several stakeholders (for example; farmers, policy makers, workers union, and government, etcetera.) to make consultative sustainable decisions.

- ✓ Consultative policy making process

Farmers, regardless of their production scale should be consulted and given a fair platform to articulate their views during the process of policy formulation. Policy makers and government should refrain from using a blanket approach when formulating a policy and taking into consideration the issue of disparities in the agricultural sector, subsectors, regions and operational scale of farmers when discussing the agricultural minimum wage policy. Consultative process in policy formulation where both parties are active participants can change the perception farmers have towards agricultural minimum wage and an amicable possible solution can be reached which benefits both the farmers and a farm worker.

- ✓ Provision of training for farm workers

Provision of training for farm workers will enhance farm production and development as well as ensure agricultural sustainability. Hiring a skilled farm worker enhances farm productivity and farmers may be willing to pay the binding minimum wage since it would be worth it. The amount paid to agricultural workers will worth the skills, expertise and duty performed on the farm by a farm worker. Hiring skilled farm workers adds value and improves farm productivity, so farmers may be willing to pay the binding minimum wage in return of increased net farm income.

- ✓ Agricultural minimum wage awareness campaign

A majority of farmers believe that payment agreed upon between a farmer and a farm worker will uphold regardless of external forces' influence and the amount paid to a farm worker is befitting and fair according to their judgment or ability. Awareness about the importance and purpose of the agricultural minimum wage policy in the agricultural sector must be disseminated to all farmers in all different parts of the country. Understanding the purpose and importance of the binding agricultural minimum wage can influence the perceptions both smallholder and commercial farmers have towards it.

6.5 Areas for further research

Research has to be conducted in line with the viability of standardised agricultural minimum wage for farmers in South Africa, taking into consideration their socio-economic characteristics, subsectors, regions and scale of operation disparities.

7. REFERENCES

- Agriorbit, (2018). Agriculture and the Minimum Wage.
Available from: <https://www.agriorbit.com/agriculture-and-the-national-minimum-wage/>.
Accessed [19 May 2019].
- BFAP, (2012). Farm Sectoral Determination: An Analysis of Agricultural wages in South Africa. Bureau for Food and Agricultural Policy. Pretoria. Available from: https://www.hopcal.co.za/wp-content/uploads/2018/04/article_files_61_bfapfarm-sector-determination-report-draft-17-dec.pdf. [Accessed 29 March 2018].
- Bhorat, H. Kanbur, R. & Stanwix, B. (2012). Estimating the Impact of Minimum Wages on Employment, Wages and Non-Wages Benefits: The Case of Agriculture in South Africa. DPRU Working Paper No. 12-149. Development Policy Research Unit, South Africa.
- Bhorat. H. Kanbur, R & Mayet N. (2013). The Impact of Sectoral Minimum Wage Laws on Employment, Wages and Hours of Work in South Africa. IZA Journal of Labour & Development, 2(1), p1-27. *DPRU Working paper.12/154*. Available: http://www.dpru.uct.ac.za/sites/default/files/images_tool/images/36/DPRU%20WP12.pdf [30 August 2018].
- Bless, C., Higson-Smith C., & Sithole, S.L. (2014). *Fundamentals of Social Research Methods: An African Perspective*. 5th Edition, Juta, Cape Town.
- Bushbuckridge Local Municipality Local Economic Development Strategy. (2010). Available from: <https://bushbuckridge.gov.za/wpcontent/uploads/2017/10/Bushbuckridge-LED-Strategy-2010-20142-1.pdf>. Accessed [30 February 2019].
- Card, D. (1992). Do Minimum Wages Reduce Employment? A Case Study of California, 1997-89. *Industrial and Labour Relations Review*, Vol.46, No.1. (Oct. 1992), pp.

38-54. Cornell University. Available from: <http://links.jstor.org/sici?sici=0019-7939%28199210%2946%3A1%3C38%3ADMWREA%3E2.0.CO%3B2-%23>. Accessed [15 August 2018].

Card, D & Krueger, A.B. (1992). Minimum Wage and Employment: A Case Study of the Fast Food Industry in New Jersey and Pennsylvania. Vol.84. No.4. Available from: <https://davidcard.berkeley.edu/papers/njmin-aer.pdf>. Accessed [06 October 2019].

Cassim, A. Jourdan, B. & Pillay, K. (2015). Development Policy Research Unit. The Misunderstood Minimum Wage: A case Study of South Africa, Chapter 4. Available from: <http://nationalminimumwage.co.za/wpcontent/uploads/2015/09/1019-The-Misunderstood-minimum-wage.pdf>. Accessed [23 September 2018].

Coleman, N. (2014). A National Minimum Wage of South Africa. The Changing Face of Labour Law: Tensions and Challenges. Available: https://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved0CBwQFjAA&url=http%3A%2F%2Fwww.cosatu.org.za%2Fdocs%2Fmisc%2F2014%2Fneilcoleman_11cnmw.pdf&ei=7gwsVYjTA5DdarOoPAO&usg=AFQjCNFmXk1h1GQxgV1jMnpytuRydwWaA&sig2=9aIHLQzofTkV1MxImayMHQ&bvm=bv.90491159,d.d2s. Accessed [12 April 2018].

Darrol, C. (2014). National minimum wage: A complicated Issue. SBP. (Business Unity South Africa) Available: <http://www.rebosa.co.za/wp-content/uploads/2014/10/National-Minimum-Wage-Background-Paper.pdf> [April 10 2015].

De Wit, C.T. (2003). The Efficient Use of Labour, Land and Energy in Agriculture.

Department of Theoretical Production Ecology, Agricultural University,
Wageningen, the Netherlands. Available from:
<https://core.ac.uk/download/pdf/29382761.pdf>. Accessed [28 October 2020].

Department of Labour, (2018). Government Gazette No.42124 No. 1401. Available from:
https://file:///C:/Users/training/AppData/Local/Temp/42124_19-12_Labour.pdf.
[Accessed 18 September 2018].

Department of Labour (2001). Land Redistribution and Agricultural Development
Programme, Pretoria: LA. Available from:
http://www.ruraldevelopment.gov.za/phocadownload/Documents/crdp_version_1-28july09.pdf. Accessed [23 March 2019].

Development Policy Research Unit n.d. Estimating the Impact of Minimum Wages on
Employment, Wages and Non-Wage Benefits: The Case Study of Agriculture in
South Africa. Available from:
http://www.dpru.uct.ac.za/sites/default/files/image_tool/images/36/DPRU%20WP12-149.pdf. [Accessed 30 August 2018].

Dickens, R. machine, S. Manning, A. Metcalf, D. Wadsworth, J & Woodland S. (1995).
The Effect of Minimum Wages on UK Agriculture. Available from:
<https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1477-9552.1995.tb00748.x>
[/https://doi.org/10.1111/j.1477-9552.1995.tb00748.x](https://doi.org/10.1111/j.1477-9552.1995.tb00748.x). [Accessed 15 July 2019].

Fakir, E. & Abdool, S. (2017). South Africa's National Minimum Wage: A total Sell Out?
OR Bright Light in a Dark Tunnel? ASRI. Short paper on National Minimum
Wage. Available from: <http://www.asri.org.za/wp-content/uploads/2017/04/South-Africa%E2%80%99s-National-minimumwage.pdf>. [Accessed 23 June 2019].

Finn, A. (2015). A National Minimum Wage in the Context of the South African Labour
Market. Wits University, South Africa. Available from:

<http://nationalminimumwage.co.za/wp-content/uploads/2015/09/NMW-RIDescriptive-Statistics-Final.pdf>. [Accessed 6 May 2018].

- Freeman, R.B. (1996). "The minimum Wage as a Redistributive tool. The Economic Journal: Policy Forum: Economic Aspects of Minimum Wages (The Royal Economic Society). 1996; 106 (436): 639-649. Available from: <https://ideas.repec.org/a/ecj/econjl/v106y1996i436p639-49.html>. [Accessed 02 March 2019].
- Gala, X.M.H. (2013). Challenges Facing an LED Agricultural Cooperative in the greater Tzaneen Municipality (A Case Study Nkomamonta Primary Agricultural Cooperative in Limpopo). Available from: http://ulspace.ul.ac.za/bitstream/handle/10386/1015/Gala_xmh_2013.pdf?sequence=1&isAllowed=y. Access [23 October 2020].
- Gowers, R. & Hatto, T.J. (1997). The origins and early impact of minimum wage in agriculture. *The Economic History Review: New Series, Vol. 50, No. 1, pp. 82-103*. Available from: https://www.jstor.org/stable/2600012?seq=1#page_scan_tab_contents. [17 August 2019].
- Grub, A. (2005). The Impact of Labour Legislation in South Africa Workers' Livelihood in the Skuinsdrift Area, North West Province. Available from: <http://wiredspace.wits.ac.za/bitstream/handle/10539/1800/thesis%20grub.pdf?Sequence=2&isAllowed=y>. [Accessed 30 August 2018].
- Guo, G. Wen, Q. & Zhu, J. (2015). The Impact of Aging Agricultural Labour Population on Farmland Output: From the Perspective of Farmer Preferences. *Mathematical Problems in Engineering*, Volume 2015 |Article ID 730618 7 pages, 2015. Available from: <https://doi.org/10.1155/2015/730618>. Accessed [15 October 2020].
- Hall, R. (2014). Towards a minimum wage: what do we know about wages and employment in agriculture? Institute of Poverty, Land and Agrarian Studies,

University of Western Cape. Parliamentary Hearings. Available from: <file:///C:/Users/mphozee/AppData/Local/Temp/0009Minimum-wage-Ruth-Hallpresentation-3.pptx>. [Accessed 10 September 2018].

Hosmer, D.W. & Lemeshow, S. (2000). *Applied Logistic Regression, 2nd edn*. New York: Wiley. Available from: http://resource.heartonline.cn/20150528/1_3kOQSTg.pdf. [Accessed 23 November 2018].

Hurst, P. Termine, P & Karl, M. (2005). Agricultural Workers and their Contribution to Sustainable agriculture and Rural Development Available from: https://cisp.cachefly.net/assets/articles/attachments/02243_agricultural.pdf. Accessed [23 September 2020].

ILO, (2017). BRICS Brief Series. BRICS Summary: Youth Employment. Available from https://www.ilo.org/wcmsp5/groups/public/---dgreports/--dcomm/documents/publication/wcms_636204.pdf. Accessed [20 June 2019].

Kropko, J. (2008). Choosing Between Multinomial Logit and Multinomial Probit Models for Analysis of Unordered Choice Data. The University of Chapel Hill. Available from: http://www.Choosing_between_multinomial_logit_and_multinomial_probit_models_for_analysis_of_unordered_choice_data.pdf. [Accessed 15 October 2019].

Lakens, D. 2021. Sample Size Justification, Eindhoven University of Technology. Available from: file:///C:/Users/mphozee/AppData/Local/Temp/sample_size_justification.pdf. [Accessed 10 August 2021].

Lemos, S. (2004). The Effects of the Minimum Wage in the Private and Public Sectors in Brazil. Working Paper No.04/12, University of Leicester. Available from: <https://www.le.ac.uk/economics/research/RePEc/lec/leecon/dp04-12.pdf>.

[Accessed 25 October 2018].

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 1–55. Available from: https://legacy.voteview.com/pdf/Likert_1932.pdf.

[Accessed 16 August 2018].

LIMA, (2016). Post-Harvest Innovation Programme: Bushbuckridge Agricultural Development Plan. Available from: <http://postharvestinnovation.org.za/wpcontent/uploads/2016/02/PHI-Bushbuckridge-Mpumalanga-Report.pdf>.

[Accessed 23 October 2018].

Magagula, B. & Tsvakirai, C.Z. (2019). Youth perception of agriculture: influence of cognitive process on participation in agripreneurship. Available from:

<https://www.tandfonline.com/doi/full/10.1080/09614524.2019.1670138>.

Accessed [12 October 2020].

Manciya, S. (2012). The Impact of New Co-operative Act on Employment and poverty Reduction: A Case Study of Sorghum Producers in Eastern Cape Province.

Unpublished M-Agric thesis, University of Fort Hare, Alice.

Masipa, T.S. (2016). South Africa's Pursuit for Minimum Wage: A Double Edge Sword.

University of Limpopo, South Africa. Available from:

<https://pdfs.semanticscholar.org/fc30/50deaddf1a637bd9042def8c0e517cca64a2.pdf>. [Accessed 30 August 2018].

MEGA N.D., the Mpumalanga Agri-Hubs. Available:

www.mega.gov.za/thempumalanga-agri-hubs/. [10 November 2019].

Merten, M. (2018). Daily Maverick. Parliament: The Unravelling of the National Minimum Wage Bill, South Africa. Available from:

<https://www.dailymaverick.co.za/article/2018-03-26-parliament-the-unravellingof-the-national-minimum-wage-bill/>. Accessed [7 August 2018].

- Mpande, B. LowVelder (2018). Maximum reaction to minimum wage. *LowVelder*, May 13 2018 May 3! 2018. Available from:
<http://www.google.com/amp/s/lowvelder.co.za/432081/maximum-reactionwage/amp>. Accessed [17 August 2018].
- Municipalities of South Africa. Available from:
<https://municipalities.co.za/map/1142/bushbuckridge-local-municipality>. Accessed [15 June 2019].
- Mzuyanda, C. (2014). Assessing the Impact of Primary Agricultural Co-Operative Membership on Smallholder Farm Performance (crops) in Mnquma Local Municipality of the Eastern Cape Province. Available from <http://libdspace.ufh.ac.za/handle/20.500.11837/315>. Accessed [11 October 2020].
- Naidoo, L. Klerck, G. & Manganeng L. (2007). The “bite” of Minimum Wage: Enforcement of and Compliance with sectoral determination for farm workers. *South African Journal of Labour Relations*: Vol. 31, No. 1. 2007.
- National Treasury. Republic of South Africa. (2010). National Budget Review 2010. Pretoria: National Treasury. Available from:
<http://www.treasury.gov.za/documents/national%20budget/2010/review/Budget%20Review.pdf>. Accessed [23 October 2019].
- Nel, G.P. & Nel, E.J. (2009). Description of the natural environment and biodiversity impact assessment of the planned Vele colliery. Dubel: Integrated environment sciences.
- Newman, R.A. Ortman, G.F. & Lyne, M.C. (1997). Research Note: Farm Labour Remuneration, Labour Legislation and Commercial Farmers’ perceptions in Kwazulu-Natal. *Agrekon*, Vol. 36, No.1.

- Ngqangweni, S. & Delgado, C. (2013). Decisions on livestock keeping in the semi-arid areas of Limpopo Province. Working Paper, Department of Agricultural Economics, Extension and Rural Development, University of Pretoria, Pretoria.
- NGAU, P., & KUMSSA, A. (2004). *Research design, data collection, and analysis: a training manual*. [Nairobi], United Nations Centre for Regional Development, Africa Office.
- Piek, M. & Von Fintel, D. (2018). Sectoral minimum wages in South Africa: disemployment by firm size and trade exposure. Stellenbosch Economic Working Papers: WP/2018. Available from: <http://www.ekon.sun.ac.za/wpapers/2018/wp192018>. Accessed [09 August 2019].
- Ranchord V. & Bassier, I. (2017). Estimating the wage and employment effects of a large Increase in South Africa's agricultural minimum wage. RED13x3 Working Paper No.38.
- Robert, T. & Antrobus, G.G. (2013). "Farmers Perceptions of the impact of legislation on Farm workers' wages and working conditions: an Eastern Cape case study", *Agrekon*, Taylor & Francis Journals, vol.52 (1), pages 40-67, March. University of Rhodes.
- Roberts, T.J. (2004). The Effects of Minimum Wage Legislation on Farm Workers' Wages and Working Conditions in the Albany area. Unpublished Honours research paper. Grahamstown: Department of Economics, Rhodes University
- Sechaba, T. (2017). Perception of Minimum Wage in the Johannesburg Taxi Industry. University of Witwatersrand. Available from: <http://wiredspace.wits.ac.za/bitstream/handle/10539/23105/SECHABA%20TU%20MELO%20SECOND%20FINAL%20EDITED%20REPORT%20JUNE%20%202017.pdf?Sequence=1&isAllowed=y>. [Accessed 30 July 2018].
- Shabangu, R.R. (2015). Effect of Masibuyele Emasimini Agricultural Programme on Food

Security at New Forest Irrigation Scheme in Bushbuckridge Municipality of Ehlanzeni District in Mpumalanga Province. Available from: http://ulspace.ul.ac.za/bitstream/handle/10386/1583/shabangu_rr_2015.pdf?Sequence=1&isAllowed=y. [Accessed 26 October 2018].

Siedlecki, S.L 2020. 'Understanding Descriptive Research Designs and Methods' *Clinical Nurse Specialist*, vol. 34, no. 1, pp. 8-12. Simbi, T. & Aliber, M. (2000). Agricultural Employment Crisis in South Africa, TIPS Policy Forum, Working Paper 13, 2000. Muldersdrift, September. Available from: <https://agris.fao.org/agris-search/search.do?recordID=GB2013202943>. [Accessed 23 August 2018].

Stanxiw, B. (2013). Development Policy Research Unit: Minimum Wages and Compliance in South Africa agriculture, University of Cape Town. Available from: http://uscdn.creamermedia.co.za/assets/articles/attachments/43158_stanxiw_jan_2013_minimum_wages_final.pdf. [Accessed 23 March 2018].

STATSA, Census (2011). Bushbuckridge Municipality. Available from: <https://census2011.adrianfrith.com/place/877>. [Accessed 23 July 2018].

Stella, 2019. 'Water crisis deepening in Bushbuckridge: part 1', *Changing Practice, Our projects, Permaculture Projects Uncategorized*, November 05 2019. Available from: <https://zingelaulwazi.org.za/water-crisis-deepening-in-bushbuckridge-part-1/>. [Accessed 20 May 2019].

Stigler, G.J. (1946). "The Economics of Minimum Wage Legislation." *American Economic Review* 36 (3): pp. 358-365.

Stuiver, M. Leeuwis, C. & van der Ploeg, J.D. (2004). The Power of Experience: Farmers' Knowledge and Sustainable Innovations in Agriculture. Available from: <https://library.wur.nl/WebQuery/wurpubs/fulltext/338074>. Accessed [28 October 2020].

- Tauer, L.W. (1984). Productivity of Farmers at Various Ages. Available from: <https://www.jstor.org/stable/1349302?seq=>. Accessed [23 October 2020].
- Tocco, B. Davidova, S. & Bailey, A. (2012) Key Issues in Agricultural Labour Markets: A Review of Major Studies and Project Reports on Agriculture and Rural Labour Markets. Working Paper No. 20, February 2012. Available from: http://aei.pitt.edu/58523/1/Factor_Markets_20.pdf. Accessed [28 October 2020].
- Trant, L Brekken, C.A Lev, L & Gwin, L. (2018). Implications of the 2016 Oregon Minimum Wage Increase for Direct Market Farmers, Farmworkers and Communities. *Sustainability* 2018, 10(2), 370. Available from: <https://www.mdpi.com/20711050/10/2/370/html>. [17 July 2019].
- Truter, J. (2018). Labour News Teazer: National Minimum Wage Effective 1 January 2019. Available from: <http://www.labourwise.co.za/labour-news-teazer/newnational-minimum-wage-1-january-2019>. [Accessed 15 January 2019].
- Van Der Zee, K. (2017). Assessing the Effects of Two Agricultural Minimum Wage Shocks in South Africa. University of Cape Town. Available from <https://open.uct.ac.za/handle/11427/25504>. [Accessed 18 June 2018].
- Vink, N. & Tregurtha, N. (2003). A Theoretical Perspective on a Minimum Wage in South African Agriculture. *Agrekon* 42(1):49–59. Available from: <https://ideas.repec.org/a/ags/agreko/246012.html>. [Accessed 28 April 2019].
- Vink, N. & van Rooyen, J. (2009). The Economic Performance of Agriculture in South Africa since 1994: *Implications for Food Security*. *Development Bank of South Africa. Working Paper Series No.17*.

APPENDIX

QUESTIONNAIRE NO:

Questionnaire ID.....



Department of Agricultural Economics and Animal Production
PERCEPTION OF SMALLHOLDER AND COMMERCIAL FARMERS TOWARDS THE
2018 AGRICULTURAL MINIMUM WAGE: A CASE STUDY IN BUSHBUCKRIDGE
MUNICIPALITY OF MPUMALANGA PROVINCE.

The questionnaire is part of a master’s dissertation on analysing the perception of smallholder and commercial farmers towards the 2018 agricultural minimum wage in Bushbuckridge municipality of Mpumalanga province. All the information you provide in this questionnaire is confidential.

I fully agree to participate in this survey by completing this questionnaire voluntarily and the information will be used for the purpose of this research only. If you agree please indicate with an X

Researcher: Kubayi Future (201210293)

Interview date

Enumerator’s name

Name of Village

Interview Duration

SECTION A: Socio-Economic Characteristics

1. Gender of the Farmer

1	0
Male	Female

2. Age of the Farmer (years)

3. Number of years in farming (as a farmer)

4. How many household members are dependent on you.....

5. Number of household members assisting you with farming.....

6. Educational status of the farmer

Formal

- a) Primary
- b) Secondary
- c) Tertiary

Informal (Adult education)

- a) Abet
- b) No Education

7. Size of the farmer's household

8. Main occupation of the farmer

Farming	Non-farming
1	2

9. Marital status of the farmer

Married	Other
1	0

10. Are you a member of any agricultural cooperative

Yes	No
-----	----

1	0
---	---

12. a) if yes, how many are you in your cooperative.....

13. Household income per month.....

14. Do you have access to news sources?

Yes	No
1	0

14. a) If yes, please specify.....

SECTION B: Farm Production Information

1. How many hectares do you own.....

2. Type of farming

Crop	Livestock
1	0

3. How many hectares are arable.....

4. What type of labour do you employ

Permanent	Seasonal/casual
1	0

5. How many labours do you employ.....

6. How much is Labour paid per month? A) Permanent R.....& Seasonal R.....

7. Do you provide perquisite for labours?

1	0
Yes	No

8. If yes, please specify.....

9. Are you satisfied with the amount paid to your labours?

1	0
Yes	No

9. a)

Substantiate.....

10. Do you have access to credit?

1	0
Yes	No

11. If No, how do you fund your farming production costs

.....
.....

12. Do you use mechanization?

1	0
Yes	No

13. If Yes, please specify.....

14. Do you have access to advisory extension services?

1	0
Yes	No

SECTION C: Market Information

1. What is the main *purpose* of farming?.....

2. What is the main reason for selling your produce?.....

3. Do you have access to market?

1	0
Yes	No

4. If yes, specify type of market

5. Do you receive any market information prior to sales?

1	0
Yes	No

6. If yes, what are the sources of market information.....

7. Do you have any knowledge about market requirements?

1	0
Yes	No

8. If no, how do you sell your produce.....

9. Do you participate in value adding chain?

1	0
Yes	No

9. a) If yes, please specify.....

10. Are you satisfied with the channel through which your produce are marketed?.....

11. How many produce did you sell in the past 12 months?.....

12. What mode of transport do you use to transport your produce to the market

1	2
Own transport	Public transport

13. How many kilometers from your farm to the market?.....

14. What are the market challenges do you face?.....

.....

SECTION D: Farmers' perception towards 2018 agricultural minimum wage

Many farmers are engaged in the agricultural sector as their main primary source of income and livelihoods. Please answer the following questions based on 2018 agricultural minimum wage.

1. Do you receive any information about the minimum wage?

1	0
Yes	No

2. If yes, what is your sources of information.....

3. Do you have knowledge about the 2018 agricultural minimum wage?

1	0
Yes	No

4. Are you satisfied with the amount of minimum wage recommended by the Sectoral Determination?

1	2	3	4	5
Very satisfied	Satisfied	Uncertain	Dissatisfied	Very dissatisfied

5. Will you comply with the 2018 agricultural minimum wage?

1	2	3
Fully comply	Uncertain	Never comply

6. Do you think agricultural minimum wage is a good thing for farmers?

1	2	3	4	5
Strongly agree	Agree	I don't know	Disagree	Strongly disagree

7. Do you think farmers are well represented in determining the agricultural minimum wage?

Yes	No
-----	----

1	0
---	---

8. Do you think farmers can afford to pay the prescribed 2018 minimum wage?

1	2	3	4	5
Strongly agree	Agree	I don't know	Disagree	Strongly disagree

8. a) Substantiate your answer

.....

9. Do you think the agricultural minimum wage leads to both labour and farm productivity?

1	2	3	4	5
Strongly agree	Agree	I don't know	Disagree	Strongly disagree

10. Are you a member of any farmers' Union?

Yes	No
1	0

10. a) Do you think farmers are well represented?.....

1	2
Yes	No

11. Did you provide formal contracts to your employees as the legislation requires?

1	2
Yes	No

12. How many hours your employees work per week?.....

13. Do you discuss Sectoral Determination with your employees?.....

1	2
Yes	No

17. Do you think minimum wage is time consuming?

1	2	3	4	5
Strongly disagree	disagree	uncertain	Agree	Strongly Agree

14. In your opinion, who should be reliable for determining agricultural minimum wage?

.....

15. Do you agree that the minimum wage policy enable farmers to afford more units of labour?

1	2	3	4	5
Strongly agree	Agree	I don't know	Disagree	Strongly disagree

THANK YOU